Software Requirements Specification

Tindev - Tinder For Developers

Version 1.0

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1 Introduction

1.1 Purpose

This document was made to give a detailed explanation regarding the mobile application tinder for developers . This document will illustrate what features are used ,any development required further in the system. This document is primarily made for interaction between the users and the development team so as the first version can be made.

1.2 Intended Audience and Reading Suggestions

As we can see this software is open for all programmers who want to be a part of this.

This document is a base model for the application to be created. It has to be functioned on by the developers, testers, designers and the end users. This SRS is a specification of the requirements for the given software and for everyone to become familiar with it.

Developers: New features and better facilities regarding this mobile application are to be reviewed by these developers.
Testers: Any bugs or faults regarding the application can be found by the testers and can review it for the better functioning of the app.
Designing: The way in which this app can appeal to us in an enhanced way can be suggested to us by the by designing team.
End Users: They can read about this project on this document and be familiar about the concept of it.

1.3 Project Scope

Tinder for developers is a Mobile application that allows programmers or developers to work on a project with fellow compatible project programmers or developers . There are many developers with great sense of ideas who do not actually have proper knowledge to implement their thoughts whereas in the contrary there are many developers who have a high technical knowledge and have a good sense of implementing projects but need some great ideas. Also projects are something with which if a good team can be formed it is easy to divide the tasks and the work to be eventually done with. Tinder for developers is a platform to work on for these developers to find a team , or to work on different ideas and project by right swiping on it.

2 Overall Description

2.1 Project Perspective

The System consist of a mobile application, which will be used by the programmers.
1. In this application, first registration for everyone is compulsory and then everyone has to enter their skills and their Area of interests.
2. Accordingly for their skills they will get a list of projects in which they can work. They can show that they are interested in a project.
3. Also there is a button after pressing it people can add their own projects to function in and form a team.
4. In the options view one can look at their individual profile, if there are any new notification regarding their projects, and can also chat with fellow developers . Also people can view profile of the developers who are interested In their project and want to work with them, and judging them by their profile can choose whether they want to work with them.
5. Also to deal with fake developers there is a report button to report developers ,if a number of people have reported an account that account will be deactivated.

2.2 User Classes and Characteristics

The users that can interact with the application specifically should be a developer or a programmer.

2.3 Operating Environment

The Operating Envirement for the mobile application is- Android
Database- PostgreSQL.
Platform- JAVA.

2.4 Design and Implementation Constraints

- The internet is one of the constraints for the application ,since it cannot function without it.

- The performance of the database while fetching a topic reduces when more people search for the same topics as the database is shared by many users.

- Also the capacity of the users cannot exceed the capacity of the database used.

2.5 Product Overview

The System consist of a mobile application, which will be used by the programmers.

- In this application ,first registration for everyone is compulsory and then everyone has to enter their skills and their Area of interests.

- Accordingly for their skills they will get a list of projects in which they can work. They can show that they are interested in a project.

- Also there is a button after pressing it people can add their own projects to function in and form a team.

- In the options view one can look at their individual profile, if there are any new notification regarding their projects, and can also chat with fellow developers. Also people can view profile of the developers who are interested In their project and want to work with them, and judging them by their profile can choose whether they want to work with them.

- Also to deal with fake developers there is a report button to report developers ,if a number of people have reported an account that account will be deactivated.

3 External Interface Requirements

3.1 Hardware Interfaces

Since our application has no need of specific hardware or sensors, we do not care about specific hardware interfaces available.

3.2 Software Interfaces

Database System: PostgreSQL v10.4
Tindev has to interface with PostgreSQL Database system for getting and presenting all the user and project data to the user, in the UI.
Backend Server: Java Servlet with Apache Tomcat v8.5
Server interfaces directly with postgres for sending and retrieving data, and the android application interfaces with the backend server.
Caching: Redis v4.0
Caching mechanism at the server.
Database Connectivity: JDBC(Java DataBase Connectivity) v4.3
For connecting the servlets to the database.

3.3 Communications Protocols

HTTPS: Hyper Text Transfer Protocol Secure: For communication between the client and the server.
JDBC: Java DataBase Connectivity: For communication between servlets and database server.
RESP: REdis Serialization Protocol: For communication between servlets and redis server.
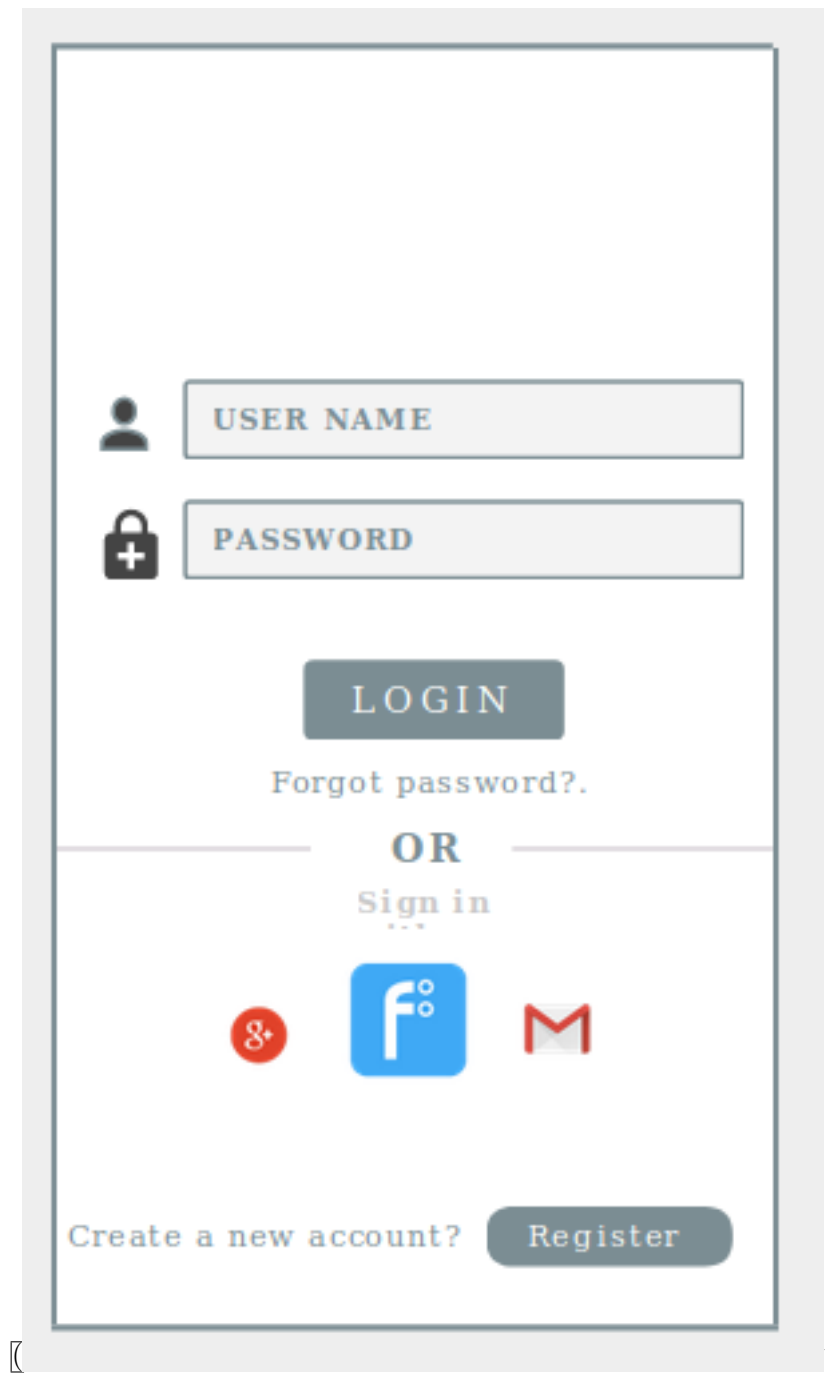
3.4 User Interfaces

USER NAME

PASSWORD

LOGIN

Forgot password?.

OR

Sign in

Create a new account? Register

Figure 3.1: Login view

Figure 3.2: Registeration view

Figure 3.3: Homepage view 1

Figure 3.4: Homepage view 2

Figure 3.5: Add project view

Figure 3.6: View Project view
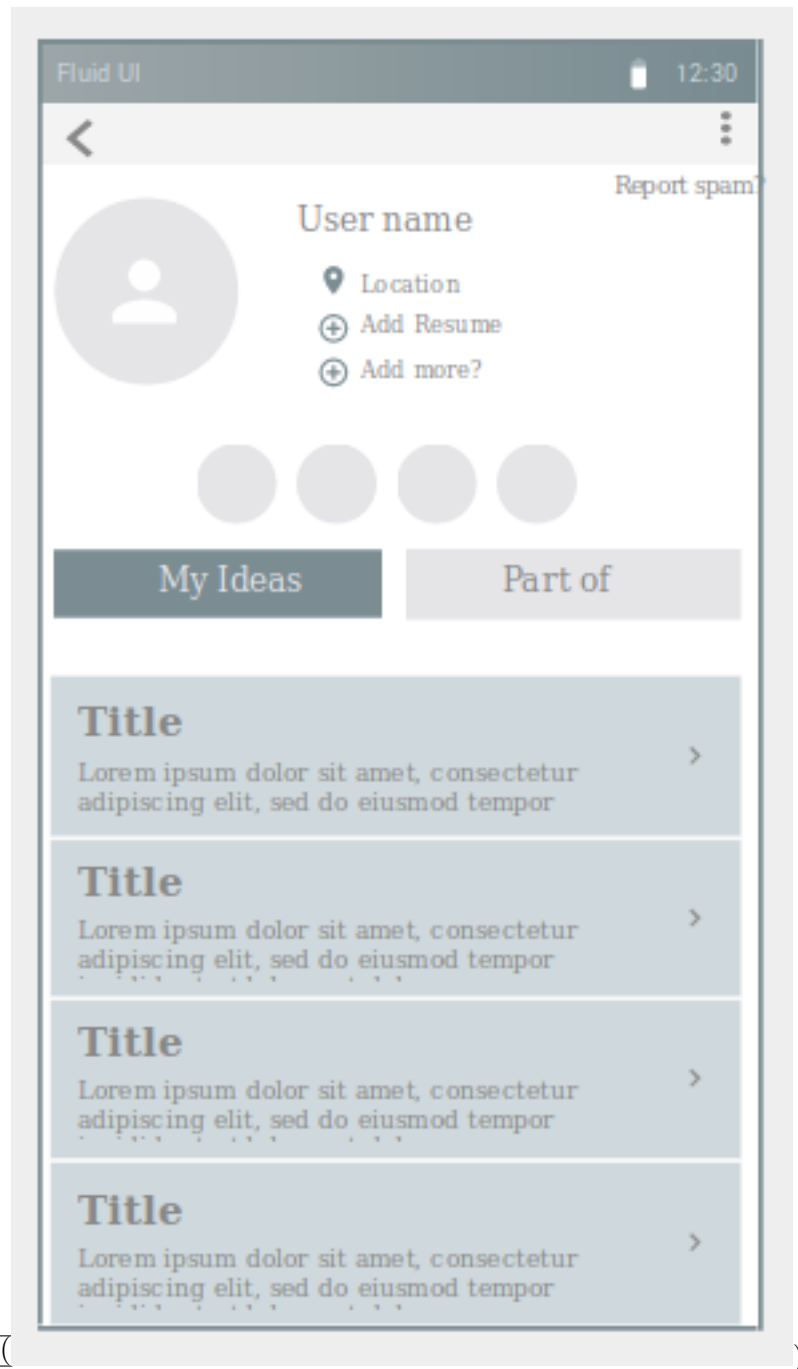
Figure 3.7: Notifications view
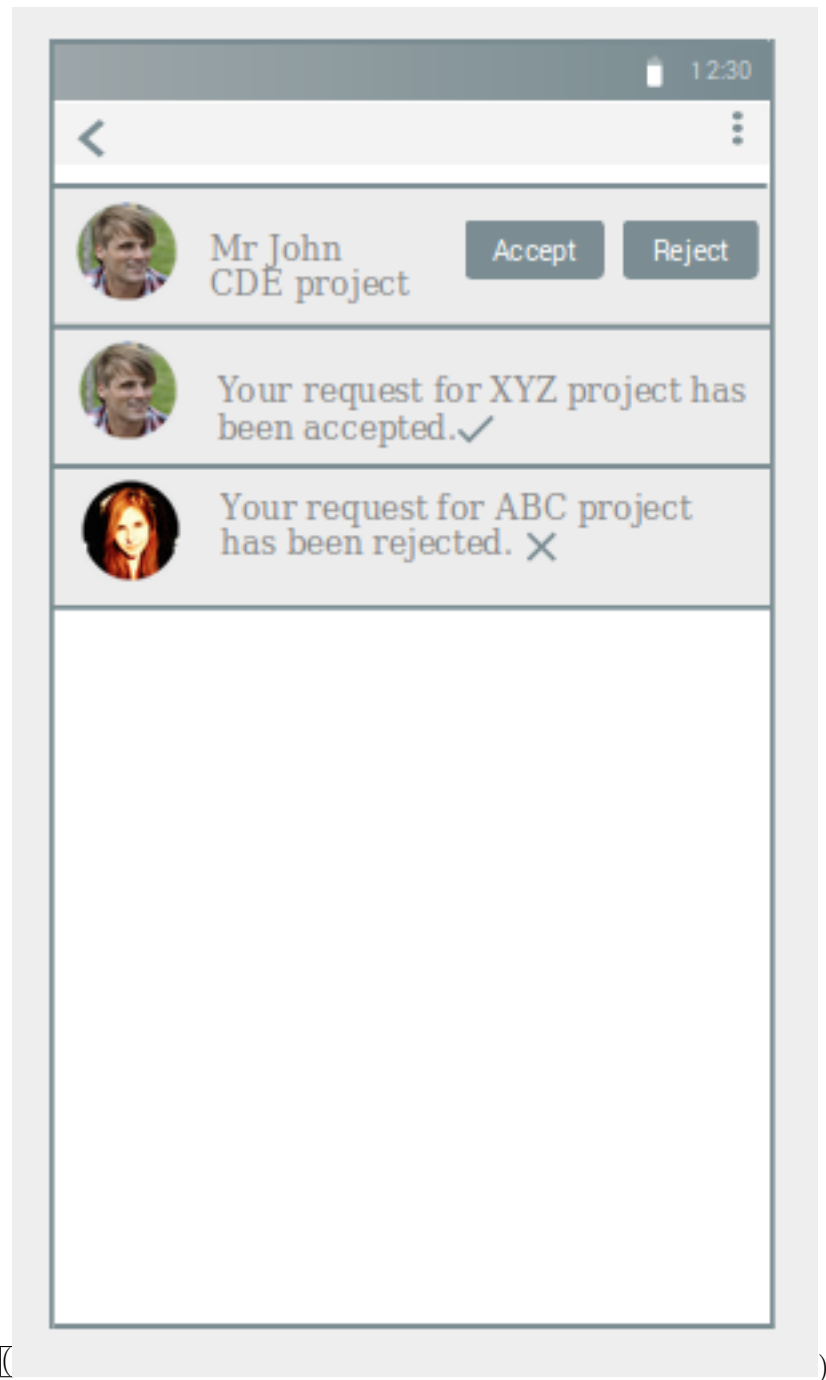
Figure 3.8: Notifications view
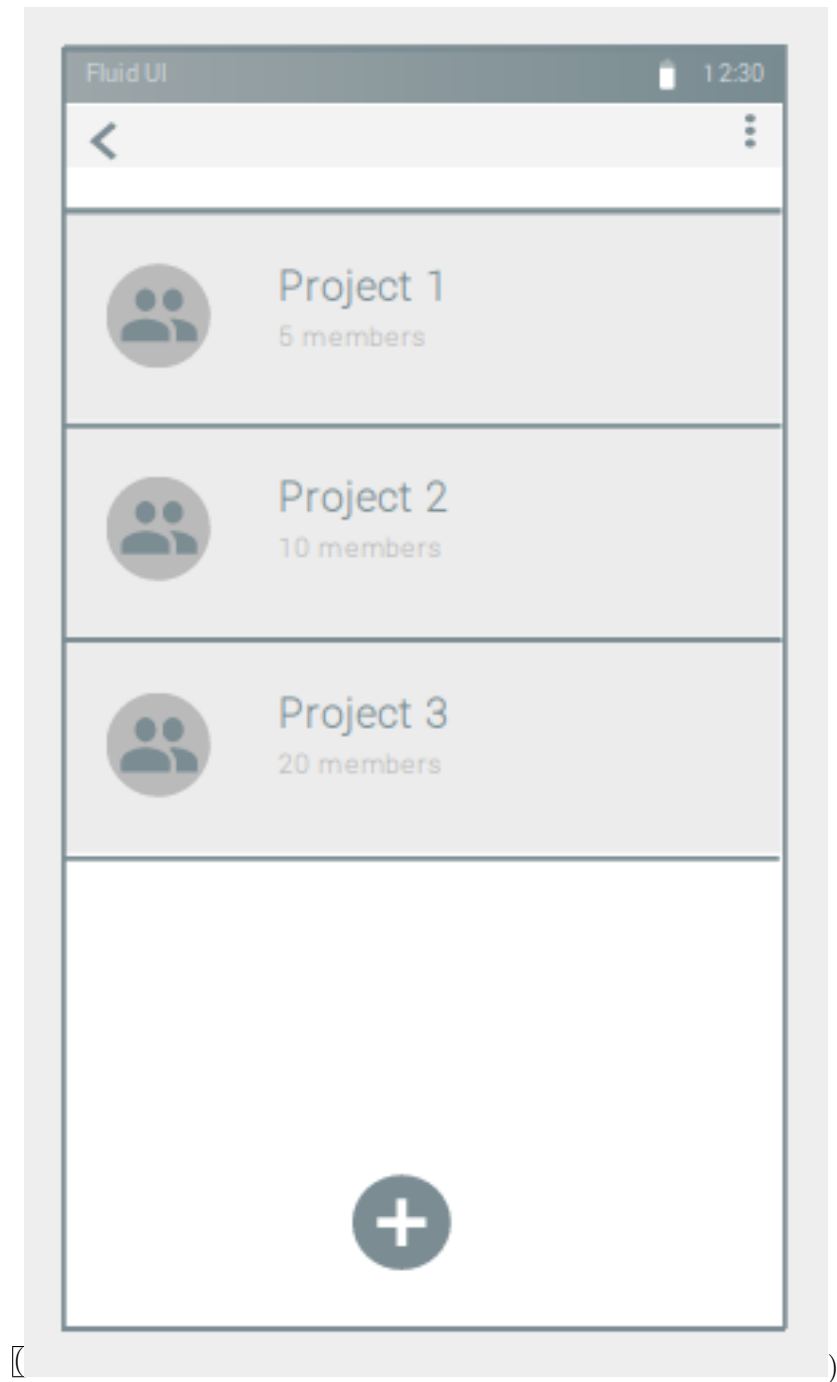
Figure 3.9: Chat view

4 System Features

4.1 Functional Requirements

Accessing Application

ID : FR1
TITLE : Download mobile application
DESC : A user should be able to download the mobile application
through any application store.The application should be free to download.

ID : FR2
TITLE : Mobile application-User registeration
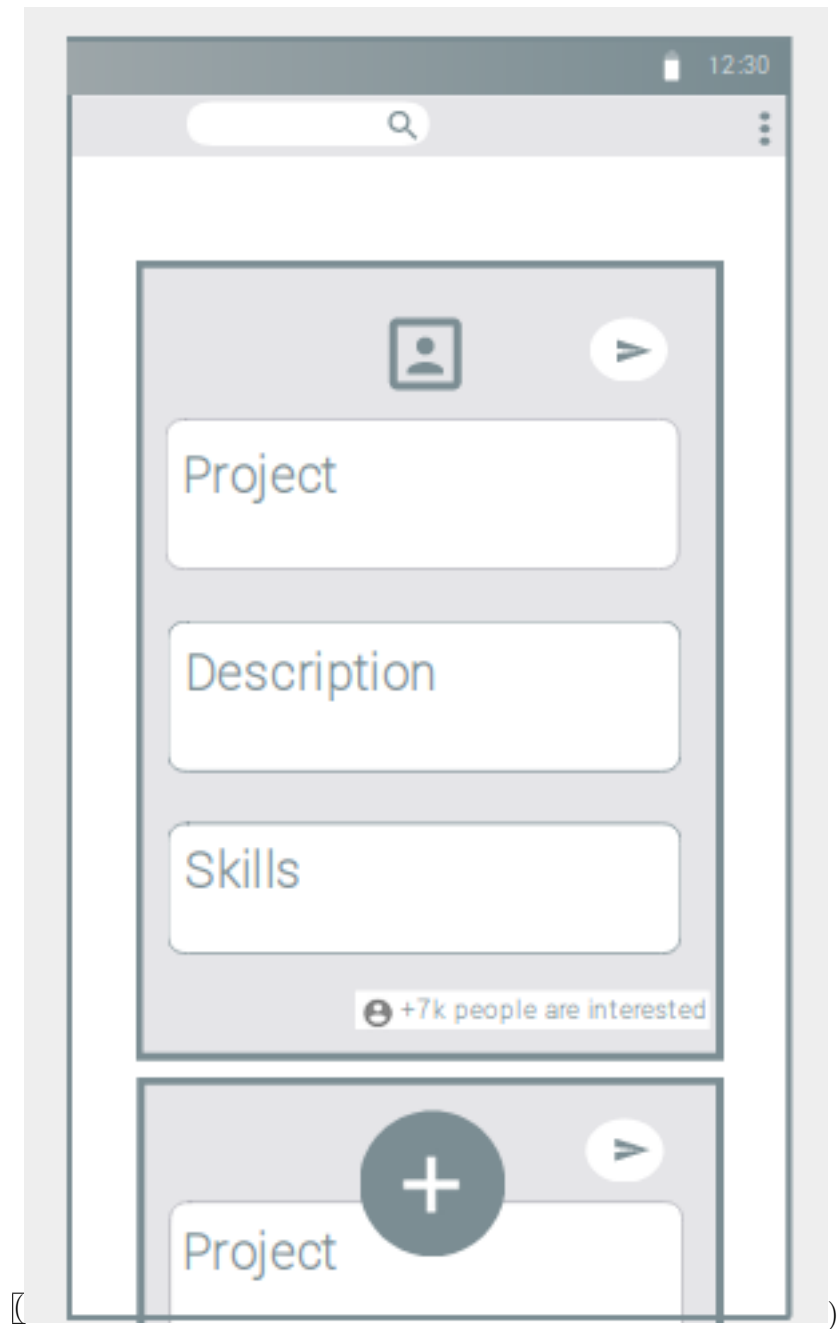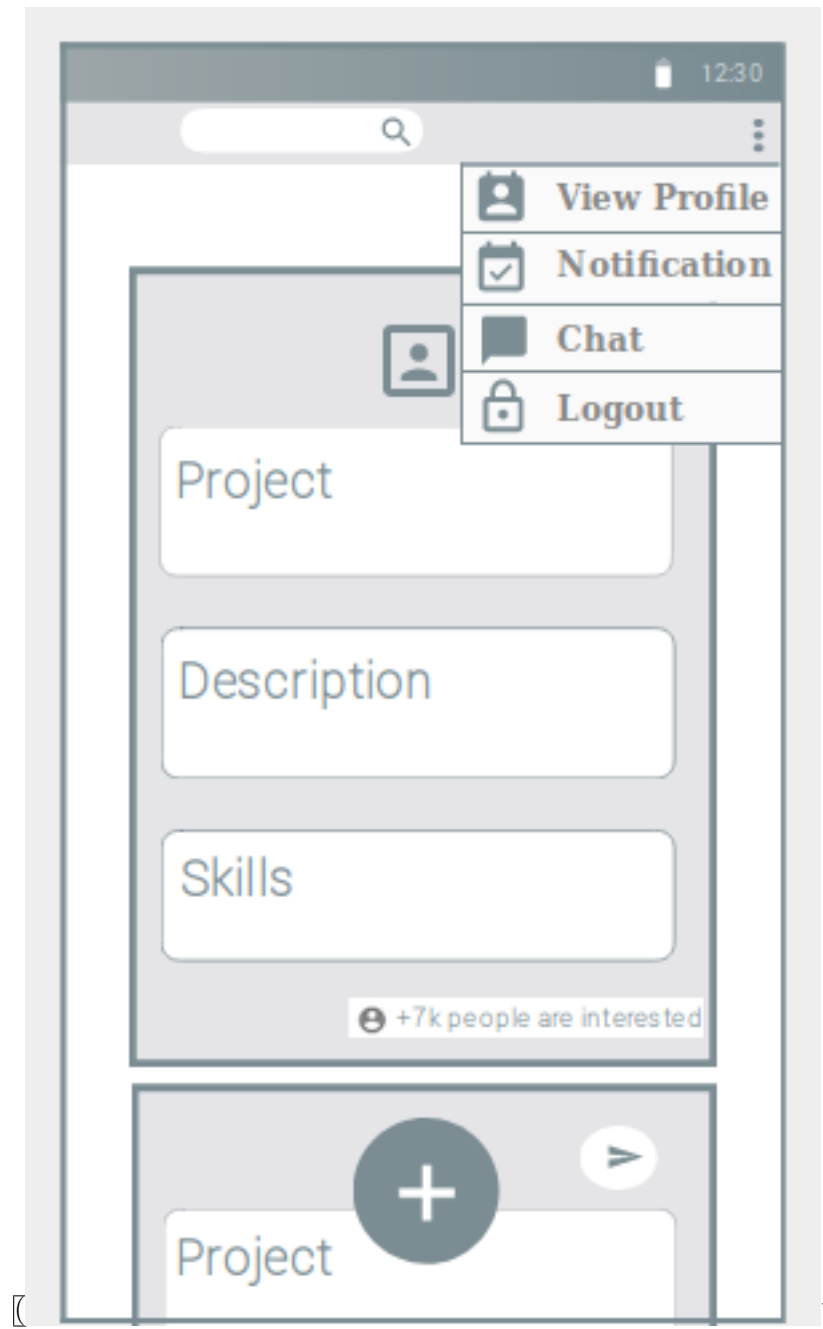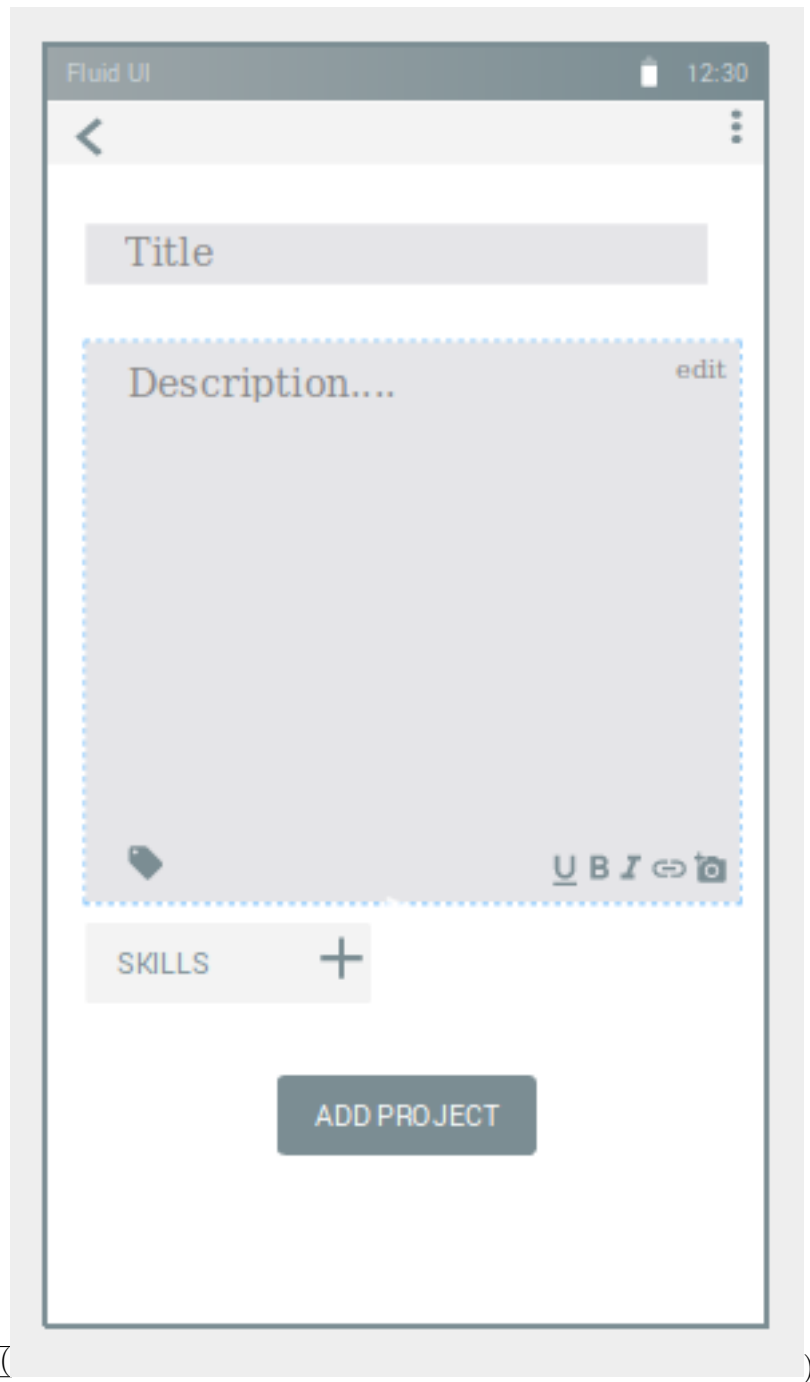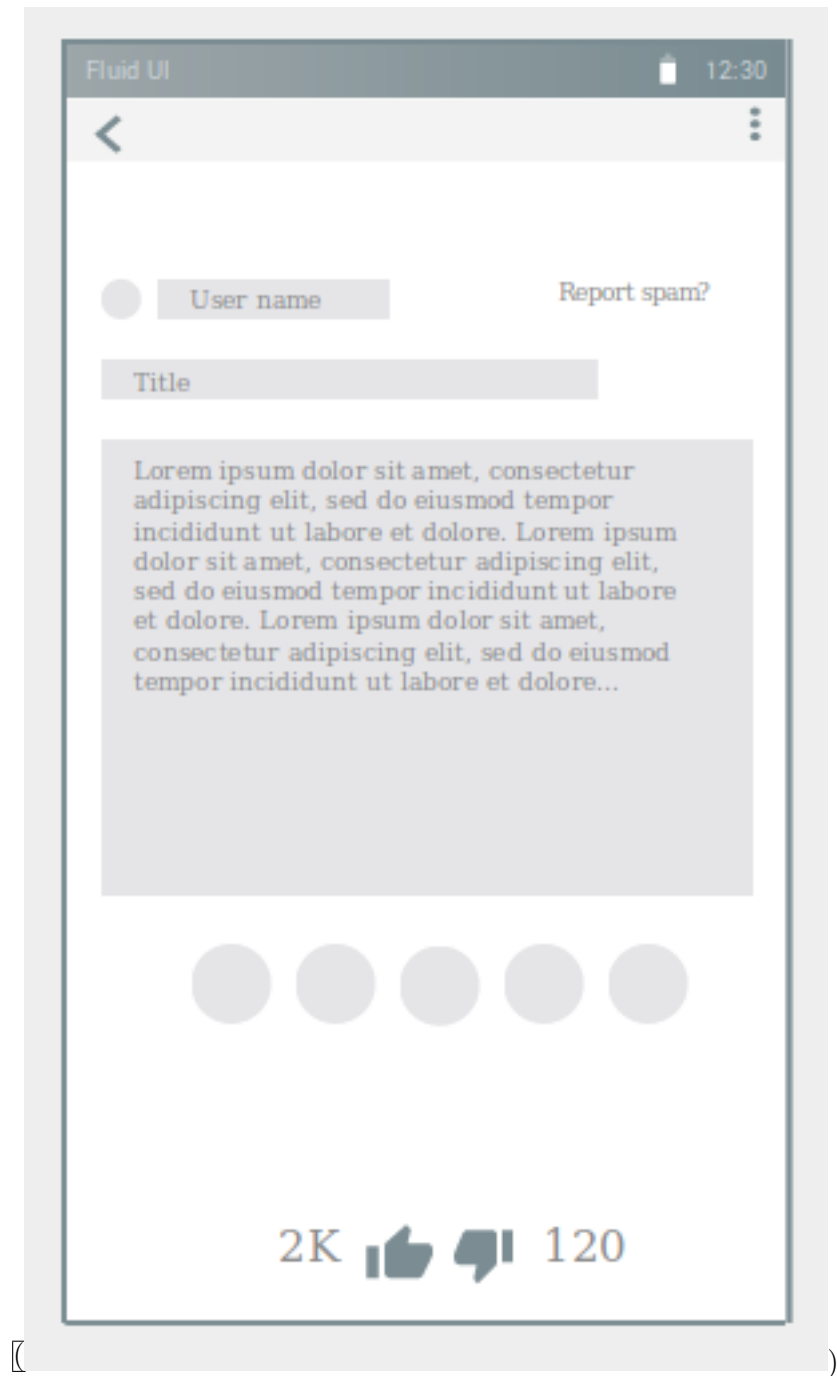**DESC :** Given that a user has downloaded the mobile application,then the user should
be able to register through the mobile applicaton(if he/she is a new user).The user must
provide name,email address, username,password,confirm password,skills and area of interest.Then this information should be stored in database.

ID : FR3
TITLE : Mobile application-User LogIn
DESC : IF user has already created account then user should be able to login to it or
he/she can sign in with any of given account.

Home Page

Search feature

ID : FR4
TITLE : Mobile application:Home page-search project
DESC : Given that user is logged in to the mobile application,then the first page that is
shown should be the Home page. Here,if the user wants to search for project of interest
then user should be able to search it by name or he/she should be able to scroll it to see
next project topic.

Users Interest

ID : FR5
TITLE : Mobile application-Interest in Project of the viewed list
DESC : Given that user is viewing different project by scrolling or searching by its name than to show his interest he should be able to right swap on card view of project.

Create project feature

ID : FR6
TITLE : Mobile application:Home page-crate project1
DESC : Given that user is logged in to the mobile application,then the first page that is shown should be home page,if the user wants to create his/her own project to find team members for it then he/she should be able to add their own project with the help of + sign,by clicking on it he should be seeing user name,title text view,Description box to add content and various effects to edit that content, skill box to add skills and add project button.

ID : FR7
TITLE : Mobile application:Home page-crate project2(Add Project)
DESC : Given that user has selcted +(add button) than user should be able to fill all details in the input box given in that view and he/she should be able to add it by selecting Add Project button.

Project Description

ID : FR8
TITLE : Mobile application- Project description view 1
DESC : User should be able to see detail description of project of interest by clicking on arrow button on card view of project.And than he/she should be see the detailed view containing username,Title,Description,Team memebers,Like/Dislike button.

ID : FR9
TITLE : Mobile application-Project description view 2
DESC : Given that user is viewing detail description of project view then to like/dislike the idea of project he should be able to click on like button or dislike button.

ID : FR10
TITLE : Mobile application-Project description view 3
DESC : Given that user is viewing detail description of project view in which already present team members must be shown Than user should be able to select any team member's icon to see his/her profile.

ID : FR11
TITLE : Mobile application-Project description view 4(REPORT SPAM)

Different options features

ID : FR12
TITLE : Mobile application-Option button on Home page1
DESC : Different options should be viwed by clicking on option button like Your Profile,Notification,Chat,LogOut.

ID : FR13
TITLE : Mobile application-Option button on Home page2(Profile picture)
DESC : Given that user is viewing option button from which for checking his/her profile picture user should be selecting Your Profile option,Than accordingly he/she should be seeing profile view.

ID : FR14
TITLE : Mobile application-Option button on Home page3(Profile picture-My Ideas)
DESC : Given that user is on Profile view that should be consisting of user profile picture,user name,location,add resume option,add more option,list of team members, and two section from which one is of My ideas and other is of Part of. from which by selecting on My ideas section user should be able to see list of projects he has added to application.

Profile view

ID : FR15
TITLE : Mobile application-Profile view(My ideas-side arrow)
DESC : To view specific project from list of My ideas user should be selecting side arrow beside the topic of list than he/she should be directed to project view of his own project having advantages of editing or adding the same project.

ID : FR16
TITLE : Mobile application-Profile view(Part of option)
DESC : To view Part of option, user should be selecting it and he/she should be directed to the page where user should see the list of topic in which he is interested.

ID : FR17
TITLE : Mobile application-Profile view(Add resume)
DESC : To add resume, user should be selecting on that option where he should add his/her resume of any doc type from his Pc.

ID : FR18
TITLE : Mobile application-Profile view(Add more)
DESC : To add different accounts link like github,linked in user should be able to add it through this option.

ID : FR19
TITLE : Mobile application-Profile view(Team members)
DESC : On user's profile there should be list of team members of user's project,so to view their profile user should be selecting it.

Notification

ID : FR20
TITLE : Mobile application-Option button on Home page-Notification types
DESC : Given that user has selected notification option to view it.Than user should be able to see two types of notification there. One showing other users interest in his/her project and other type of notification should be notifying user whether his/her interest on other users project has been accepted or rejected.

ID : FR21
TITLE : Mobile application-Option button on Home page-Notification(Accept/Reject)
DESC : Given the user is viewing notification of type 1 as mentioned above than user should be able the accept or reject other users interest by selecting The button given on that.

ID : FR22
TITLE : Mobile application-Option button on Home page-Notification(Accepted-Chat option)
DESC : If user has accepted the other users interest than that interested user should be added to group of Developer user automatically. i.Here after accepting the interest request of other user, chat option of developer's account should be added accepted user's account to the group automatically with the existing team members. ii.And inside the chat option of interested user he should be able to use developers project group having existing team members. Above all things should be seen by selecting chat option on Home page's option button.

Log out

ID : FR23
TITLE : Mobile application-Log out
DESC : To log out the account user should be selecting log out option.

4.2 Database Requirements

Table 4.1: Users Table

Username	Email	Password	Location	ResumeLink	MoreLinks	ImagePath

Table 4.2: Skills Table

Skill	SID

Table 4.3: Area of Interest Table

Area	AID

Table 4.4: User skills table

Username	Skill

Table 4.5: User Area of Interests Table

Username	AreaOfInterest

Table 4.6: Users Spam Table

Reporter	Spammer

Table 4.7: Projects Table

Title	Description	Owner	PID	NumberOfLikes	NumberOfDisklikes

Table 4.8: Projects Skills Table

PID	Skill

Table 4.9: Projects Area Table

PID	Area

Table 4.10: Projects Likes/Dislikes Table

PID	Username	LikeDislike

Table 4.11: Projects Members Table

PID	Username

Table 4.12: Projects Spam Table

PID	Reporter

Table 4.13: Projects Requests Table

From	PID	Status	RequestedTime	ActionTime

Table 4.14: Chat Messages Table

Sender	PID	Message	Time	MessageNumber

Table 4.15: Message Count Table

PID	Count

Table 4.16: Notifications Table

NID	For	Type	Time	PID

5 Non-Functional Requirements

5.1 Security

Everytime user login to the system an email should be sent to user to notify about login activity of user. Password of the system needs to pass some criterias to build strong password like it should include special characters, numbers, calpital characters to make it difficult for hackers to hack it.And it will be stored in the database in encrypted form. Report spam feature of system gives the assurity of having secure system since with the help of this feature one user will be able to identify fake user who needs to steal the data and misuse of the system,by using this feature user will get proof of having best and trust worthy team together. with any hardware failure backup system feature will come into account to save all essential data of user related to his project and team member. if user fails to login for more than 5 times than the system will be blocked for certain amount of time for sequrity purpose.

5.2 Performance

System should be able to handle great number of users around the number should be in thousands. Search function of the system should be prominent and it should give fast and accurate result. Selecting any element from the system should take less than second time. Connection withe server and database should be done faster so that to retrieve queries, executing queries or sending request getting response all this activities should be sone faster. System will be available 24 by 7 and the above connection will be done faster if the user has good connection of internet.

5.3 Software Quality Attributes

5.3.1 Usability

The system should be userfriendly.All the features of the system should be easy to understand and all the bugs/error should be easily handle by the system to make it easy for user to handle.

5.3.2 Availability

The system should be available anytime ensuring user has good internet connection and expected platform.(Android user) Testability:A seperate test environment will be provided for tester to test bugs/errors and all the requirements for the system.

5.3.3 Maintainability

The application should be build in such a way that it should be easy to extend it. The code of the system should easily incorporate new changes in the existing one.since we are using agile process model which gives us facilty to do so easily.

5.3.4 Correctness

Application should provide accurate result of every action performed by user.

5.3.5 Reliabilty

The reliability of the system depends on reliabilty of the each components for eg: Search operation,notification,etc feature of the system should be reliable to give accurate result and make the whole system reliable. Usability:The system should be userfriendly.All the features of the system should be easy to understand and all the bugs/error should be easily handle by the system to make it easy for user to handle.

5.3.6 Portability

Since the system should be using MYSQL,TOMCAT which are independent of any OS and the application is build for android user so all the user having android system will be easily access this application.