How to Use this Template

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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**"

GitHub Username: futhrevo

FF - SMS

Description

FF - SMS aims to be your personal organizer backed by received sms. It helps to declutter your sms and to organise promotional and transactional sms received on phone into beautiful cards / list with context based action. Users can add rules to delete expired promotion sms, OTP messages and likewise limited validity sms.

Intended User

All android users

Features

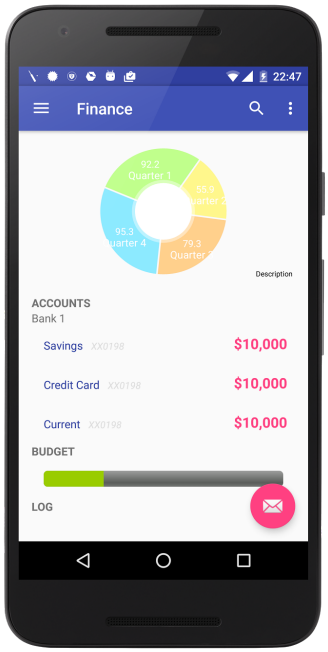
App contains some categorized tabs. Each tab can contain cards, list or any rich data

- Users are asked to set reminders for notification sms like bills
- User can check latest bank account balance, set budget and list all expenditures all updated based on received sms
- Users can have travel ticket pinned as app notification on or before travel day based on settings
- Users can view received OTP using action button on notification for privacy
- Users can view active promotions sms received
- Users can enable Google signin to enable to backup database and restore
- Analytics to identify which areas need improvement and new features
- Adview to show banner ads
- Widget on home screen to view budget goals and instant advice for spending

User Interface Mocks

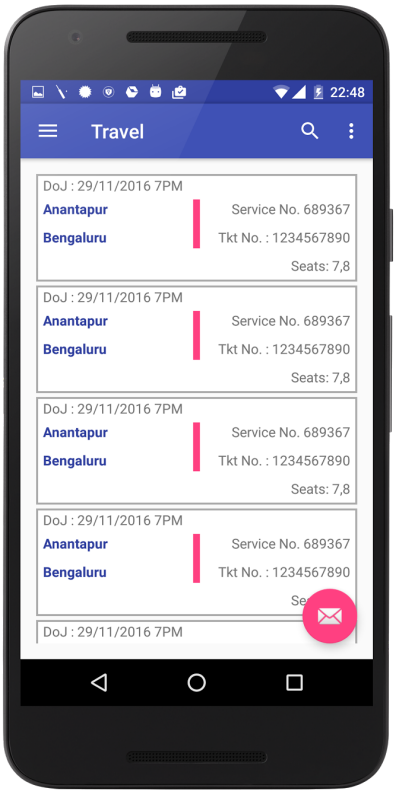
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



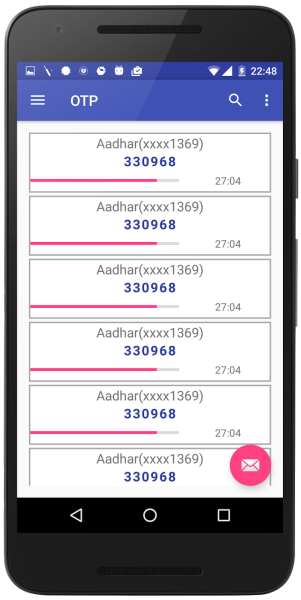
Finance screen gives all the summary of your finance related sms summary. It identifies bank accounts, balances, purchases etc for each account number and updates information based on new sms. Users can set view their expenditure categorised as pie chart, set their monthly budget and monitor it as widget. Finally all purchases are also logged here based on bank sms

Screen 2



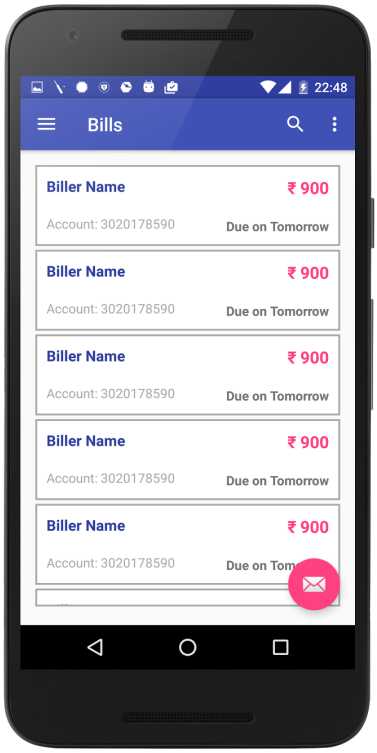
Travel screen shows all upcoming travel related sms in list or cards based on number of messages. Detail view for each item with more information and details sent in follow on sms regarding upgrade of seat or any new information

Screen 3



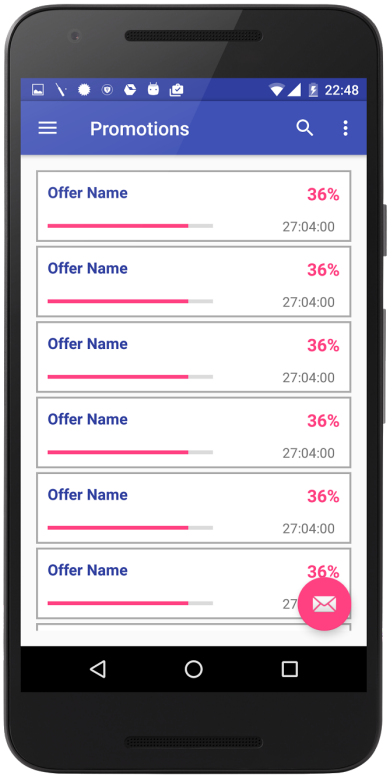
OTP screen shows otp sender with progress bar and timer denoting validity of otp. Users can choose to delete expired messages or archive it

Screen 4



Bills screen shows current bills in demand with their due date. Archive paid bills and get notifications or reminders for the unpaid bills

Screen 5



Promotions tab shows active promotions with validity

Other Screens

Any uncategorized sms to be placed in separate tab and user conversations can be maintained in another tab. Ticket items require detail view which will be built based on analytics input. Any list item can have call for action button if any link is received

Key Considerations

How will your app handle data persistence?

App builds a content provider for sms like here

Describe any corner cases in the UX.

Any uncategorized sms like greetings sms, caution sms or other transaction sms need to be handled as any important information need to be passed to user to increase their reliance on app

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

https://github.com/EverythingMe/easy-content-providers - for building custom content providers for sms
https://github.com/PhilJay/MPAndroidChart - for showing pie for expenditure, income finance details
OpenNLP - to identify parts of sms and for parsing
And other UI related for swipeable list items, cards with actions etc

Describe how you will implement Google Play Services.

1. Google SignIn to enable app restore
2. Google Drive for backup
3. Analytics for measuring app stats
4. Ad-view for banner ads

Next Steps: Required Tasks

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

Task 1: Project Setup

- Set up content provider and parsing sms data
- Setup NLP parsing to identify patterns using some existing sms from my phone
- Setup play services and enable login
- Setup drive to enable backup and restore
- Setup analytics to measure sender Id
- Setup adview for banner ads for free variant
-

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for Each category and detail views for displaying more information

Task 3: Persistent Notifications

- Add persistent notifications for time bound sms

Task 4: Implement Search function

- Implement keyword based search function and type ahead feature

Task 5: Implement Settings screen

- Add settings screen to get user preferences for deleting/ archiving old and obsolete sms

Task 6: Implement widget for budget

- Add a widget to get budget constraints on home screen to stop spending itch

Task 7: Implement tablet layout

- Implement views on tablet layout for saving space

Add as many tasks as you need to complete your app.

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