A PROJECT REPORT

ON

PLATFORM FOR CLIENTS AND DEVELOPERS

Submitted to

UNIVERSITY OF MUMBAI

In Partial Fulfilment of the Requirement for the Award of

BACHELOR'S DEGREE IN
COMPUTER ENGINEERING
BY

SHAH ANWAR AHMED MUNIR ALI AABIDA KHATOON	11CO37
KARELE MEHRAJ RAZA MEHMOOD NARGIS	13CO79
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UNDER THE GUIDANCE OF
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Plot No. 2 3, Sector - 16, Near Thana Naka,
Khandagaon, New Panvel - 410206

2017-2018
AFFILIATED TO
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A PROJECT II REPORT
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CERTIFICATE

This is certify that the project entitled

Platform for Clients and Developers

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 2017-2018, under our guidance.

Date: / /

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SHAH ANWAR AHMED MUNIR ALI

KARELE MEHRAJ RAZA MEHMOOD

ALI KABIR

Project II Approval for Bachelor of Engineering

This project entitled ***P̈latform for Clients and Developers¨*** by ***SHAH ANWAR AHMED MUNIR ALI (Roll No: 11CO37), KARELE MEHRAJ RAZA MEHMOOD (Roll No: 13CO79), ALI KABIR (Roll No: 12CO19)*** is approved for the degree of ***Bachelor of Engineering in Department of Computer Engineering.***

Examiners

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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

Platform for Clients and Developers Accompanied by the rapid growth of Information Technology Engineering, android mobiles are now used widely in a variety of fields.However, most applications are designed for normal persons and are designed to make people's life easier.Clients Developers On Cloud enables ubiquitous access of data and information by college clients and developers.Using this service developers have the facility to dynamically avail clients of varied branches with documents, notes, information, program codes, data files, audios, videos, and notification related to subject matter regarding project development at any time and place.The application has two sections majorly, one being the developers end and other is Clients end; both having their own separate utilities and responsibilities.Developers can remotely access the application and download and upload all types of files whereas Clients can also download and upload the all types of files from the application by having a ubiquitous access of data and information.Push Notification helps clients to be aware of notices regarding project development related activities, circulars and all the sudden events and important information to be shared with all the clients of the colleges.Forum has been implements in the application for doubts and discussion between developers and clients where a Clients can raise a doubt about the subjects related project development and developers can reply to it thus removing any miscommunication between developers and clients.

Keywords: Project Repositories, Digital Material, Interest Match- ing Engine, Educational Resources, Cloud, Push Notification, Fo- rum, Moodle.

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Chapter 1

Introduction

PLATFORM FOR CLIENTS AND DEVELOPERS

Accompanied by the rapid growth of Information Technology Engineering, android mobiles are now used widely in a variety of fields. However, most applications are designed for normal persons and are designed to make people's life easier. Clients Developers On Cloud enables ubiquitous access of data and information by college clients and developers. Using this service developers have the facility to dynamically avail clients of varied branches with documents, notes, information, program codes, data files, audios, videos, and notification related to subject matter regarding project development at any time and place. The application has two sections majorly, one being the developers end and other is Clients end; both having their own separate utilities and responsibilities. Developers can remotely access the application and download and upload all types of files whereas Clients can also download and upload the all types of files from the application by having a ubiquitous access of data and information. Push Notification helps clients to be aware of notices regarding project development related activities, circulars and all the sudden events and important information to be shared with all the clients of the colleges. Forum has been implements in the application for doubts and discussion between developers and clients where a Clients can raise a doubt about the subjects related project development and developer can reply to it thus removing any miscommunication between developers and clients.

1.1 Purpose

A. This project involves the development of an application which can be categorized into two sections.

B. The first section mainly helps the developers to download and upload all kinds of files like documents, instant camera images/videos while the second module will help the clients to download and upload the all kinds of files.

C. Apart from this push notification will help clients to receive the notices of any sudden events and important information regarding project development at any time and place.

D. Apart from this push notification will help clients to receive the notices of any sudden events and important information regarding project development at any time and place.

E. The second module involves the development of an app that has push notifications which is implemented using Google cloud messaging integrated in push-bots a third party application software.

F. Forum which is held for doubts and discussion is open source php scripts implemented with all its features in web view of the android.

1.2 Project Scope

A. In future this project can be expanded by adding the code authentication module.

B. This module checks the authentication of the project which is been uploaded by the clients.

C. This module ensures the institute that the project is genuine and should be upload on the server Code authentication module consist of the environment to execute the code and check its authenticity.

D. For this we have to create a web application,java,android environment to test the software on this web application.

1.3 Project Goals and Objectives

1.3.1 Goals

A. Seamless communication.

B. Tracks of projects can be maintained.

C. Stand alone Platform to separately maintain track of the data and time-line of the overall project construction to the clients as well as the developers.

D. Supports maximum file format.

1.3.2 Objectives

A. To give developers the facility of file sharing from remote location using the application.

B. To give clients the facility of downloading and uploading the files from remote location using the application.

C. Push Notification giving the authority to admin for dynamically sending notices to Clients and developers of sudden events.

D. Also giving the developers the facility of uploading instant camera image/video.

E. Forums for having a profound doubts and discussion.

1.4 Organization of Report

In Chapter 1, we have considered Project overview under which we have explained various important terminologies like introduction of the project, motivation (what exactly motivates us to create travel guide application),goals of this project.

In chapter 2, We have discussed about various papers that we have referred for our project, we have mentioned the description, pros and cons, and how to overcome the problems of each paper. 3 papers have been referred before the development of this project.

In chapter 3, We have done with the project planning in which every members' capabilities and responsibilities have been detailed. Assumptions and constraints have been discussed and project management approach has been given and also the ground rules for the project has been detailed.

In Chapter 4, We have discussed about the requirement analysis, under which we have discussed about platform requirement(supporting OS for the software), Software requirement and hardware requirement along with feasibility study.

In Chapter 5, We can see the system design and its architecture, various diagrams can be seen in this chapter which represent the software, diagrams included are System architecture, class diagram, sequence diagram, component diagram and deployment diagram.

In Chapter 6, We discussed about the implementation details of the system. This part contains details of the implementation of various modules. In short we describe how the system works.

In Chapter 7, We have shown the test cases and results along with analytical discussion. This part contains the results of the output of our project.

In Chapter 8, We have shown various screenshots of the project.

In Chapter 9,We have concluded the whole project and future scope along with the limitations. Followed by references and appendix.

Chapter 2

Literature Survey

2.1 Institutional Repository Digital Object Meta-data Enhancement Re-architecting1

We present work undertaken at our institutional repository to enhance meta-data and re-organize digital objects according to new information architecture, in an effort to minimize administra- tive object management and processing, and improve object discovery and use. This work was partly motivated by the launch of a new discovery platform at our institution, which aggregates meta-data and full text from our four open access repositories into a cohesive, consistent, and enhanced searching and browsing experience. The platform provides digital object identifier (DOI) assignment, meta-data access via various formats, and an open meta-data and full text application program interface (API) for researchers, among other features. Functionality of these platform features relies heavily on accurate object representation and meta-data. This work facilitates and improves the discovery and engagement of the diverse digital objects avail- able from our institution, so they can be used and analyzed in new, flexible, and innovative ways by a myriad of communities and disciplines.

2.1.1 Advantages of Paper

a. Phone number can be entering either by voice or you can select it from contact list.

2.1.2 Disadvantages of Paper

a. This Repository is lack of an authority system, including the balance of meta-data consistency and accuracy.

b. No evaluation of OC user feedback received since launch, with the goal to prioritize new features, abilities, and enhancements in the next development cycle.

2.1.3 How to overcome the problems mentioned in Paper

a. There Should be authority system which balances the meta-data consistency and accuracy.

b. There Should be authority system which balances the meta-data consistency and accuracy.

2.2 Educational Repositories

Educational repositories of Digital Educational Material and Learning Objects allow teachers and students to store and retrieve educational resources, to be used in virtual teaching and learning environments as well as in face-to-face educational spaces. They are also an impor- tant means of disseminating and evaluating the quality of educational resources produced by teachers. The quality of these resources largely relies on guidelines and policies issued by ed- ucational institutions and supplied to their teachers, so that these resources can be created with an adequate level of quality and deployed in different learning management systems. The ob- jective of this study is to explore to what extent Ecuadorian universities make use of educational repositories of Digital Educational Material, specialized repositories of Learning Objects and the way in which they have evolved over the last five years. The study also helps to identify barriers and factors that hinder their use. It is expected that the conclusions drawn from this analysis will permit the design of strategies aimed to promote the creation and use of quality digital educational materials.

2.2.1 Advantages of Paper

a. Enter phone number by speech or select contact from contact list. As user presses select contact here by selecting name of person it gives all phone num bers of that person in phone contact list box. Now it is possible to send sms to all numbers of same person on one click which results in reducing time of searching each number.

2.2.2 Disadvantages of Paper

a. Lack of collection of information about the standard of meta-data used by universities.

b. No collection of information on licensing of the DEM (Digital Education Material) form.

c. No analyze assessment models for the determination of the quality of the Learning object (LO).

2.2.3 How to overcome the problems mentioned in Paper

a. Collection of the study material should be done at university level.

b. Licensed Digital Education Material should be collected.

c. Analyze assessment models for the determination of the quality of the Learning object (LO).

2.3 The Study On Constructing Institutional Repository Of University

By the study of the early development and actual situation of the institutional repository as while as the specific situation in our country's universities, the article comes up with the significance of constructing the institutional repository, including academic information can be stored for a long, expand the scope of the impact of university research and promotion of university research and teaching development. What's more, there have some problems which exist and need to be considered during the process of constructing. Aiming at these problems which include data collection, choice of the constructing platform, it provides some solutions, introduces several well-known software and the basic method of constructing the institutional repository from analysis to design and finally to achieve the system.

2.3.1 Advantages of Paper

a. Developed Speech recognizer system tested for a SMS sending application and found that it recognizes the speech to an accuracy of more than 90.

2.3.2 Disadvantages of Paper

a. this Digital Repository does not preserve the projects of the students.

b. Uploading scholarly information unlimited,without the audit or rough audit, makes the repository became crude and at will on contents.

2.3.3 How to overcome the problems mentioned in Paper

a. A Section of Project Submission should be added so that student can upload their projects.

b. Every Digital education material should be audited and authorized.

2.4 Planning and Implementation of Institutional Repository

Institutional Repositories (IR) are developed primarily for collecting, preserving and disseminating the intellectual output of an institution. This knowledge assists in sharing and learning of an institution. For the successful set up of an Institutional Repository, strategic planning is required with a predetermined goal and scope as well. This paper is a case study of setting up a digital Institutional Repository at Maharashtra Education Society's Institute of Management and Career Courses [MES's IMCC], Pune an Indian Management Institute using the open source software D-space. The basic objective of this paper is to provide a road-map for setting up an institutional repository in an academic institution. The paper also discusses the role of librarian in setting up a digital Institutional Repository, problems faced and major milestones to cover in the venture.

2.4.1 Advantages of Paper

a. Multiple contact selection manually.

2.4.2 Disadvantages of Paper

a. No communication between student or Users in this digital repository.

b. No direct registration of the project.

c. No Validation of the project.

2.4.3 How to overcome the problems mentioned in Paper

a. There Should be authority system which balances the meta-data consistency and accuracy.

b. There should be OC user feedback with new feature, abilities.

Chapter 3

Project Planning

3.1 Members and Capabilities

Table 3.1: Table of Capabilities

SR. No	Name of Member	Capabilities
1	Karele Mehraj	Database, UI Design
2	Shah Anwar	Modules Integration
3	Ali Kabir	System Testing

3.2 Roles and Responsibilities

Table 3.2: Table of Responsibilities

SR. No	Name of Member	Role	Responsibilities
1	Karele Mehraj	Team Leader	UI Design
2	Shah Anwar	Team Member	Modules Integration
3	Ali Kabir	Team Member	System Testing

3.3 Assumptions and Constraints

1. Assumptions
   The team member should know the andriod coding.
   To deveople a system better available in the market.
   No significant changes in technology to change our system.

2. Constraints
   The project should be completed before the deadline.
   The module which is to be added should be known in advance.
   The user should be able to understand how the system works

3.4 Project Management Approach

We have use Agile methadology for the development of this project.The Agile Project Management Process is a value-centered methods of project management that allows projects to get processed in small phases or cycles. The methodology is one that is extremely flexible and projects that exhibit dynamic traits would benefit from this process as you would find that project managers working in this environment treat milestones the goal being to continuously adapt to abrupt changes from our project guide feedback.

3.5 Ground Rules for the Project

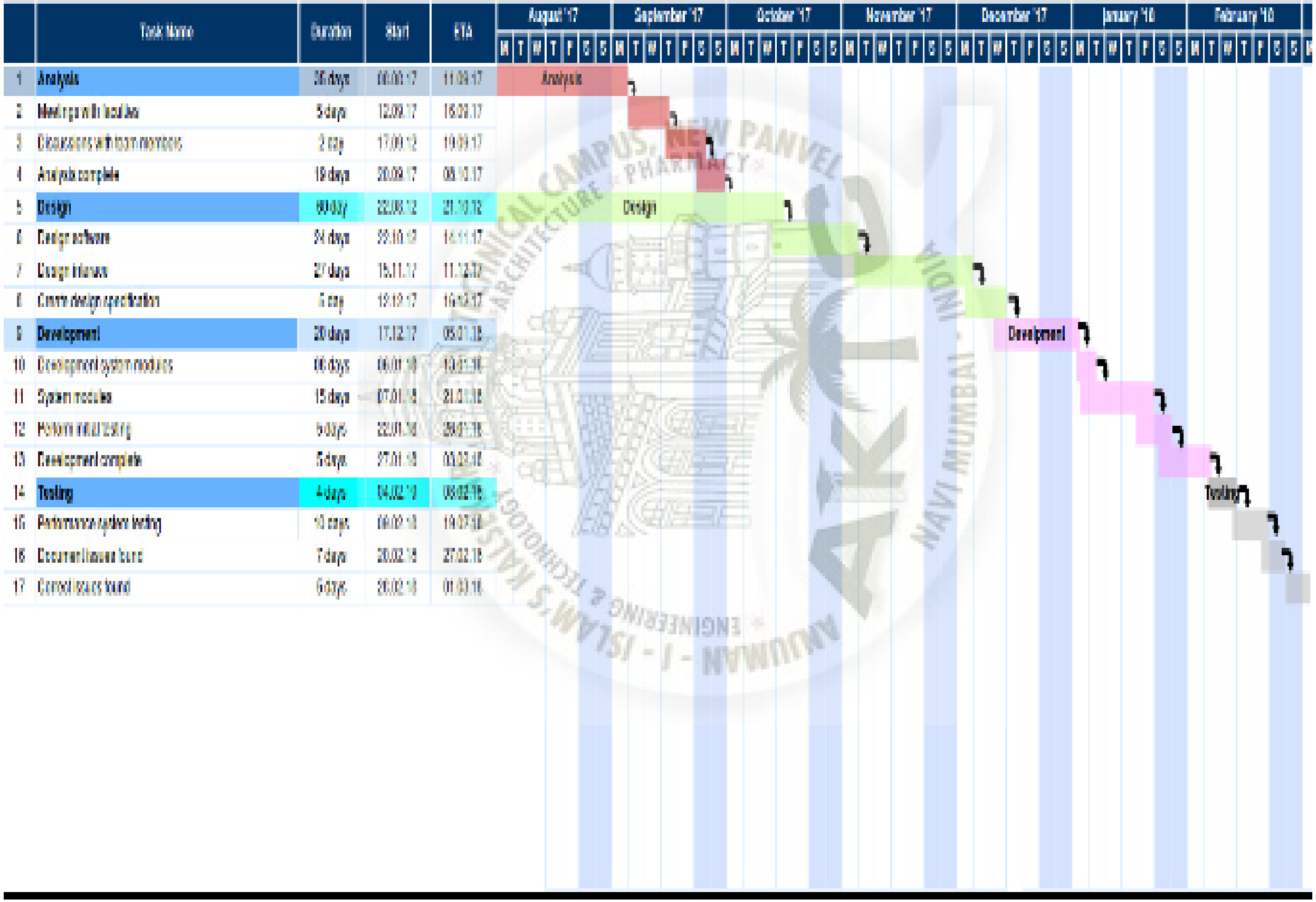
1. We treat each other with respect.
2. We intend to develop personal relationships to enhance trust and open communication.
3. We value constructive feedback. We will avoid being defensive and give feedback in a constructive manner.
4. As team members, we will pitch in to help where necessary to help solve problems and catch-up on behind schedule work.
5. Additional meetings can be scheduled to discuss critical issues or tabled items upon discussion and agreement with the team leader.
6. One person talks at a time; there are no side discussions
7. When we pose an issue or a problem, we will also try to present a solution.

3.6 Project Budget

The budget for this project is very low as most of the tools we have use are open source.Following are the budget for the project

1. Operating System:linux mint (Open Source).
2. IDE:Andriod Studio (Open Source).
3. API:Google SR API. (Open Source)

3.7 Project Timeline



	Task Name	Duration	Start	ETA
1	Analysis	36 days	06.08.17	11.09.17
2	Meetings with faculties	5 days	12.09.17	16.09.17
3	Discussions with team members	2 day	17.09.17	18.09.17
4	Analysis complete	18 days	20.09.17	08.10.17
5	Design	60 days	22.08.17	21.10.17
6	Design software	24 days	22.10.17	14.11.17
7	Design interface	27 days	15.11.17	11.12.17
8	Create design specification	5 day	12.12.17	16.12.17
9	Development	20 days	17.12.17	05.01.18
10	Development system modules	08 days	06.01.18	13.01.18
11	System modules	15 days	07.01.18	21.01.18
12	Perform initial testing	5 days	22.01.18	26.01.18
13	Development complete	5 days	27.01.18	03.02.18
14	Testing	4 days	04.02.18	08.02.18
15	Performance system testing	10 days	09.02.18	19.02.18
16	Document issues found	7 days	20.02.18	27.02.18
17	Correct issues found	6 days	20.02.18	01.03.18

Chapter 4

Software Requirements Specification

4.1 Overall Description

4.1.1 Product Perspective

The application here will use the SR with Google server which uses HMM method. The description of how the speech recognized are as follows. Initially a speech inputted and sound fluctuates which can be represented by set of signals. Signals which are generates application is depends on quality of sound .If sound quality is high then signal level increases at a high level. Speech recorded a recorder. After a recording a done, speech divided into set of frames or words and every words and phrases works as independently Additional sounds comes with speech is filtered by a MFCC model, so that it can be easily understood by a system .Background voice and low quality voice all should be filter to convert it into desired text. Then algorithm is used for making a conversion from speech to text at sender site. These converted texts send to receivers. As above processes Text-to-Speech is also done.

4.1.2 Product Features

- Speech to text conversion:- Speech Recognition stands majorly on five pillars that are, feature extraction, acoustic models database which is built based on the training data, dictionary, language model and the speech recognition algorithm. The inputs data i.e. voice are first converted to digital signal and are sampled on time and amplitude axis.
- SMS:-The user will be having 2 ways to send SMS in this project. He can send directly by telling the mobile number and the message. Here the user will tap on the mic and will tell the number it will be displayed in the edit text. Only numbers are allowed to be spelled in the number edit text. He needs to do the same for the message edit text also.
- View and Add contacts:-Here instead of sending message directly the user was also allowed to add and view contacts. He will add contacts by spelling and all

the contacts will be displayed in the list view. By clicking on the list the text to speech conversion takes place and it will be spelled to the user.

4.1.3 User Classes and Characteristics

- Text-to-speech:conversion is to be done on the basis of message.
- Speech-to-text:conversion is to be done on the basis of voice quality.
- Multiple contact selection: Multiple contact can be select by manually or by speech.

4.1.4 Operating Environment

Software Requirements
For Implementation:

1. Programming Language: Java Platform
2. IDE: Android Studio
3. Operating system : Windows 7
4. Tool Kit : Android 2.3 ABOVE

For Deployment : Android Platform 2.3.3.

4.1.5 Hardware Requirements

For Implementation

1. Processor : Core i5
2. 1280*800 minimum Screen Resolution
3. Hard Disk : 40 GB.
4. Ram : 3GB ; plus 1 GB for Android Emulator

For Deployment:

1. MOBILE : ANDROID

The visually impaired segment of the population,the inability to read has a substantive negative impact on their quality of life.Printed text(books, magazines, menus, labels,etc.) still represents a sizable portion of the information this group needs to have unrestricted access.Over the years speech recognition has taken the market.The speech input can be used in varying domains such as automatic reader and for inputting data to the system.

4.2 System Features

The major features of our system it gives message services and phone number can be selected manually or by using a voice.multiple contacts can be selected at a time by voice command and can by manually.

4.2.1 System Feature

1. Selection of number of projects.
2. can select choice based developer.
3. Can interact with developer.

Description and Priority

1. Selection of number of projects. : First the speech is taken as the input, now it analyzed by the speech analysis with the help of speech dictionary or speech to text conversion database and then it further checking by the vocabulary database database by the selection of words,phrases according to the sound and ascent of the user then it finally converts all the speech into the text and can send this speech by the text message.
2. can select choice based developer: First the input is taken as the text it analyzed by text analysis with the help of text dictionary or text to Speech converter and it sends to the speech database which selects the units of words spoken on the mike now it further sends speech generation module and on the basis of this process text is converted into the text.

Stimulus/Response Sequences

1. Selection of number of projects.
2. can select choice based developer .
3. Can interact with developer.

Functional Requirements

1. The user should be able to handle the system.
2. The system should able to get conversion of Text.
3. The system should able to get conversion of Speech.
4. Multiple contact will be selected by voice and manual.

4.3 External Interface Requirements

4.3.1 User Interfaces

Speech is a very natural and basic way in human-to-human communication. For communicating purpose in this digital world peoples uses their smart phones with messages and calling.In this system if a user unable to type or read the message data coming from sender side can be easily read by mic on commanding Like ”Speak” and can write easily by tap on mic it automatically converts speech to text and commanding like send it send to selected contact.

4.3.2 Hardware Interfaces

In this System mobile or smart phones are used as hardware for communicating purpose.Firstly in our smart phones we have to install application after installing we have to first login into the system after login system is ready to communicate over the available contacts.for sending and receiving smart phone is used as a hardware communication channel .

4.3.3 Software Interfaces

For sending message, voice command is provided to open application to send message .Once application is open, it will ask for contact of receiver, then it will ask for the message to be sent, then it will speak that message to check, after conforming the message it will send it to corresponding receiver. Every time the application asks anything, through voice and user also provides response with voice commands that are told by guide.As part of sending message application is responsible for voice to text transmission to convert message told by user into text,text to voice to check message, and for interaction through voice.

4.3.4 Communications Interfaces

1. The major communication for location purposes will be done by google api,the data is accessed by the google by using the google apis.
2. The interface between the android SR algorithm and the system will be done by using http protocol

4.4 Nonfunctional Requirements

4.4.1 Performance Requirements

Speech based solutions have taken center stage with growth in the services industry where there is a need to cater to a very large number of people from all strata of the society. While natural language speech interfaces are the talk in the research community, yet in practice, menu based speech solutions thrive. Typically in a menu based speech solution the user is required to respond by speaking from a closed set of words when prompted by the system. A sequence of human speech response to the IVR prompts results in the completion of a transaction.

4.4.2 Safety Requirements

If there is any damage to the large amount of the data in the database than the whole system will go down.The database should be periodically maintained and have to keep upon it.The data which is updated by the user should be commited in the database.

4.4.3 Security Requirements

The major security requirements for the system will be the safeguarding of the user data from any kind of exploit. Inorder to protect the user data the data is not stored in local databases we will be storing in the cloud for better security.

Chapter 5

System Design

5.1 System Requirements Definition

System requirement definitions specify 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

a. The developed application must be able to effectively share any type of information that is all kinds of files like documents, images and videos for project development.

b. The android phones should have android version of 4.0 for efficient use of the application.

c. The application must be a continuously running app so that any time the smart phone is switched on or the mobile internet is on it should receive push notifications.

d. The application developed to remove the miscommunication between developer and clients should effectively take the inputs given by the user on the forum in terms of doubts and any important notice to be given.

Our proposed system using speech recognition technologies of mobile devices , speech to text ,text to speech and wireless communication technologies was implemented by Java programming language. The proposed application was designed and developed on Android as well.

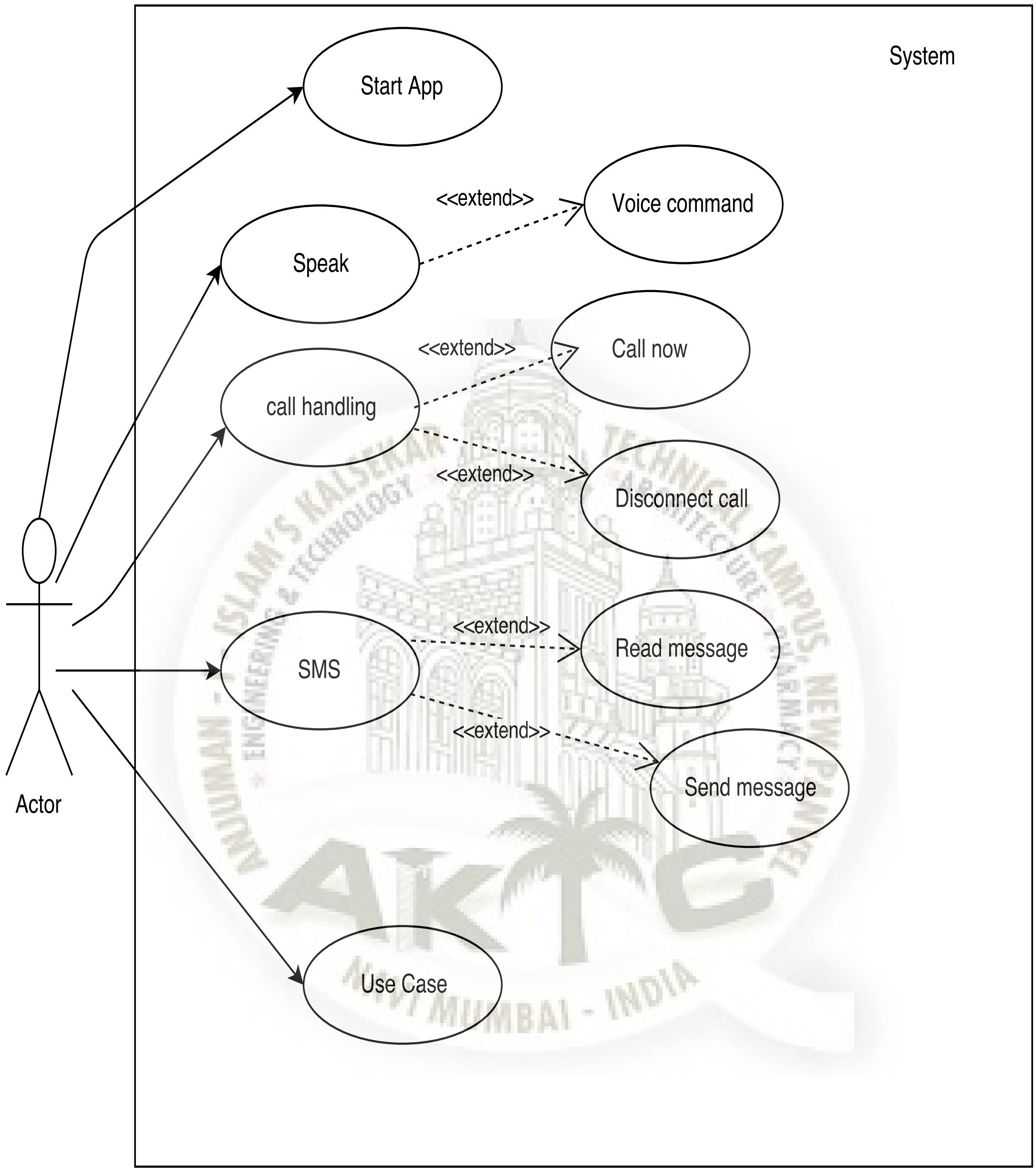


Figure 5.1: Usecase Diagram

Data-flow Diagram

DFD level 0

Speech Recognition System will take input from one application and convert it by using Speech recognition(SR) and output will represent in an another application.It performs speech-to-text and vice versa.

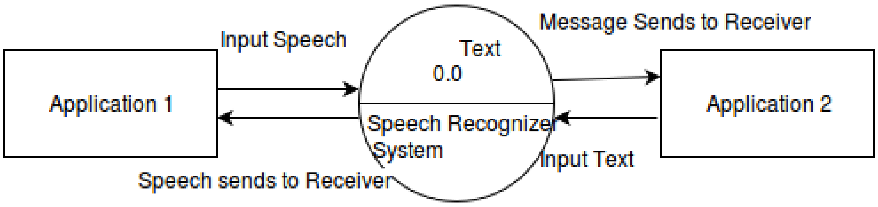


Figure 5.2: DFD level 0

DFD level 1

Application is get started and we can further search contact can be select at the same for this purpose we can use speech or voice command too select particular task .for the purpose of text to speech voice can be recognized and n-datagram is use to convert. Level 1 DFD's aim to give an overview of the full system. They look at the system in more detail. Major processes are broken down into sub-processes. Level 1 DFD's also identifies data stores that are used by the major processes. When constructing a Level 1 DFD, we must start by examining the Context Level DFD. We must break up the single process into its sub-processes. We must then pick out the data stores from the text we are given and include them in our DFD. Like the Context Level DFD's, all entities, data stores and processes must be labelled. We must also state any assumptions made from the text.

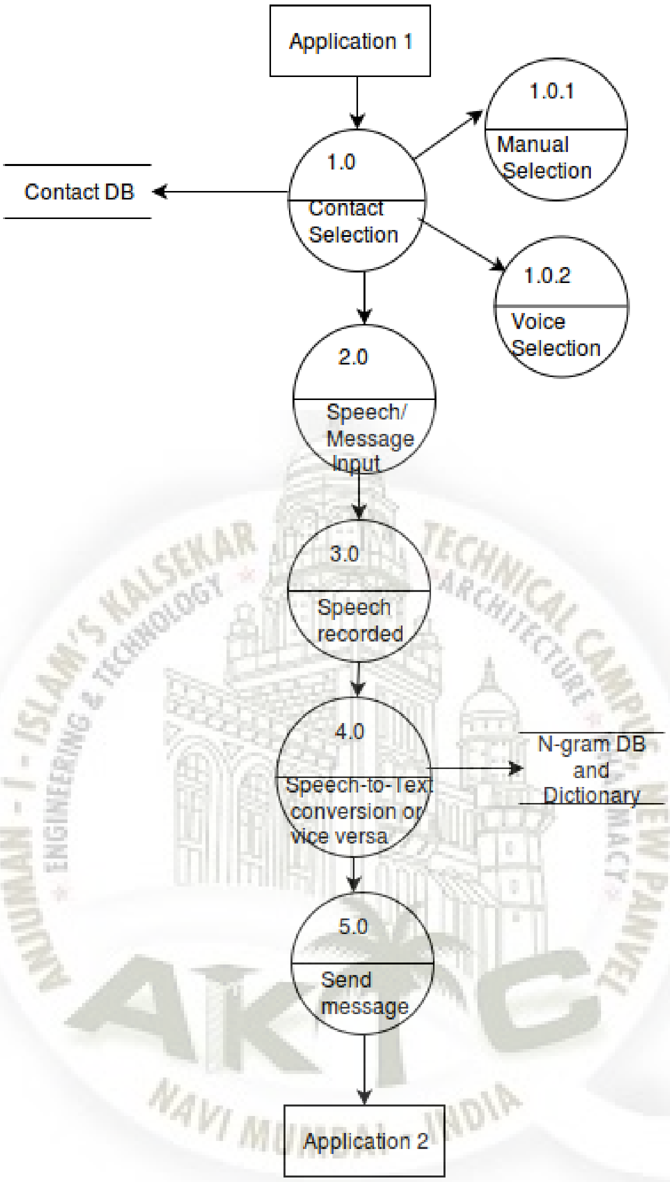


Figure 5.3: DFD level 1

5.1.2 System requirements (non-functional requirements)

1. Usability requirement-A user interface for updating the information for travel that would allow the system to better adapt the overall system.
2. Efficiency requirement-The application should be able to response quickly the user's request.
3. Performance requirement-The application should be able to response the queries submitted by the user without delay.
4. Reliability requirement-The application should work under all conditions and performed the required functionality.

Database Schema/ E-R Diagram

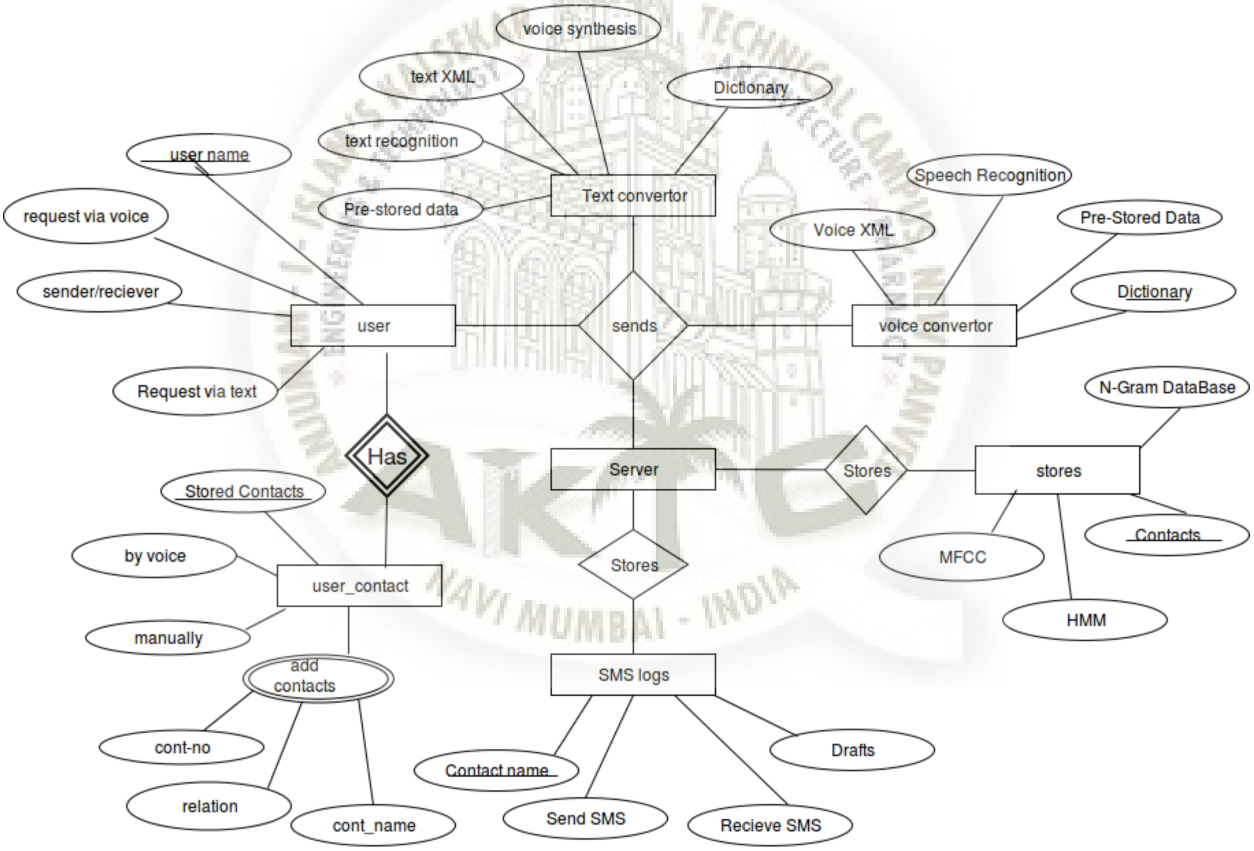


Figure 5.4: E-R Diagram

This is the ER diagram of the system in which the modules which will be there after the deployment are shown

5.2 System Architecture Design

stem Design is the first design stage for devising the basic approach to solving the problem. System Design consists of the overview of the application being developed, the system architecture and use case diagrams for the entire application the use case summary. It also consists of the sequence and Data flow Diagrams for the application for the same along with a brief description.

A. Authentication And Role Based Access This module consists of authentication and authorization services provided by the application to the different type of user. The users have also been categorized into two different types that is, clients and developers according to their privileges.This module is subdivided into two categories. I) Authentication: Authentication is a process in which the credentials provided are compared to those on file in a database of authorized users' information on a local operating system or within an authentication server. II) Role-Based Access Control (RBAC): Role-based access control (RBAC) is a method of regulating access to computer or network resources based on the roles of individual users within an enterprise. In this context, access is the ability of an individual user to perform a specific task, such as view, create, or modify a file. Roles are defined according to job competency, authority, and responsibility within the enterprise.

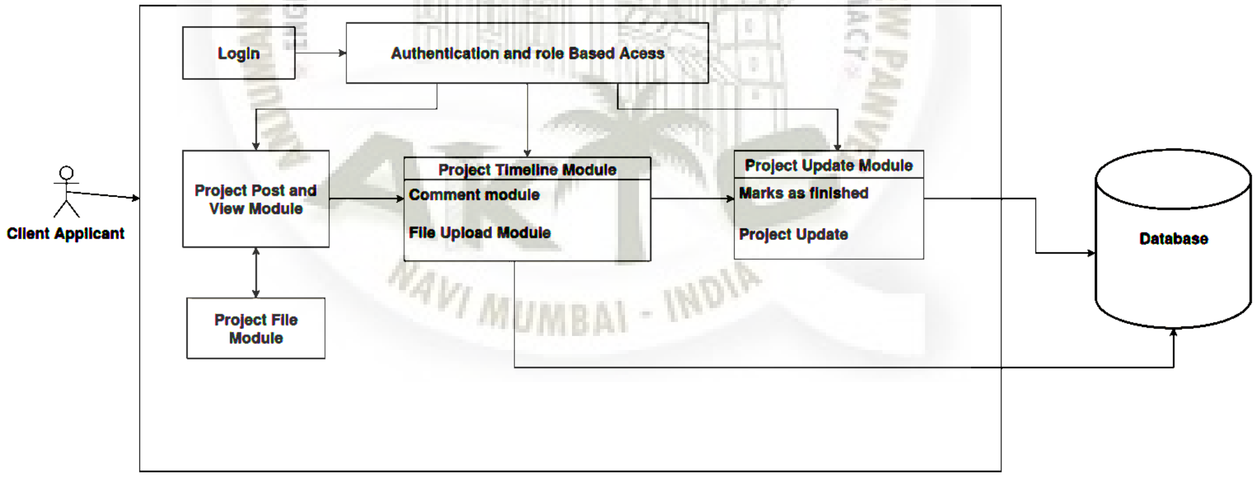


Figure 5.5: System Architecture

5.3 Sub-system Development

Application will always be in running state at the background once it is started.The application is built on top of SMS, so that once application is installed on mobile,all SMS related activities are by default performed by application. With respect to user perspective,application working is divided in two ways–One application is used for sending messages and other when application is used to read received messages. As part of sending message application is responsible for voice-to-text transmission to convert message told by user into text, text-to-voice to check message, and for interaction through voice. Modules :

1. Selection of number of projects.
2. can select choice based developer.
3. Can interact with developer.

5.3.1 Selection of number of projects

First the speech is taken as the input, now it analyzed by the speech analysis with the help of speech dictionary or speech to text conversion database and then it further checking by the vocabulary database database by the selection of words, phrases according to the sound and ascent of the user then it finally converts all the speech into the text and can send this speech by the text message.

can select choice based developer.

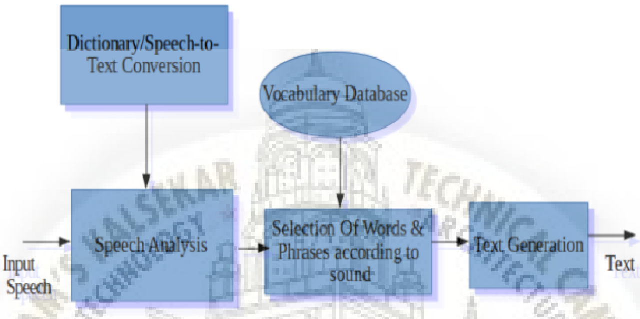

Dictionary/Speech-to-Text Conversion
Vocabulary Database
Input Speech
Speech Analysis
Selection Of Words & Phrases according to sound
Text Generation
Text

Figure 5.6: Speech Recognition

5.3.2 Can interact with developer

First the input is taken as the text it analyzed by text analysis with the help of text dictionary or text to Speech converter and it sends to the speech database which selects the units of words spoken on the mike now it further sends speech generation module and on the basis of this process text is converted into the text.

Text Recognition Flow Diagram

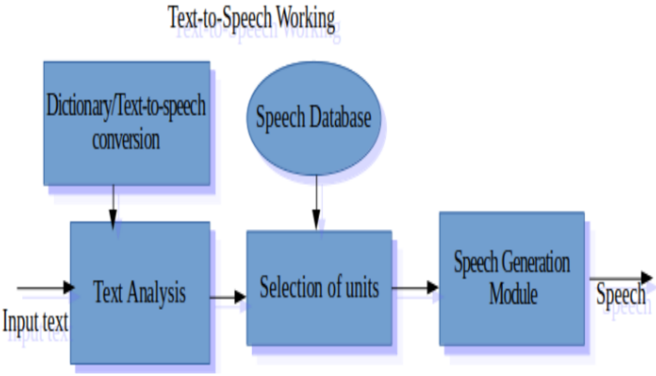


Figure 5.7: Text Recognition

5.3.3 Multiple Contact Selection

multiple contact can be selected at a time by the user it can be done by manually or can be done by speech command. Now the message can send to selected contacts or it can be typed by manually or by speech.

Multiple Contact Selection Flow Diagram

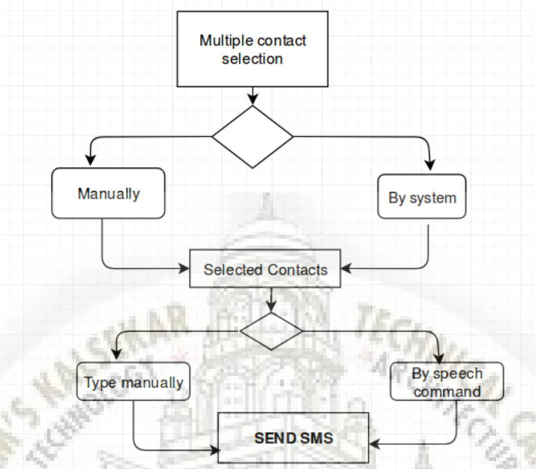


Figure 5.8: Multiple Contact Selection

5.4 Systems Integration

The speech input can be used in varying domains such as automatic reader and for inputting data to the system. Speech recognition can minimize the use of text and other types of input, at the same time minimizing the calculation needed for the process. A decade back speech recognition was difficult to use in any system, but with elevation in technology leading to new algorithms, techniques and advanced tools. Now it is possible to generate the desired speech recognition output. One such method is the hidden Markov models which is used in this paper. Voice or signaled input is inserted through any speech device such as microphone, then speech can be processed and convert it to text hence able to send SMS, also Phone number can be entering either by voice or you may select it from contact list. Voice has opened up data input for a variety of user's such as illiterate, handicapped, as if the person cannot write then the speech input is a boon and other's too which can lead to better usage of the application.

5.4.1 Class Diagram

The interaction between objects arranged in time sequence is described using a task event diagram.In other words,this diagram is used to describe how tasks respond to each of their input events or messages. The order in which messages are passed between tasks can be used to help engineers in implementing the system tasks more efficiently.

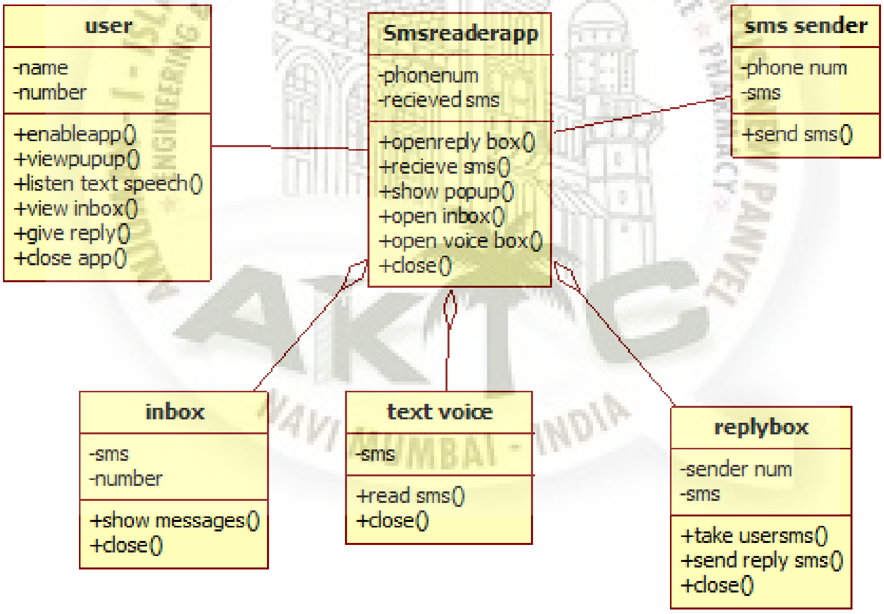


Figure 5.9: Class Diagram

5.4.2 Sequence Diagram

This is the Sequence Diagram for our system which shows the sequential flow of our system when particular user searches or visit a new location this are explained in the below figure:

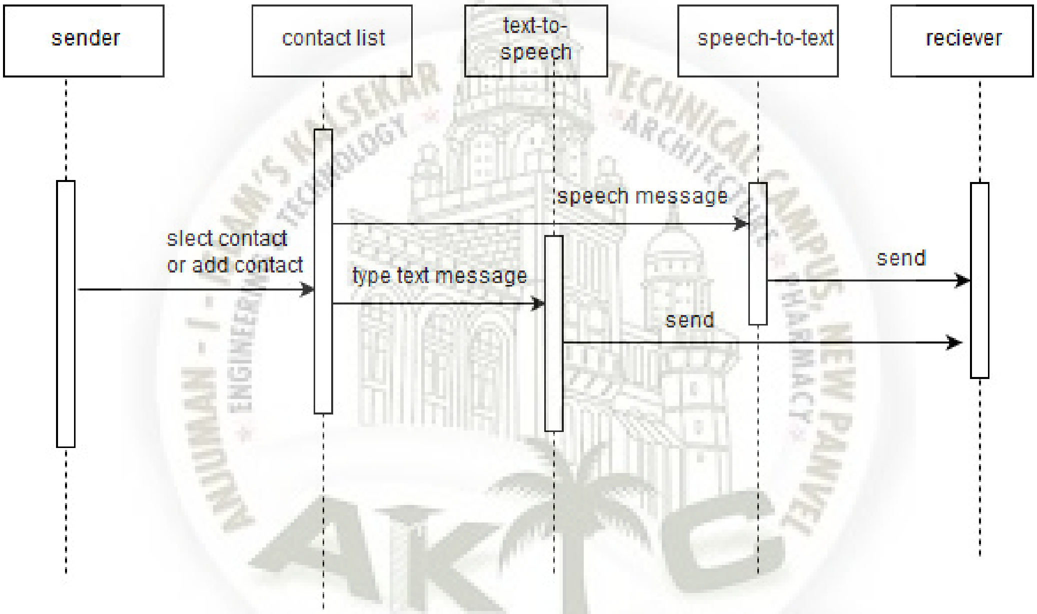


Figure 5.10: Sequence Diagram

5.4.3 Component Diagram

Component diagram is a special kind of diagram in UML. The purpose is also different from all other diagrams discussed so far. It does not describe the functionality of the system but it describes the components used to make those functionalists .This diagram of our system shows the components which are included in our system :

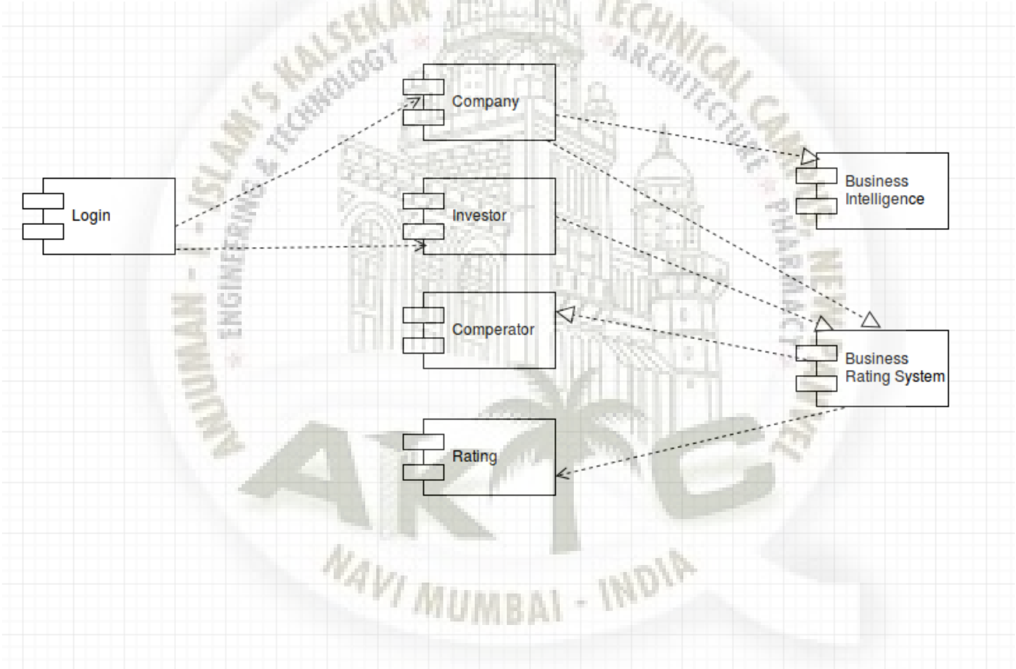


Figure 5.11: Component Diagram

5.4.4 Deployment Diagram

This diagram of our system shows the deployment stages of our system which all together makes the whole system:

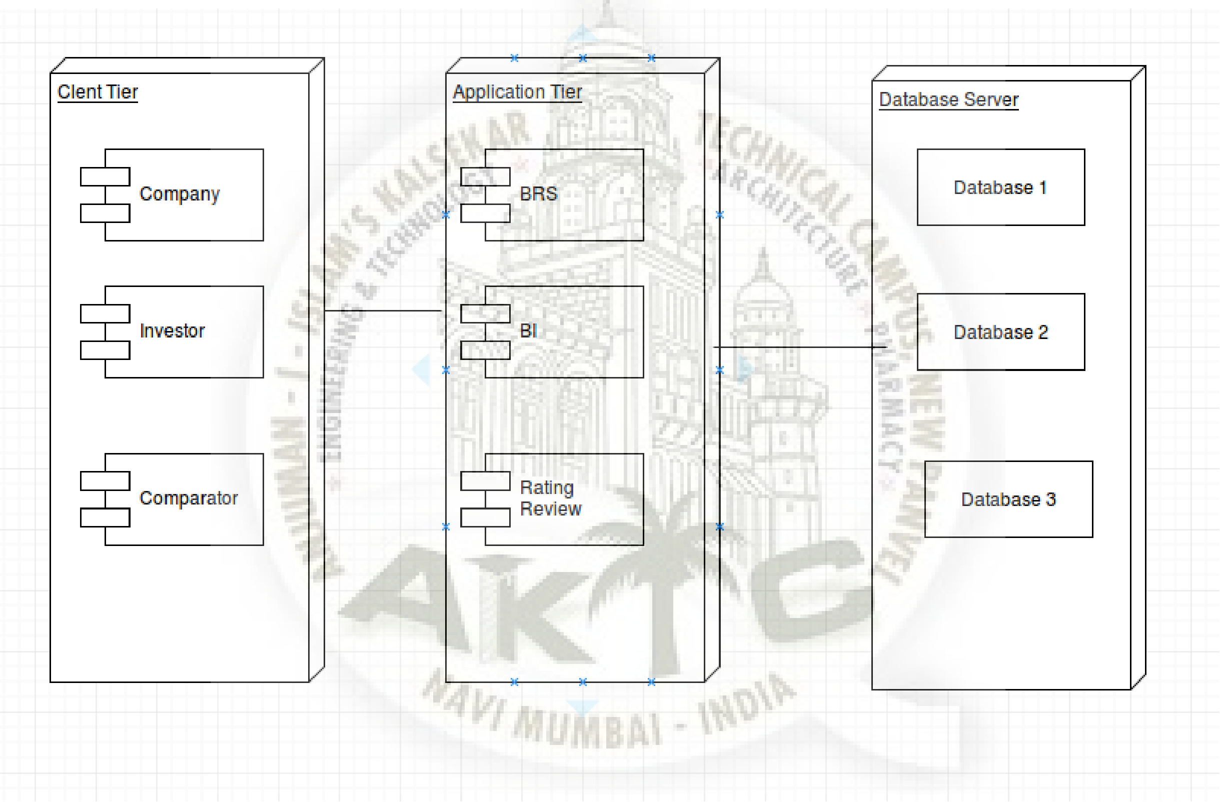


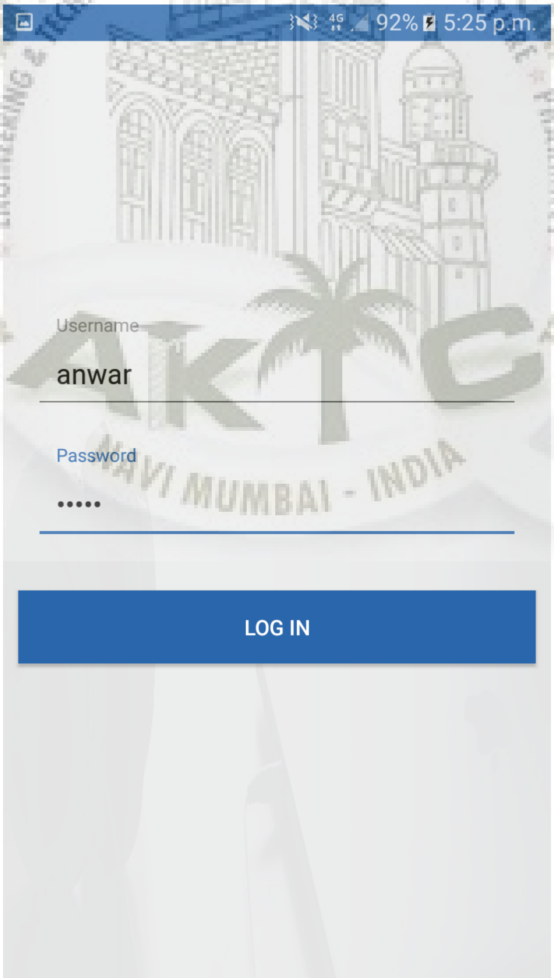
Figure 5.12: Deployment Diagram

Chapter 6

Implementation

6.1 Module 1 : Main Page

This module consist of feature such as:create message and read message.It consist of message,date of message,name of contact.User can perform both i.e speech-to-text and text-to-speech.This module consist of actual conversion of speech-to-text and text-to-speech.



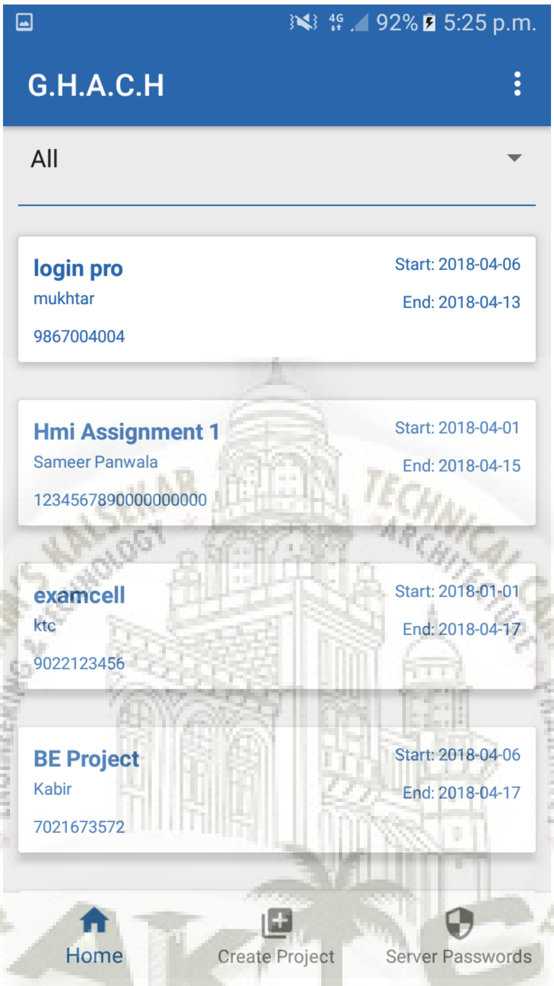
Username
anwar
Password
•••••

Figure 6.1: MAIN PAGE

```java
package com.example.wayneenterprise.ghach;

import android.app.Activity;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.annotation.Nullable;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import java.util.HashMap;

/**
 * Created by Aftab on 19-08-2017.
 */

public class Login extends Activity {

    UserSessionManager session;
    Button loginbtn;
    String username,password;
    EditText usernameet,passwordet;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.login);


        // User Session Manager
        session = new UserSessionManager(getApplicationContext());
        Toast.makeText(getApplicationContext(),
                "User Login Status: " + session.isUserLoggedIn(),
                Toast.LENGTH_LONG).show();


        loginbtn=(Button)findViewById(R.id.loginbtn);
        usernameet=(EditText)findViewById(R.id.usernameet);
        passwordet=(EditText)findViewById(R.id.passwordet);


        loginbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

//                  username=usernameet.getText().toString();
//                  password=passwordet.getText().toString();
//
//                  session.createUserLoginSession(username, password);
//                  Intent i=new Intent(getBaseContext(),HomeActivity.class);
//                  i.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
//
//                  // Add new Flag to start new Activity
//                  i.setFlags(Intent.FLAG_ACTIVITY_NEW_TASK);
//                  startActivity(i);
//                  finish();

                loginuser();


            }
        });
    }

    private void loginuser() {

        final String username=usernameet.getText().toString();
        final String password=passwordet.getText().toString();



        class Loginuser extends AsyncTask<Void,Void,String> {

            ProgressDialog loading;

            @Override
            protected void onPreExecute() {
                super.onPreExecute();
                loading = ProgressDialog.show(Login.this,”Loading”,”Wait...”,
                   false,false);
            }

            @Override
            protected void onPostExecute(String s) {
                super.onPostExecute(s);
                loading.dismiss();

                if(s.equalsIgnoreCase(”Success”))
                {
                    Toast.makeText(getBaseContext(),”Login Successful”,Toast.
                       LENGTH_LONG).show();
                    session.createUserLoginSession(username, password);

                    Intent i=new Intent(getBaseContext(),HomeActivity.class);
                    i.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);

                    // Add new Flag to start new Activity
                    i.setFlags(Intent.FLAG_ACTIVITY_NEW_TASK);
                    startActivity(i);
                    finish();
                }
                else{

                    Toast.makeText(Login.this,s,Toast.LENGTH_LONG).show();
                }
            }

            @Override
            protected String doInBackground(Void... v) {
                HashMap<String,String> params = new HashMap<>();
                params.put(Config.username,username);
                params.put(Config.password,password);


                RequestHandler rh = new RequestHandler();
                String res = rh.sendPostRequest(Config.URL_LOGIN, params);
                return res;


            }




        }

        Loginuser ae = new Loginuser();
        ae.execute();


    }
}
```

6.1.1 Module 2 : All Details of contact.

After login into the page user can check the details of previous projects and developers details.



login pro
mukhtar
9867004004
Start: 2018-04-06
End: 2018-04-13

Hmi Assignment 1
Sameer Panwala
1234567890000000000
Start: 2018-04-01
End: 2018-04-15

examcell
ktc
9022123456
Start: 2018-01-01
End: 2018-04-17

BE Project
Kabir
7021673572
Start: 2018-04-06
End: 2018-04-17

Figure 6.2: Detail of projects

```
 package com.example.wayneenterprise.ghach;

import android.graphics.Bitmap;
import android.graphics.BitmapFactory;

import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;

import java.io.IOException;
import java.net.MalformedURLException;
import java.net.URL;



public class GetAlImages {

    public static String[] imageURLs;
    public static Bitmap[] bitmaps;

    public static final String JSON_ARRAY=”result”;
    public static final String IMAGE_URL = ”url”;
    private String json;
    private JSONArray urls;
    URL url = null;


    public GetAllImages(String json){
        this.json = json;
        try {
            JSONObject jsonObject = new JSONObject(json);
            urls = jsonObject.getJSONArray(JSON_ARRAY);
        } catch (JSONException e) {
            e.printStackTrace();
        }
    }

    private Bitmap getImage(JSONObject jo){
        Bitmap image = null;
        try {
            url = new URL(jo.getString(IMAGE_URL));
            image = BitmapFactory.decodeStream(url.openConnection().
                getInputStream());
        } catch (MalformedURLException e) {
            e.printStackTrace();
        } catch (IOException e) {
            e.printStackTrace();
        } catch (JSONException e) {
            e.printStackTrace();
        }
        return image;
    }

    public void getAllImages() throws JSONException {
        bitmaps = new Bitmap[urls.length()];

        imageURLs = new String[urls.length()];

        for(int i=0;i<urls.length();i++){
            imageURLs[i] = urls.getJSONObject(i).getString(IMAGE_URL);
            JSONObject jsonObject = urls.getJSONObject(i);
            bitmaps[i]=getImage(jsonObject);
        }
    }
}
```

6.2 Module 3 : Add Project

User can create a new Project from a create project module.Create message module consist of two fields such as:number field and project field.User has to fill these information in a fields to send a new message.User has to speech a number and message in a mice then these speech get convert into text and then send to a receiver.

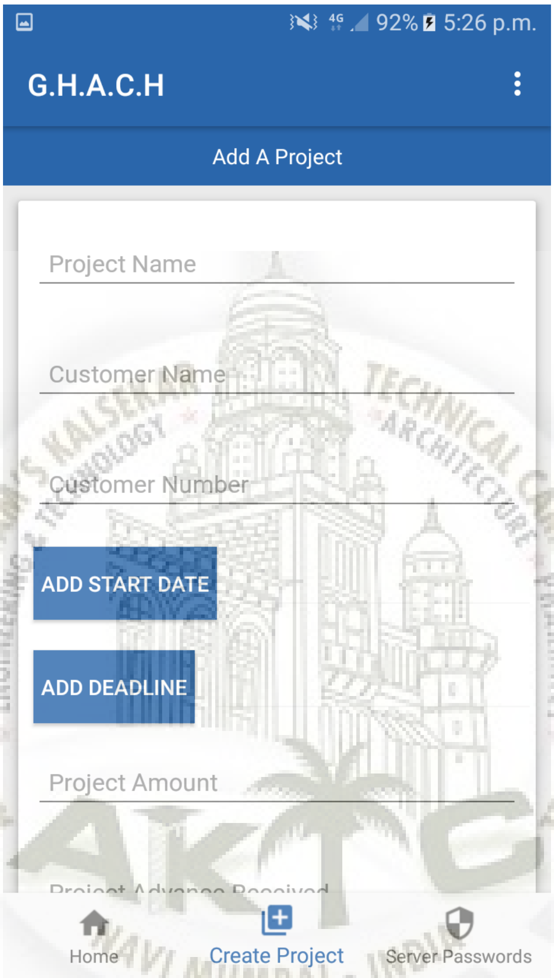


Figure 6.3: ADD CONTACT

```
  package com.example.wayneenterprise.ghach;


import android.app.DatePickerDialog;
import android.app.ProgressDialog;
import android.content.Context;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.Toast;

import java.util.Calendar;
import java.util.HashMap;

public class AddProjectFragment extends Fragment {

    Button getstartdate,getenddate,addproj;
    Context context;
    int mYear, mMonth, mDay;
    EditText startdateet,enddateet,projnameet,custnameet,custnumberet,amountet,
       advanceet;
    Spinner status;
    String projname,custname,custnumber,amount,advance,startdate,enddate,
       statusval;

    int startday,endday,startmonth,endmonth,startyear,endyear;

    @Override
    public View onCreateView(LayoutInflater inflater,
                             ViewGroup container, Bundle savedInstanceState) {

        //Inflate the layout for this fragment

        View view= inflater.inflate(
                R.layout.projectfragment, container, false);

        projnameet=(EditText)view.findViewById(R.id.pname);
        custnameet=(EditText)view.findViewById(R.id.cnam);
        custnumberet=(EditText)view.findViewById(R.id.cnum);
        amountet=(EditText)view.findViewById(R.id.amt);
        advanceet=(EditText)view.findViewById(R.id.adv);

        status=(Spinner)view.findViewById(R.id.statusspinneradd);


        getstartdate=(Button)view.findViewById(R.id.getstartdate);
        getenddate=(Button)view.findViewById(R.id.getenddate);
        startdateet=(EditText)view.findViewById(R.id.startdateet);
        enddateet=(EditText)view.findViewById(R.id.enddateet);
        addproj=(Button)view.findViewById(R.id.addproj);


        addproj.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                if(startyear>endyear||(startyear<=endyear&&startmonth==endmonth
                   &&startday>endday))
                {
                    Toast.makeText(getActivity(),”Start Date Cant Be Smaller
                       Than End Date”,Toast.LENGTH_LONG).show();
                }

                else {

                        if (projnameet.getText().toString().equals(””)||
                           custnameet.getText().toString().equals(””)||
                           custnumberet.getText().toString().equals(””)||
                           amountet.getText().toString().equals(””)||advanceet.
                           getText().toString().equals(””)||startdateet.getText
                           ().toString().equals(””)||enddateet.getText().
```

```
                            toString().equals(””))
                        {
                            Toast.makeText(getActivity(),”Please fill all the
                                fields”,Toast.LENGTH_LONG).show();
                        }
                        else {
                            AddProject();
                        }
                    }




            }
        });



        getstartdate.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                // Get Current Date
                final Calendar c = Calendar.getInstance();
                mYear = c.get(Calendar.YEAR);
                mMonth = c.get(Calendar.MONTH);
                mDay = c.get(Calendar.DAY_OF_MONTH);


                DatePickerDialog datePickerDialog = new DatePickerDialog(
                    getActivity(),
                        new DatePickerDialog.OnDateSetListener() {

                            @Override
                            public void onDateSet(DatePicker view, int year,
                                                   int monthOfYear, int
                                                       dayOfMonth) {

                                startdateet.setText(year + ”-” + (monthOfYear +
                                    1) + ”-” + dayOfMonth);
                                startday=dayOfMonth;
                                startmonth=monthOfYear;
                                startyear=year;

                            }
                        }, mYear, mMonth, mDay);
                datePickerDialog.show();


                }




        });

        getenddate.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                // Get Current Date
                final Calendar c = Calendar.getInstance();
                mYear = c.get(Calendar.YEAR);
                mMonth = c.get(Calendar.MONTH);
                mDay = c.get(Calendar.DAY_OF_MONTH);


                DatePickerDialog datePickerDialog = new DatePickerDialog(getActivity(),
                        new DatePickerDialog.OnDateSetListener() {

                            @Override
                            public void onDateSet(DatePicker view, int year,
                                                  int monthOfYear, int dayOfMonth) {

                                enddateet.setText(year + ”–” + (monthOfYear + 1) + ”–” + dayOfMonth);
                                endday=dayOfMonth;
                                endmonth=monthOfYear;
                                endyear=year;
                            }
                        }, mYear, mMonth, mDay);
                datePickerDialog.show();


            }




        });






        return view;






    }

    private void AddProject() {

        try {

                  projname=projnameet.getText().toString();
                  custname=custnameet.getText().toString();
                  custnumber=custnumberet.getText().toString();
                  amount=amountet.getText().toString();
                  advance=amountet.getText().toString();
                  startdate=startdateet.getText().toString();
                  enddate=enddateet.getText().toString();
                  statusval=status.getSelectedItem().toString();


                  class UpdateData extends AsyncTask<Void, Void, String> {

                ProgressDialog loading;

                @Override
                protected void onPreExecute() {
                    super.onPreExecute();
                    loading = ProgressDialog.show(getActivity(), ”Adding Project
                        ...”, ”Wait...”, false, false);
                }

                @Override
                protected void onPostExecute(String s) {
                    super.onPostExecute(s);
                    loading.dismiss();

                    projnameet.setText(””);
                    custnameet.setText(””);
                    custnumberet.setText(””);
                    amountet.setText(””);
                    advanceet.setText(””);
                    startdateet.setText(””);
                    enddateet.setText(””);


                    Toast.makeText(getActivity(), s, Toast.LENGTH_LONG).show();
                }


                @Override
                protected String doInBackground(Void... v) {
                    HashMap<String, String> params = new HashMap<>();
                    params.put(Config.projname, projname);
                    params.put(Config.custname, custname);
                    params.put(Config.custnumber, custnumber);
                    params.put(Config.amount, amount);
                    params.put(Config.advance, advance);
                    params.put(Config.startdate, startdate);
                    params.put(Config.enddate, enddate);
                    params.put(Config.statusval, statusval);


                    RequestHandler rh = new RequestHandler();
                    String res = rh.sendPostRequest(Config.URL_INSERT_PROJECT,
                        params);
                    return res;


                }


            }

            UpdateData ud = new UpdateData();
            ud.execute();


        } catch (NumberFormatException e) {
            //Log it if needed

        }
    }

}
```

6.3 Module 4: Chat

This module consist of feature such as:create message and read message.It consist of message,date of message,name of contact.User can perform both.

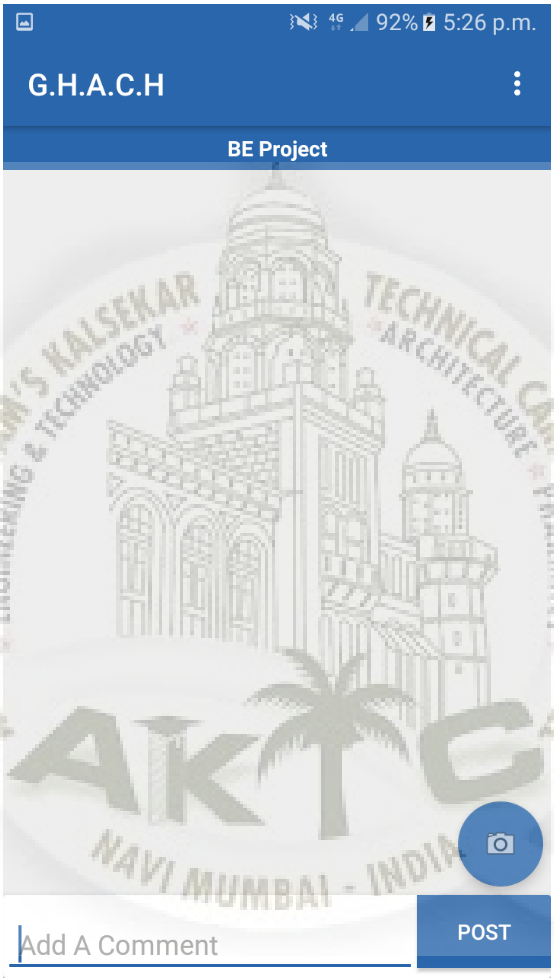


Figure 6.4: chat feild

```
  package com.example.wayneenterprise.ghach;

import android.app.DatePickerDialog;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.annotation.Nullable;
import android.support.v7.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.Toast;

import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;

import java.util.ArrayList;
import java.util.Calendar;
import java.util.HashMap;



public class Update extends AppCompatActivity {

    private String JSON_STRING;
    ArrayList<HashMap<String,String>> list;
    String projname,custname,custnumber,amount,advance,startdate ,enddate,
        statusval;
    EditText startdateet ,enddateet,projnameet,custnameet,custnumberet,amountet,
        advanceet;
    Spinner status;
    Button getstartdate ,getenddate,updateproj;
    int startday ,endday,startmonth ,endmonth,startyear ,endyear;
    int mYear, mMonth, mDay;
    String j;



    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.update);
        getJSON();


        Intent iin = getIntent();
        Bundle b = iin.getExtras();
        if (b != null) {
            j = (String) b.get(”projectname”);

        }


        projnameet=(EditText)findViewById(R.id.pname);
        custnameet=(EditText)findViewById(R.id.cnam);
        custnumberet=(EditText)findViewById(R.id.cnum);
        amountet=(EditText)findViewById(R.id.amt);
        advanceet=(EditText)findViewById(R.id.adv);

        status=(Spinner)findViewById(R.id.statusspinneradd);


        getstartdate=(Button)findViewById(R.id.getstartdate);
        getenddate=(Button)findViewById(R.id.getenddate);
        startdateet=(EditText)findViewById(R.id.startdateet);
        enddateet=(EditText)findViewById(R.id.enddateet);
        updateproj=(Button)findViewById(R.id.updateproj);


```

```
getstartdate.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        // Get Current Date
        final Calendar c = Calendar.getInstance();
        mYear = c.get(Calendar.YEAR);
        mMonth = c.get(Calendar.MONTH);
        mDay = c.get(Calendar.DAY_OF_MONTH);


        DatePickerDialog datePickerDialog = new DatePickerDialog(Update.
            this,
                new DatePickerDialog.OnDateSetListener() {

                    @Override
                    public void onDateSet(DatePicker view, int year,
                                                          int monthOfYear, int
                                                             dayOfMonth) {

                        startdateet.setText(year + ”–” + (monthOfYear +
                           1) + ”–” + dayOfMonth);
                        startday=dayOfMonth;
                        startmonth=monthOfYear;
                        startyear=year;

                    }
                }, mYear, mMonth, mDay);
        datePickerDialog.show();


    }




});

getenddate.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        // Get Current Date
        final Calendar c = Calendar.getInstance();
        mYear = c.get(Calendar.YEAR);
        mMonth = c.get(Calendar.MONTH);
        mDay = c.get(Calendar.DAY_OF_MONTH);


        DatePickerDialog datePickerDialog = new DatePickerDialog(Update.
            this,
                new DatePickerDialog.OnDateSetListener() {

                    @Override
                    public void onDateSet(DatePicker view, int year,
                                                          int monthOfYear, int
                                                             dayOfMonth) {

                        enddateet.setText(year + ”–” + (monthOfYear + 1)
                            + ”–” + dayOfMonth);
                        endday=dayOfMonth;
                        endmonth=monthOfYear;
                        endyear=year;
```

```
                            }
                        }, mYear, mMonth, mDay);
                datePickerDialog.show();


            }




    });




    updateproj.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                if(startyear>endyear||(startyear<=endyear&&startmonth>endmonth)||(startyear<=endyear&&startmonth<=endmonth&&startday>endday))
                {
                    Toast.makeText(getBaseContext(),”Start Date Cant Be Smaller Than End Date”,Toast.LENGTH_LONG).show();
                }

                else {

                    if (projnameet.equals(””)||custnameet.equals(””)||custnumberet.equals(””)||amountet.equals(””)||advanceet.equals(””)||startdateet.equals(””)||enddateet.equals(””))
                    {
                        Toast.makeText(getBaseContext(),”Please fill all the fields”,Toast.LENGTH_LONG).show();
                    }
                    else {
                        UpdateProject();
                    }
                }
            }
    });




    }

    private void UpdateProject() {


        try {

            projname=projnameet.getText().toString();
            custname=custnameet.getText().toString();
            custnumber=custnumberet.getText().toString();
            amount=amountet.getText().toString();
            advance=amountet.getText().toString();
            startdate=startdateet.getText().toString();
            enddate=enddateet.getText().toString();
            statusval=status.getSelectedItem().toString();

            class UpdateData extends AsyncTask<Void, Void, String> {

                ProgressDialog loading;

                @Override
                protected void onPreExecute() {
                    super.onPreExecute();
                    loading = ProgressDialog.show(Update.this, ”Adding Project ...”, ”Wait...”, false, false);
                }

                @Override
                protected void onPostExecute(String s) {
                    super.onPostExecute(s);
                    loading.dismiss();

                    Intent i=new Intent(getBaseContext(),HomeActivity.class);
                    startActivity(i);



                    Toast.makeText(getBaseContext(), s, Toast.LENGTH_LONG).show();
                }


                @Override
                protected String doInBackground(Void... v) {
                    HashMap<String, String> params = new HashMap<>();
                    params.put(Config.projname, projname);
                    params.put(Config.custname, custname);
                    params.put(Config.custnumber, custnumber);
                    params.put(Config.amount, amount);
                    params.put(Config.advance, advance);
                    params.put(Config.startdate, startdate);
                    params.put(Config.enddate, enddate);
                    params.put(Config.statusval, statusval);
                    params.put(Config.psess,j);


                    RequestHandler rh = new RequestHandler();
                    String res = rh.sendPostRequest(Config.URL_UPDATE_PROJECT, params);
                    return res;


                }


            }

            UpdateData ud = new UpdateData();
            ud.execute();


        } catch (NumberFormatException e) {
            //Log it if needed

        }
```

```

    }

    private void showValues(){
        JSONObject jsonObject = null;
        list = new ArrayList<HashMap<String , String>>();
        try {
            jsonObject = new JSONObject(JSON_STRING);
            JSONArray result = jsonObject.getJSONArray(Config.TAG_JSON_ARRAY);

            for(int i = 0; i<result.length(); i++){
                JSONObject jo = result.getJSONObject(i);
                projname = jo.getString(Config.projectname);
                custname = jo.getString(Config.custname);
                custnumber = jo.getString(Config.custnumber);


                amount = jo.getString(Config.amount);
                advance = jo.getString(Config.advance);
                startdate = jo.getString(Config.startdate);
                enddate = jo.getString(Config.enddate);
                statusval = jo.getString(Config.statusval);

                projnameet.setText(projname);
                custnameet.setText(custname);
                custnumberet.setText(custnumber);
                amountet.setText(amount);
                advanceet.setText(advance);
                startdateet.setText(startdate);
                enddateet.setText(enddate);
                if (statusval.equals(”Incomplete”))
                {
                    status.setSelection(0);
                }

                else if (statusval.equals(”Complete”))
                {
                    status.setSelection(1);
                }
                else if (statusval.equals(”Didnt Start”))
                {
                    status.setSelection(2);
                }



            }

        } catch (JSONException e) {
            e.printStackTrace();
        }


    }

    private void getJSON(){
        class GetJSON extends AsyncTask<Void,Void,String> {

            ProgressDialog loading;
            @Override
            protected void onPreExecute() {
                super.onPreExecute();
                loading = ProgressDialog.show(Update.this,”Fetching Data”,”Wait
                    ...”,false,false);
            }

            @Override
            protected void onPostExecute(String s) {
                super.onPostExecute(s);
                loading.dismiss();
                JSON_STRING = s;
                showValues();
            }

            @Override
            protected String doInBackground(Void... params) {
                RequestHandler rh = new RequestHandler();
                String s = rh.sendGetRequest(”https://ghach.000webhostapp.com/
                    updateproject.php?projectname=”+j);
                return s;
            }
        }
        GetJSON gj = new GetJSON();
        gj.execute();
    }
}
```

Chapter 7

System Testing

The System is tested in every environment,we have done unit testing and make them intergrated together for intergration testing.We have done Beta testing by the person apart from our group.

7.1 Test Cases and Test Results

Test ID	Test Case Title	Test Condition	System Behavior	Expected Result
T01	Testing contact Information	Is it displaying whole information?	Display only contact name	Display contact number with name
T02	Text-to-speech	User clicks on message ,Speech has to perform	Message display on another text field	Perform speech

7.2 Sample of a Test Case

Title: Contact information – Display contact information.
Description: When user selects a contact from list ,it has to show a contact name and number on message page.

Precondition: Open to a contact module and select contact. ***Assumption:*** Our system must be installed in the user mobile phone .

Test Steps:

1. Go to menu
2. Select a contact
3. Select any contact in contact list
4. Now it will display a contact information on message list

Expected Result:A page displaying the contact of a user with it's name for making it more convenient.
Actual Result: When user select a contacts from a contact list ,application shifts to another page where it displays a contact of a recipient.expected Contact is to display a contact of a recipient with name and number but it displays a contact information with only name.

Figure 7.1: CONTACT ADD

7.3 Sample of a Test Case

Title: Add Projects. **Description:** When user clicks on a message,to has to perform text-to-speech conversion.

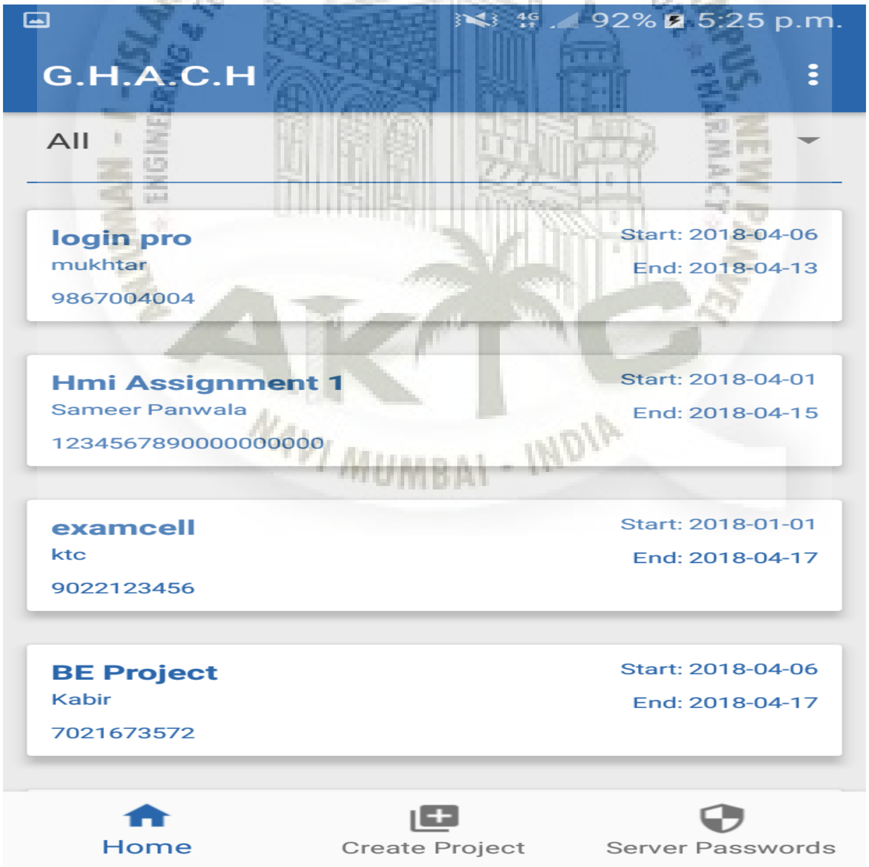
Precondition: Select a message module and click on message. ***Assumption:*** Our system must be installed in the user mobile phone .

Test Steps:

1. Go to menu
2. Select a message
3. Select any message to read.
4. Now it will convert it into speech.

Expected Result: When user select a message module,it performs text-to-speech conversion.

Actual Result: User select a message module,it display list of messages.when user click to convert these messages into speech,it only show a same message on screen rather than converting it into speech.



login pro
mukhtar
9867004004
Start: 2018-04-06
End: 2018-04-13

Hmi Assignment 1
Sameer Panwala
1234567890000000000
Start: 2018-04-01
End: 2018-04-15

examcell
ktc
9022123456
Start: 2018-01-01
End: 2018-04-17

BE Project
Kabir
7021673572
Start: 2018-04-06
End: 2018-04-17

Figure 7.2: Message Module

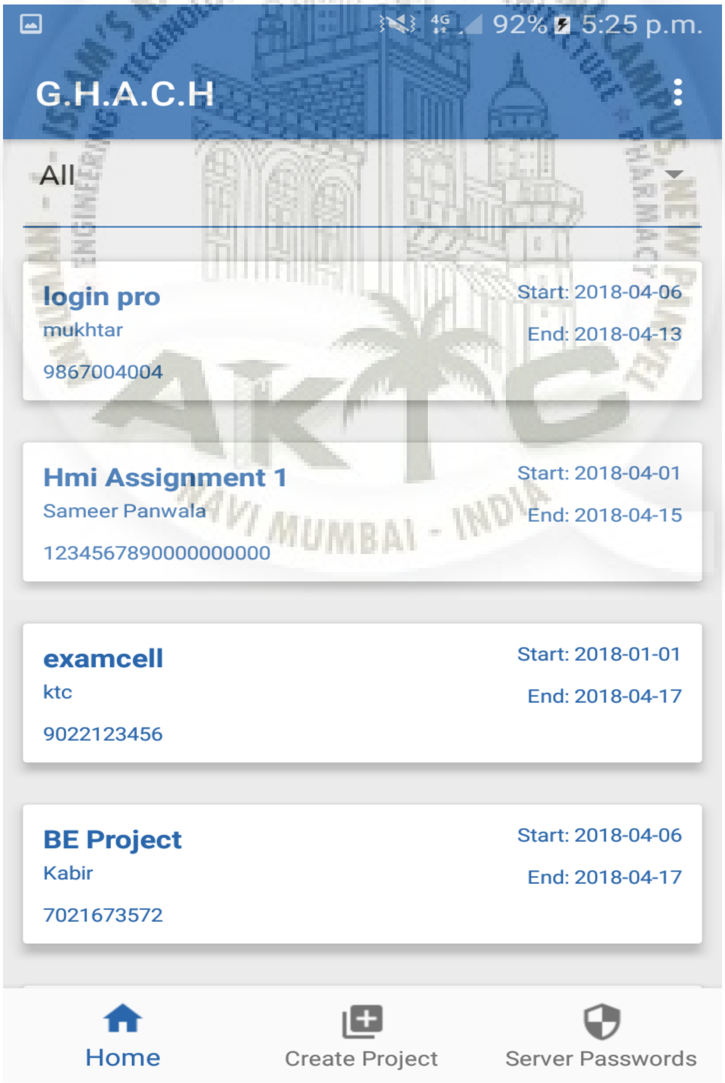
7.3.1 Software Quality Attributes

1. AVAILABILITY: The system should not be down,whenever the user use the system the specific data should be available to the user.
2. CORRECTNESS: As per the user search the correct data should be shown to the user like at time for searching the near by place the system should show only the places around the user.
3. MAINTAINABILITY: The administrators of the system will maintain the system with effective updates though on air update if needed.
4. EXTENSIBILITY: The system is capable to be modified by changing some modules or by adding some features to the existing system

Chapter 8

Screenshots of Project

8.1 Home Screen



92% 5:25 p.m.

G.H.A.C.H

All

login pro
mukhtar
9867004004
Start: 2018-04-06
End: 2018-04-13

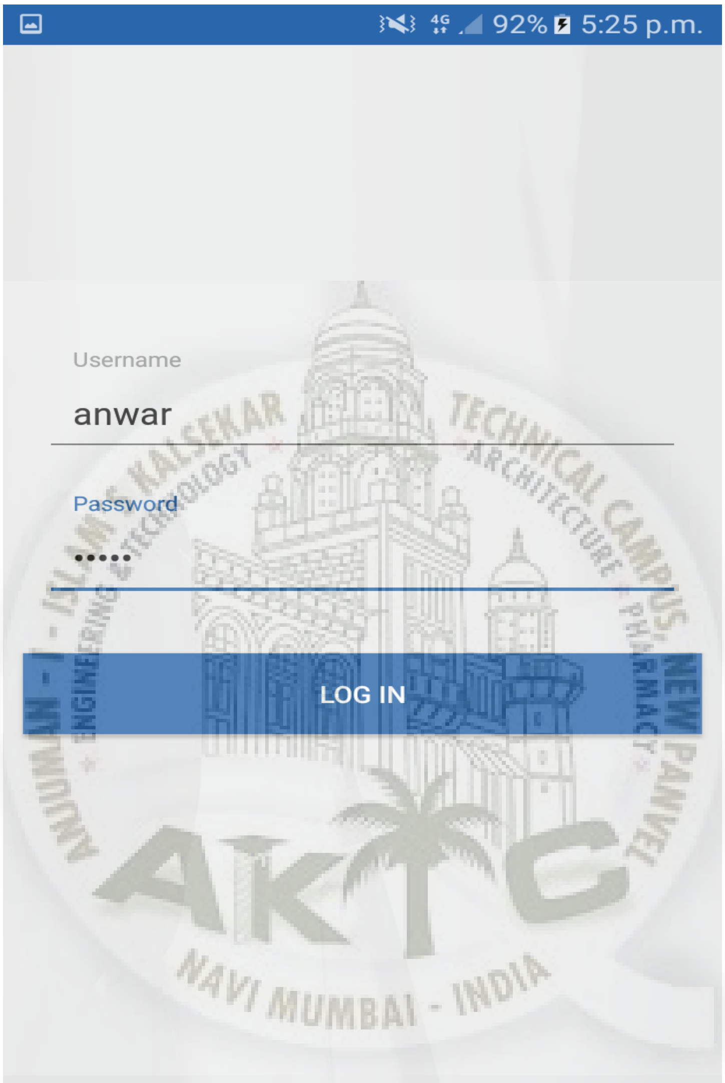
Hmi Assignment 1
Sameer Panwala
1234567890000000000
Start: 2018-04-01
End: 2018-04-15

examcell
ktc
9022123456
Start: 2018-01-01
End: 2018-04-17

BE Project
Kabir
7021673572
Start: 2018-04-06
End: 2018-04-17

Figure 8.1: Home Screen Screen shot

8.2 Login Section



92% 5:25 p.m.

Username

anwar

Password

•••••

Figure 8.2: Login Section Screen shot

8.3 Chat

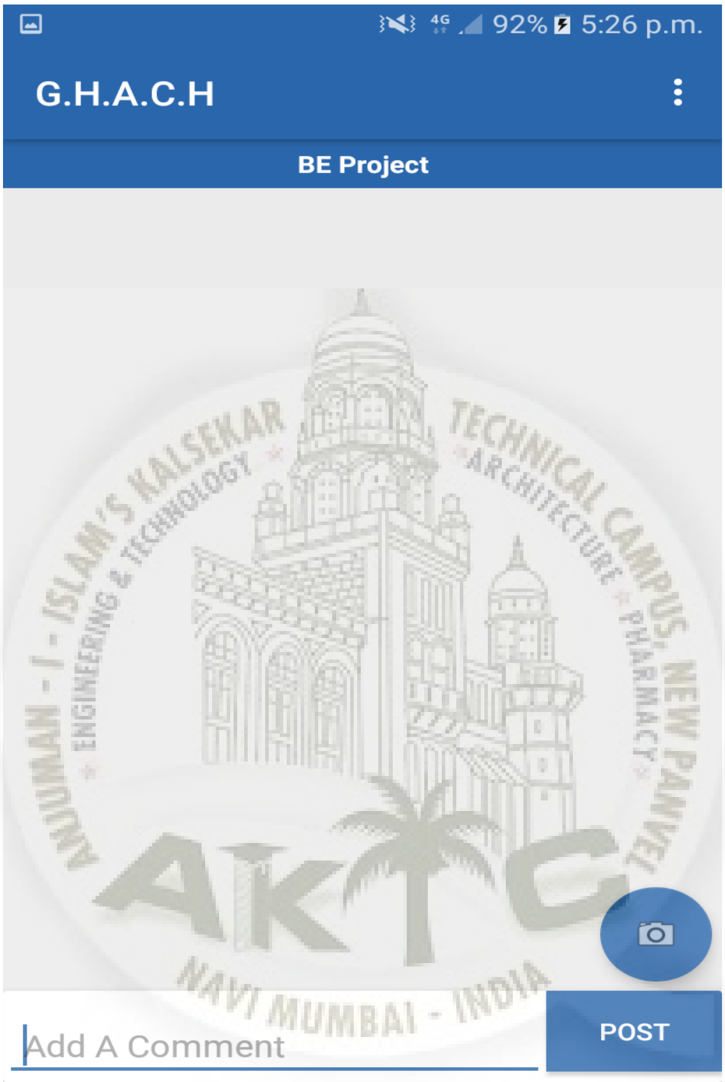
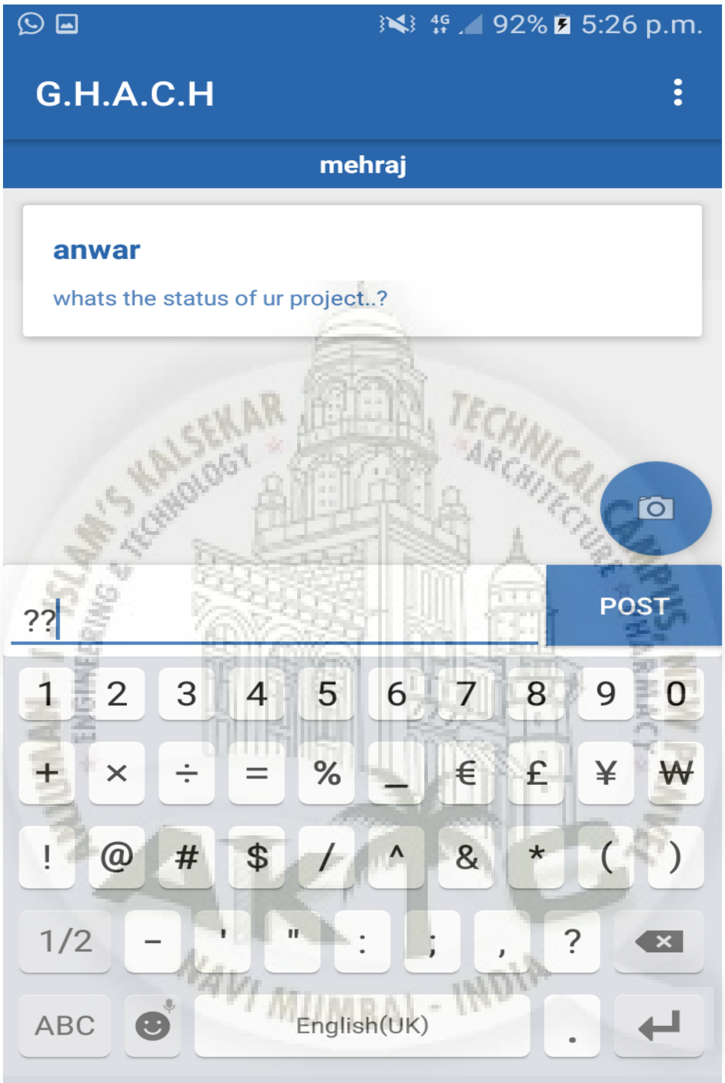

92% 5:26 p.m.
G.H.A.C.H
BE Project
ANJUMAN - I - ISLAM'S KALSEKAR TECHNICAL CAMPUS, NEW PANVEL
ENGINEERING & TECHNOLOGY ARCHITECTURE PHARMACY
AIKTC
NAVI MUMBAI - INDIA
Add A Comment
POST

Figure 8.3: Chat Screen shot

8.4 Send message



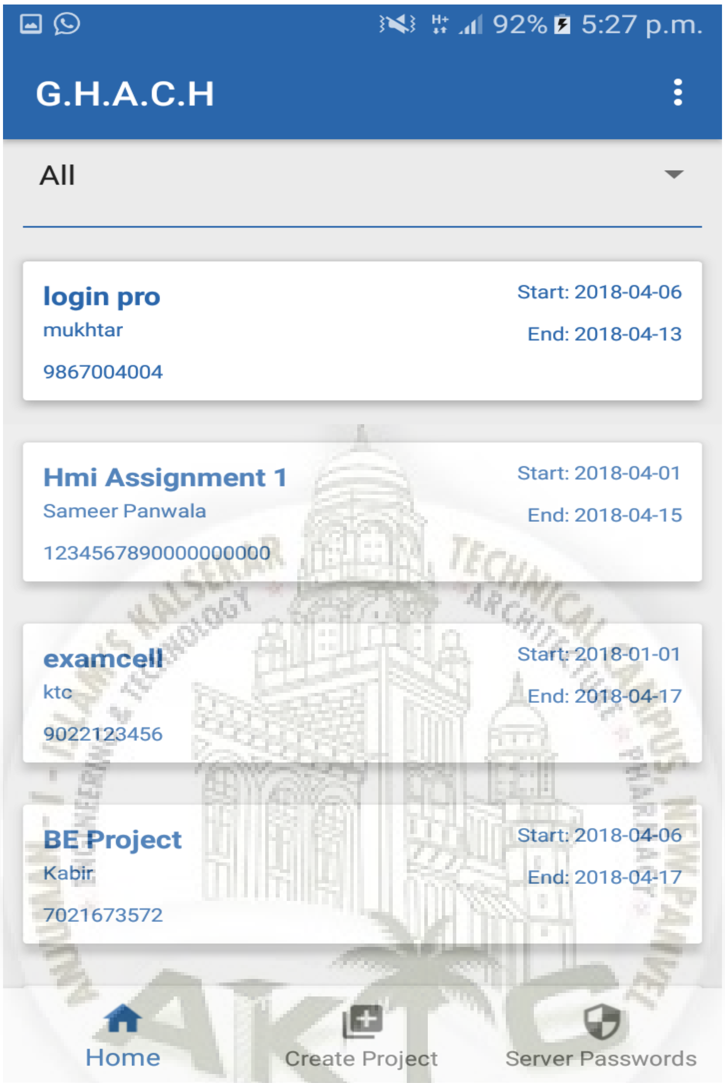
anwar

whats the status of ur project..?

??

Figure 8.4: Send Message Screen shot

8.5 Project list



92% 5:27 p.m.

G.H.A.C.H

All

login pro
mukhtar
9867004004
Start: 2018-04-06
End: 2018-04-13

Hmi Assignment 1
Sameer Panwala
1234567890000000000
Start: 2018-04-01
End: 2018-04-15

examcell
ktc
9022123456
Start: 2018-01-01
End: 2018-04-17

BE Project
Kabir
7021673572
Start: 2018-04-06
End: 2018-04-17

Figure 8.5: Project list Screen shot

8.6 Add Project

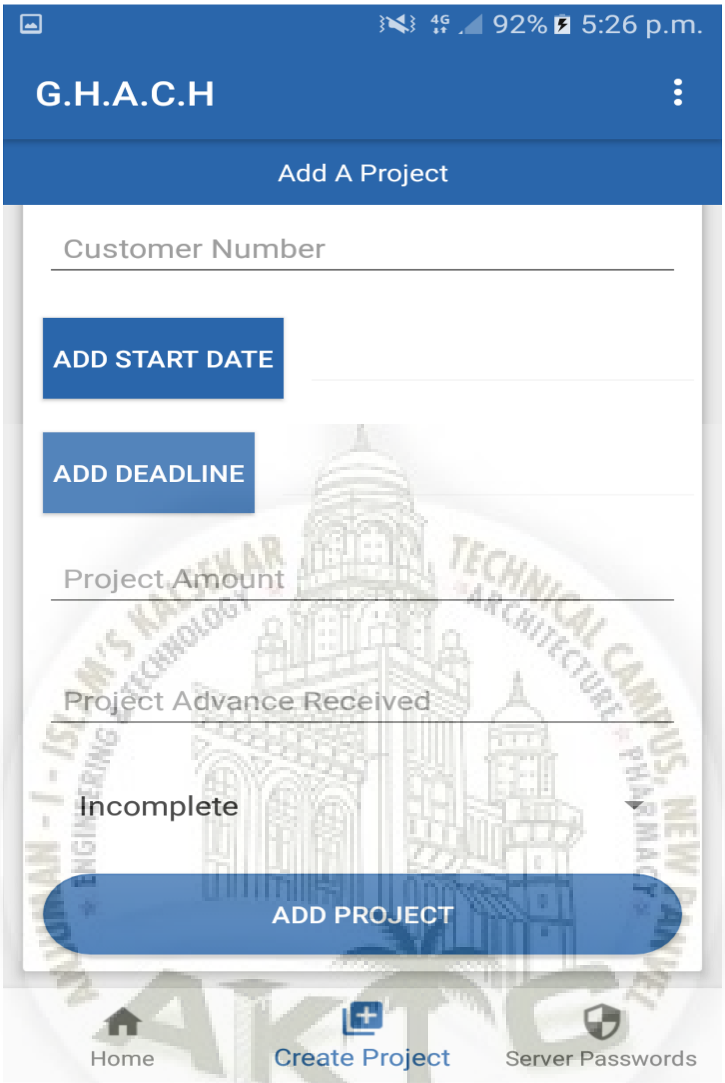


Figure 8.6: Add Project Screen shot

8.7 Stored account

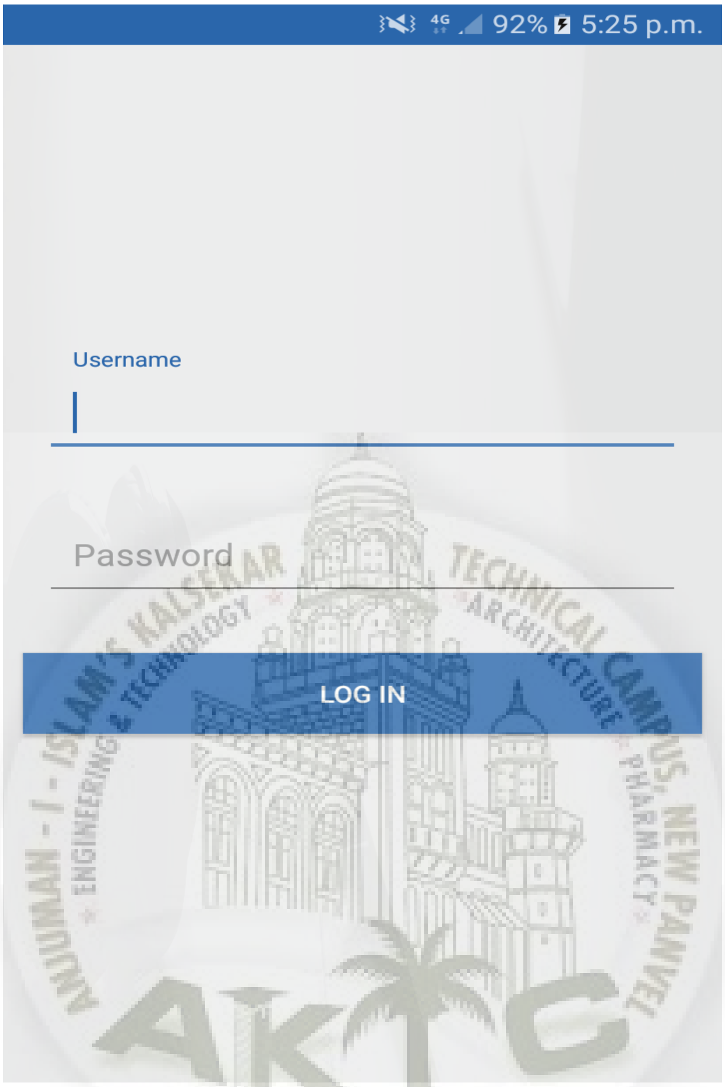


Figure 8.7: Stored account Screen shot

Chapter 9

Conclusion and Future Scope

9.1 Conclusion

However, most applications are designed for normal persons and are designed to make people's life easier. Clients Developers On Cloud enables ubiquitous access of data and information by college clients and developers. Using this service developers have the facility to dynamically avail clients of varied branches with documents, notes, information, program codes, data files, audios, videos, and notification related to subject matter regarding project development at any time and place. The application has two sections majorly, one being the developers end and other is Clients end; both having their own separate utilities and responsibilities. Developers can remotely access the application and download and upload all types of files whereas Clients can also download and upload the all types of files from the application by having a ubiquitous access of data and information. Push Notification helps clients to be aware of notices regarding project development related activities, circulars and all the sudden events and important information to be shared with all the clients of the colleges. Forum has been implements in the application for doubts and discussion between developers and clients where a Clients can raise a doubt about the subjects related project development and developer can reply to it thus removing any miscommunication between developers and clients.

9.2 Future Scope

An application of speech synthesis have been developed for android platform. The developed application is reliable and user friendly and performed an impressive communication. This system can be a problem solution for the people and specially targeting to those with audible problems as it would help them to listen to their problems that they faced regarding their mobile operators. The application work has been done for English language. In future, this work can also be done for rest of the regional languages like Gujarati, Tamil, Telugu, etc .

- This application can be implemented for multiple languages selection.
- Scanner can also be added as a feature which can scan a written text paper and can convert it into a message form.
- Suggestions can also be added for both i.e message and contact.Based on a words type on screen it can predict a next word.It can also predict a contact number based on frequent use.

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Achievements