ASE Project Increment2

Group# 12: Project "Ask UMKC"

Group Members:

- Sravan Kumar Appana
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- Architha Mukka
- Manikanta Maddula

Introduction:

Name of the application "Ask UMKC".

The App is about questionnaires which can be posted by any user and any registered user can answer the question. The questions need not to be in specific area like finance, course and sports etc., it can be of any topic related to university activities like events, career, etc. Student who wants to join UMKC will have many doubts like 'last date for paying fee!', 'where is a particular event?', 'Student associations 'etc. It is easy to drop a mail to the authorities asking for details but if answer is needed on weekends and on holidays, it's difficult. But with this application answer can be found at any time.

Objective:

An android application which help students of UMKC in clearing their doubts in all domains like fees, course, sports etc. Answers can be replied by other students or any other registered user.

Features:

Users can login to app using their Google account or they can sign up for the account. After successful login, user navigates to a page with ask button and when slided left in home page, app displays various fields like 'Academic', 'Nonacademic ', 'Admissions', 'Career', 'update profile', 'My questions' and FAQ. User can select a particular field to question and answer. When a particular field is selected, questions are displayed as a list in reverse chronological order. User can scroll for different questions. Clicking on a question will display question and

multiple answers for it. User has a feasibility to answer in the same page or the user can use the ask button in home page for posting a question and answer. There is a vote up option to decide appropriate answers for every question.

Existing Services or API:

User can sign in in to the application using their Google account. Mash up of Google sign in with the application is achieved with the following API:

https://www.googleapis.com/auth/userinfo.profile

Design of features:

Wireframes:-

Login Screen:

Register:

Ask UMKC

First Name

Last Name

Phone Number

Email Id

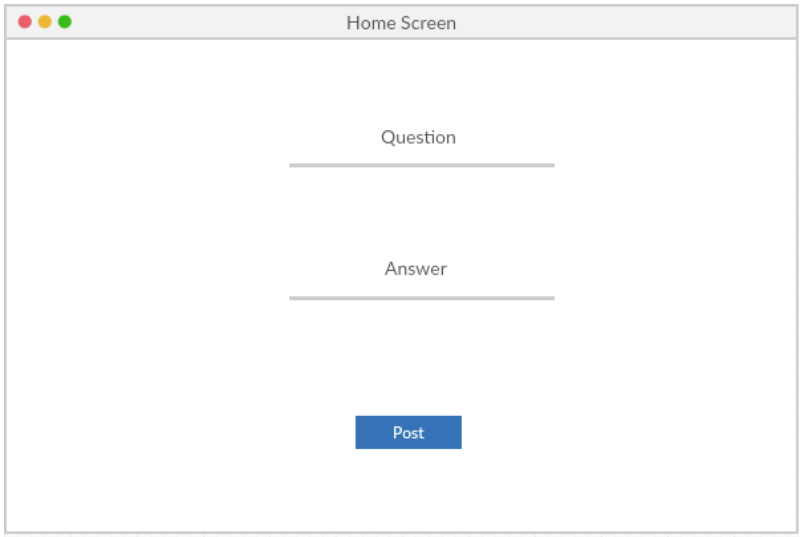
User Name

Password

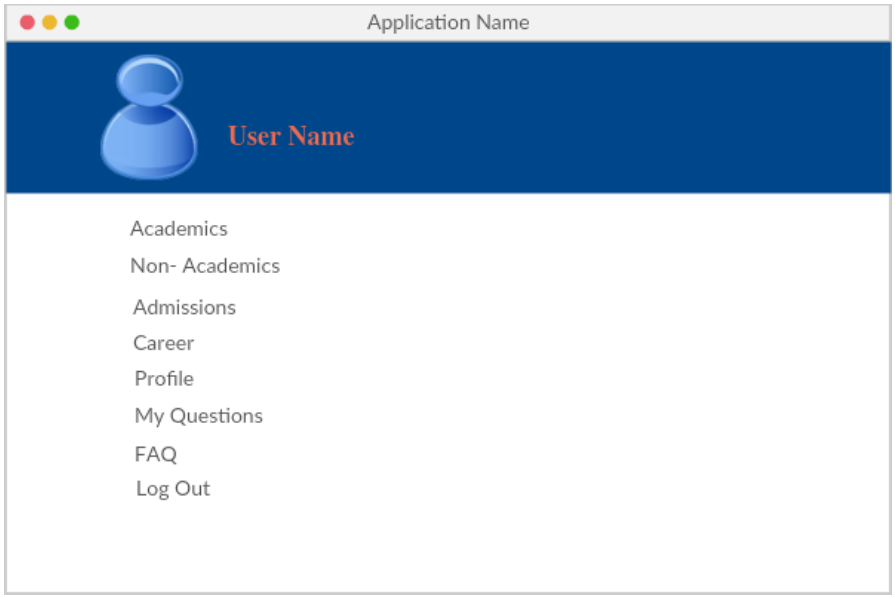
Register

Homepage:

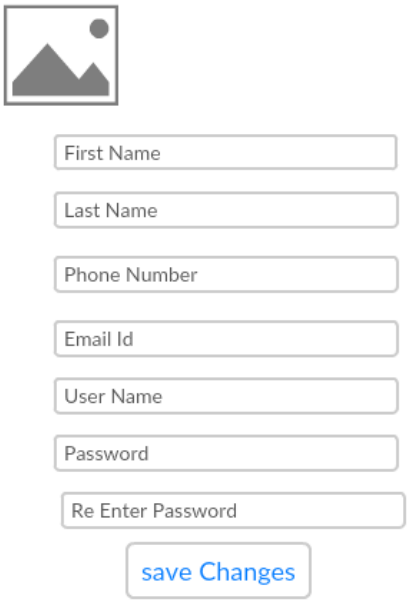
Ask question:



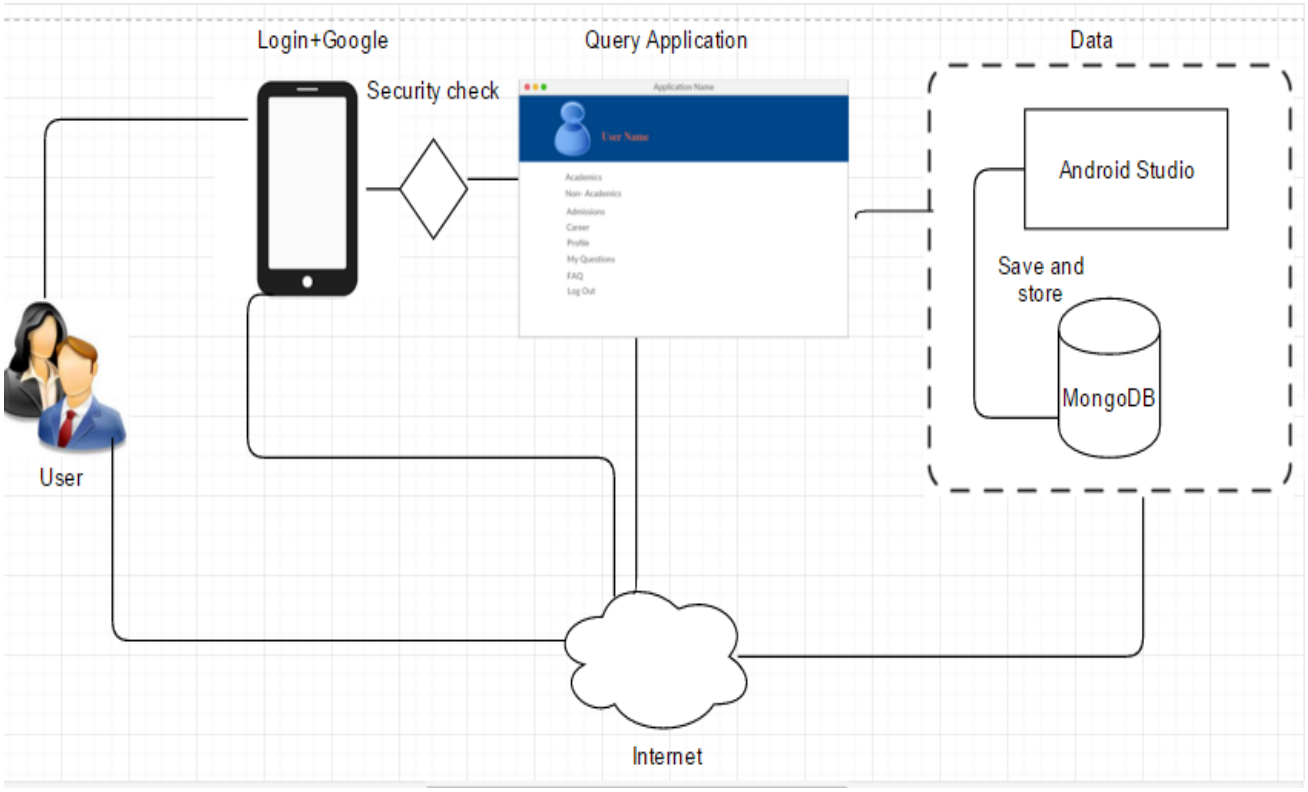
Categories:



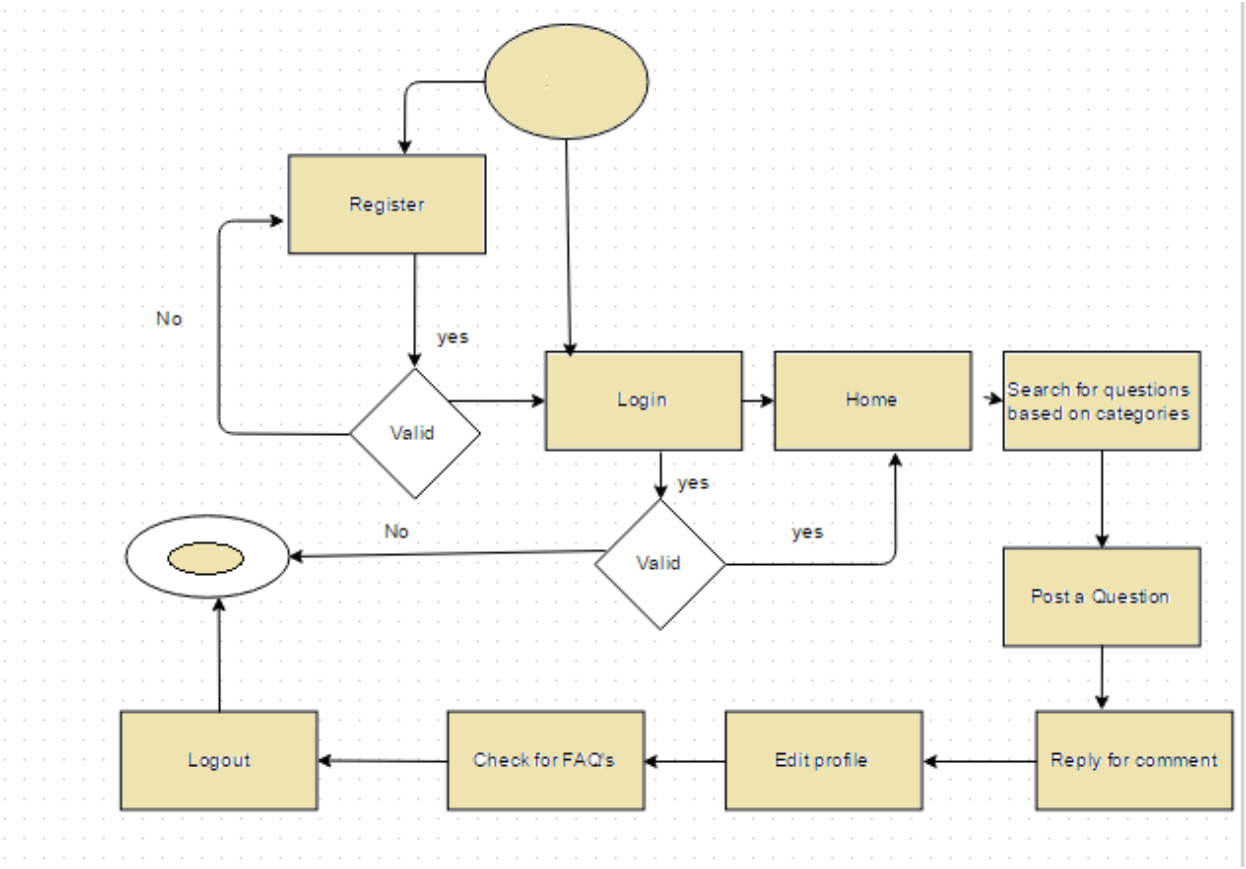
Profile update:



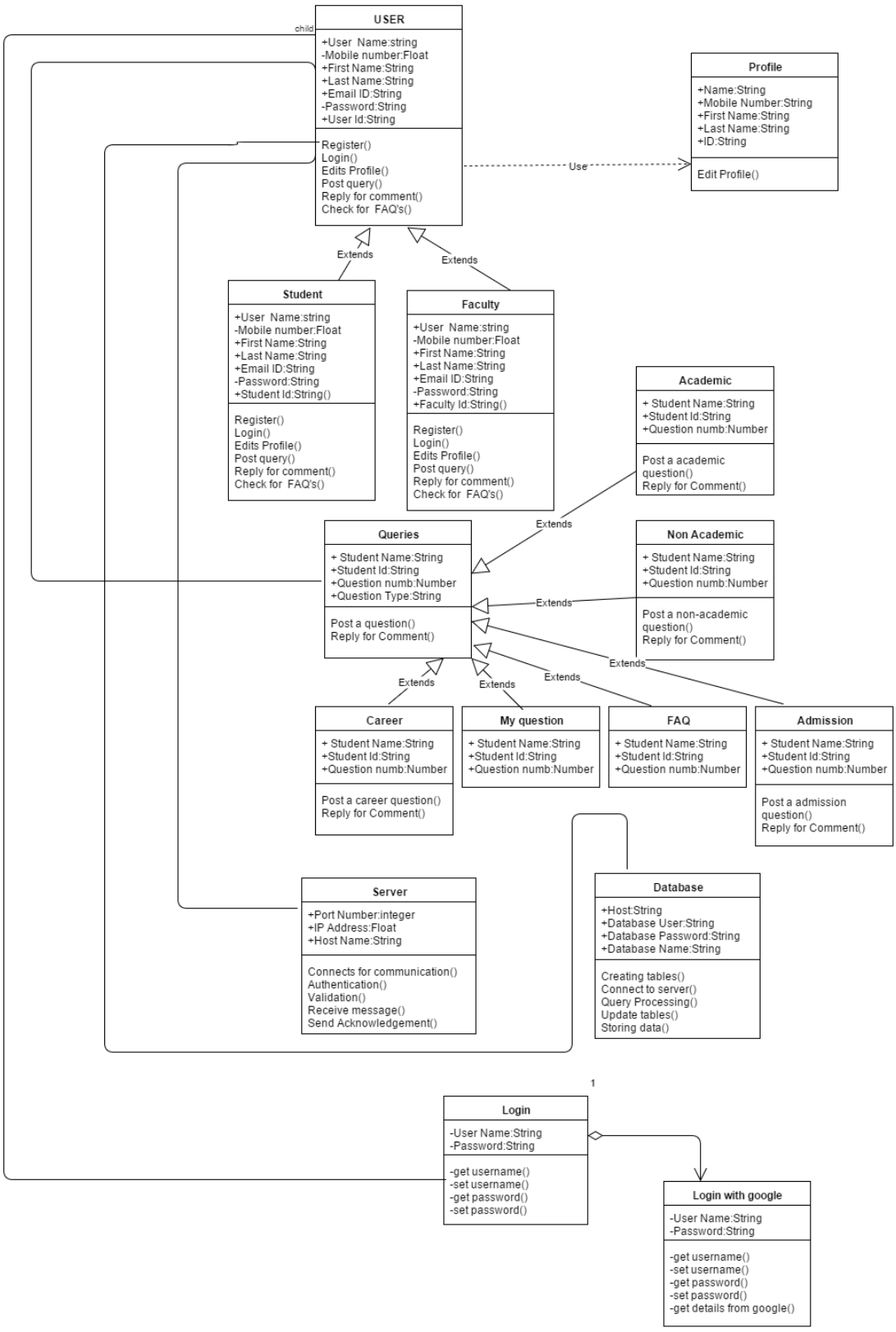
Architecture Diagram:



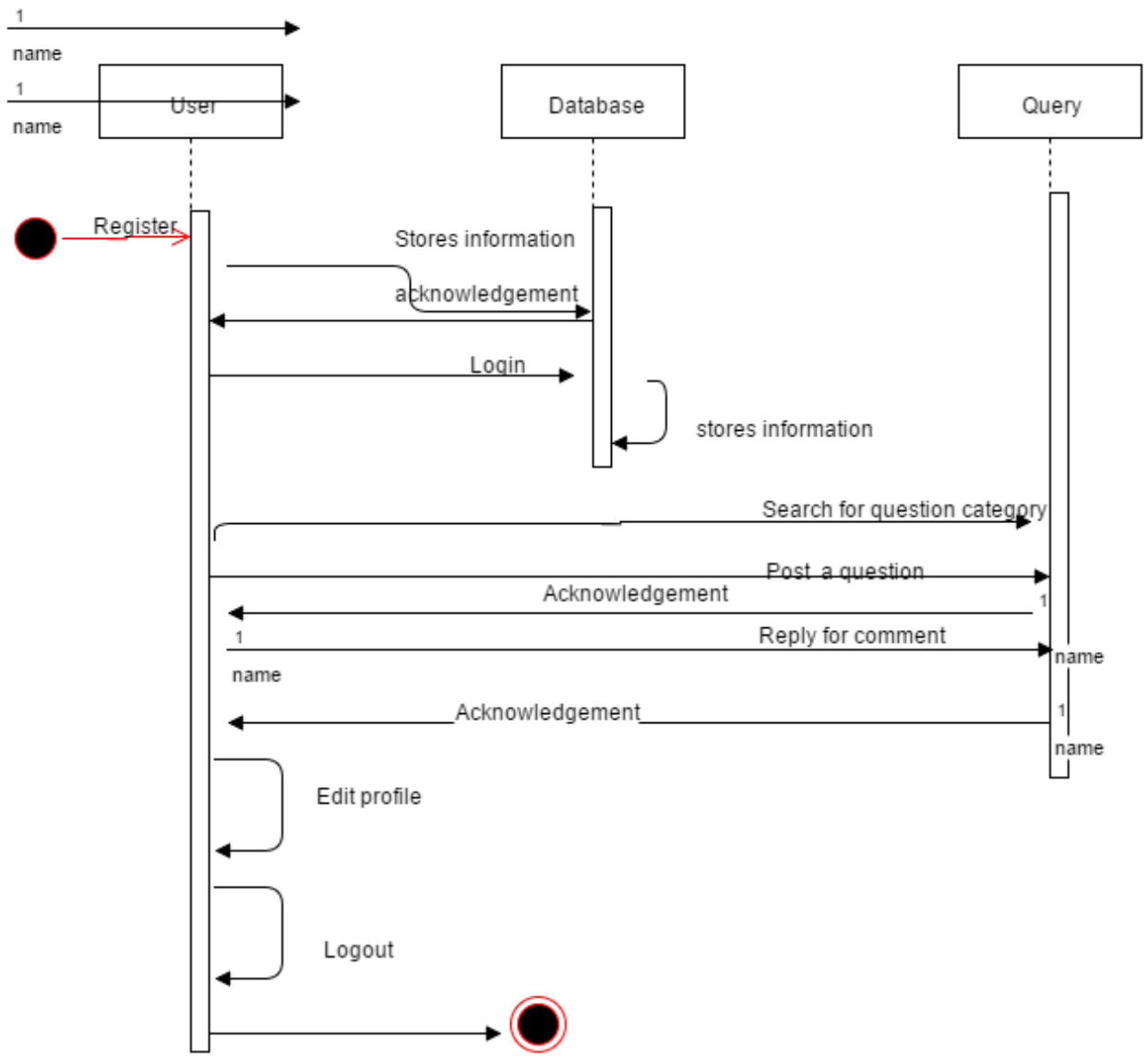
Activity Diagram:



Class Diagram:


USER
+User Name:string
-Mobile number:Float
+First Name:String
+Last Name:String
+Email ID:String
-Password:String
+User Id:String
Register()
Login()
Edits Profile()
Post query()
Reply for comment()
Check for FAQ's()
child
Profile
+Name:String
+Mobile Number:String
+First Name:String
+Last Name:String
+ID:String
Edit Profile()
Use
Extends
Extends
Student
+User Name:string
-Mobile number:Float
+First Name:String
+Last Name:String
+Email ID:String
-Password:String
+Student Id:String()
Register()
Login()
Edits Profile()
Post query()
Reply for comment()
Check for FAQ's()
Faculty
+User Name:string
-Mobile number:Float
+First Name:String
+Last Name:String
+Email ID:String
-Password:String
+Faculty Id:String()
Register()
Login()
Edits Profile()
Post query()
Reply for comment()
Check for FAQ's()
Academic
+ Student Name:String
+Student Id:String
+Question numb:Number
Post a academic question()
Reply for Comment()
Extends
Queries
+ Student Name:String
+Student Id:String
+Question numb:Number
+Question Type:String
Post a question()
Reply for Comment()
Non Academic
+ Student Name:String
+Student Id:String
+Question numb:Number
Post a non-academic question()
Reply for Comment()
Extends
Extends
Extends
Extends
Career
+ Student Name:String
+Student Id:String
+Question numb:Number
Post a career question()
Reply for Comment()
My question
+ Student Name:String
+Student Id:String
+Question numb:Number
FAQ
+ Student Name:String
+Student Id:String
+Question numb:Number
Admission
+ Student Name:String
+Student Id:String
+Question numb:Number
Post a admission question()
Reply for Comment()
Server
+Port Number:integer
+IP Address:Float
+Host Name:String
Connects for communication()
Authentication()
Validation()
Receive message()
Send Acknowledgement()
Database
+Host:String
+Database User:String
+Database Password:String
+Database Name:String
Creating tables()
Connect to server()
Query Processing()
Update tables()
Storing data()
1
Login
-User Name:String
-Password:String
-get username()
-set username()
-get password()
-set password()
Login with google
-User Name:String
-Password:String
-get username()
-set username()
-get password()
-set password()
-get details from google()

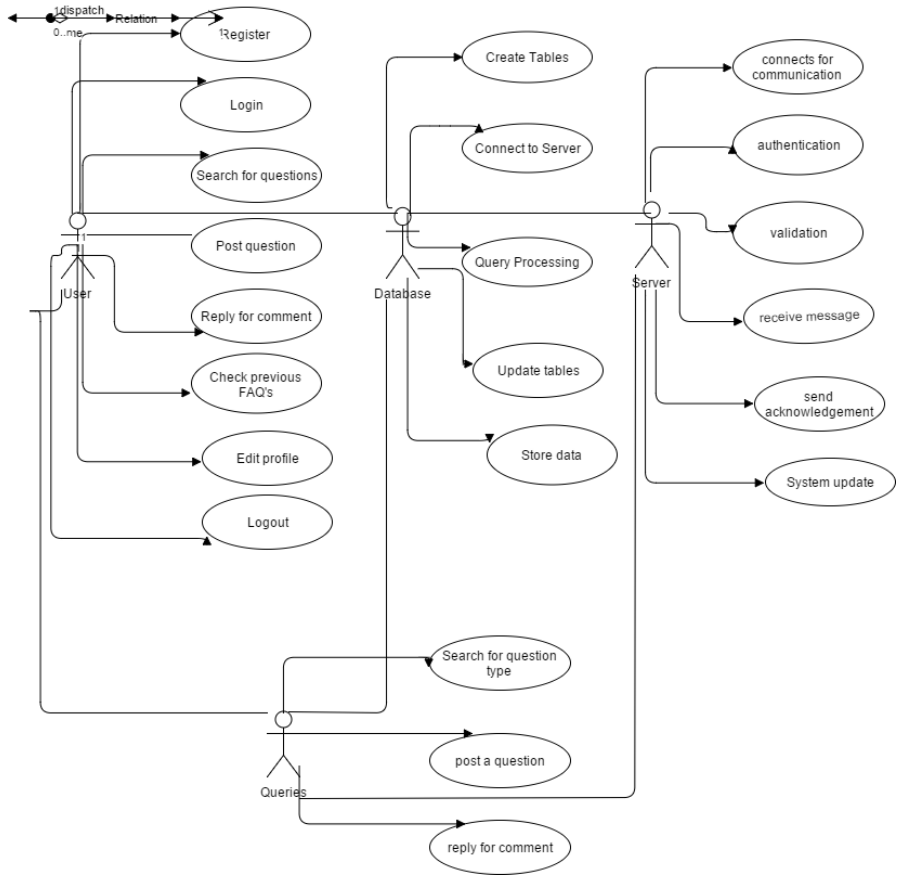
Sequence Diagram:



User Stories:

- As a user, I must login in to the account to access the application.
- As a user, I must register in to the account to access the application.
- As a user, I must sign up through Google account.
- As a system, I must allow the user to register, login, sign up only if the credentials are correct.
- As a system, I must be able to access the database which shows the details of questions, answers and saves user profile.
- As a system, I must display question and answer page for posting while using ask button.
- As a system, I must analyze the question and display multiple answers for that question.

Use Case :



Testing:

1. Login/register:

S.No	Test Description	Steps to Follow	Expected Result	Actual Result
1.	User should be able to login/New-user should be able to register	User would be able to enter the E-mail and password and click login to enter to application	User should be able to login	User is logged-in.
2.	User should be able to login/New-user should be able to register	New-User should click the Sing-up button to register, to navigate to registration page	New-users are directed to register page.	New-Users are able to view the registration page.
3.	User should be able to login/New-user should be able to register	User should enter E-Mail and Password and are validated for the users.	User details are authenticated.	User is able to login only when accurate details are submitted
4.	User should be able to login/New-user should be able to register	When user enters wrong details an error would pop up.	User credential are to be validated and if wrong a pop-up would be display	User would be able to view a message if incorrect details are entered.

2. Home Screen:

S.No	Test Description	Steps to Follow	Expected Result	Actual Result
1.	Registered User should be able to ask a question or search for answers	User enters question and answer to post.	Users should be able to enter question and answer for posting	Users should be able to enter question and answer for posting.
2.	Registered User should be able to ask a question or search for answers	Users can select categories based on the doubt.	Users can view the categories	Users are able to view categories.
3.	Registered User should be able to ask a question or search for answers	User can navigate to the respective category page and check for question or post.	Users can view multiple answers for a question.	Users can view multiple answers for a question.

Implementation:

Server side Implementation:-

We implemented the whole application in android studio.

The source code is written in java and used bootstrap to implement GUI of our application. The database is maintained by Mongo DB.

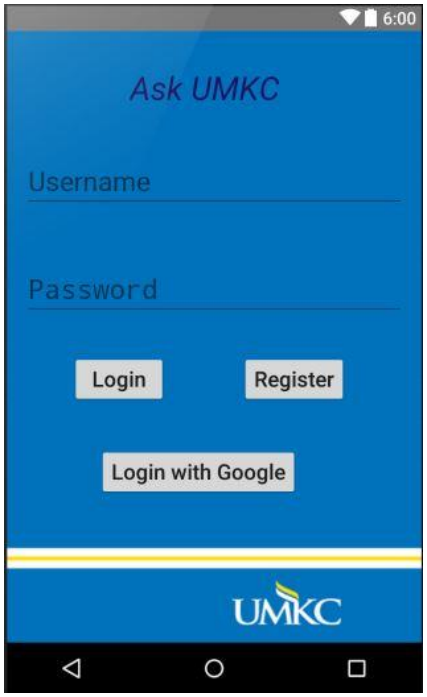
Mobile client Implementation:-

Mobile client application enable users to access the applications on their smart phones unlike web applications which need PC to access the application.

We are implementing our project in mobile client using android studio.

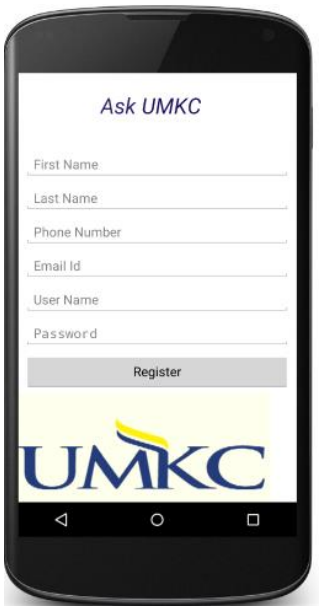
Deployment:

Login Screen:



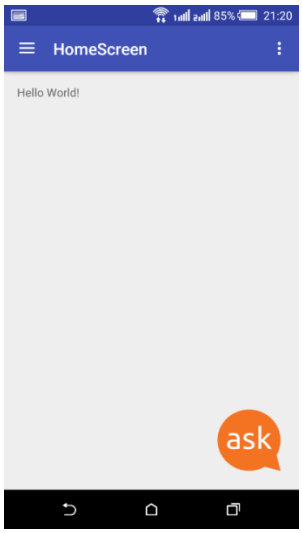
User can login using Google account or with the credentials of registered app account. New users can register for the app using register button.

Register:



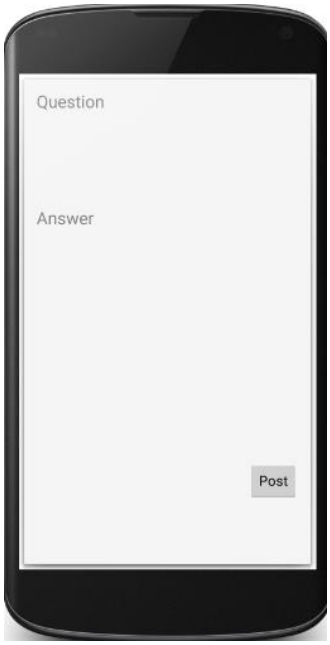
In order to register, user should fill a form containing basic information like First Name, Last Name, Phone Number, Email Id, User Name, and Password. All the fields are mandatory to become a registered user. After successful registration, user will be redirected to login page and user have to login in order to view home page.

Home Page:



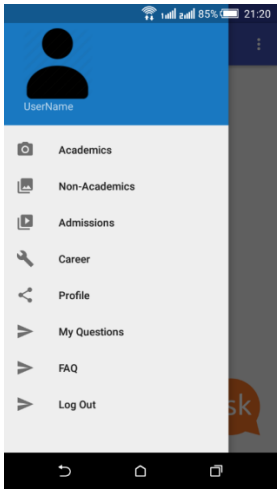
User can ask a question by touching ‘Ask’ button on home page.

Ask question:



After touching ‘Ask’ button in home page, user will be redirected to ask question screen. Here user will have different views to add question, add category.

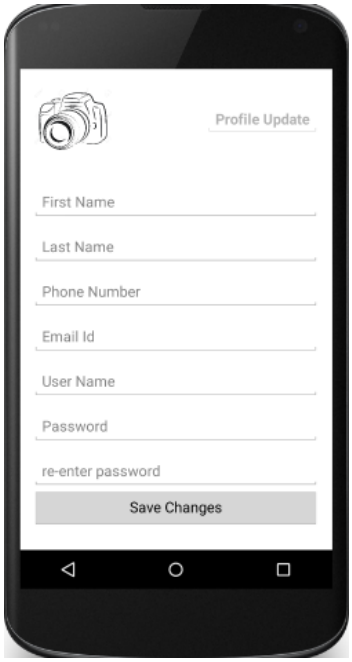
Categories:



After successful login user navigates to home page where user can view all questions in a list view. User can scroll down to several questions. Questions are presented in reverse chronological order. Home will have menu option as shown in below image. Questions are divided into several categories and presented in menu. Menu will have options to ‘update profile’, ‘My questions’, ‘FAQ’. Selecting a question launches a screen where user can see

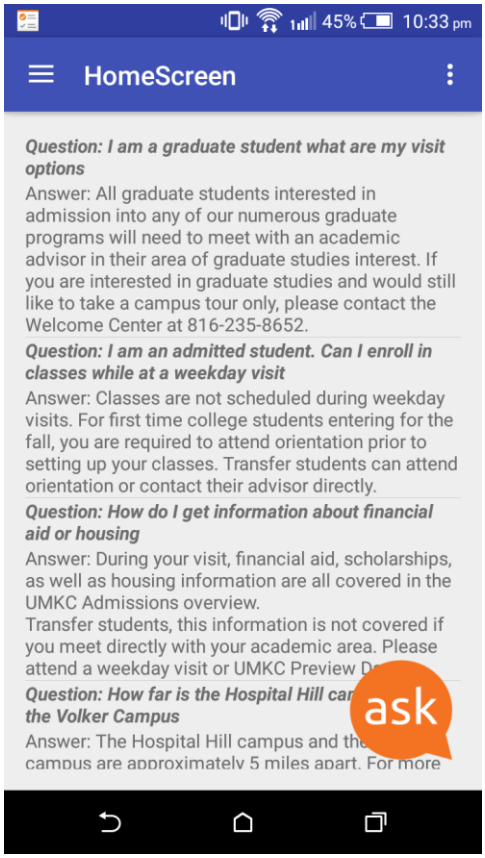
question and answers given to them. User can add an answer here in same page. Here user will have option to up vote an answer.

Profile Update:



User can update various details of his profile like photo, password etc as shown in below screens.

FAQ:



When user checks for FAQ in category, it navigates to the above screen with frequently asked questions.

System requirements:

Operating System: Windows /Linux/Mac OS X

RAM: 2 GB RAM (takes lot of time to run, so 4 GB recommended)

Hard Disk: 400 MB hard disk

Data Base: Mongo DB (can alter depending upon future enhancements

Servers: Amazon Server (can alter depending upon availability of free online sources)

Software's: Java Development kit (JDK) and Android SDK

Screen resolution: 1280px * 800px minimum

Additional: 1 GB space is required for android SDK, images and cache data

Project Management:

project timeline: 03-11-2016

members:

- Sravan Kumar Appana
- Vikesh Padarthi
- Architha Mukka
- Manikanta Maddula

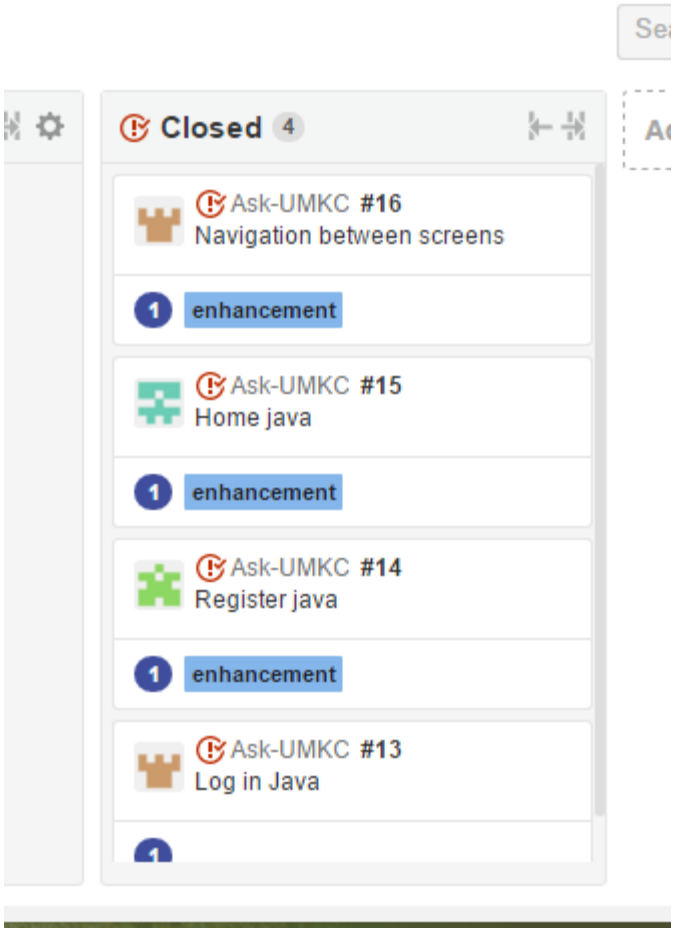
Issue1: Navigation between screens: Whenever user tries to go to a different screen/page new memory gets adding due to serial onclick() events. Though this is not an issue functionality wise, it's not good for performance of app across several devices. Sravan worked on this issue for 35 hours. Manikanta and Vikesh helped in debugging this issue.

Issue2: Home screen needs to accommodate a list view to user where, questions are present in a reverse chronological order. But first we need to populate data into list view. And there should be count for correct answers and wrong answers and a button to follow the post. Vikesh worked on this issue for about 32 hours. Architha helped him in activity diagram for application and tuning UI for this screen.

Issue3: Login is one of the basic operations that will be performed by any user. Our app allows to login by creating a profile or using gmail account. Manikanta worked on integrating gmail login, normal login, and validating a user while logging in. As this is the first screen that's going to be visible to user, several hours were kept in enhancing UI. Gmail integration still needs to be tested because it's not working properly yet. He worked for about 30 hours on this issue.

Issue 4: Register page lets user create a profile and for future login. The data entered by user should be created in DB(mongo DB). Architha worked on this critical issue for many hours and pushing data to db worked partially. She worked on this for about 35 hours on this.
All screens UI was fine tuned. Each UI took about 2 hours for fine tuning, and everyone worked on them equally.

Issues/Concerns:
1. Interaction of data between mongoDB and android is not fully implemented yet. It seems its very different between web application and android. Open documentation available is also less.
2. How to store user image in mongoDB. Blob data can be used. But still have to be tested.
3. Forgot password option for login page is not yet implemented. Have to rethink on how notifications can be given to user.
4. Categories option is still have to be implemented in questions page.


Closed 4
Ask-UMKC #16
Navigation between screens
1 enhancement
Ask-UMKC #15
Home java
1 enhancement
Ask-UMKC #14
Register java
1 enhancement
Ask-UMKC #13
Log in Java

ASE-SAMV / Ask-UMKC

Unwatch 1 | Star 0 | Fork 0

Code | Issues 15 | Pull requests 0 | Boards | Burndown | Wiki | Pulse | Graphs | Settings

Filters | is:open milestone:"Increment 2" | Labels | Milestones | New issue

Clear current search query, filters, and sorts

4 Open | 0 Closed | Author | Labels | Milestones | Assignee | Sort

Navigation between screens enhancement 1
#16 opened 8 days ago by sravanvarma | Increment 2 | Done

Home java enhancement 1
#15 opened 8 days ago by sravanvarma | Increment 2 | Done

Register java enhancement 1
#14 opened 8 days ago by sravanvarma | Increment 2 | Done

Log in Java 1
#13 opened 8 days ago by sravanvarma | Increment 2 | Done

ProTip! no:milestone will show everything without a milestone.

Increment 2

Edit Milestone | Change Milestone

Start: **Feb 29, 2016** Edit | Due: **Mar 11, 2016** Edit

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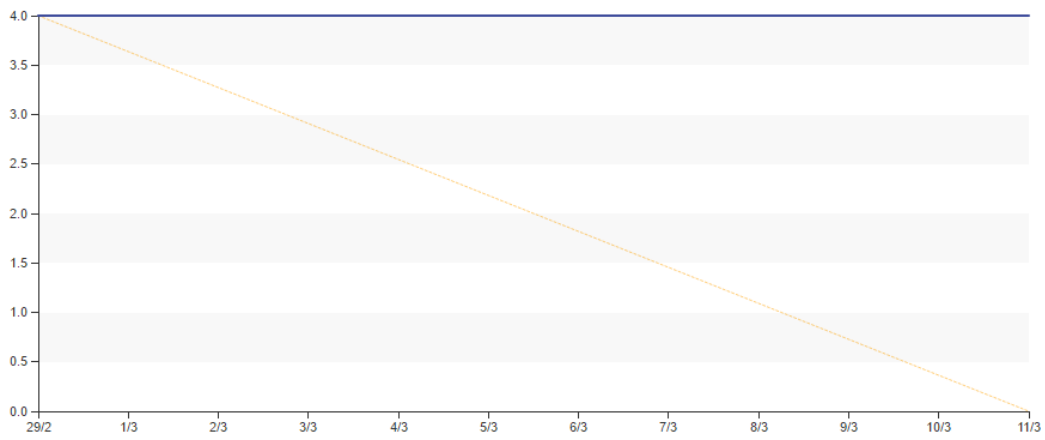

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Bibliography:

1) https://www.quora.com

2) http://www.umkc.edu/