Feasibilty Study report

Software Engineering Laboratory



Notesify

A Student’s Assistant in Learning

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# Document Revision History

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| 1.5 | Rubal | 25-08-2019 | Initialised Description of Project. |
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# Group Members Details

## Rupinderjit Kaur

I am a student of B. Tech in Computer Science at Dr. BR Ambedkar National Institute of Technology, currently in my 5th Semester. I am an enthusiastic learner and has keen interest in learning new programming languages and principles. I also have a decent interest in solving coding problems and puzzles. I love to ponder my mind on logical questions. I am open minded towards both positive and negative feedback and criticism an try my best to overcome my negative attributes. My major aspiration from this project is to improve my Software Engineering skills.

## Rubal Khehra

I am currently pursuing Bachelors of Technology degree in Computer Science and Engineering from Dr. BR Ambedkar National Institute of Technology. I am quick learner and keen interest in new developing technology. Currently , I do not have any experience in android application development but excited to a level that it would going to be an easy job. I also interested in machine learning and clouding, which in future , I must pursue. I love solve puzzles. I am also developing skills in programming to be good programmer. I am type of person which take any task to be challenge and give best of my efforts to gain better understanding. I like to read about achievements of different famous personalities and try to inculcate their good qualities. I always dreamt to be an employee at google.

## Rajnish

I am an undergraduate student at NIT Jalandhar pursuing my Bachelors in Computer Science. I have a keen interest in programming with knowledge of C++ language. I am proactive in solving programming questions on various online platforms. I am particularly interested in Android Development and have a growing interest in IoT. My personal goal from this project is to learn about software development principles by implementing this in real case scenario. I generally like to work independently so my second goal from this project will be to learn how to work in a team and use individual knowledge for common benefit.

I am passionate for what I do and am eager to learn and adapt to different environment. I am also a very patient person. I actively participate in various cultural and technical activities both online and offline. I also take part in dramatics activities. My other hobbies include Painting.

# Feasibility Study Report Outline

## Title

The title of the project is the name of our application, i.e., ***Notesify***. The title is so decided as our project focuses on **Notes** and will also **Notify** students about any new study materials posted.

## Abstract

Our project consists of an Android Application which aims to provide a common platform for current students, their seniors, alumni and teachers to interact with each other. Here, older students can post the study materials they used to help other students such as any kind of website links, ppts, books, video lecture links, digital copies of handwritten notes, etc. Also, the app will provide a chatting mechanism where any student can put up any query, about which his/her seniors will be notified and anyone can volunteer to help the student. Teachers or any alumni working or doing research in any field can post about their work. Alumni can post about their preparations for any kind of job/post for which they qualified to guide other students. The app will also a provide a feature for students belonging to same class interact with each other effectively. There will be a polling mechanism through which all the students of a class can vote to take a decision that has to be done collectively by a class as whole. The Class Representative will be able to see the results of the poll according to which decision can be taken effectively.

## Keywords

* Notes
* Editorial
* Tutorial
* Books
* PDFs
* Links
* Queries
* Poll
* Mentor
* Field of Work
* Java
* Android Studio
* MySQL
* Database

## 

## Description of the Project

This project is an android application to promote the sharing of valuable information among new learners and freshers coming to college. This project will not only support them with academic notes but also guide them and interleave other valuable topics not included in curriculum. It helps to gather the mind/knowledge of large number of people belonging to different departments, work field on a single platform. One of the superior features of our project is authenticated access. Verification of users will be done via their email accounts. Rating and comment system aim to minimise the efforts of users in comparing the quality of documents available. The User Interface of this application is simplistic and straightforward. It does not require any prerequisite training to use its features. Users will easily understand the operations of this application within one or two usages. The application aims at providing reviewed content within seconds. Now, the users don’t need to waste their valuable hours on searching for best online material. The desired material is available on a single click. The application can be operated on any latest version android smartphone.

### **Tour of our Application**

#### Login Page

The Login Page will appear every time the application is opened. It will take Email ID and Password of user as input and Login if credentials are verified. It will then display the Home Page according to the kind of the user. We will also provide the Forgot Password functionality to the user in case he forgets his password. In this case, a Password Reset link will be sent to the verified email account of the user.

If the user is new to our application then he can create new account, which will open the Registration Page.



#### Registration Page

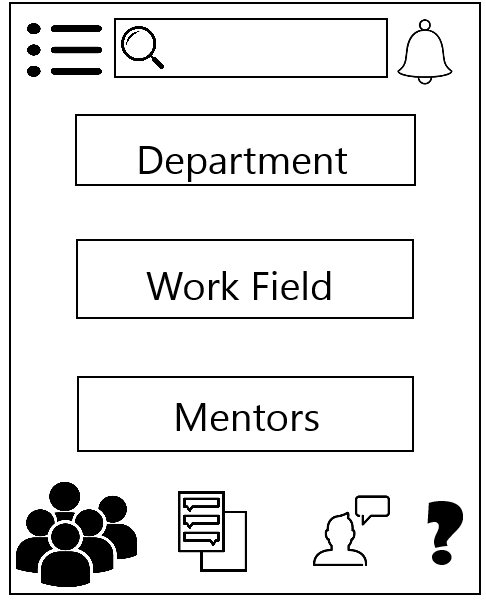
There can be major three kinds of users- Students, Alumni and Teachers. Each different kind of user will be asked for different kind of information.

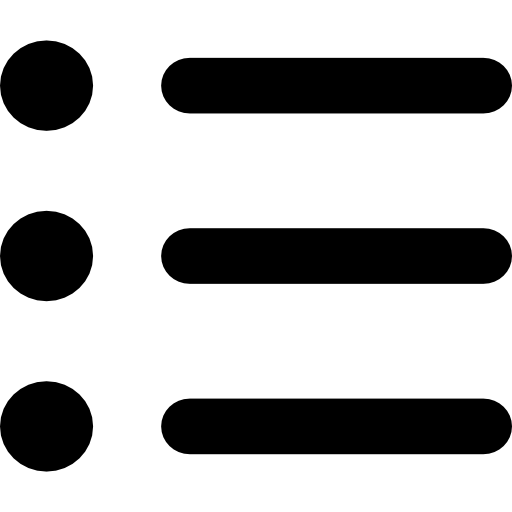
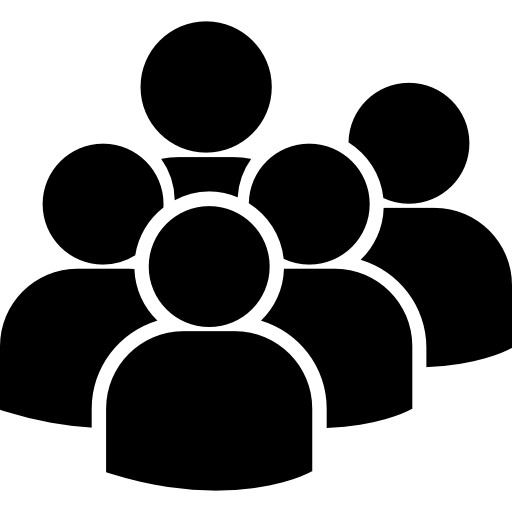
Students will be asked for credentials like- College Name, Course, Education Field, etc. Alumni will be asked for information like- Current Place of Work, Role, Education Field, their Projects, etc. Teachers will also be asked for similar information. It will help us filter out the results for the students searching for guidance in various fields.

#### Home Page

Login Page will direct a user to Home Page. This is the main page from where a student can explore various features of the application.

Components of this page are-



*  - Clicking on this icon will open Options Menu which will include options-
* Edit Profile- Here the user can change his credentials like email id, phone, password, etc.
* Change Status- Here the user can change his mentor status. If a student thinks he/she has gained enough knowledge and experience in any field then he can volunteer to become a mentor.
* Followings- This shows the list of all those mentors who a student follows.
* Followers- If a user is a mentor then this shows a list of all the students who are following him/her.
* Settings- Here the User can change any settings related to the application like Font Size, Background Theme, Notification Settings, etc.
* FAQ- Here a user can read answers for all the Frequently Asked Questions.
* Sign Out- Click here to sign out from your account.
* - Clicking on this Notification Bell icon, a user can see if any of the Mentors or Teachers who the he/she follows have posted any new document or replied to his/her queries.
*  - Clicking on this icon will open the Class Group of the Student, where a student can track any of the class activities like any assignment due or any other kind announcements. Here he\she will also be able to participate in any decision making in the class through the Polling Mechanism.
*  - Clicking on this option will open the My Posts Page where a user can see the posts that he/she has pinned for future readings. The user can upload new documents and also edit his/her already uploaded posts.
* - Clicking on this icon will open the feedback form where a user can send feedback to the administrators suggesting any improvements in the application.
* **?** - Clicking on this iconwill open the Queries Block where a Student can post Queries openly for anyone to answer.
* Pressing on the ‘Department’ Button will list of various departments from where the student can select the required department from where he/she can further select the Semester. Each Semester will include various courses. Available courses will have different course materials like Notes, PDFs, Books, PPTs, etc.

* Pressing on the ‘Work Field’ Button will list various Fields of Work. Each field of work will have some active mentors and faculty working in those fields. We can Select any mentor and his/her profile will pop up.

## Previous Works

In our college, we are provided a google drive link created by previous batches which contains pdfs, ppts and notes. These are seldom updated and moreover the contents are only limited to our course subjects’ syllabus. Also, this link is not interactive. We cannot put up any queries there. Moreover, we are going to build an android application which the students will prefer more than a link. Plus, the app will provide additional features such as polling and chatting mechanism.

## Project Scope and Contributions

Main Stakeholders of this project are:

* Current College Students
* College Alumni
* Teaching Faculty

Main use cases associated with our project:

1. A Student can-
   * View already posted study material by his Seniors/Alumni/Teachers.
   * Post any relevant study material for the use of his juniors.
   * Search about the people working in the fields of his interest and take guidance.
   * Directly ask Queries from his/her seniors/alumni/teachers through a chat box.
   * Vote for a decision to be taken by his/her class.
   * Volunteer to assist his/her juniors by answering their queries.
2. An Alumni/Teacher can-
   * Share about his/her work experience to help other aspiring students interested in the same field of work.
   * Volunteer to assist students from his/her college by answering their queries.
3. A Class Representative can-
   * Post a Poll in his/her class group to make a decision.
   * See the results of the poll in the form of a Pie Chart having three sections- Agree, Disagree, Not Responded.

Initially, our application’s scope will be limited to only the students of our own college then gradually we will try to take it globally. It will contribute a great deal in the life of a college student by easing his/her way of finding any relevant study material.

## Technical Feasibility

The technologies to be used in this project are-

* Java Programming Language
* Android Studio
* MySQL Database

Each of the above-mentioned technologies are freely available and technical skills required are easily manageable. Also, our project is not very complex so we will be able to develop an acceptable application with necessary but not limited features. Moreover, time limitations of the project development and the ease of implementing using these technologies are synchronized.

The basic requirements to develop the application like Computers, power supply, internet and soft-wares are easily available in college computer laboratories. Also, there are not much financial overheads which can pose any difficulty.

The app will not be using any confidential organisational data for which we will be needing any kind of permissions. The mentors or teachers will provide any personal or educational information willingly.

## Risk Analysis

The major risk currently is not being able to meet the deadlines. So, we plan to develop the project in modules. Also, doing so will help us keep our errors minimal. As this project contains a various number of functionalities, the code may become a mess as we are inexperienced developers.

Other risks include version operability of our project on various platforms. We will try to keep our applications as diverse as possible. We will also maintain our app so that it can cope up with technology upgradations.

One other risk is that someone may post some irrelevant or incorrect content. To handle this issue, we will introduce a rating system where students can rate any document based on the quality of the document.

We will also introduce a feedback system, to refine the application with emerging technological developments.

## Work Plan/ Schedule

We plan to develop this project in various versions. We will introduce new functionalities one by one in each version of our project. Each version will act as a milestone for us.

The major guidelines for us will be as following-

* Deciding all the features to be included in our application.
* Collecting all requirements to achieve these features in our application and stating them formally in the form of predicates.
* Generating various Use Cases.
* Developing the Login Page and the Registration Page.
* Developing the Home Page. It will include developing each feature associated with each icon in the Home Page one by one. We will Test and Debug each feature after its development before moving ahead.
* The tables in the database will be developed simultaneously with the pages according to the arising needs.

## Suggested Deliverables

The end result of this project will be an android application having different sign in options for students, teachers and alumni, and a centralized database to store all the data that is posted on the application. Each Stakeholder will have different kind of GUI.

## Any other Details

## References

We contacted other students, which are actually our customers, to get a clearer picture of our requirements. They also suggested us other features and functionalities that can be added to our application for a better user experience. Their Suggestions were as following-

* Adding a Search Bar- It may have become difficult for a user to search for any material by opening various folders. A search bar can facilitate a user in searching for the desired document by typing keywords.
* Comments- Earlier we had only included the concept of a Rating System where a user can rate any document according to its quality, usability and user’s own experience of the document. Adding comments can not only provide users with the functionality to give feedback for the document but also provide an aid for other users to choose the best study material.
* About Us- Here we will provide the contacts of the administration staff in case any user faces any difficulty.
* FAQ- It will display the Frequently Asked Questions which all the students are asking. It will lessen the burden on the alumni and senior students as otherwise they would have to answer same things to different students.