GitHub Username: Gr8manish

SkitApp

Description

The notice board has always been the place where students gathers to get their latest release of news. SkitApp brings the notice board to a virtual location where students can read notices. Push notification alerts may be sent out notifying students that a new notice has been posted.

Intended User

It's the app for college students who wants to get all notices of college on their phone.
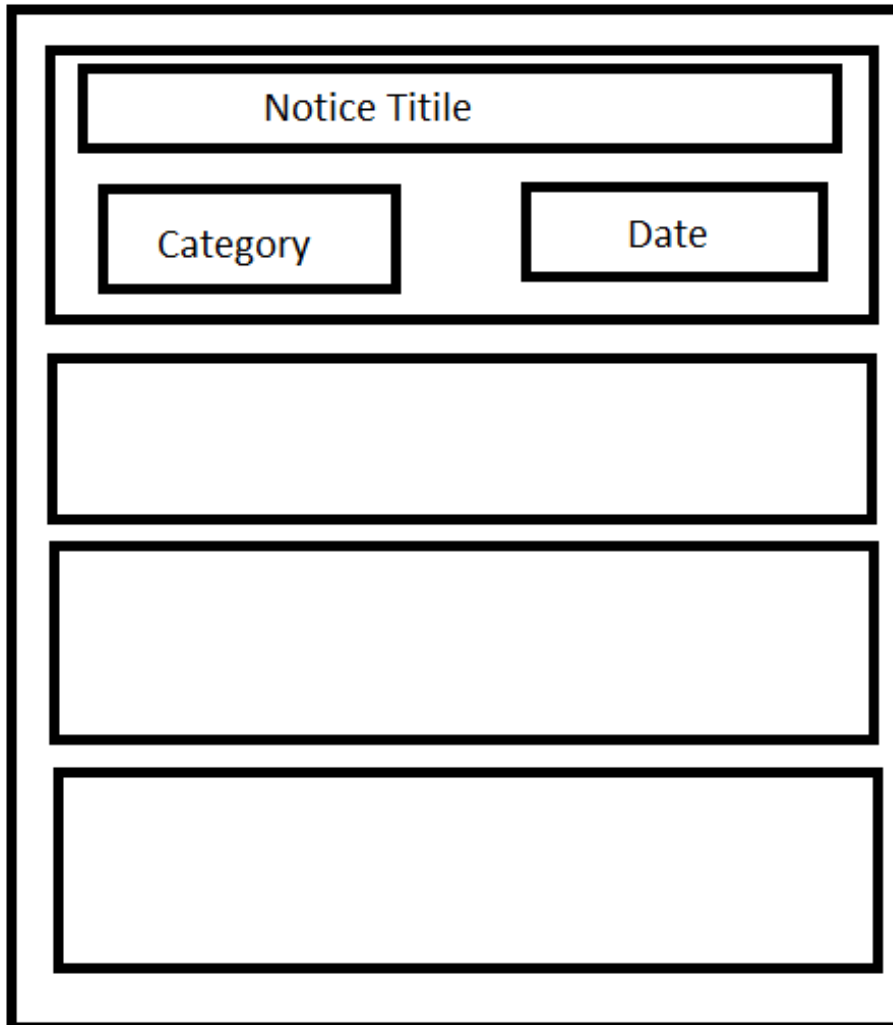
Features

List the main features of your app. For example:
- Show notices list sorted by uploading date
- Setting to change the Branch & Semester
- Details Activity show the Notice board image
- Push Notification for new notices
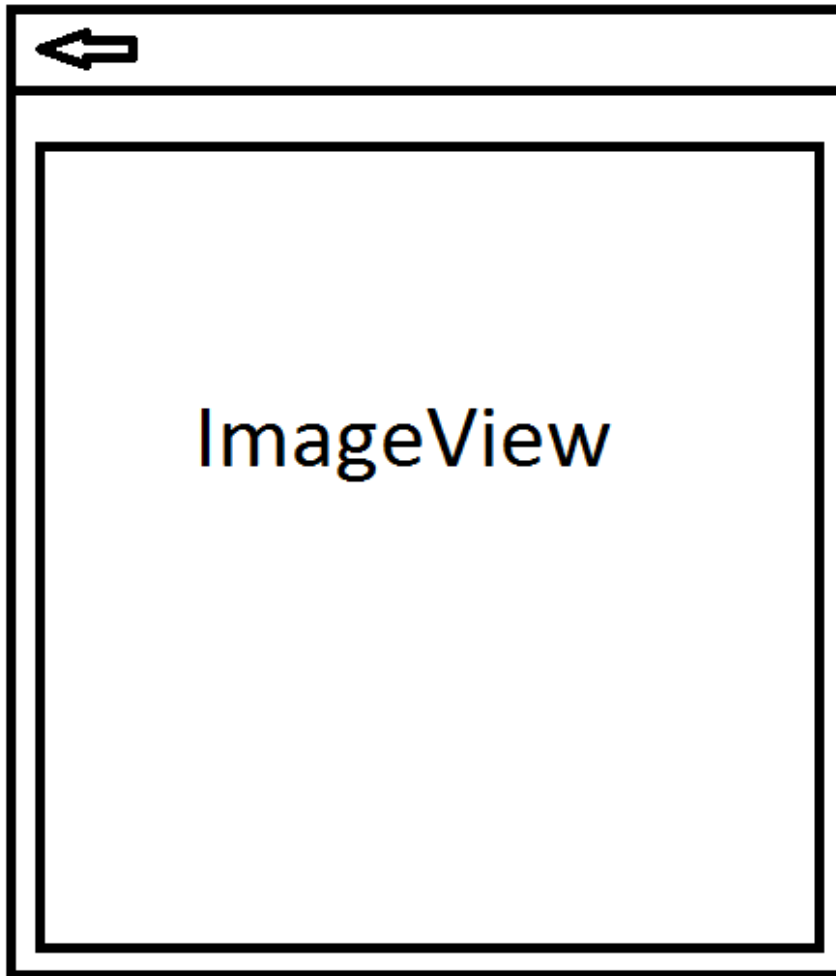- Zoom in , zoom out feature to see notice board

User Interface Mocks

Screen 1: MainActivity with RecyclerView

This Screen contain the list of notices, which contain different text fields. Clicking on these items will open the Detail Activity.

Screen 2: Detail Activity

This activity show the image of notice , We can perform following operations on the imageView
- Pinch zoom
- Moving the image so that user can see any portion of the image etc.

Screen 3: Preference Activity

This is a preference activity where user can change preferences, All the preferences as List preferences. for example, when user will click on course than he will be shown the list with different courses from which user can select a course.

Screen 4: Widget

Widget will also have same screen as MainActivity which will show all the notices list .

Key Considerations

How will your app handle data persistence?

This app has three types of data
1.) Images
2.) Text (Title, date, Category etc.) to be shown in recycler view
3.) User preference

Text will be stored in SQLite database using content provider, User Preferences will be stored as Shared preference and Images will be always fetched from the server.

Describe any corner cases in the UX.
If the image is not able to load than placeholder will be used to let user know that there was a problem. Clicking on error image will retry to reload the image.

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

Picasso - A powerful image downloading and caching library for Android

Describe how you will implement Google Play Services.

Google Play Services: Ad Mob
Google Play Services: Analytics

Next Steps: Required Tasks

Task 1: Project Setup

1. Create a new Android Studio project using the following information:

Application name: SkitApp
Company Domain: hnmn3.mechanic.optimist
Package name: hnmn3.mechanic.optimist.skitapp
Platform : Phone and Tablet
Minimum SDK: API 16 - Android 4.1 (Jelly Bean)

2. Modify build.gradle file in app folder to include all the dependencies libraries.

Task 2: Implementing MainActivity for Notice list

Implementing MainActivity which will contain a Recycler view to show notices list with dummy data.

Task 3: Implementing DetailActivity to show notice

Implementing DetailActivity, which will show image a dummy image on which following operations can be performed by the user –
- Pinch zoom
- Moving the image so that user can see any portion of the image etc.

Task 4: Implementing Preference Activity

In this task, I will implement the shared preference Activity where use can define preferences, Some of preferences are as follows -
- Branch (Branch of the student)
- Semester (semester of student)
- Course (Course of the student like MBA, B.Tech etc.)

Task 5: Implementing Google cloud endpoint module

- GCE will be used as sever so it will store all the data required by the application
- Data will be fetched in JSON format from the GCE.
- JSON will contain the URL of images which will be shown in detail activity.
- Implementing GCM to let user know that new data is available

Task 6: Implementing all network related task

- Fetching data from the server
- Replacing Data inside MainActivity with fetched data according to user preferences
- Fetching image inside DetailActivity from server

Task 7: Loader & New data fetching

- Loaders will be used to load the data from server and then setting this data to Recycler view
- Whenever new data will be available on the server , GCM will let users know that new data is available so that user can fetch the data .

Task 8: Storage related task

- Creating database helper class for SQLite database with all necessary functions
- Implementing Content provider for data storage

Task 9: Implementing Widget

Task 10: Implementing AdMob and Google analytics

Task 11: Implementing Push notification

Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"