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REC Student Portal

Description

REC Student Portal is the official student portal of Ramgarh Engineering College. We have attempted to make the life easier of everyone in the campus by making as much as possible data online. It is the one stop destination for all the notices released in the campus. Teachers upload all the notes and assignments they give in the class. Apart from that, there is a newsfeed where students can post doubts and update status and anybody in the college can like ,comment and share them. There is a result section where you will find all the results released in the campus ever. There is a gallery section too where all the photos of all the events of the college are present. There is a success stories section too where we interview the successful students of Ramgarh Engineering College. We have a make a complaint section where students can complain to the respective authorities. There is a previous year question paper section where all the previous year questions of all departments are available. There is a video gallery too where videos of all events are present.Last but the least, there is a section from where you can download the syllabus. There will be a section in which I have marked all the important places like Police Station, hospital and shops around the college so that students do not panic and waste time,money and energy locating them in times of distress. There will also be a section for writing down your daily goals so that you do not forget any of your important tasks.

Intended User

All the students of Ramgarh Engineering College

Features

List the main features of your app. For example:
- Notices released in the college
- Notes and Assignments given in the class
- Syllabus of all semesters
- News feed to post doubts and anyone in the college can reply to it
- Make A Complaint Section
- Success Stories Section where we interview the successful students
- Photo Gallery

- Previous Year Question Papers Section
- Google Maps showing all the important places like Police Station, hospital and important shops around the college.
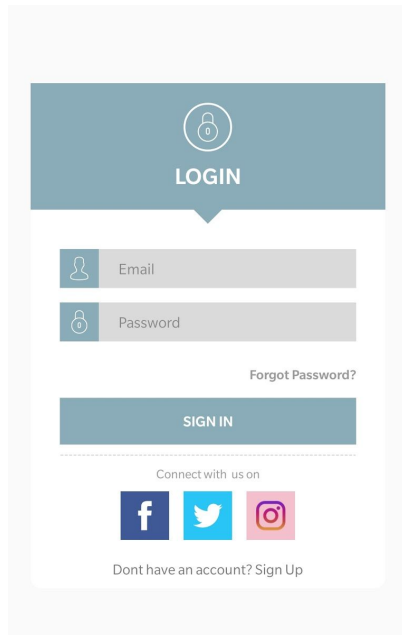- Set your goals section to remember all your important tasks.

User Interface Mocks

Screen 1 (Intro Slider)
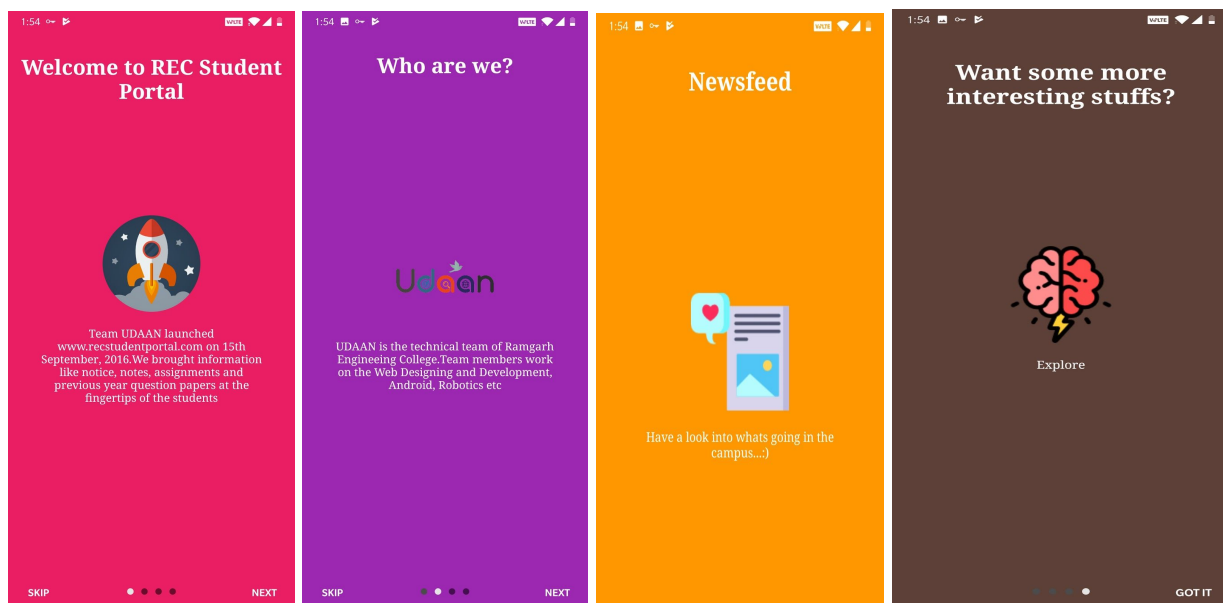
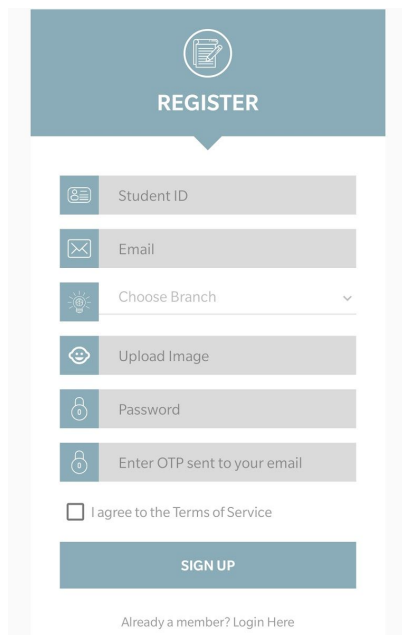Intro Slider to keep a preview about what the all app is all about

Screen 2 (Login Screen)

Login screen to authenticate a user. It also has buttons to move to the Forget password screen and sign up if you are a new user. There are also link to our facebook, twitter and instagram page.

Screen 3 (Sign up Screen)

Sign Up screen for a new user

Screen 4 (Forget password)

Update Password...

If your account does not have any linked email.
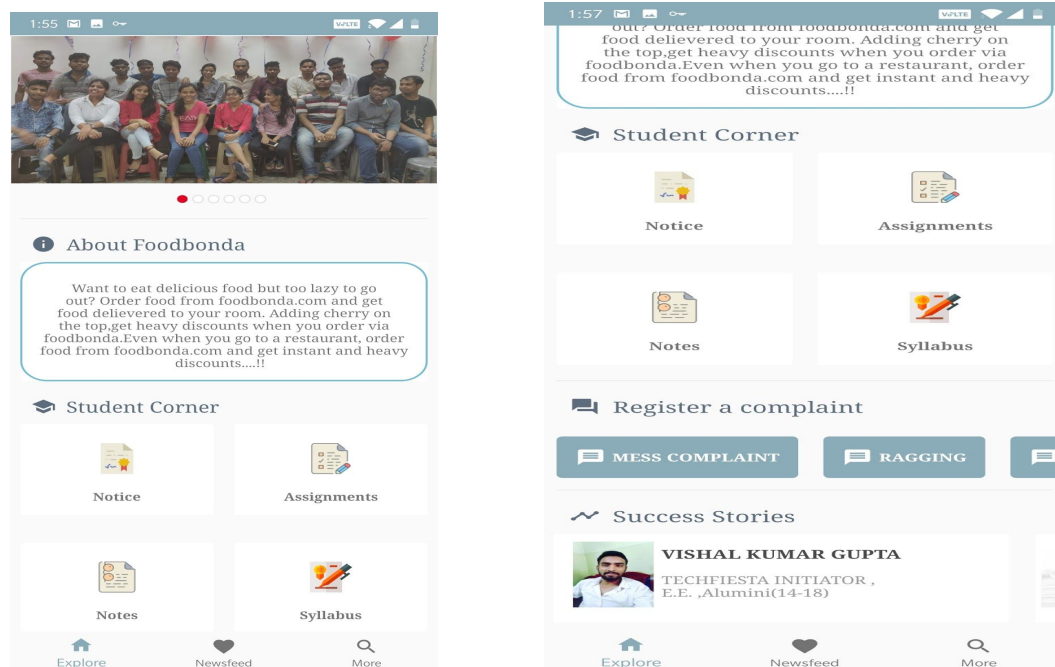
CONTACT TO TEAM

☑ Enter Your Student ID

SUBMIT ➤

Enter Your OTP

Enter One Time Password sent to your linked email.

VALIDATE ☑

In case you forget your password, enter your student id. An otp will be sent to your registered mail id. Enter the otp to reset your password

Screen 5

About Foodbonda

Want to eat delicious food but too lazy to go out? Order food from foodbonda.com and get food delievered to your room. Adding cherry on the top,get heavy discounts when you order via foodbonda.Even when you go to a restaurant, order food from foodbonda.com and get instant and heavy discounts....!!

Student Corner

Notice   Assignments

Notes   Syllabus

Explore   Newsfeed   More

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Student Corner

Notice   Assignments

Notes   Syllabus

Register a complaint

MESS COMPLAINT   RAGGING

Success Stories

VISHAL KUMAR GUPTA
TECHFIESTA INITIATOR ,
E.E. ,Alumini(14-18)

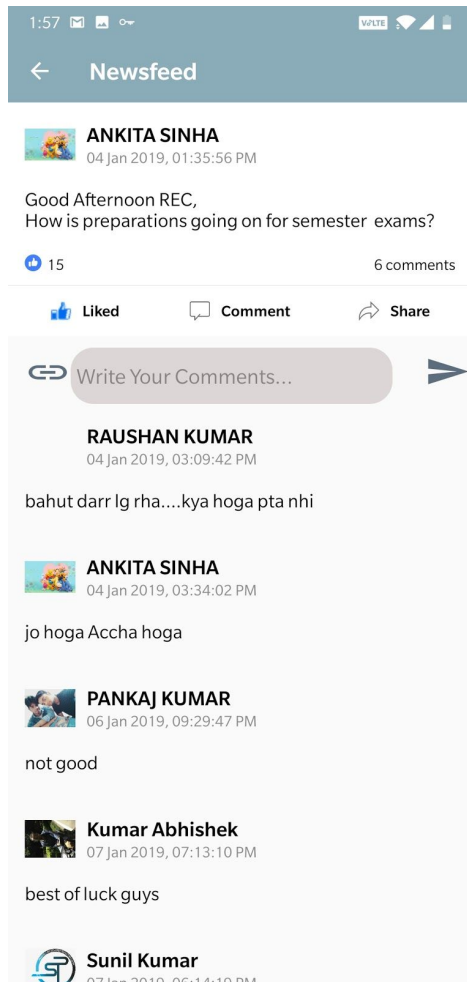Explore   Newsfeed   More

Homepage is a tabbed layout where you have options to navigate to various places in the app.
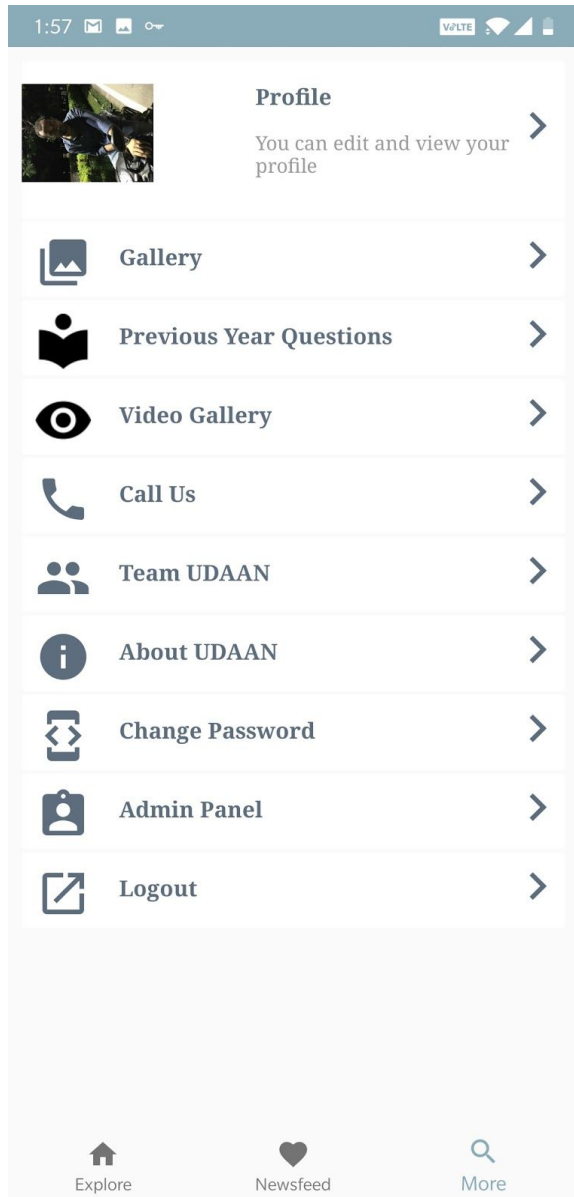
Screen 6 (Newsfeed)
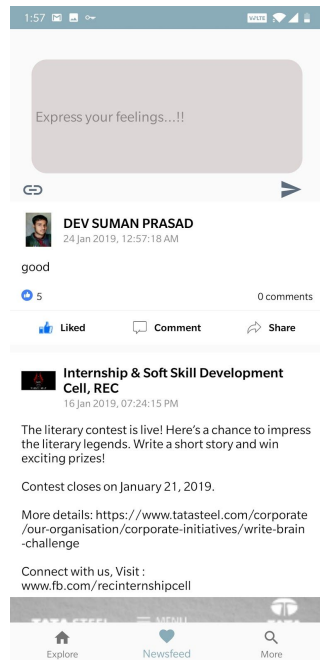
News feed of the App where students can post their doubts. Anyone can reply to them. Students can also like and share.

Screen 7 (Newsfeed : Detailed View)

Detailed view of anything posted on the newsfeed. Here you can read the comments of all. You can also write your own comment.

Screen 8 (Settings)

Students can navigate to various other sections of the app.

Screen 9 (Change Personal Options)

Student has the option to modify their personal details in this screen.

Screen 10 (Gallery)
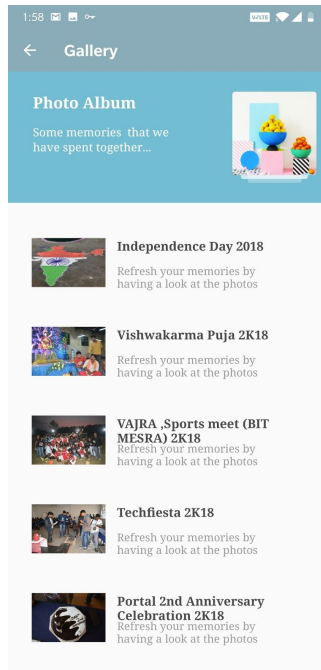
Students can view photos of all the events that has happened in the college.

Screen 11 (Notice Section)
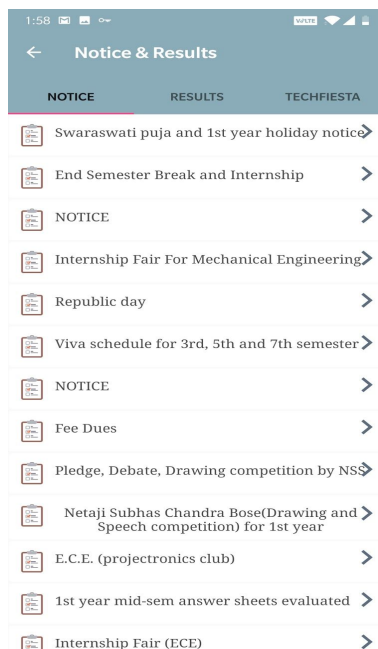
Students can go through the notice and results published in the college.

Screen 12 (Make A Complaint)

Students can make a complaint to the concerned authority in this section . The complaint will be emailed to the concerned authority.

Screen 13 (Success Stories Section)
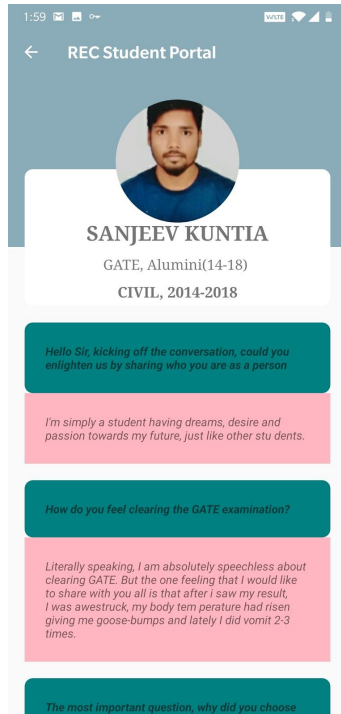
Here we interview the successful Student of Ramgarh Engineering College.

Screen 14 (Widget)

One of the most important feature of the app is to show all the notices released in the college. In order to save time and make sure that the students do not miss important notices, I will create an app widget which will showcase the 3 recent notices.

Screen 15 (Set A Goal)

Have some important task to do in the near future but you fear you will forget ? No issues...The app has a Set your goals section where you can set your near future goals. Keeping in mind, most people just create goals and then never work for it, we will not save these goals on the server. It will be stored locally as a reminder that if you do not complete the task, nobody will remind you to do that your whole life.
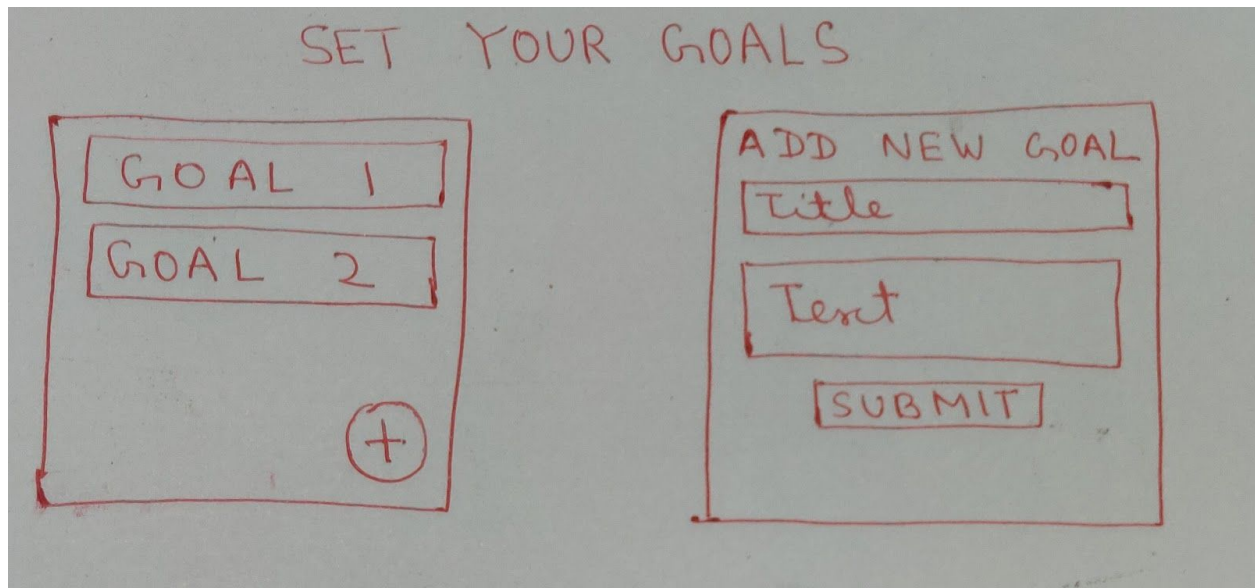
Key Considerations

How will your app handle data persistence?

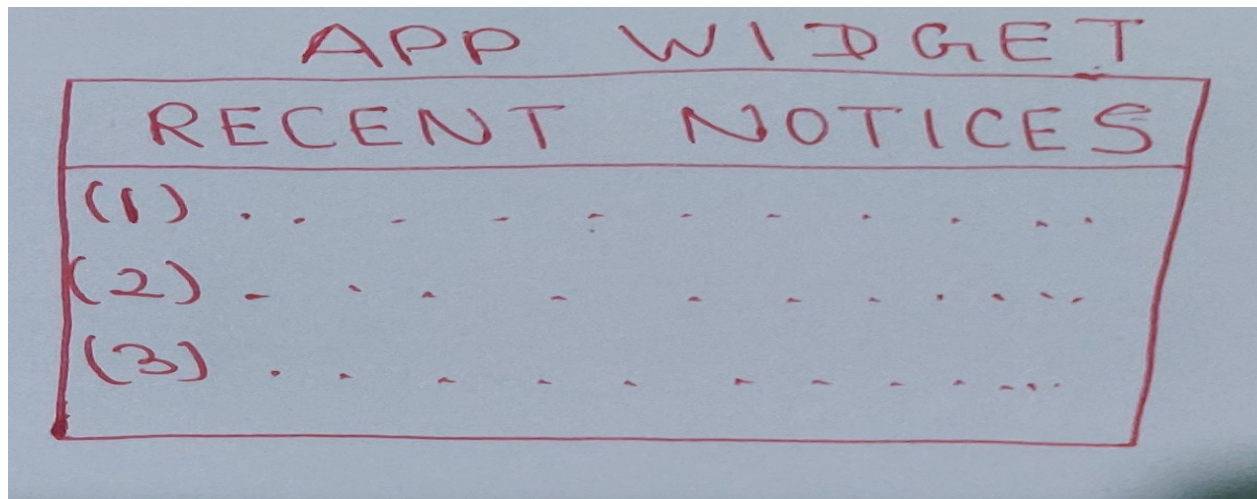If the student is able to successfully enter his email and password, his student id is saved in the shared preferences. All the data that you can see in the App is coming from online MySQL Database.

The goals created by the students will be saved in a local MySQLite database implemented using Room & Livedata.

Describe any edge or corner cases in the UX.

If there is no network, everytime user tries to fetch some data from the internet, they get a toast saying no internet connection available.

In the login screen ,if the user clicks sign in within writing anything in the username and password section, a red error image pops up indicating empty search fields. In other places, where user input is necessary, a toast message is shown indicating one or more fields are empty.

In case of notes and assignment section, if there is nothing to show for a particular department, I have provided a no resource found photo for the users to understand properly what is happening.

Describe any libraries you'll be using and share your reasoning for including them.

I will be using stable versions of all libraries, Gradle and Android Studio

com.google.firebase:firebase-messaging	11.8.0
com.android.support:design	28.0.0
RecyclerView to implement RecyclerView in the app	28.0.0
Volley to parse JSON	0.1.4
GSON to implement JSON Parsing	2.8.2
Picasso to handle the loading and caching of images.	2.5.2
CardView to implement Card like UI	28.0.0
Jake Warton view pager to implement paging	2.4.1
Okhttp3 for handling HTTP requests	3.11.0
com.weiwangcn.spinner to change the feel of android spinner	1.1.0
circleImageView:2.2.0 to give round shape to the imageView	2.2.0

com.google.android.gms:play-services-maps	16.0.0

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Describe how you will implement Google Play Services or other external services.

I will be using Firebase Cloud Messaging & Maps to send push notifications and to show the important places like police station,hospital,shops etc respectively. I will connect firebase to my project. Then, whenever I require I will go the the firebase console and send notifications . For google maps sdk, I will add the relevant dependencies in the build.gradle file. I will also make changes in the manifest file and then write the necessary code.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

Task 1: Project Setup

Create a new project.
- Configure the necessary libraries.
- Add the necessary permissions in the Android Manifest.xml

```
<uses-permission android:name="android.permission.GET_ACCOUNTS" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.CALL_PHONE" />
<uses-permission android:name="com.google.android.c2dm.permission.RECEIVE" />
```

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:
- Build UI for Intro Slider
- Build UI for Sign In
- Build UI for Forget Password
- Build UI for Sign Up
- Build UI for HomePage
- Build UI for Notice,Notes,Assignments and Syllabus section
- Build UI for Make A Complaint Section
- Build UI for Success Stories Section
- Build UI for News feed
- Build UI for Profile Settings
- Build UI for Photo Gallery

App keeps all strings in a strings.xml file and enables RTL layout switching on all layouts.

My app includes support for accessibility. I have included content descriptions for all my imageViews, ImageButtons and checkboxes.

Task 3: Database

My database is online MySQL database. Draw schema for all the tables
Go to the godaddy and create the necessary tables. There is also a local MySQLite database implemented using Room & Livedata to save the goals set locally.

Task 4: Backend

Java language will be used for development

App pull data from several APIs at several places in the App. Whenever user goes to notice,notes,assignments, success stories,news feed ,personal settings, gallery, team photos and syllabus, data is being fetched from server via APIs. Which API will be used to fetch the data depends upon the request of the user.

When a user posts something on the newsfeed, data is sent and stored in the online MySQL database.

AsyncTask is used during the sign in to check whether the username and password entered is correct and whether the user should be allowed to enter the app or not.

Create the backend for all the UI created above.

Task 5: App's Widget

Create a widget for the app which will display the recent 3 notices released by the college. These notices will be fetched from API every 3 hours using an Intent Service. Async Task is used to fetch data from the API.