

**A PROJECT REPORT**  
**ON**  
**“EXAM CELL AUTOMATION”**

**Submitted to**  
**UNIVERSITY OF MUMBAI**

**In Partial Fulfilment of the Requirement for the Award of**

**BACHELOR’S DEGREE IN**  
**COMPUTER ENGINEERING**

**BY**

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**UNDER THE GUIDANCE OF**  
**PROF. KALPANA BODKE**



**DEPARTMENT OF COMPUTER ENGINEERING**  
**Anjuman-I-Islam’s Kalsekar Technical Campus**  
**SCHOOL OF ENGINEERING & TECHNOLOGY**

Plot No. 2 3, Sector - 16, Near Thana Naka,  
Khandagaon, New Panvel - 410206  
**2019-2020**

**AFFILIATED TO**  
**UNIVERSITY OF MUMBAI**

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## CERTIFICATE

This is certify that the project entitled  
“EXAM CELL AUTOMATION“

submitted by

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is a record of bonafide work carried out by them, in the partial fulfilment of the requirement for the award of Degree of Bachelor of Engineering (Computer Engineering) at *Anjuman-I-Islam's Kalsekar Technical Campus, Navi Mumbai* under the University of MUMBAI. This work is done during year 2019-2020, under our guidance.

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We are grateful to her for her timely feedback which helped us track and schedule the process effectively. Her time, ideas and encouragement that she gave helped us to complete our project efficiently.

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At last we must express our sincere heartfelt gratitude to all the staff members of Computer Engineering Department who helped us directly or indirectly during this course of work.

IRAM FANGARI  
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## Project I Approval for Bachelor of Engineering

This project entitled *EXAM CELL AUTOMATION* by *IRAM FANGARI, MARIYAM PANGARKAR, GAZALA QURESHI* is approved for the degree of *Bachelor of Engineering in Department of Computer Engineering*.

Examiners

1. ....

2. ....

Supervisors

1. ....

2. ....

Chairman

.....

## Declaration

We declare that this written submission represents our ideas in our own words and where others ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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## ABSTRACT

Currently Exam cell activity mostly includes a lot of manual calculations and is mostly paper based. The project aims to bring in a centralized system that will ensure the activities in the context of an examination that can be effectively managed. This system allows students to enroll themselves into the system by registering like by providing their Enrollment number, Name, email, examination, semester, etc. Examination Cell Automation System is developed for the college to simplify the activities of Staff and Students .It facilitates to access the examination information of a particular student in a particular department. The information is stored into the database,which will be provided by the teacher for a respective student. Here the admin updates the student details, staff details and can add or delete them

Exam Cell Automation System has been created to avoid lot of manual work traditionally done by the Students, Faculties as well as the Exam Cell. The major Focus of the System is to efficiently manage the activities carried out by the exam cell.As we all know that examination plays a very crucial role in Students as well as in faculties life when its adhered to, all the work needs to be done with perfection and with full attention, however manually carrying out the examination work might lead to a flaw or a mistake sometime which in turn increases the work of the respected faculty. The Basic aim of designing this system is to computerize the manual work to a greater extent almost next to negligible. In this system the result will be generated by the exam cell by calculating the CGPI and SCPI of every individual student.The System will have a easy to use interface which will in turn will be helpful for the user. Currently the system used by the Exam cell also automated the work to a greater extent but still it requires a lot of manual work by the Students as well as the Exam cell and Faculties. This System acts as an interface between the Students, Faculties and the Exam Cell department. The information is stored into the database,which will be provided by the teacher for a respective student. Here the admin updates the student details, staff details and can add or delete them. The result will be finally a fully automated system.

**Keywords:** Keywords—CGPI,SGPI,Manual work,Computerised,Term End Examination,Term Work,Gazette,CO Attainment.

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# Chapter 1

## Introduction

Examination System is an integral part of the Exam cell Department. Earlier Exam form filling requires a lot of paper work by the students as well as by the Exam cell department, but through Exam Cell Automation System all the student, faculties and the Exam cell related work will be done automatically. The online filling and submission of the form is taking over the traditional system. With the help of such system exam cell can gather all the useful information from the Centralized database. Previously the students have to form a long queue to submit the exam form by bunking their lectures because form filling is mandatory so they have to submit it any how. As all this work were done manually that were more prone to flaws, and requires lot of labour work. The current systems are traditional systems which support manual processes leading to huge time consumption and stack of hard copies. The systems make the processe delayed. So, to overcome all such flaws and errors we have developed such a system that will provide a digital environment and most of the problem has been solved by the System.

### 1.1 Purpose

The system is created to ease the work of the users. This system does almost all the work digitally rather than manually and hence it requires lot of storage to store all the details of the students, staffs. This System will be used by the Students, the faculties and the exam cell members.

### 1.2 Project Scope

The scope of the project is that all the examination related work for the students can be done using this system. It will provide faster and easier access for updating records as the paper work will reduce. All the students related database can be retrieve any time by authorized person. Students have to register for the first time with our system to enrol themselves by providing personal details, uploading photo and sign etc. which will generate a unique id for each student. The students can also

modify/edit their details in future if required. Once registered students can login to our website through their registered id and password and can fill various forms like Exam form, K.T form. The Exam cell admin can verify students form through his/her login id and can modify the students form if students have made any mistake during filling the form and by chance submitted it. Revaluation form can be filled without having to stand in a long queue. Application support and maintenance after deployment will be provided to production. The System can be customized as per the requirements of the college and student as well as the faculty can access it remotely.

### 1.3 Project Goals and Objectives

#### 1.3.1 Goals

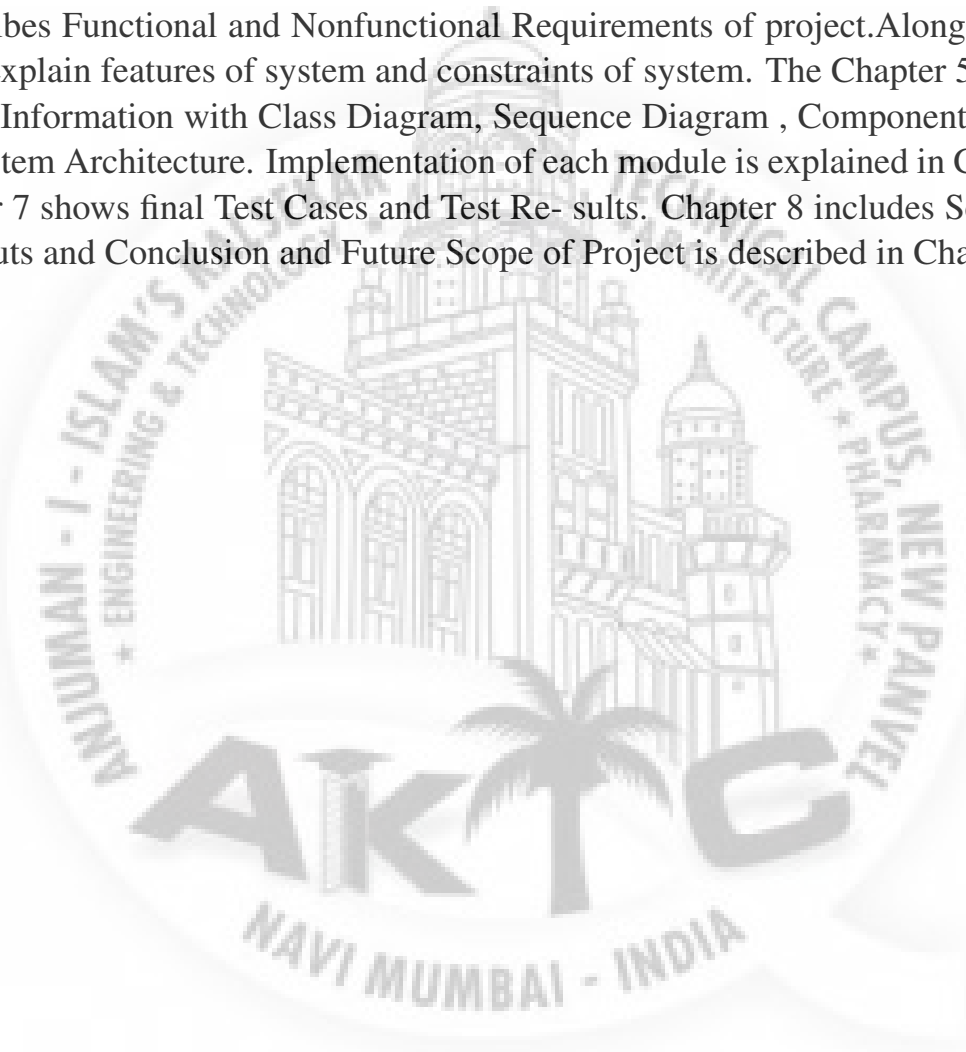
- a. Provide a solution for our exam cell system which reduce manual work .
- b. It allows students to fill exam form from anywhere which help us to not to be in present in college and also reduce the chance of bunking class to stand in long queue for filling form .
- c. It also allow students to fill form for ATKT according to their previous data stored in database.
- d. It provides a facility to auto-generate new rollno for new joiners to the institute.
- e. Can easily allocate subjects to specific teachers by HOD.

#### 1.3.2 Objectives

- a. objective of the project is to save men power and time .
- b. Reduce the manual work(paper work) .
- c. Can be always available for everyone from everywhere so everyone can access their data from anywhere.

## 1.4 Organization of Report

The report is organized as follows : The introduction is given in Chapter 1.It describes the fundamental terms used in this project.It describes the Goal, Objectives and scope of this project. The Chapter 2 describes the review of the relevant various techniques in the literature systems. It describes the pros and cons of each technique with how to overcome those cons using new technology. The project planning includes members and capabilities of this project ,roles and responsibilities of each member,Budget of Project and Project timeline is describe in Chapter 3. The Chapter 4 describes Functional and Nonfunctional Requirements of project.Along with this it also explain features of system and constraints of system. The Chapter 5 includes Design Information with Class Diagram, Sequence Diagram , Component Diagram and System Architecture. Implementation of each module is explained in Chapter 6. Chapter 7 shows final Test Cases and Test Re- sults. Chapter 8 includes Screenshot of outputs and Conclusion and Future Scope of Project is described in Chapter 9.



## Chapter 2

# Literature Survey

### 2.1 Paper Title 1

Exam Cell Automation System

#### 2.1.1 Advantages of Paper

- a. Easy to handle and operate.
- b. Friendly interface. Fast and convenient.
- c. Less human effort.

#### 2.1.2 Disadvantages of Paper

- a. Takes a lot of time.
- b. Resembles like a complex problem while allocating faculty to different rooms.
- c. Less Accurate.

#### 2.1.3 How to overcome the problems mentioned in Paper

- a. Efficiency should be increased
- b. Faculties database should be made flexible to provide high accuracy.

### 2.2 Paper Title 2

E-Exam Cell



### 2.2.1 Advantages of Paper

- a. Fast and easy approach
- b. Work done is smoother
- c. Security is high

### 2.2.2 Disadvantages of Paper

- a. Paper work required.
- b. Student's self modification is provided..
- c. Automatic filling of student's information is not included

### 2.2.3 How to overcome the problems mentioned in Paper

- a. Paper work should be removed by making it more digital.
- b. Self modification by the students should be restricted.
- c. It should be made fully digital.

## 2.3 Paper Title 3

Online Exam Cell and Result Analysis Automation

### 2.3.1 Advantages of Paper

- a. Boosts Enterprise accessibility.
- b. Faster exam registration.
- c. Easy result generation.

### 2.3.2 Disadvantages of Paper

- a. The system is not fully automated.
- b. It takes time for the process in hall ticket generation.
- c. Firstly the seat numbers are manually generated and than it is fed into the system.

### 2.3.3 How to overcome the problems mentioned in Paper

- a. More information should be fed into the database so that it can be fully automated.
- b. Students details should be filled automatically as soon as he/she logs in.
- c. Seat numbers of the students and necessary details should be fed into the system automatically.

## 2.4 Paper Title 4

XamClick Exam Cell Automation System

### 2.4.1 Advantages of Paper

- a. Manual Work is reduced extremely
- b. Information is presented in easy and efficient manner

### 2.4.2 Disadvantages of Paper

- a. The biggest weakness in this system is the security.
- b. Risk in loss of data
- c. System is more prone to errors.

### 2.4.3 How to overcome the problems mentioned in Paper

- a. Each and every user will be given specific privileges through which the users will not be able to access any other information
- b. Students should be restricted to modify their own marks

## 2.5 Paper Title 5

Automated Examination Support System

### 2.5.1 Advantages of Paper

- a. Accessibility rights are provided to the user
- b. The system produces data for all users
- c. Each user have his/her work displayed on the system

### 2.5.2 Disadvantages of Paper

- a. The system doesn't provide any effort in generating mark sheets.
- b. The system doesn't provide generation of gazette copies.
- c. The system only deals with calculation of CGPI and SGPI by the use of formulae for conversion of percentage into grade point indices.

### 2.5.3 How to overcome the problems mentioned in Paper

- a. Our system will overcome the drawback of not generating the results by providing a function of Gazette copy generation along with Mark Sheet generation as per the requirement of the
- b. Our system provides a convenient environment for users by giving them flexibility into the system

## 2.6 Technical Review

Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic.

Laravel offers a rich set of functionalities which incorporates the basic features of PHP frameworks like CodeIgniter, Yii and other programming languages like Ruby on Rails. Laravel has a very rich set of features which will boost the speed of web development.

### 2.6.1 Advantages of Technology

- a. The web application becomes more scalable, owing to the Laravel framework.
- b. Considerable time is saved in designing the web application, since Laravel reuses the components from other framework in developing web application.
- c. It includes namespaces and interfaces, thus helps to organize and manage resources.

### 2.6.2 Reasons to use this Technology

- a. Modularity

Laravel provides 20 built in libraries and modules which helps in enhancement of the application. Every module is integrated with Composer dependency manager which eases updates.

**b. Testability**

Laravel includes features and helpers which helps in testing through various test cases. This feature helps in maintaining the code as per the requirements.

**c. Routing**

Laravel provides a flexible approach to the user to define routes in the web application. Routing helps to scale the application in a better way and increases its performance.



# Chapter 3

## Project Planning

### 3.1 Members and Capabilities

Table 3.1: Table of Capabilities

SR. No	Name of Member	Capabilities
1	Mariyam	Database, Backend
2	Iram	UI Design
3	Gazala	Backend, UI Design

#### Work Breakdown Structure

- All of the members are equally important in developing the project.
- We work on a different part of the project based on one's capability.
- Firstly we came up with documentation, And based on the documentation we set our goal and created a blueprint.
- We then started going hands-on with the project to develop it according to the flow as decided earlier.

### 3.2 Roles and Responsibilities

Table 3.2: Table of Responsibilities

SR. No	Name of Member	Role	Responsibilities
1	Mariyam Pangarkar	Team Leader	Database, Backened
2	Iram Fangari	Frontend	UI Design, developing
3	Qureshi Gazala	Integration	Backend, UI design

### 3.3 Assumptions and Constraints

- Users of this System must be qualified.
- Users of this System must be an individual of the college who has the authority to access.
- The system doesnt require much time to process the data.

### 3.4 Project Management Approach

- a. Planning of project.
- b. Defining the scope of the project.
- c. Estimation of time and It's management.
- d. Creating Gantt Charts and properly assigning tasks to members.
- e. Reporting the progress of project with the guide.

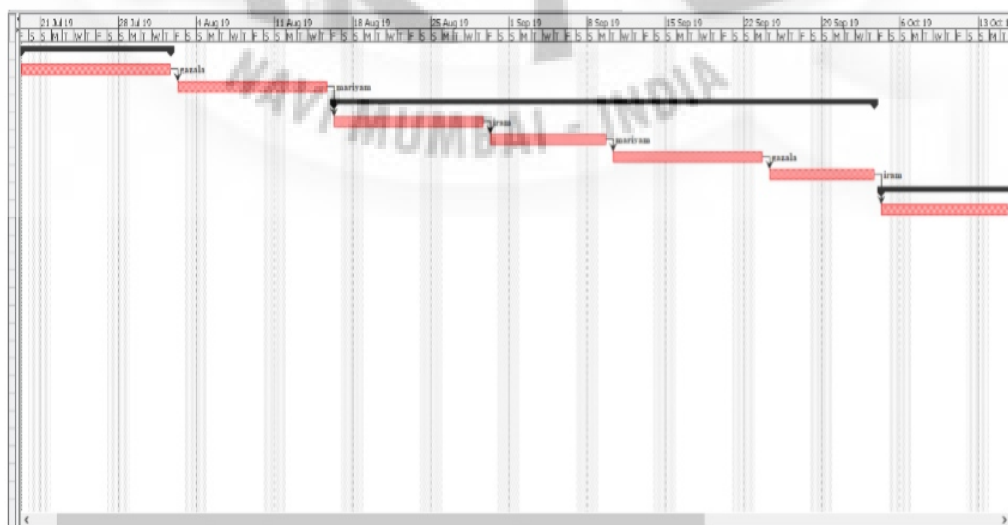
### 3.5 Ground Rules for the Project

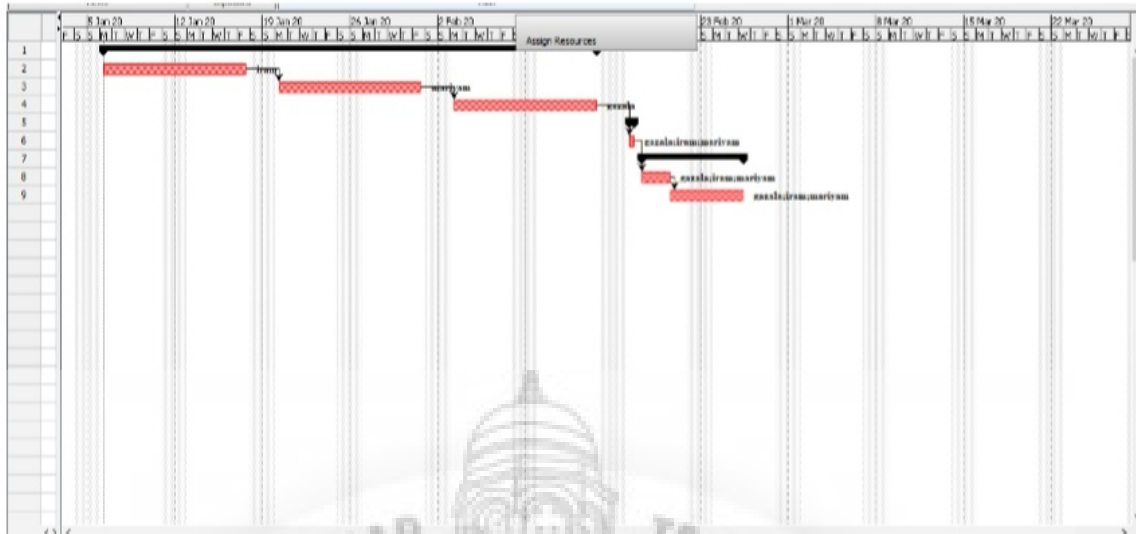
- a. Properly planning and gathering relevant information is very important.
- b. Developing a Blueprint of the project and work accordingly.
- c. All the members should report to the guide whenever required.
- d. Setting up small goals every week.
- e. Achieving the small goal within that span of time.
- f. Keeping tracks of the progress towards project.

### 3.6 Project Budget

- a. It is a web based project.
- b. Cost of the project is very low and efficient.

### 3.7 Project Timeline





## Chapter 4

# Software Requirements Specification

### 4.1 Overall Description

#### 4.1.1 Product Perspective

Currently Exam cell activity mostly includes a lot of manual calculations and is mostly paper based. The project aims to bring in a centralized system that will ensure the activities in the context of an examination that can be effectively managed. This system allows students to enroll themselves into the system by registering like by providing their Enrollment number, Name, email, examination, semester, etc. Examination Cell Automation System is developed for the college to simplify the activities of Staff and Students .It facilitates to access the examination information of a particular student in a particular department. The information is stored into the database,which will be provided by the teacher for a respective student. Here the admin updates the student details, staff details and can add or delete them.

#### 4.1.2 Product Features

The System will do all of its work digitally.Manual work has been completely avoided to provide ease to the Students and the Staff. Students will get the exam form based on their previous KT's and backlogs automatically as soon as it logs in. All the Data will be stored in the database through which the previous records of the students is fetched. Separate internal and external marksheets are provided digitally to the faculties on the website where they have to fill in the marks and submit it on to the exam cell.

#### 4.1.3 User Classes and Characteristics

Faculty-Every faculty will be assigned a privilege through which they will be able to fill in the marksheets,etc.

HOD- HOD will be assign a privilege as soon as he logs in so that he can enter the marks and can verify the marks entered by the Faculty.



Student-As soon as the student logs in he/she will receive a password auto generated by the exam cell and a form of students personal details will be flashed on the screen auto filled.After that student can change his/her password and can fill the necessary exam form available below.The student cannot make any changes in the marksheets as it will be secure.

Exam Cell-The Exam Cell will have the full privilege of allotting passwords to the students.They enables and disables the exam form according to the date decided. After getting the marksheets from the faculties they start making results and gadgets of the individual.

#### **4.1.4 Operating Environment**

On server side for Software Requirements- Microsoft Windows 7 or later / Ubuntu 16.0 LTS or later will be required, HTML5 compatible Browser will be required, Bootstrap,opencv.js libraries is needed. For Server side Hardware Requirements- Intel Core i5 3rd gen processor or any equivalent and 8 GB RAM 20 GB Disk Space is needed. For Client side Software Requirement Microsoft Windows XP or later / Ubuntu 12.0 LTS or later/ MAC OS 10.1 or later/Android jellybean or later (For Mobile),HTML 5 compatible Browser are needed. For Client side Hardware Requirement Intel Core i3 3rd gen processor or any equivalent (For Desktop), Qualcomm snapdragon 400 series or any equivalent (For mobile), 4 GB RAM Disk Space (for Desktop)/ 2 GB RAM Disk Space (for Mobile) are required.Online filling of exam form, online generation of marksheets,online generation of question paper format,gazette generation, digital generation of result.

#### **4.1.5 Design and Implementation Constraints**

This system doesnot have any hardware limitation as it is a complete software based product.Exam cell will activate the particular slot as and when the time is decided.It will not be available on the users demand.As it requires a huge database to store all the details of the students, memory requirement will be more and low available memory will lead to a hang or a crash in the system.The software that is been used to make the system is Laravel which is a great software and the database that is used is PhpMyAdmin.The language that will be used is a complete English Language.For security purpose Bcrypt algorithm is used.

### **4.2 System Features**

This system is totally web based product which will help student and faculties to ease their work and its properly secured so that no student can be able to make changes by their own.

### 4.2.1 System Feature

Online filling of exam form, online generation of marksheets, online generation of question paper format, gazette generation, digital generation of result.

#### Description and Priority

The main feature is student can be able to fill their exam form remotely as this issues had a major impact on the student's form as they have to be present physically on the form filling day otherwise this creates a problem but by using this system it would be helpful for the students to fill form remotely from any location.

#### Stimulus/Response Sequences

stimulus: student clicks, a form is generated

response: student fills the form and submit it

stimulus: student clicks, a hall ticket is generated

response: student can download the hallticket

stimulus: on a click faculties submits the marks

response: a marksheet is generated

stimulus: on a click result is generated

response: student can download the result

#### Functional Requirements

REQ-1: Login ID and Password must be their for every student and faculty to login.

REQ-2: If Login Id/Password is incorrect it should create a link on which the students can recover their passwords

REQ-3: Students can be able to perform their activities only which are permitted to them.

REQ-4: While inserting the marks the Term work marks should have been verified by the HOD.

REQ-5: Rollno Should be entered correctly to download the hallticket. REQ-6: CO Attainment chart should be prepared with proper target.

## 4.3 External Interface Requirements

### 4.3.1 User Interfaces

On the first page that is the landing page consist of few buttons such as login registration where they can simply login, they can get the exam form, their reval form on a single click. On the next page the faculties will get the marksheets of UT1/UT2

where they can enter the marks of every student including their names and rollno. On Scrolling down details of various departments and their courses is made available. In the About us tab all the information related to the college and exam cell is provided where user can ask doubts or queries. There a dashboard on login will give the entry to the user in his/her particular dashboard.

### **4.3.2 Hardware Interfaces**

It Doesn't required any external software's, but it requires external hardware devices like keyboard,monitor,mouse it also requires huge memory database to store information of plenty of students, and to quickly access that data.

### **4.3.3 Software Interfaces**

The product only requires good internet connection.For developing this system the Framework used is LARAVEL 6.It doesnt require any external component to communicate with the user, the database used is MYSQL,and operating system used in developing the system is UBUNTU and this system is platform independent.The nature of communication with the system is smooth it doesnt require any external things to get communicated,any special library has not been used.The data will be shared to the exam cell department.

### **4.3.4 Communications Interfaces**

As this system is very vast it requires huge amount of database.We have used MYSQL database, email is been used to reset the password if forgotten by the faculty/student. Databases access has been done globally,Also https standard is used in-order to gain the access.Data is transferred from client to the server using https.

## **4.4 Nonfunctional Requirements**

### **4.4.1 Performance Requirements**

Performance of overall system is very efficient and well optimize as maximum things are done digitally and with proper ease as compared to previous system..

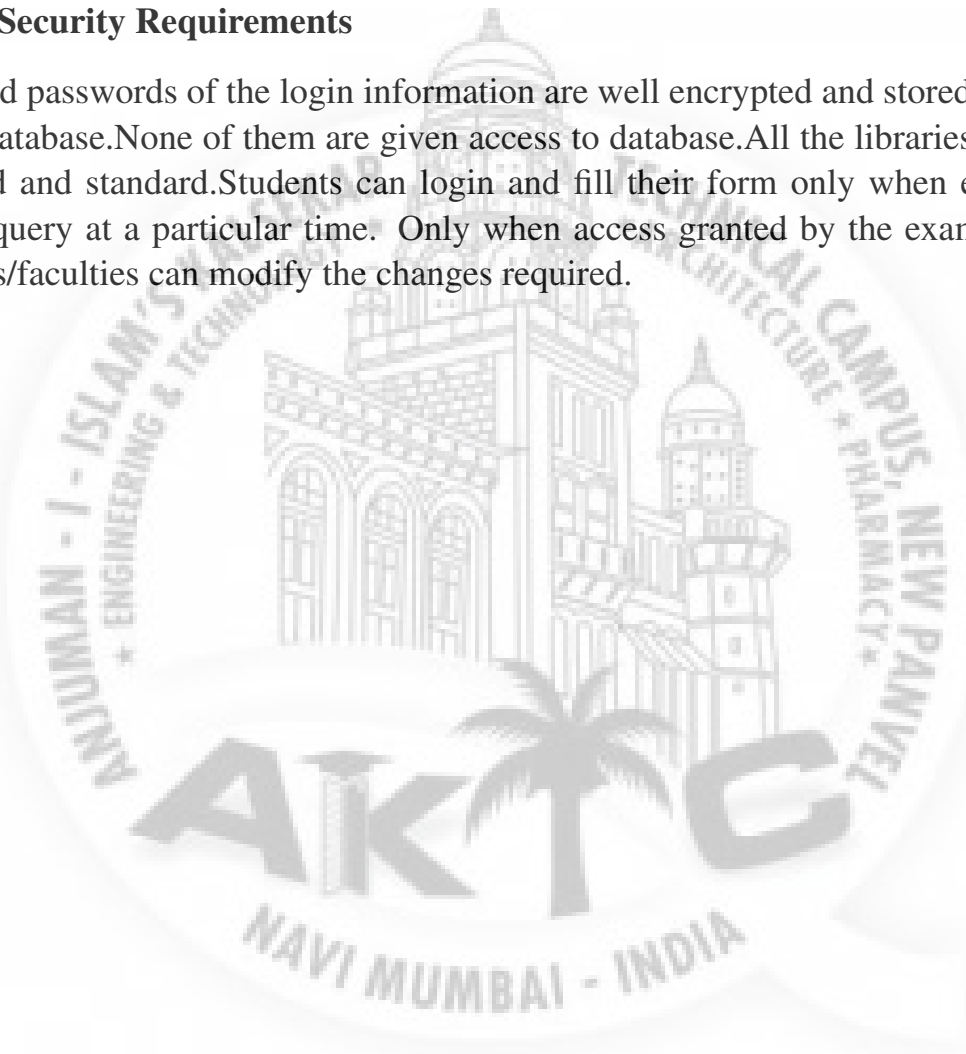
It can be accessed from anywhere.The manual work has been reduced for the exam cell and the faculties.List of UT is been generated automatically and also the question paper format made easy to enter marks digitally.

#### 4.4.2 Safety Requirements

This system contains critical data of the students' marks which shouldn't be changed by anyone without any permission. Queries are run such that no permission is given to anyone except the exam cell to change or modify marks if any wrong marks entered by mistake by the faculties. No unnecessary access should be given to anyone. System loss can only take place if there is any crash in the system. The modification in the system's design will not lead to any damage in the system.

#### 4.4.3 Security Requirements

Data and passwords of the login information are well encrypted and stored properly in the database. None of them are given access to the database. All the libraries used are certified and standard. Students can login and fill their form only when the exam cell fires a query at a particular time. Only when access is granted by the exam cell, the students/faculties can modify the changes required.



# Chapter 5

## System Design

### 5.1 System Requirements Definition

System requirement definitions specify [1] what the system should do, its functionality and its essential and desirable system properties. The techniques applied to elicit and collect information in order to create system specifications and requirement definitions involve consultations, interviews, requirements workshop with customers and end users. The objective of the requirements definition phase is to derive the two types of requirement:

#### 5.1.1 Functional requirements

They define the basic functions that the system must provide and focus on the needs and goals of the end users.

- a. Login and registration system for each and everyone in institute for authentication and accessing website from everywhere.
- b. For login we need auto-roll generation by admin.
- c. Student can access his previous years records which is already maintained in database by admin .
- d. Auto form generation based on previous records for both regular/KT examination.
- e. Subject allotment for each teacher by head of department.
- f. Hall-ticket generation so far every student can take printout of hallticket from everywhere ,he/she does not need to come college to take hall-ticket.

Use-case Diagram

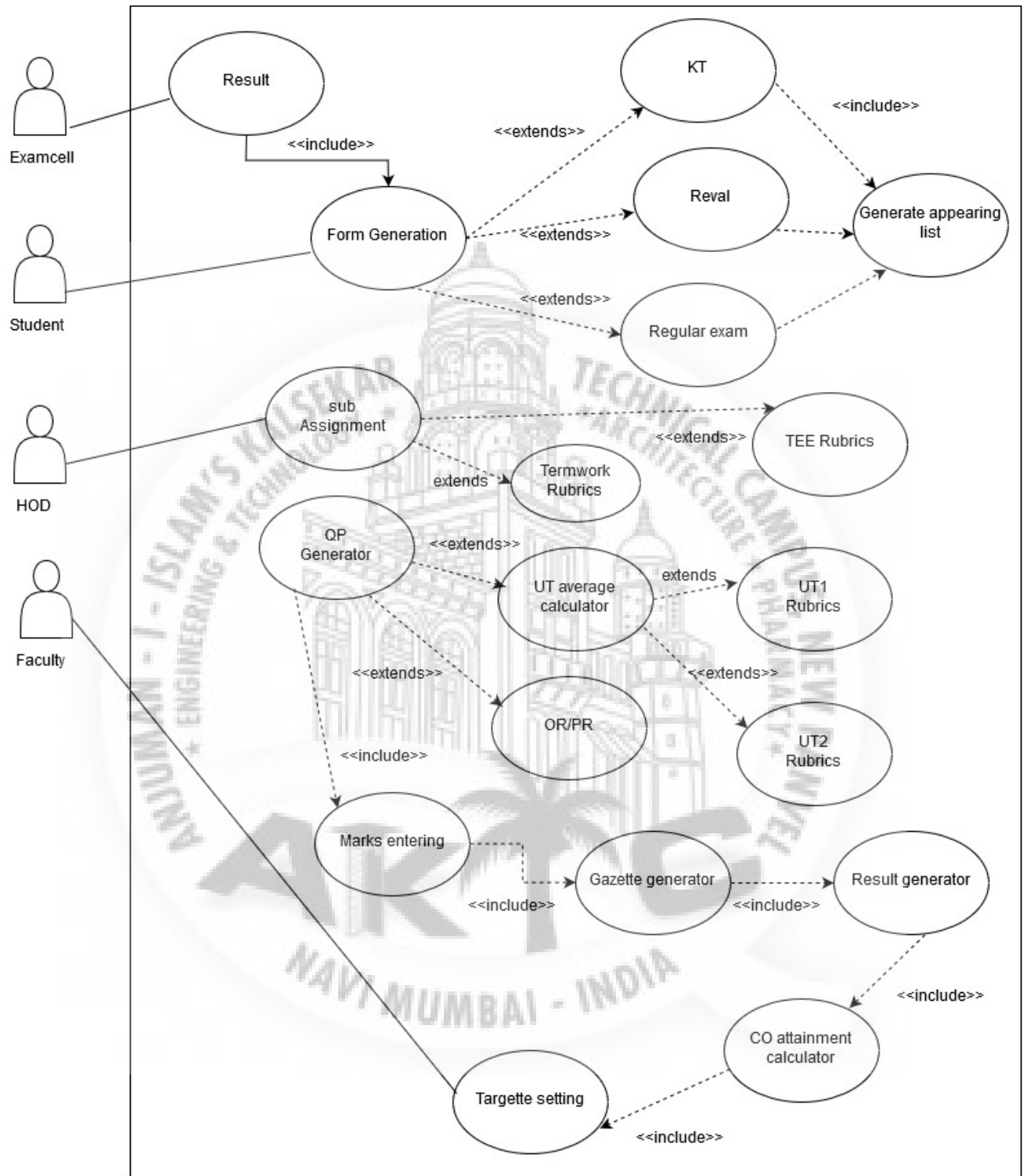


Figure 5.1: Use Case Diagram for Exam Cell Automation

### Data-flow Diagram

A data-flow diagram is a way of representing a flow of a data of a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. Given below is Level 0 Level 1 and Level 2 DFD of system.

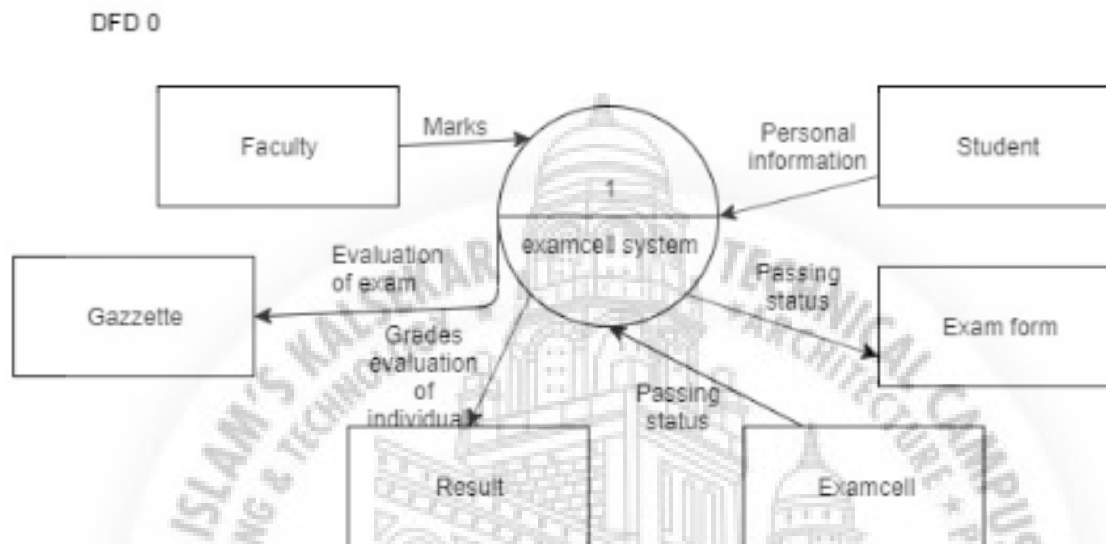


Figure 5.2: 5.2: DFD Level 0 for Exam cell Automation

DFD Level 0 shows the simple management of the student, faculties based on the working of the exam cell. It simply shows the input and output from the exam cell.

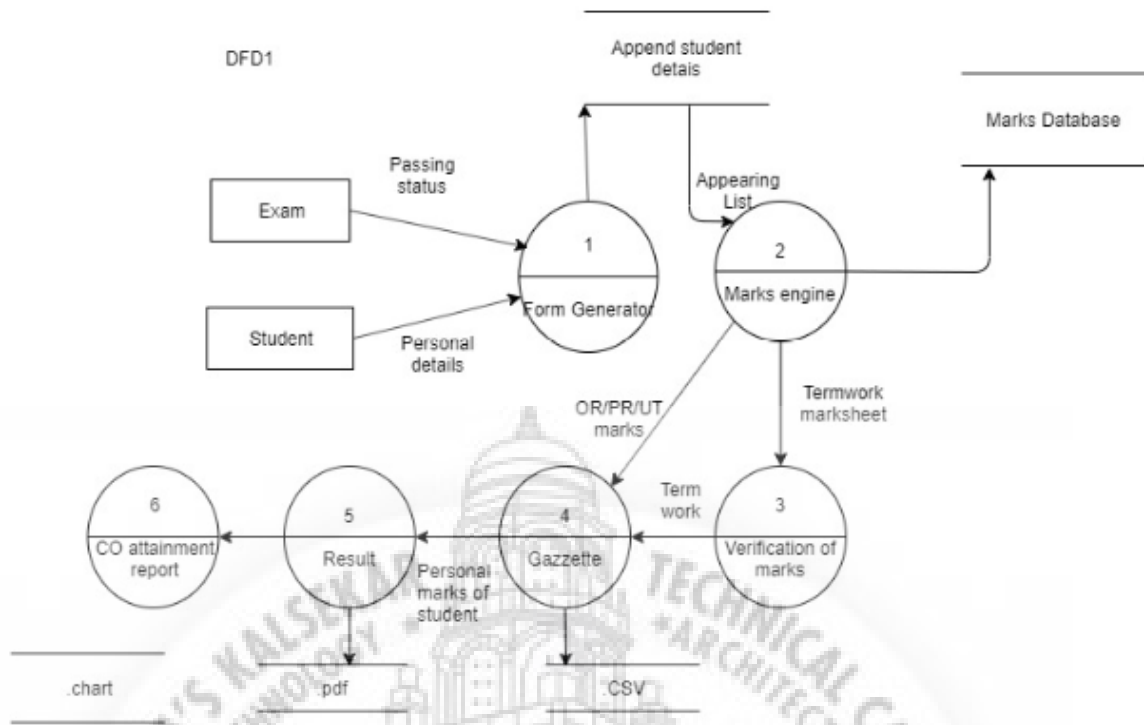
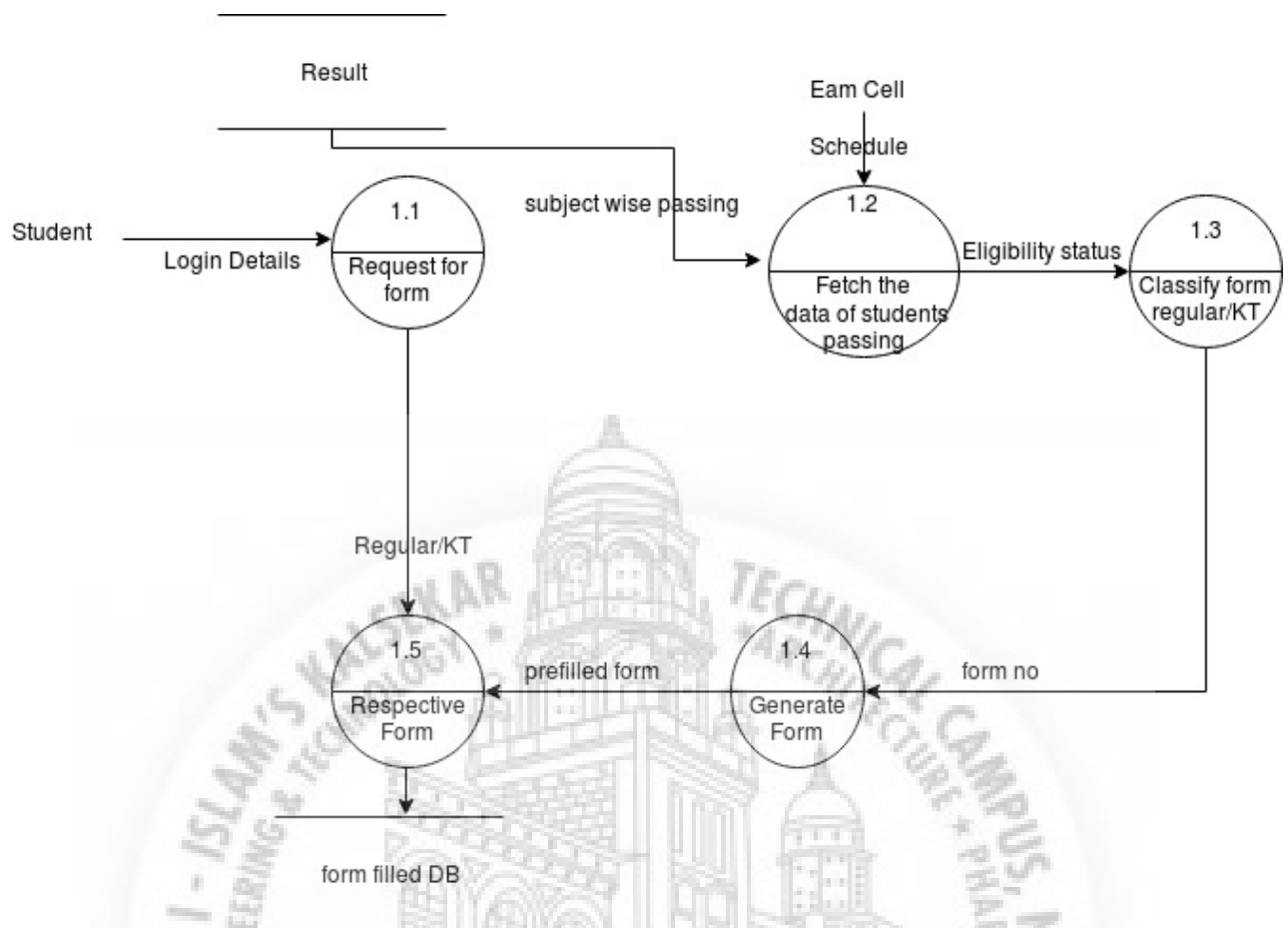


Figure 5.3: DFD level 1 for Exam cell Automation

DFD level 1 will show all the modules of the system. It also shows the input and output of every module. It generally shows the basic flow of the modules .





**Figure 5.4:** DFD level 2.1 for Form Generator Module

DFD level 2.1 is an extended DFD for Form Generation which gives details about the form generation and its complete working.

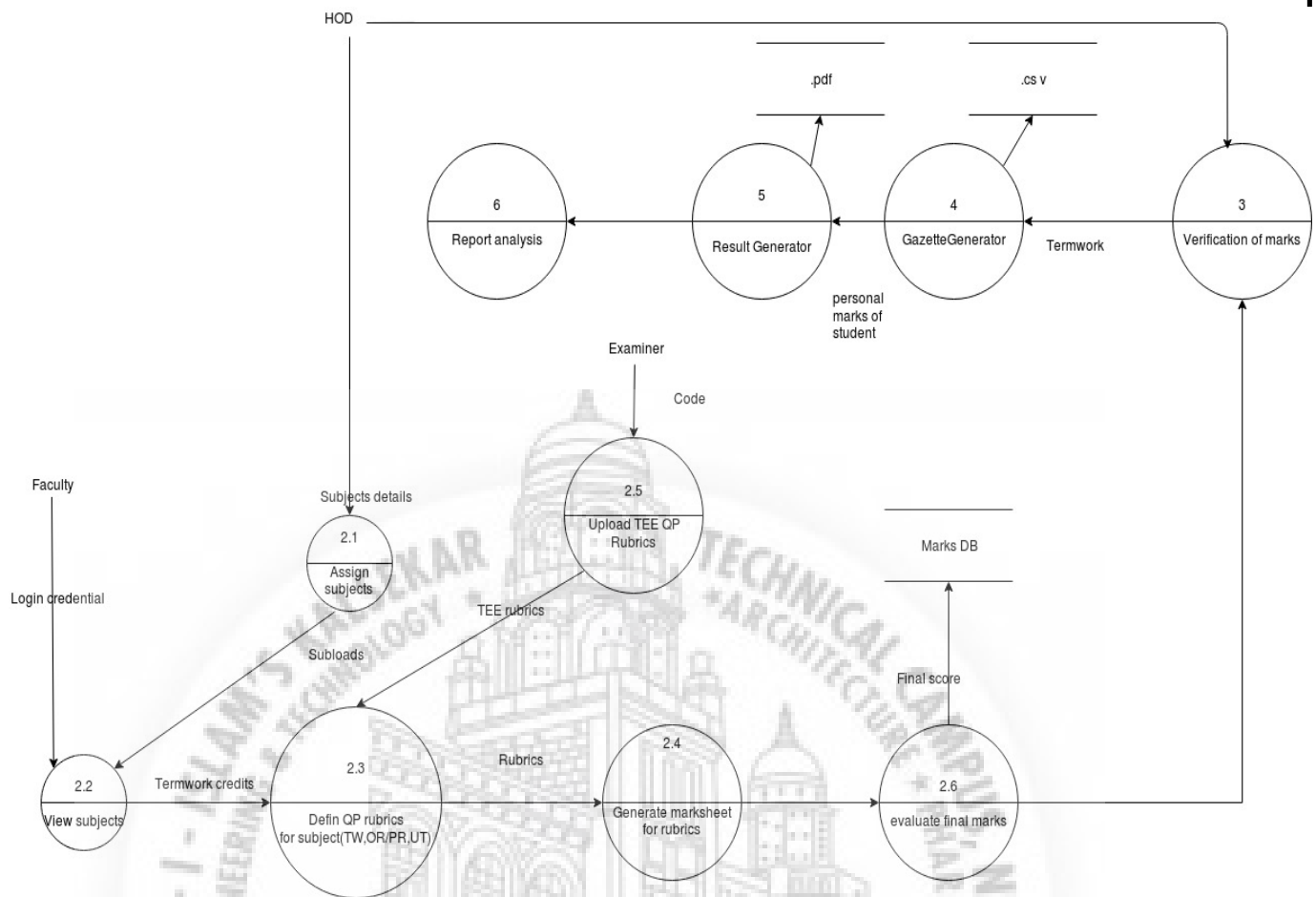


Figure 5.5: DFD Level 2.2 for Marks Engine Module

DFD level 2.2 is an extended DFD for Marks Engine Module which gives the detailed working about the overall marks updation through faculty.

### 5.1.2 System requirements (non-functional requirements)

These are non-functional system properties such as availability, performance and safety etc. They define functions of a system, services and operational constraints in detail.

#### Algorithm

#### bcrypt

bcrypt is a password hashing function designed by Niels Provos and David Mazières, based on the Blowfish cipher, and presented at USENIX in 1999.[1] Besides incorporating a salt to protect against rainbow table attacks, bcrypt is an adaptive function: over time, the iteration count can be increased to make it slower, so it remains resistant to brute-force search attacks even with increasing computation power. The bcrypt function is the default password hash algorithm for OpenBSD[2] and other

systems including some Linux distributions such as SUSE Linux.[3] There are implementations of bcrypt for C, C++, C, Go,[4] Java,[5][6] JavaScript,[7] Elixir,[8] Perl, PHP, Python,[9] Ruby and other languages.

**Database Schema/ E-R Diagram**

## 5.2 System Architecture Design

Result database will contain result of all the students. According to the passing status of a student form generator will generate forms for regular examination and KT examination. According to the KT examination that cumulative cost will calculate and subject will be decided and for regular form cost will be displayed. For regular form and KT form the information will already be entered by the examcell. The students information is already there in the DB just student have to proceed for the examination. If there is any query for the subject they may ask the question but they don't fill data by their own.

In form generation forms will be available in student's login only when exam cell triggers the process on a particular day than the form of the respected student will move to their login. KT and regular forms will be dealt accordingly. After that the examination form will generate the appearing list from the examination form of the student who proceed to the examination then automatically appearing list will be generated and will be used in the next examination as well.

The Subject assignment will be done by the HOD accordingly the faculty will upload a question paper format i.e. a rubrics for the TW/OR/PR/UT. Faculty should upload the rubrics for the final question paper before Term End Examination. The marks will be distributed to the term work and assignments accordingly, and according to the performance of the student marks will be provided for term work and assignment. In the Question paper format the faculties have to map the questions and marks to that particular question as per the weight-age. and same mapping has to be done for the experiments as well this over all mapping done will make a co attainment report. during the external practical examination the faculty will upload the oral practical marks and term work marks will be referred by the HOD and average will go for the result generation. and all this marks of TW/OR/PR/UT will go to the gadget generator.

Whenever the examiner examines the term end examination paper they will add marks in Term End Examination marksheet and than marksheet will upload the marks in result generator than gadget gets generated and will store into result database

also from the same data individual result copy of the student will generate and whenever the results are declared this will go to the login of the student from where it is visible to the student. If any KT found then reval form will be available to the students where they can fill the form and after the assessment of the form again the result will be generated and previous process will be continued



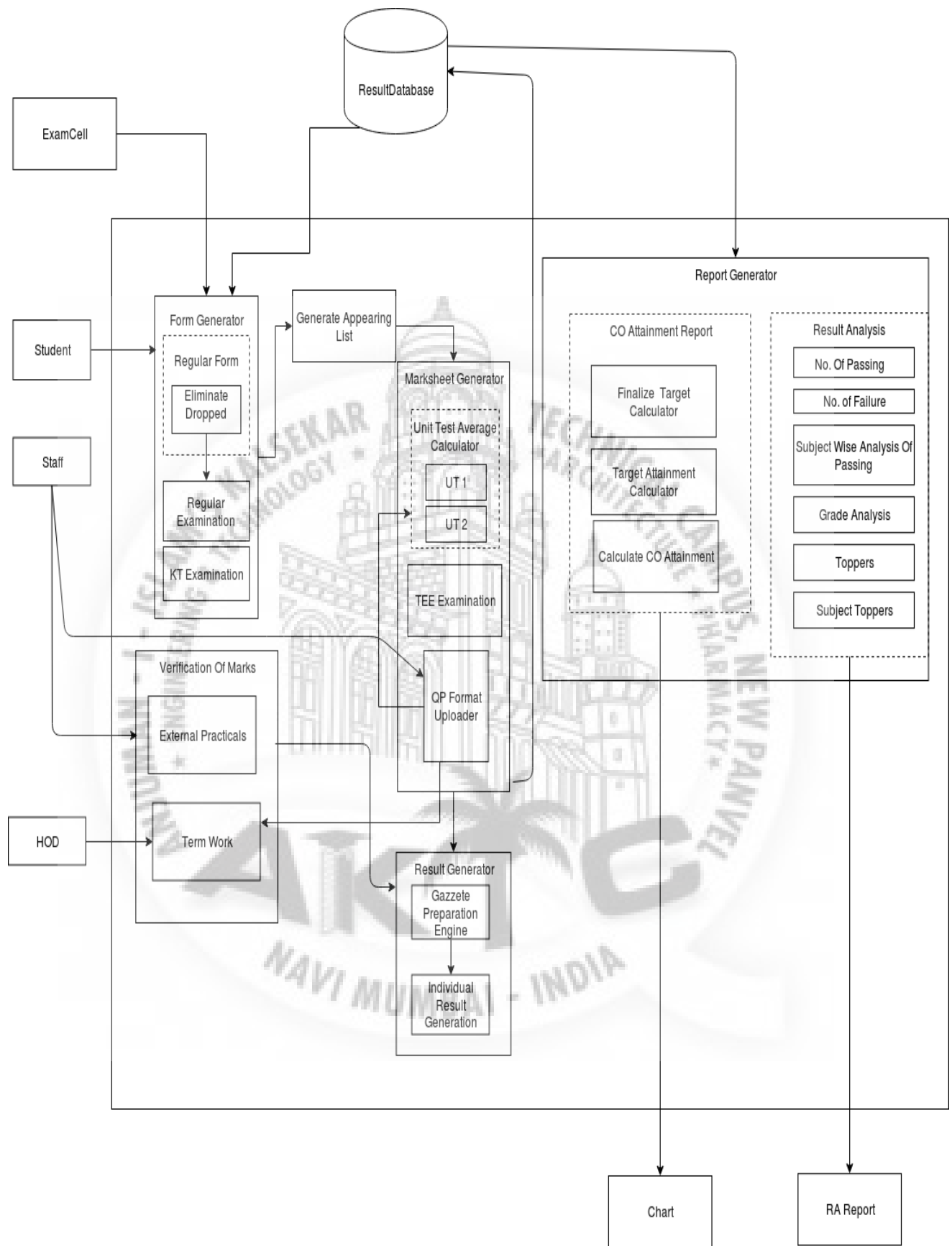


Figure 5.6: System Architecture for Exam Cell Automation

## 5.3 Sub-system Development

The first module is the Login and Registration module where the students will be assigned a unique ID and password which can be changed. The second module is Marksheet generator where the marks of the students will be entered based in their performance. The third module is gazette generator where all the marks whether it is UT/TW/OR/PR/TEE is been contained. The fourth module is Result generator which will be developed after getting all the marks in the marksheet.

### 5.3.1 Sequence Diagram

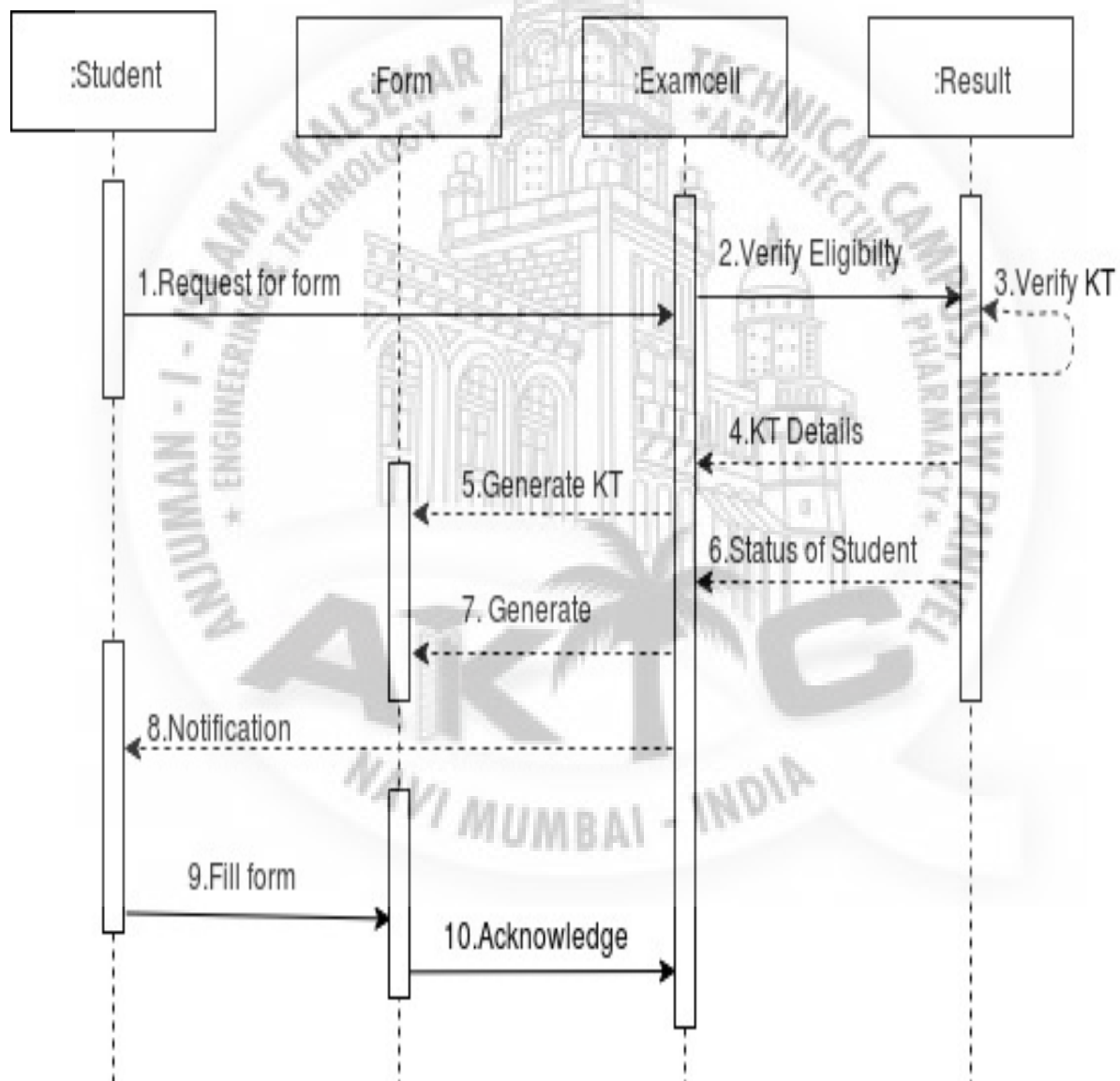


Figure 5.7: Sequence diagram for Form Generation

Sequence diagram for form generation representing how the student will be able to fill the form and all the steps involve while filling the form.

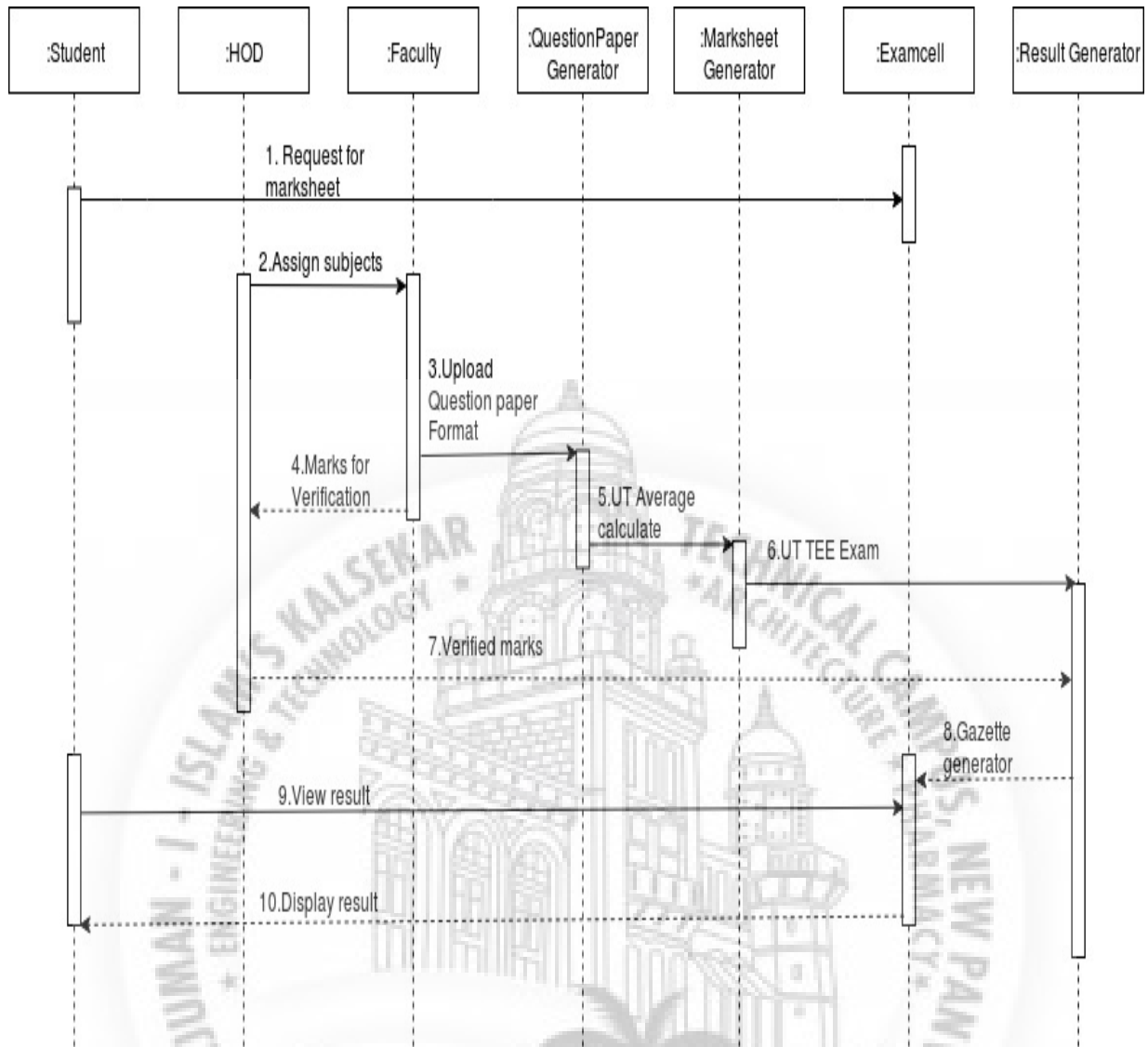


Figure 5.8: Sequence diagram for Result Generation

Sequence diagram for Result generation represents the student sequence of asking for the result. Several steps will be performed by the exam cell in displaying the result to the student.

## Chapter 6

# Implementation

### 6.1 LOGIN PAGE

In login system we need ID and PASSWORD to login into the system. ID will be our roll no which will be generated automatically when new user adds in the Institute. This no is unique and called as roll no which identifies each and everyone in campus.

In the very beginning the passwords will be birth date of the user. User can not directly register himself to the system he will get his user id and password once he takes admission in the campus. After login in to the system he can change his password.

name  
enter name

Password  
enter password

login

Figure 6.1: LOGIN MODULE



```

1 Register
2 <!doctype html>
3 <html>
4   <head>
5     <meta charset="utf-8">
6     <title>Registration Form</title >
7
8     <link href="{{ asset('assets/css/style1.css ') }}" type="text/css" rel="
9       stylesheet">
10    <link rel="stylesheet" href="{{ url('css/bootstrap.min.css ') }}">
11    <link rel="stylesheet" href="{{ url('css/trial-style1.css ') }}">
12    <style type="text/css">
13    </style>
14    <script src="{{ url('js/bootstrap.min.js ') }}"></script >
15    <script src="{{ url('js/jquery-3.4.1.min.js ') }}"></script >
16  </head>
17    <body>
18      <div class="registration-box">
19        <form method="post" action="{{ route('register ') }}">
20          {{ csrf_field () }}
21          <h1>Registration </h1>
22        </div>
23        href="{{ url('css/trial-style.css ') }}">
24        <style type="text/abrar@mariyam-hp-348-g3:~/Desktop/e-css">
25      </style>
26      <script src="{{ url('js/bootstrap.min.js ') }}"></script >
27      <script src="{{ url('js/jquery-3.4.1.min.js ') }}"></script >
28    </head>
29    <body>
30      <div class="login-box">
31        <form method="post" action="/studentlogin">
32          @csrf
33          <h1>Login </h1>
34
35          <div class="textbox">
36            <i class="fas fa-users" aria-hidden="true"></i>
37            <label>name</label>
38            <input type="text" name="name" required="" placeholder="enter name">
39          </div>
40          <div class="textbox">
41            <i class="fas fa-lock" aria-hidden="true"></i>
42            <label>Password</label>
43            <input type="password" name="password" required="" placeholder="
44              enter password">
45          </div><br>
46          <div class="form-group row mb-0">
47            <div class="col-md-6 offset-md-4">
48              <button type="submit" class="btn btn-primary">
49                {{ --('login') }}
50              </button>
51            </div>
52          </div>
53        </form>
54      </div>
55    </body>
56  </html>

```

## 6.2 GENERATE ROLL NUMBERS

Roll no is nothing but an unique number which identify each and everyone in campus .in our system we are generating roll no automatically whenever new user get admission in campus a new roll no will be generate or assign to that user based on his personal information.

HOD Details

Name	Email	Date of birth	Joining Year	Department	role
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="joiningyear"/>	<input type="text" value="Department"/>	<input type="text" value="roll"/>
<input type="button" value="submit"/>					

Student Details

Name	Email	Date of birth	Academic Year	Department	School
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="AcademicYear"/>	<input type="text" value="Department"/>	<input type="text" value="school"/>
role					
<input type="text" value="roll"/>					
<input type="button" value="submit"/>					

Faculty Details

Name	Email	Date of birth	Joining Year	Department	role
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="joiningyear"/>	<input type="text" value="Department"/>	<input type="text" value="faculty"/>
<input type="button" value="submit"/>					

Figure 6.2: UNIQUE ID GENERATION MODULES

```

1  STUDENT ROLLNO GENERATE:
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6
7  <title>Student Details</title>
8  <meta charset="utf-8">
9  <meta name="viewport" content="width=device-width, initial-scale=1">

```

```

10 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
    css/bootstrap.min.css">
11 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"
    ></script>
12 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
    js"></script>
13 <style>
14 table {
15     font-family: arial, sans-serif;
16     border-collapse: collapse;
17     width: 100%;
18 }
19
20 td, th {
21     border: 1px solid #dddddd;
22     text-align: left;
23     padding: 8px;
24 }
25
26 tr:nth-child(even) {
27     background-color: #dddddd;
28 }
29 </style>
30 </head>
31 <body>
32 <form method="post" action="/student">
33 @csrf
34
35 <div class="container-fluid mt--6">
36     <div class="row">
37         <div class="col">
38             <div class="card-wrapper">
39                 <!-- Custom form validation -->
40                 <div class="card">
41                     <!-- Card header -->
42                     <div class="card-header">
43                         <h3 class="mb-0">Student Details </h3>
44                     </div>
45                     <!-- Card body -->
46                     <div class="card-body">
47                         <div class="row">
48                             <div class="col-lg-8">
49
50
51                             </div>
52                         </div>
53                         <hr />
54                         <form class="needs-validation" novalidate>
55                             <div class="form-row">
56                                 <div class="col-md-2 mb-3">
57
58                                     <label>Name</label>
59                                     <input class="con" type="text" name="name" placeholder="
60                                         Name">
61                                 </div>
62                             </div>
63
64                             <div class="form-row">
65                                 <div class="col-md-2 mb-3">
66
67                                     <label>Email</label>

```

```

67         <input class="con" type="text" name="email" placeholder="
68             Email">
69     </div>
70 </div>
71 <div class="form-row">
72 <div class="col-md-2 mb-3">
73     <label>Date of birth</label>
74     <input class="con" type="date" name="dob" placeholder="
75         Date of birth">
76 </div>
77 </div>
78 <div class="form-row">
79 <div class="col-md-2 mb-3">
80     <label>Academic Year</label>
81     <input class="con" type="text" name="AcademicYear"
82         placeholder="AcademicYear">
83 </div>
84 </div>
85 <div class="form-row">
86 <div class="col-md-2 mb-3">
87     <label>Department</label>
88     <input class="con" type="text" name="department"
89         placeholder="Department">
90 </div>
91 </div>
92 <div class="form-row">
93 <div class="col-md-2 mb-3">
94     <label>School</label>
95     <input class="con" type="text" name="school" placeholder="
96         school">
97 </div>
98 </div>
99 <br><br>
100 &nbsp;
101 &nbsp;
102
103 <div class="form-row">
104 <div class="col-md-2 mb-3">
105     <label>role</label>
106     <input class="con" type="text" name="role" placeholder="
107         roll">
108 </div>
109 </div>
110 <br>
111
112 <div class="form-group row mb-0">
113     <div class="col-md-6 offset-md-4"><br><br>
114     <!-- <div class="row text-center"> -->
115     <div class="col text-center">
116         <button type="submit" class="btn btn-primary text-center">
117             {{ --('submit') }}
118
119     </button>
120 </div>
121 </div>

```

```

122         </form><br>
123     <!-- <div class="form-row">
124         <div class="col-md-2 mb-3">
125             <label class="form-control-label" for="validationCustom01"
126                 >First name</label>
127             <input type="text" class="form-control" id="
128                 validationCustom01" placeholder="First name" value="
129                 Mark" required>
130             <div class="valid-feedback">
131
132             </div>
133         </div>
134         <div class="col-md-2 mb-3">
135             <label class="form-control-label" for="validationCustom02"
136                 >Last name</label>
137             <input type="text" class="form-control" id="
138                 validationCustom02" placeholder="Last name" value="
139                 Otto" required>
140             <div class="valid-feedback">
141
142             </div>
143         </div>
144         <div class="col-md-2 mb-3">
145             <label class="form-control-label" for="
146                 validationCustomUsername">Username</label>
147             <input type="text" class="form-control" id="
148                 validationCustomUsername" placeholder="Username" aria-
149                 describedby="inputGroupPrepend" required>
150             <div class="invalid-feedback">
151             </div>
152         </div>
153     </div>
154 </div>
155 </div>
156 </div>
157 </div>
158 </div>
159 </div>
160 </body>
161 </html>
162
163 CONTROLLER:
164 <?php
165 namespace App\Http\Controllers;
166
167 use Illuminate\Http\Request;
168 use App\Student;
169 use DB;
170
171 class StudentController extends Controller
172 {
173     public function index(){
174         return view('student3');
175     }
176     public function student(Request $request)
177     {
178         $student = new Student();
179         $student->name = $request->input('name');
180     }
181 }

```

```

174 $student->email= $request->input('email');
175 $student->date_of_birth = $request->input('dob');
176 $student->Academic_year = $request->input('AcademicYear');
177 $student->department = $request->input('department');
178 $student->school= $request->input('school');
179 $student->role= $request->input('role');
180 $student->save(); // save method
181 $getlast_id = $student->id; // this is the id of student which has inserted
    in database recently.
182 $department_name = $request->input('department'); //department name
183 $dept = substr($department_name,0,2); //getting 1st two letters of department
    .
184 $department_name = $request->input('department');
185
186 $Academic_year = $request->input('AcademicYear'); //department name
187 $Acad = substr($Academic_year ,2,4); //getting 1st two letters of department.
188 $Academic_year = $request->input('AcademicYear');
189 $role=$request->input('role');
190 // $p_date = date("Y"); //getting current year
191 // $dates = substr($p_date ,2,3);
192 // $main_rollno = $dates.$dept.$getlast_id; //concatenated
193 $main_rollno = $Acad.$dept.$getlast_id;
194 DB:: table('students')->where('id',$getlast_id)->update(['roll_no'=>
    $main_rollno]);
195 $password=$request->input('dob');
196
197 DB:: table('users')->insert(
198     array(
199         'name'=>$main_rollno ,
200         'pass' => ($password),
201         'password'=> $password,
202         'role'=>$role ,
203
204     )
205 );
206 return view('/personaldetails');
207
208 }
209 }
210 HOD ROLL NO GENERATE:
211 <!DOCTYPE html>
212 <html lang="en">
213 <head>
214
215     <title>HOD Details </title>
216     <meta charset="utf-8">
217     <meta name="viewport" content="width=device-width, initial-scale=1">
218     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
        css/bootstrap.min.css">
219     <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"
        ></script>
220     <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
        js"></script>
221     <style>
222     table {
223         font-family: arial, sans-serif;
224         border-collapse: collapse;
225         width: 100%;
226     }
227
228     td, th {

```

```

229 border: 1px solid #dddddd;
230 text-align: left;
231 padding: 8px;
232 }
233
234 tr:nth-child(even) {
235 background-color: #dddddd;
236 }
237 </style>
238 </head>
239 <body>
240 <form method="post" action="/hod">
241 @csrf
242
243 <div class="container-fluid mt--6">
244 <div class="row">
245 <div class="col">
246 <div class="card-wrapper">
247 <!-- Custom form validation -->
248 <div class="card">
249 <!-- Card header -->
250 <div class="card-header">
251 <h3 class="mb-0">HOD Details </h3>
252
253 </div>
254 <!-- Card body -->
255 <div class="card-body">
256 <div class="row">
257 <div class="col-lg-8">
258
259 </div>
260 </div>
261 <hr />
262 <form class="needs-validation" novalidate>
263 <div class="form-row">
264 <div class="col-md-2 mb-3">
265
266 <label>Name</label>
267 <input class="con" type="text" name="name" placeholder="
Name">
268 </div>
269 </div>
270
271 <div class="form-row">
272 <div class="col-md-2 mb-3">
273
274 <label>Email</label>
275 <input class="con" type="text" name="email" placeholder="
Email">
276 </div>
277 </div>
278 <div class="form-row">
279 <div class="col-md-2 mb-3">
280
281 <label>Date of birth </label>
282 <input class="con" type="date" name="dob" placeholder="
Date of birth">
283 </div>
284 </div>
285 <div class="form-row">
286 <div class="col-md-2 mb-3">

```

```

287
288     <label>Joining Year</label>
289     <input class="con" type="text" name="joiningyear"
290         placeholder="joiningyear">
291     </div>
292 </div>
293
294
295 <div class="form-row">
296 <div class="col-md-2 mb-3">
297
298     <label>Department</label>
299     <input class="con" type="text" name="department"
300         placeholder="Department">
301     </div>
302 </div>
303 <div class="form-row">
304 <div class="col-md-2 mb-3">
305
306     <label>role</label>
307     <input class="con" type="text" name="role" placeholder="
308         roll">
309     </div>
310 </div>
311 <br>
312 <div class="form-group row mb-0">
313     <div class="col-md-6 offset-md-4"><br><br>
314     <!-- <div class="row text-center"> -->
315     <div class="col text-center">
316         <button type="submit" class="btn btn-primary text-center">
317             {{ --('submit') }}
318     </button>
319     </div>
320 </div>
321 </form><br>
322 <!-- <div class="form-row">
323     <div class="col-md-2 mb-3">
324         <label class="form-control-label" for="validationCustom01"
325             >First name</label>
326         <input type="text" class="form-control" id="
327             validationCustom01" placeholder="First name" value="
328             Mark" required>
329         <div class="valid-feedback">
330
331             </div>
332     </div>
333 <div class="col-md-2 mb-3">
334         <label class="form-control-label" for="validationCustom02"
335             >Last name</label>
336         <input type="text" class="form-control" id="
337             validationCustom02" placeholder="Last name" value="
338             Otto" required>
339         <div class="valid-feedback">

```



```

339         validationCustomUsername">Username</label>
        <input type="text" class="form-control" id="
            validationCustomUsername" placeholder="Username" aria-
            describedby="inputGroupPrepend" required>
340         <div class="invalid-feedback">
341         </div>s
342     </div>
343     →
344     </div>
345     </div>
346 </div>
347 </div>
348
349
350 </div>
351 </div>
352 </div>
353 </body>
354 </html>
355
356 CONTROLLER:
357 <?php
358
359 namespace App\Http\Controllers;
360 use App\Hod;
361 use DB;
362 use Illuminate\Http\Request;
363
364 class HodController extends Controller
365 {
366     public function index(){
367         return view('hod3');
368         // return view('hod3');
369     }
370
371     public function hod(Request $request)
372     {
373         $hod = new Hod();
374         $hod->name = $request->input('name');
375         $hod->email= $request->input('email');
376         $hod->date_of_birth = $request->input('dob');
377         $hod->joining_year = $request->input('joiningyear');
378
379
380         $hod->department = $request->input('department');
381         $hod->role= $request->input('role');
382         $hod->save(); // save method
383
384         $getlast_id = $hod->id; // this is the id of hod which has inserted in
            database recently.
385         $department_name = $request->input('department'); //department name
386         $dept = substr($department_name,0,2); //getting 1st two letters of department
            .
387         $department_name = $request->input('department');
388
389         $joining_year = $request->input('joiningyear'); //department name
390         $join = substr($joining_year ,2,4); //getting 1st two letters of department.
391         $joining_year = $request->input('joiningyear');
392
393         $roll = $request->input('role'); //department name
394         $rol = substr($roll,0,2); //getting 1st two letters of department.

```

```

395     $roll = $request->input('role');
396 $role=$request->input('role');
397     // $p_date = date("Y"); // getting current year
398 // $dates = substr($p_date,2,3);
399     // $main_rollno = $dates.$dept.$getlast_id; // concatenated
400 $main_rollno = $join.$dept.$rol.$getlast_id;
401     DB::table('hods')->where('id',$getlast_id)->update(['roll_no'=>$main_rollno])
402     ;
403     $password=$request->input('dob');
404
405     DB::table('users')->insert(
406         array(
407             'name'=>$main_rollno ,
408             'pass' => ($password),
409             'password'=> $password ,
410             'role' => $role ,
411         )
412     );
413     return view('/hod');
414 }
415 }
416 FACULTY ROLL NO GENERATE:
417 <!DOCTYPE html>
418 <html lang="en">
419 <head>
420
421     <title >Faculty Details </title >
422     <meta charset="utf-8">
423     <meta name="viewport" content="width=device-width, initial-scale=1">
424     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
425         css/bootstrap.min.css">
426     <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"
427         ></script>
428     <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
429         js"></script>
430     <style>
431     table {
432         font-family: arial, sans-serif;
433         border-collapse: collapse;
434         width: 100%;
435     }
436     td, th {
437         border: 1px solid #dddddd;
438         text-align: left;
439         padding: 8px;
440     }
441     tr:nth-child(even) {
442         background-color: #dddddd;
443     }
444 </style>
445 </head>
446 <body>
447 <form method="post" action="/faculty">
448 @csrf
449 <div class="container-fluid mt--6">
450     <div class="row">
451         <div class="col">

```

```

452 <div class="card-wrapper">
453   <!-- Custom form validation -->
454   <div class="card">
455     <!-- Card header -->
456     <div class="card-header">
457       <h3 class="mb-0">Faculty Details </h3>
458
459     </div>
460     <!-- Card body -->
461     <div class="card-body">
462       <div class="row">
463         <div class="col-lg-8">
464
465         </div>
466       </div>
467       <hr />
468       <form class="needs-validation" novalidate>
469         <div class="form-row">
470           <div class="col-md-2 mb-3">
471
472             <label>Name</label>
473             <input class="con" type="text" name="name" placeholder="
474               Name">
475             </div>
476           </div>
477           <div class="form-row">
478             <div class="col-md-2 mb-3">
479
480               <label>Email</label>
481               <input class="con" type="text" name="email" placeholder="
482                 Email">
483             </div>
484           </div>
485           <div class="form-row">
486             <div class="col-md-2 mb-3">
487
488               <label>Date of birth</label>
489               <input class="con" type="date" name="dob" placeholder="
490                 Date of birth">
491             </div>
492           </div>
493           <div class="form-row">
494             <div class="col-md-2 mb-3">
495
496               <label>Joining Year</label>
497               <input class="con" type="text" name="joiningyear"
498                 placeholder="joiningyear">
499             </div>
500           </div>
501           <div class="form-row">
502             <div class="col-md-2 mb-3">
503
504               <label>Department</label>
505               <input class="con" type="text" name="department"
506                 placeholder="Department">
507             </div>
508           </div>

```

```

508     <div class="form-row">
509     <div class="col-md-2 mb-3">
510
511         <label>role </label>
512         <input class="con" type="text" name="role" placeholder="
513             faculty">
514     </div>
515 </div>
516 <br>
517 <div class="form-group row mb-0">
518     <div class="col-md-6 offset-md-4"><br><br>
519     <!-- <div class="row text-center"> -->
520     <div class="col text-center">
521         <button type="submit" class="btn btn-primary text-center">
522             {{ --('submit') }}
523
524         </button>
525     </div>
526 </div>
527 </form><br>
528 <!-- <div class="form-row">
529     <div class="col-md-2 mb-3">
530         <label class="form-control-label" for="validationCustom01"
531             >First name</label>
532         <input type="text" class="form-control" id="
533             validationCustom01" placeholder="First name" value="
534             Mark" required>
535         <div class="valid-feedback">
536
537         </div>
538     </div>
539     <div class="col-md-2 mb-3">
540         <label class="form-control-label" for="validationCustom02"
541             >Last name</label>
542         <input type="text" class="form-control" id="
543             validationCustom02" placeholder="Last name" value="
544             Otto" required>
545         <div class="valid-feedback">
546
547         </div>
548     </div>
549     <div class="col-md-2 mb-3">
550         <label class="form-control-label" for="
551             validationCustomUsername">Username</label>
552         <input type="text" class="form-control" id="
553             validationCustomUsername" placeholder="Username" aria-
554             describedby="inputGroupPrepend" required>
555         <div class="invalid-feedback">
556
557         </div>
558     </div>

```

```

559         </div>
560 </body>
561 </html>
562
563 CONTROLLER:
564 <?php
565
566 namespace App\Http\Controllers;
567 use App\Faculty;
568 use DB;
569
570
571 use Illuminate\Http\Request;
572
573 class FacultyController extends Controller
574 {
575     public function index(){
576         // return "THIS IS HOD DASHBOARD";
577         return view('faculty3');
578     }
579     public function faculty(Request $request)
580     {
581         $faculty = new Faculty();
582         $faculty->name = $request->input('name');
583         $faculty->email= $request->input('email');
584         $faculty->date_of_birth = $request->input('dob');
585         $faculty->joining_year = $request->input('joiningyear');
586         $faculty->department = $request->input('department');
587         $faculty->role= $request->input('role');
588
589         $faculty->save(); // save method
590
591         // $p_date = date("Y"); // getting current year
592         // $dates = substr($p_date,2,3);
593         // $main_rollno = $dates.$dept.$getlast_id; // concatenated
594         $main_rollno = $join.$dept.$rol.$getlast_id;
595         DB::table('faculties')->where('id', $getlast_id)->update(['roll_no'=>
596             $main_rollno]);
597         $password=$request->input('dob');
598
599         DB::table('users')->insert(
600             array(
601                 'name'=>$main_rollno ,
602                 'pass' => ($password),
603                 'password'=> $password ,
604                 'role' => $role ,
605
606             )
607         );
608         return view('faculty');
609     }
610 }

```

### 6.3 ASSIGN SUBJECTS

subject assignment will be done head of each department .assigning subject to individual teacher will be based on their area of intrest which head of dept(HOD) will decide .

for assigning subject firstly hod will select academic year then department. after selecting department subject will be display in drop down option and then will have to select semester and lastly hod will select faculty name .

subject Assignment

academicyear

department

subjects

semesters

faculty name

**Figure 6.3: IMAGE CAPTION**

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4
5 <title>Subject Assignment</title>
6 <meta charset="utf-8">
7 <meta name="viewport" content="width=device-width, initial-scale=1">
8 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
9   css/bootstrap.min.css">
10 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"
11   ></script>
12 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
13   js"></script>
14 <style>
15 table {
16   font-family: arial, sans-serif;
17   border-collapse: collapse;
18   width: 100%;
19 }
20 td, th {
21   border: 1px solid #dddddd;
22   text-align: left;
23   padding: 8px;

```



```
81 </form>
82 </body>
83 </html>
84
85 CONTROLLER:
86 <?php
87
88 namespace App\Http\Controllers;
89 use App\Department;
90 use App\Academicyear;
91 use App\Semester;
92 use App\Subject;
93 use App\Assignsub;
94 use Illuminate\Http\Request;
95 use DB;
96 class AssignsubController extends Controller
97 {
98     public function assignsub()
99     {
100         $departments = Department::all();
101         $years = Academicyear::all();
102         $subjects = Subject::all();
103         $semesters = Semester::all();
104         return view('assignsub', compact('departments', 'years', 'semesters',
105             'subjects'));
106     }
107 }
```



## 6.4 UNIT TEST MARKS

In this module average of both unit test will be calculated and will be store in database .this value will be use come in use to generate gazzete and marksheet.

In our UT calculation there is round of value will be there like if the value is 7.5 so it will automatically generate 8marks .

DEPARTMENT OF ENGINEERING	
ROLLNO	<input type="text" value="ROLLNO"/>
CLASS	<input type="text" value="class"/>
subject	<input type="text" value="subject"/>
CLASS TEST 1	
Q.01:Attempt Any 5(10Marks)	Marks
1a)	<input type="text"/>
1b)	<input type="text"/>
1c)	<input type="text"/>
1d)	<input type="text"/>
1e)	<input type="text"/>
1f)	<input type="text"/>
Q.02:Attempt Any 1(05Marks)	
2a)	<input type="text"/>
2b)	<input type="text"/>
Q.03:Attempt Any 1(05Marks)	
3a)	<input type="text"/>
3b)	<input type="text"/>
total marks of ut1	<input type="text" value="avg"/> <input type="text" value="Total marks"/>
CLASS TEST 2	
Q.01:Attempt Any 5(10Marks)	Marks
1a)	<input type="text"/>
1b)	<input type="text"/>
1c)	<input type="text"/>
1d)	<input type="text"/>
1e)	<input type="text"/>
1f)	<input type="text"/>
Q.02:Attempt Any 1(05Marks)	
2a)	<input type="text"/>

Figure 6.4: UNIT TEST MARKSHEET

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>calculation </title>
5
6   <link rel="stylesheet" type="text/css" href="style.css">
7   <meta charset="utf-8">
8   <meta name="viewport" content="width=device-width, initial-scale=1">
9   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
10     css/bootstrap.min.css">
11   <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"
12     ></script>
13   <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
14     js"></script>
15 </head>
16 '<link rel="stylesheet" type="text/css" href="basics.css">'
17 <body>
18
19   <form action = "submit" method = "POST">
20   @csrf
21   <script type = "text/javascript">
22
23     var unit_test1;
24     function calc() {
25
26       var number1= parseInt(document.getElementById("number1").value);
27
28       if (isNaN(number1 )) {
29         alert('please enter number1 ');
30       }
31       var number2=parseInt(document.getElementById("number2").value);
32       if (isNaN(number2)) {
33         alert('please enter number2 ');
34         return;
35       }
36       var number3=parseInt(document.getElementById("number3").value);
37       if (isNaN(number3 )) {
38         alert('please enter number3 ');
39         return;
40       }
41       var number4=parseInt(document.getElementById("number4").value);
42       if (isNaN(number4 )) {
43         alert('please enter number4 ');
44         return;
45       }
46       var number5=parseInt(document.getElementById("number5").value);
47       if (isNaN(number5 )) {
48         alert('please enter number5 ');
49         return;
50       }
51
52       return;
53     }
54     var number10=parseInt(document.getElementById("number10").value);
55     if (isNaN(number10 )) {
56       alert('please enter number10 ');
57       return;
58     }
```

```

59     unit_test1 = parseInt(document.getElementById('total_ut1')).value = (number1+
        number2+number3+number4+number5+number6+number7+number8+number9+number10
        );
60
61     }
62
63 var unit_test2;
64
65     function ut2() {
66
67         var _number1= parseInt(document.getElementById("2number1").value);
68
69         if (isNaN(_number1 )) {
70             alert('please enter number1 ');
71         }
72     }
73     return;
74 }
75     var _number5=parseInt(document.getElementById("2number5").value);
76     if (isNaN(_number5 )) {
77         alert('please enter number5 ');
78         return;
79     }
80     var _number6=parseInt(document.getElementById("2number6").value);
81     if (isNaN(_number6 )) {
82         alert('please enter number6 ');
83         return;
84     }
85     var _number7=parseInt(document.getElementById("2number7").value);
86     if (isNaN(_number7 )) {
87         alert('please enter number7 ');
88         return;
89     }
90     var _number8=parseInt(document.getElementById("2number8").value);
91     if (isNaN(_number8 )) {
92         alert('please enter number8 ');
93         return;
94     }
95 function add()
96 {
97     // alert('hi ');
98     var unit_test1 = $('#total_ut1').val();
99     var unit_test2 = $('#total_ut2').val();
100
101     document.getElementById("average_ut").value = (+unit_test1 + +unit_test2)/2;
102 }
103 </script>
104 <div class="container">
105     <table class="table table-bordered">
106 <div colspan = '7'>
107         <thead>
108             <tr>
109                 <th colspan="4">DEPARTMENT OF ENGINEERING</th>
110
111             </tr>
112         </thead>
113     </div>
114     <tbody>
115
116         <div>
117             <tr>

```

```

118
119 <!--          <td >UT<input type="text" name="ut" placeholder="1 or 2"></td>
120 -->
121
122         <td >ROLLNO<input type="text" name="rollno" placeholder="ROLLNO"></td>
123         <td colspan="4">CLASS<input type="text" name="class" placeholder="
           class"></td>
124     </tr>
125     <tr >
126
127         <td colspan="4">subject<input type="text" name="subject" placeholder="
           subject"></td>
128
129         <br>
130         <!-- <td>subject:<input type="subject" name="subject" placeholder="
           subject"></td>
131     -->
132     </tr>
133
134
135     <thead>
136     <tr>
137     </div>
138
139     <th colspan = '4'> <u> CLASS TEST 1</u></th>
140     </tr>
141     </thead>
142
143     <thead>
144     <tr>
145     <th>Q.01: Attempt Any 5(10Marks)</th>
146     <th>Marks</th>
147
148     </tr>
149     </thead>
150     <input type="text" name="1b" id = "number2" placeholder="MARKS"> --></td>
151 <!--
152     <td><input type="text" name="CO" placeholder="CO"></td> -->
153 </tr>
154     <tr> <td>
155         1c)
156     </td>
157     <td>
158         <input type="text" id="number3" name="1c"></br>
159         <!-- <input type="text" name="1c" id = "number3" placeholder="MARKS">
           --></td>
160         <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
161 </tr>
162     <tr> <td>
163         1d)
164     </td>
165     <td>
166         <input type="text" id="number4" name="1d"></br>
167         <!-- <input type="text" name="1d" id = "number4" placeholder="MARKS"
           > --></td>
168         <!-- <td><input type="text" name="CO" placeholder="CO"></td>
169     -->
170
171 </tr>
172
173 <tr> <td>

```

```

174     1f)
175     </td>
176     <td>
177         <input type="text" id="number6" name="1f"></br>
178
179         <!-- <input type="text" name="1f" id = "number6" placeholder="MARKS">
180             --></td>
181     <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
182 </tr>
183
184
185     <thead>
186         <tr>
187             <th>Q.02: Attempt Any 1(05Marks)</th>
188
189         </tr>
190     </thead>
191
192 </tr>
193 <tr> <td>
194     2b)
195     </td>
196     <td>
197         <input type="text" id="number8" name="2b"></br>
198         <!-- <input type="text" name="2b" id = "number8" placeholder="MARKS">
199             --></td>
200     <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
201 </tr>
202
203     <thead>
204         <tr>
205             <th>Q.03: Attempt Any 1(05Marks)</th>
206
207         </tr>
208     </thead>
209
210     <tr> <td>
211     3a)
212     </td>
213     <td>
214         <input type="text" id="number9" name="3a" ></br>
215         <!-- <input type="text" name="3a" id = "number9" placeholder="MARKS">
216             --></td>
217     <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
218 </tr>
219 <tr> <td>
220     3b)
221     </td>
222
223     <!-- </tbody>
224 </table> -->
225 </div>
226
227 <div>
228
229     <tr>
230
231     <td>total marks of ut1</td>

```

```

232
233
234     <td>     <input type="button" value="avg" onclick="calc()"> </td>
235
236         <td><input type="text" name = "total_ut1" id = "total_ut1"
                placeholder="Total marks">     </td>
237 </tr>
238 </div>
239
240
241 <!-- <input type="text" name="total_ut2" id = "total_ut1" placeholder="Total
        Marks">
242 </tr>
243 </div>
244
245
246     <input type="button" value="avg" onclick="calc()">
247
248
249
250 </div>
251 <tr>
252 <td>
253     1a)
254 </td>
255 <td>
256 <input type="text" id="2number1" name="1a" ></br>
257 <!-- <input type="text" name="1a" id = "number1" placeholder="MARKS">
        --></td>
258 <!-- <td><input type="text" name="CO" placeholder="CO"></td>
        -->
259 </tr>
260 <tr> <td>
261     1b)
262 </td>
263 <td>
264     <input type="text" id="2number2" name="1b" ></br>
265
266     <!-- <input type="text" name="1b" id = "number2" placeholder="MARKS">
        --></td>
267
268 <!--
269     <td><input type="text" name="CO" placeholder="CO"></td> -->
270 </tr>
271 </tr>
272 <tr> <td>
273     1e)
274 </td>
275 <td>
276
277 <input type="text" id="2number5" name="1e"></br>
278     <!-- <input type="text" name="1e" id = "number5" placeholder="MARKS">
        --></td>
279
280     <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
281
282 </tr>
283 <tr> <td>
284     1f)
285 </td>
286 <td>
287     <input type="text" id="2number6" name="1f"></br>

```

```

288
289      <!-- <input type="text" name="1f" id = "number6" placeholder="MARKS">
          --></td>
290      <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
291
292 </tr>
293     <thead>
294       <tr>
295         <th>Q.02: Attempt Any 1(05Marks)</th>
296
297       </tr>
298     </thead>
299     <tr> <td>
300       2a)
301     </td>
302     <td>
303       <input type="text" id="2number7" name="2a" ></br>
304       <!-- <input type="text" name="2a" id = "number7" placeholder="MARKS"
          > --></td>
305       <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
306
307 </tr>
308
309
310     <thead>
311       <tr>
312
313         <th>Q.03: Attempt Any 1(05Marks)</th>
314
315       </tr>
316     </thead>
317     <tr> <td>
318       3a)
319     </td>
320     <td>
321       <input type="text" id="2number9" name="3a" ></br>
322       <!-- <input type="text" name="3a" id = "number9" placeholder="MARKS"
          --></td>
323       <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
324
325 </tr>
326 <tr> <td>
327       3b)
328     </td>
329     <td>
330
331       <input type="text" id="2number10" name="3b"></br>
332       <!-- <input type="text" name="3b" id = "number10" placeholder="
          MARKS"> --></td>
333       <!-- <td><input type="text" name="CO" placeholder="CO"></td> -->
334
335
336 <div>
337
338 &nbsp; ;
339 &nbsp; ;
340 &nbsp; ;
341 </div>
342
343 <tr>
344

```

```

345     <td>total marks of ut2 </td>
346
347
348     <td>     <input type="button" value="av" onclick="ut2 ()"> </td>
349
350     <td><input type="text" name = "total_ut2" id = "total_ut2"
351           placeholder="Total marks">     </td>
352 </tr>
353 </div>
354
355 </tr>
356 </tbody>
357 </table>
358 </div>
359 <div>
360
361 <td><input type="text" name = "average_ut" id = "average_ut" placeholder="
362       average_ut">     </td>
363 <td><input type="button" value="avg" onclick="add ()"></td>
364 <button type="submit">submit the data </button>
365 </div>
366
367
368 </body>
369 </html>
370
371 CONTROLLER:
372 <?php
373
374 namespace App\Http\Controllers;
375
376 use Illuminate\Http\Request;
377 use App\ut2;
378
379 class ut2Controller extends Controller
380 {
381     function ut2(Request $request)
382     {
383         $Ut = new ut2 ();
384         // $Ut ->ut=$request->input(' ut ');
385
386         $Ut ->ROLLNO=$request->input(' rollno ');
387         $Ut ->CLASS=$request->input(' class ');
388         $Ut ->Subject=$request->input(' subject ');
389         $Ut->total_ut1=$request->input(' total_ut1 ');
390         $Ut->total_ut2=$request->input(' total_ut2 ');
391         $Ut->average_ut=$request->input(' average_ut ');
392         $Ut->save ();
393
394     }
395 }

```



## 6.5 EXAM FORM GENERATE

Exam form is major and very important part of exam cell system .we implemented auto exam form generation .which has already reduce lot of manual work for both students as well exam cell staffs .

purpose of making auto form generation was to reduce manual work. due to exam form filling there was huge problem for both students as well as staffs .students needed to bunk their class and would have to stand in long queue for filling the exam form that was use to make burden for both .that's why we implemented auto exam form generation .exam form will be generated based on student's previous records which is stored in database.

### Exam Form

First name	<input type="text" value="mary/"/>	Address	<input type="text" value="jbcslu/"/>
Last name	<input type="text" value="pangarkar/"/>	Admission Date	<input type="text" value="dd / mm / yyyy"/>
Father's Name	<input type="text" value="ni/"/>	HSC/Diploma %	<input type="text" value="77/"/>
Mothers Name	<input type="text" value="kh"/>		
Phone number	<input type="text" value="7778/"/>		
Email ID	<input type="text" value="maryampangarkar259@gmail.com/"/>		

coursecode	Name of the Subject	Avg of 2 test	Theory Marks	TW	PR/OR	OR	SEM	Month and YOP	SeatNo	no.of heads in which the student has failed
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			

Figure 6.5: EXAM FORM

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <meta charset="utf-8">
7 <meta name="viewport" content="width=device-width, initial-scale=1">
8 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
9 css/bootstrap.min.css">
10 <meta http-equiv="X-UA-Compatible" content="ie=edge">
11 <title >
12 Exam Form</title >
13 <!-- Font Icon -->
14 <link rel="stylesheet" href="fonts/material-icon/css/material-design-ionic-
15 font.min.css">
16 <link rel="stylesheet" href="vendor/nouislider/nouislider.min.css">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/
css/bootstrap.min.css">

```

```

17 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js
   ></script>
18 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.
   js"></script>
19 <!-- Main css -->
20 <link rel="stylesheet" href="css/style1.css">
21 <title>Exam Form</title>
22 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap
   /3.3.6/css/bootstrap.min.css"/>
23 </head>
24 <body>
25
26 <div class="container">
27 <h1>Exam Form</h1>
28 <form method="post" action="/examform">
29     @csrf
30
31 <div class="main">
32
33
34 <label for="Admission" class="required col-
   lg-4">Admission Date</label>
35 <input class="col-lg-6" type="date" name="
   Admission" id="first_name" value={{
   $auth_user->Admission}}/>
36 </div>
37 <div class="form-group row">
38 <label for="HSC/Diploma %" class="required
   col-lg-4">HSC/Diploma %</label>
39 <input class="col-lg-6" type="text" name="
   marks" id="last_name" value={{ $auth_user
   ->marks}}/>
40 </div>
41 <!--
42 --> <div class="form-group row">
43 <!-- <label for="fathers_name" class="
   required col-lg-4">Father's Name</label>
44 <input class="col-lg-6" type="text" name="
   fathers_name" id="Father" />
45 </div -->
46 <!-- <div class="col-md-6">
47 <div class="form-group">
48 <div class="form-select">
49 <div class="label-flex ">
50 <input class="col-lg-6" type="textarea"
   name="Address" id="add" />
51 <label for="Address" >Address For
   Communication</label>
52 -->
53 <!-- <input type="textarea" col-lg-6 name
   ="Address" id="Address" />
54 --> <!-- <a href="#" class="form-link">
   Lunch detail</a -->
55
56
57
58 </div>
59 </div>
60 </div>
61 </div>
62 </form>

```

```

63         </div>
64     </div>
65 </div>
66
67 </div>
68 </form>
69
70 <table class="table table-striped table-bordered">
71 <div class="dropdown">
72
73     <tr>
74     <th>coursecode </th>
75     <div class="container box">
76
77
78
79
80
81
82     <th>Name of the Subject</th>
83     <div class="container box">
84
85
86
87 </div>
88
89     <th>Avg of 2 test </th>
90     <th>Theory Marks </th>
91     <th>TW</th>
92     <th>PR/OR</th>
93     <th>OR</th>
94     <th>SEM</th>
95     <th>Month and YOP</th>
96     <th>SeatNo </th>
97     <th>no.of heads in which the student has failed </th>
98 </tr>
99
100
101 <option>Applied Mathematics-3</option>
102 <option>Digital Logic Design And Analysis </option>
103 <option>Discrete Mathematics</option>
104 <option>Electronic Circuits & Communication Fundamentals</option>
105 <option>Data Structures </option>
106 <option>Digital System Lab</option>
107 <option>Basic Electronics Lab</option>
108 <option>Data Structure Lab</option>
109 <option>OOPM(java) Lab</option>
110 </select>
111
112 <!-- Database Management System -->
113 <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
td>X</td> <td>II </td><td contenteditable="true"></td> <td
contenteditable="true"></td> <td contenteditable="true"></td></tr>
</div>
114
115
116 <tr><td><select >
117 <option>CSC301</option>
118 <option>CSC302</option>
119 <option>CSC303</option>

```

```

120     <option>CSC304</option>
121     <option>CSC305</option>
122     <option>CSL301</option>
123     <option>CSL302</option>
124     <option>CSL303</option>
125     <option>CSL304</option>
126 </select></td></td>
127 <select>
128     <option>Applied Mathematics –3</option>
129     <option>Digital Logic Design And Analysis</option>
130     <option>Discrete Mathematics</option>
131     <option>Electronic Circuits & Communication Fundamentals</option>
132     <option>Data Structures</option>
133     <option>Digital System Lab</option>
134     <option>Basic Electronics Lab</option>
135     <option>Data Structure Lab</option>
136     <option>OOPM(java) Lab</option>
137 </select>
138
139     <!-- Database Management System -->
140     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
td>X</td> <td>II</td><td contenteditable="true"></td> <td
contenteditable="true"></td> <td contenteditable="true"></td></tr>
</div>
141
142
143
144 <!--Management System -->
145     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
td>X</td> <td>II</td><td contenteditable="true"></td> <td
contenteditable="true"></td> <td contenteditable="true"></td></tr>
</div>
146
147     <tr><td><select>
148     <option>CSC301</option>
149     <option>CSC302</option>
150     <option>CSC303</option>
151     <option>CSC304</option>
152     <option>CSC305</option>
153     <option>CSL301</option>
154     <option>CSL302</option>
155     <option>CSL303</option>
156     <option>CSL304</option>
157 </select></td></td>
158 <select>
159     <option>Applied Mathematics –3</option>
160     <option>Digital Logic Design And Analysis</option>
161     <option>Discrete Mathematics</option>
162     <option>Electronic Circuits & Communication Fundamentals</option>
163     <option>Data Structures</option>
164     <option>Digital System Lab</option>
165     <option>Basic Electronics Lab</option>
166     <option>Data Structure Lab</option>
167     <option>OOPM(java) Lab</option>
168 </select>
169
170     <!-- Database Management System -->
171     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <

```

```

172         <td>X</td> <td>II </td><td contenteditable="true"></td> <td
173         contenteditable="true"></td> <td contenteditable="true"></td></tr>
174     <tr><td><select>
175         <option>CSC301</option>
176         <option>CSC302</option>
177         <option>CSC303</option>
178         <option>CSC304</option>
179         <option>CSC305</option>
180         <option>CSL301</option>
181         <option>CSL302</option>
182         <option>CSL303</option>
183         <option>CSL304</option>
184     </select></td><td>
185     <select>
186         <option>Applied Mathematics –3</option>
187         <option>Digital Logic Design And Analysis </option>
188         <option>Discrete Mathematics</option>
189         <option>Electronic Circuits & Communication Fundamentals </option>
190         <option>Data Structures </option>
191         <option>Digital System Lab</option>
192         <option>Basic Electronics Lab</option>
193         <option>Data Structure Lab</option>
194         <option>OOPM(java) Lab</option>
195     </select>
196
197     <!-- Database Management System -->
198     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
199     true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
200     td>X</td> <td>II </td><td contenteditable="true"></td> <td
201     contenteditable="true"></td> <td contenteditable="true"></td></tr>
202 </div>
203 <tr><td><select>
204     <option>CSC301</option>
205     <option>CSC302</option>
206     <option>CSC303</option>
207     <option>CSC304</option>
208     <option>CSC305</option>
209     <option>CSL301</option>
210     <option>CSL302</option>
211     <option>CSL303</option>
212     <option>CSL304</option>
213 </select></td><td>
214     <select>
215         <option>Applied Mathematics –3</option>
216         <option>Digital Logic Design And Analysis </option>
217         <option>Discrete Mathematics</option>
218         <option>Electronic Circuits & Communication Fundamentals </option>
219         <option>Data Structures </option>
220         <option>Digital System Lab</option>
221         <option>Basic Electronics Lab</option>
222         <option>Data Structure Lab</option>
223         <option>OOPM(java) Lab</option>
224     </select>
225     <tr><td><select>
226         <option>CSC301</option>
227         <option>CSC302</option>
228         <option>CSC303</option>
229         <option>CSC304</option>

```

```

227     <option>CSC305</option>
228     <option>CSL301</option>
229     <option>CSL302</option>
230     <option>CSL303</option>
231     <option>CSL304</option>
232 </select></td></td>
233 <select>
234 <option>Applied Mathematics-3</option>
235 <option>Digital Logic Design And Analysis</option>
236 <option>Discrete Mathematics</option>
237 <option>Electronic Circuits & Communication Fundamentals</option>
238 <option>Data Structures</option>
239 <option>Digital System Lab</option>
240 <option>Basic Electronics Lab</option>
241 <option>Data Structure Lab</option>
242 <option>OOPM(java) Lab</option>
243 </select>
244     <!-- Database Management System -->
245     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
td>X</td> <td>II</td><td contenteditable="true"></td> <td
contenteditable="true"></td> <td contenteditable="true"></td></tr>
</div>
246
247
248 <select>
249 <option>Applied Mathematics-3</option>
250 <option>Digital Logic Design And Analysis</option>
251 <option>Discrete Mathematics</option>
252 <option>Electronic Circuits & Communication Fundamentals</option>
253 <option>Data Structures</option>
254 <option>Digital System Lab</option>
255 <option>Basic Electronics Lab</option>
256 <option>Data Structure Lab</option>
257 <option>OOPM(java) Lab</option>
258 </select>
259
260     <!-- Database Management System -->
261     <!-- <span class="dropdown-menu"></span> --></td> <td contenteditable="
true"></td> <td contenteditable="true"></td> <td>X</td> <td>X</td> <
td>X</td> <td>II</td><td contenteditable="true"></td> <td
contenteditable="true"></td> <td contenteditable="true"></td></tr>
</div>
262
263 </div>
264
265
266 </div></div>
267
268 </div>
269     {{ --('submit') }}
270
271         </button>
272     </div>
273 <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.
js"></script>
274 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.
min.js"></script>
275 </body>
276 </html>
277

```

```
278 CONTROLLER:
279 <?php
280
281 namespace App\Http\Controllers;
282 use App\Subject;
283 use App\Semester;
284 use App\Examform;
285 use DB;
286
287 use Illuminate\Http\Request;
288
289 class ExamformController extends Controller
290 {
291     public function index(){
292         // return view('examform');
293
294
295         $selects = DB::table('subjects')->groupby('coursecode')->get();
296         return view('examform')->with('selects', $selects);
297
298     }
299 }
300
301 }
302 }
```



## Chapter 7

### System Testing

The aim of the system testing process was to determine all defects in our project. The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not. We have done integration testing as well as unit testing.

a. **INTEGRATION TESTING** In this type of testing we test various integration of the project module by providing the input. The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

b. **UNIT TESTING** Unit testing is undertaken when a module has been created and successfully reviewed. In order to test a single module we need to provide a complete environment i.e. besides the module we would require

- The procedures belonging to other modules that the module under test calls.
  - Non local data structures that module accesses.
  - A procedure to call the functions of the module under test with appropriate parameters
- Unit testing was done on each and every module that is described under module description.

#### 7.1 Test Cases and Test Results

Test ID	Test Case Title	Test Condition	System Behavior	Expected Result
T01	auto rollno gen	personal details	personal information saved	unique no generated
T02	auto form gen	previous details	matched details based on previous data	form generated successfully
T03	gazzete generation	marks obtained	calculated marks	successfully generated marks
T04	marksheet generation	obtained info from gazzete	checked by institute	successfully generated



## 7.2 Sample of a Test Case

**Title:** auto rollno generation

**Description:** A System should generate a unique no for each person who takes admission in institute for uniquely identification based on its personal information.

*Precondition:* user personal details should be present in database.

*Assumption:* a supported web browser is being used.

**Test Steps:**

1. admin will store personal details in database.
2. based on information a unique no will generate.
3. a user can use this roll no to login to system.

**Expected Result:** a system which store personal information generates unique number which can be use for login the system.

**Actual Result:** Roll no generated for each one.

**Title:** auto form generation

**Description:**A System should generate a exam-form for students automatically based on his/her previous academics results.

*Precondition:* students academics details should be present in database.

*Assumption:*form generation successfully.

**Test Steps:**

1. form will generate automatically based on previous data..
2. student will login by his roll no from anywhere and will fill the form .

**Expected Result:** previous details of each student should be present anywhere.

**Actual Result:** form generated and submitted successfully.

**Title:** gazzete generation

**Description:**A System should generate a gazzete for students automatically based on his/her results.

*Precondition:* students marks should be present in database for calculation and generation of gazzete

*Assumption:* gazzete generation successfully.

**Test Steps:**

1. form will generate automatically based on previous data.
2. student will login by his roll no from anywhere and will fill the form .

**Expected Result:** gazzete should me generated properly with accurate calculated marks.

**Actual Result:** gazzete generated successfully.

**Title:** marksheet generation

**Description:** A System should generate a marksheet for students automatically based on his/her results.

*Precondition:* A System should generate a marksheet for students au-tomatically based on his/her results.

*Assumption:* marksheet generation successfully.

**Test Steps:**

1. marksheet will generate automatically.
2. student will login by his roll no from anywhere and he will be ableto access marksheet from anywhere .

**Expected Result:** marksheet should me generated properly with accurate calculated marks.

**Actual Result:** marksheet generated successfully.

### 7.2.1 Software Quality Attributes

Availability-1 : The system shall be available to users all the time.

Availability-2 : The system shall always have something to function and always pop up error messages in case of component failure.

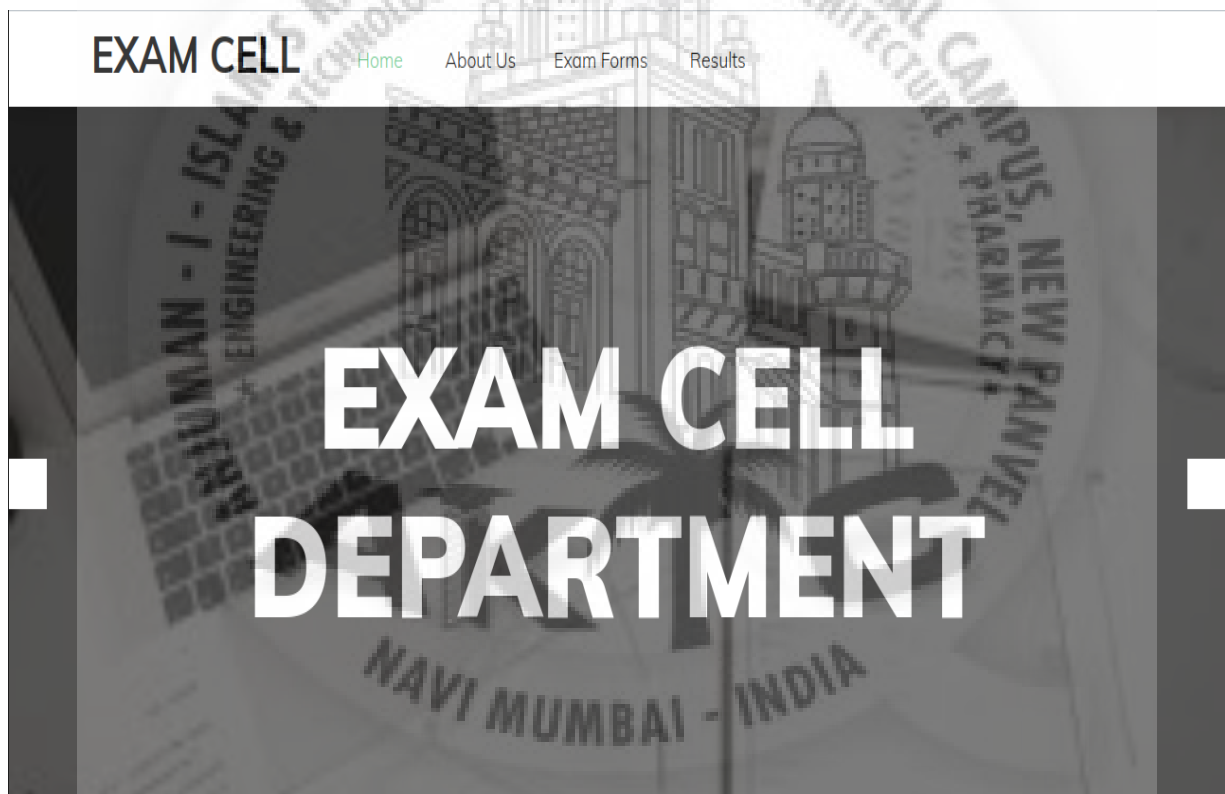
Efficiency-1 : The system shall generate the correct results .

Efficiency-2 : The system shall provide the right tools to support all its features.

## Chapter 8

### Screenshots of Project

#### 8.1 LANDING PAGE



## EXAM CELL

[Home](#)[About Us](#)[Exam Forms](#)[Results](#)

## What Exam Cell Do's?????



### Exam Form Filling

Forms of the Students has been filled manually since long but now onwards the form will be filled digitally.



### Result Generation

Individual results are been generated by the Exam Cell every Semester of reval/regular and photocopy.



### Gazette Generation

Before the generation of the Result a gazette is prepared which contains all the marks of the individual.

## 8.2 LOGIN

### Login

name

Password

### 8.3 EXAM FORM

#### Exam Form

First name	<input type="text" value="mary/"/>	Address	<input type="text" value="jbcsti/"/>
Last name	<input type="text" value="pangarkar/"/>	Admission Date	<input type="text" value="dd / mm / yyyy"/>
Father's Name	<input type="text" value="ni/"/>	HSC/Diploma %	<input type="text" value="77/"/>
Mothers Name	<input type="text" value="kh"/>		
Phone number	<input type="text" value="7778/"/>		
Email ID	<input type="text" value="mariyampangarkar259@gmail.com/"/>		

coursecode	Name of the Subject	Avg of 2 test	Theory Marks	TW	PR/OR	OR	SEM	Month and YOP	SeatNo	no.of heads in which the student has failed
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			
CSC301	Applied Mathematics-3			X	X	X	II			

### 8.4 ADMIN DASHBOARD

Admin-DASHBOARD

- Dashboard
- Student Information
- HOD Information
- Faculty Information

Dashboard / Overview

EXAM-CELL

## 8.5 HOD DETAILS

### HOD Details

Name	Email	Date of birth	Joining Year	Department	role
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="joiningyear"/>	<input type="text" value="Department"/>	<input type="text" value="roll"/>

## 8.6 STUDENT DETAILS

### Student Details

Name	Email	Date of birth	Academic Year	Department	School
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="AcademicYear"/>	<input type="text" value="Department"/>	<input type="text" value="school"/>

role

## 8.7 FACULTY DETAILS

### Faculty Details

Name	Email	Date of birth	Joining Year	Department	role
<input type="text" value="Name"/>	<input type="text" value="Email"/>	<input type="text" value="dd / mm / yyyy"/>	<input type="text" value="joiningyear"/>	<input type="text" value="Department"/>	<input type="text" value="faculty"/>

## 8.8 HOD DASHBOARD

HOD-DASHBOARD

Dashboard
Dashboard / Overview

Assign Subjects

EXAM-CELL

## 8.9 FACULTY DETAILS

subject Assignment

academicyear

department

subjects

semesters

faculty name

submit

## 8.10 SUBJECT ASSIGNMENT

DEPARTMENT OF ENGINEERING	
ROLLNO <input type="text" value="ROLLNO"/>	CLASS <input type="text" value="class"/>
subject <input type="text" value="subject"/>	
<b>CLASS TEST 1</b>	
<b>Q.01:Attempt Any 5(10Marks)</b>	<b>Marks</b>
1a)	<input type="text"/>
1b)	<input type="text"/>
1c)	<input type="text"/>
1d)	<input type="text"/>
1e)	<input type="text"/>
1f)	<input type="text"/>
<b>Q.02:Attempt Any 1(05Marks)</b>	
2a)	<input type="text"/>
2b)	<input type="text"/>



## 8.11 QUESTION PAPER FORMAT

DEPARTMENT OF ENGINEERING	
ROLLNO: <input type="text" value="ROLLNO"/>	CLASS: <input type="text" value="class"/>
Subject: <input type="text" value="Subject"/>	
<b>CLASS TEST 1</b>	
<b>Q.01: Attempt Any 5(10Marks)</b>	<b>Marks</b>
1a)	<input type="text"/>
1b)	<input type="text"/>
1c)	<input type="text"/>
1d)	<input type="text"/>
1e)	<input type="text"/>
1f)	<input type="text"/>
<b>Q.02: Attempt Any 1(05Marks)</b>	
2a)	
2b)	
<b>Q.03: Attempt Any 1(05Marks)</b>	
3a)	
3b)	
total marks of ut1	<input type="text" value=""/>
<b>CLASS TEST 2</b>	
<b>Q.01: Attempt Any 5(10Marks)</b>	<b>Marks</b>
1a)	<input type="text"/>
1b)	<input type="text"/>
1c)	<input type="text"/>
1d)	<input type="text"/>
1e)	<input type="text"/>
1f)	<input type="text"/>
<b>Q.02: Attempt Any 1(05Marks)</b>	
2a)	

## 8.12 STUDENT PERSONAL DETAILS

### STUDENT PERSONAL DETAILS

First name	<input type="text" value="j"/>	Address	<input type="text" value="nkn"/>
Roll no	<input type="text"/>	Admission Date	<input type="text" value="03/09/2020"/>
Last name	<input type="text"/>	HSC/Diploma %	<input type="text" value="bhbj"/>
Father's Name	<input type="text"/>	Upload Document	
Mothers Name	<input type="text"/>		
Phone number	<input type="text"/>		
Email ID	<input type="text"/>	select file for upload <input type="button" value="Browse..."/> 4.jpeg	
		jpeg,jpg,png,gif	
<input type="button" value="submit"/>			

## Chapter 9

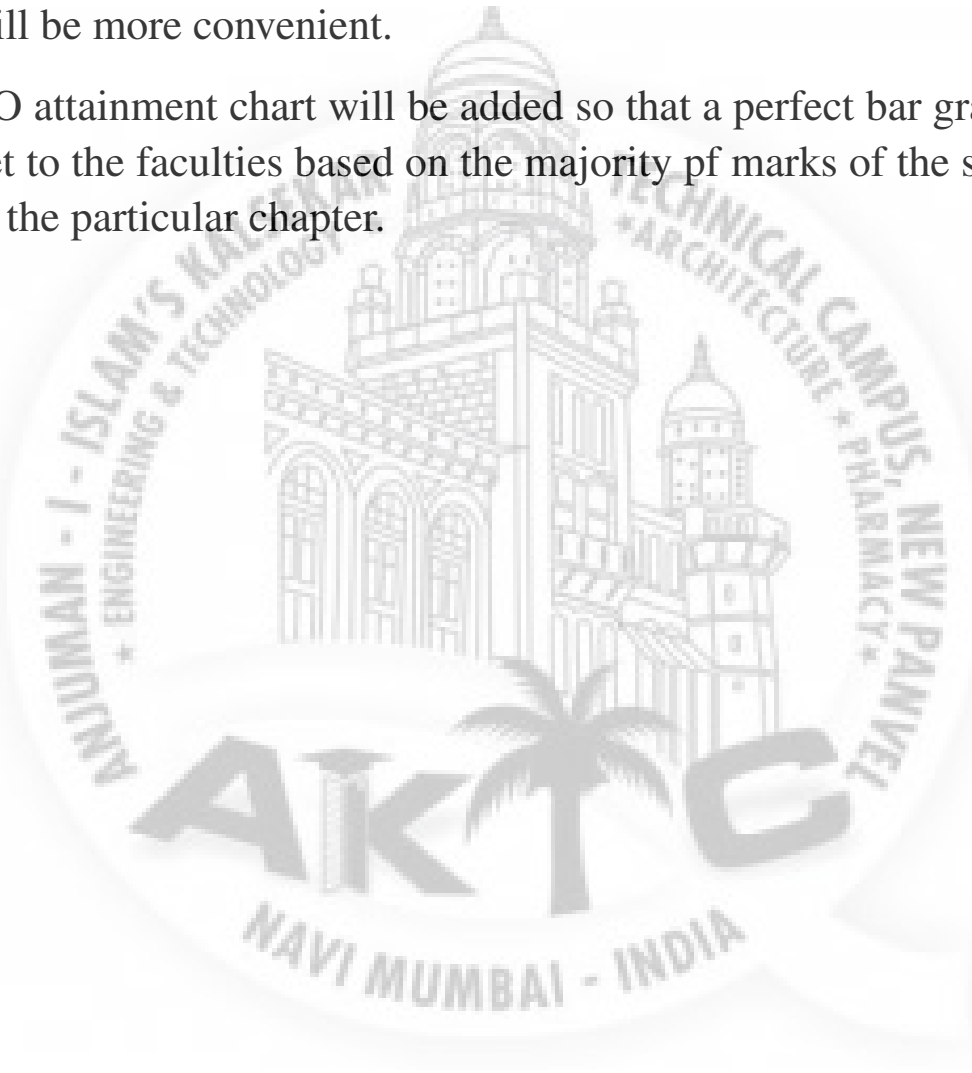
# Conclusion and Future Scope

### 9.1 Conclusion

Considering the extremely interwoven nature of exam cell activities, an automated solution to important activities like result generation and form filling would greatly benefit the institution. Exam Cell Automation will Ultimately reduce the manpower, workload on Students as well as on Staff, and on Exam Cell. It will benefit all the educational institutes by reducing the complexity involved while filling the exam form, making the result generation process easier and other works, because its a web site so we can access it from anywhere like student can fill his exam form remotely. He does not need to come to college and student can see his previous results etc faculty can examine all information regarding students. This also reduces the manual work and also save lot of time.

## 9.2 Future Scope

- Sitting arrangement is one of the important part which can be implemented in our project for every institute to make easy for allotment of seats.
- This project is a web based system which will be made adroid so that the user would be able to carry the app in their phone which will be more convenient.
- CO attainment chart will be added so that a perfect bar graph can get to the faculties based on the majority pf marks of the students in the particular chapter.



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