

How to Use this Template

1. Make a copy [File → Make a copy...]
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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**”

[Description](#)

[Intended User](#)

[Features](#)

[User Interface Mocks](#)

[Screen 1](#)

[Screen 2](#)

[Key Considerations](#)

[How will your app handle data persistence?](#)

[Describe any corner cases in the UX.](#)

[Describe any libraries you’ll be using and share your reasoning for including them.](#)

[Describe how you will implement Google Play Services.](#)

[Next Steps: Required Tasks](#)

[Task 1: Project Setup](#)

[Task 2: Implement UI for Each Activity and Fragment](#)

[Task 3: Your Next Task](#)

[Task 4: Your Next Task](#)

[Task 5: Your Next Task](#)

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Rail Track

Description

This app is for users who wants to track the train information live from their phones. Users can check train status, seat availability, live train tracking, ticket information etc. The main focus of this app is to provide the most recent data to the user whenever possible. Users are able to save the trains information locally for offline view.

Intended User

Indian users looking for train schedules, fares, live train tracking etc.

Features

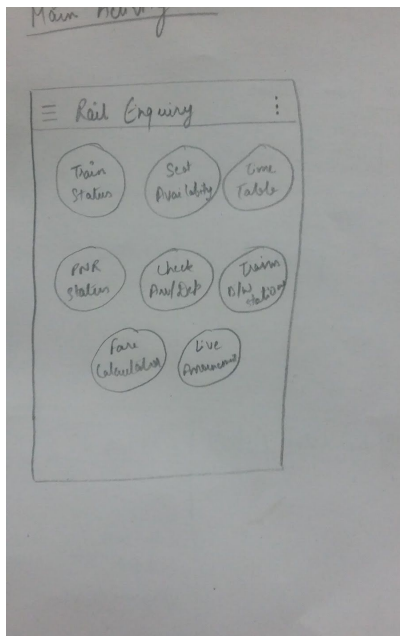
List the main features of your app. For example:

- Check train's current status.
- Seat availability
- View Train's timetable
- Check passenger & ticket details, provided the PNR id number.
- Option to find all the trains between two stations
- Check fare details for different coaches

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



This activity has the buttons for each action this app provides.

Screen 2

Train Station Activity

≡ Train Station

Train No.

Start Date

Find

Train Station Detail Activity

← Details

Train Name

Started on

Station name

Station age ⇒ AMONIG

Upcoming Stations

Station 1	6:10
Station 2	10:10 AM
Final Station	6:10
	11:10

Users can check the train status by providing the train number and the departure date.

Screen 3

Seat Availability

≡ Seat Availability

From Station

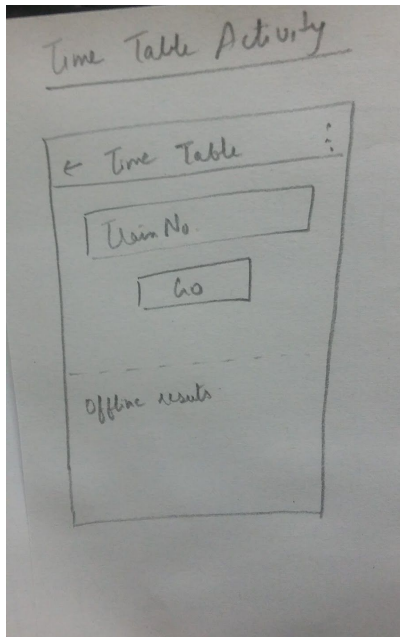
To Station

Check

Result

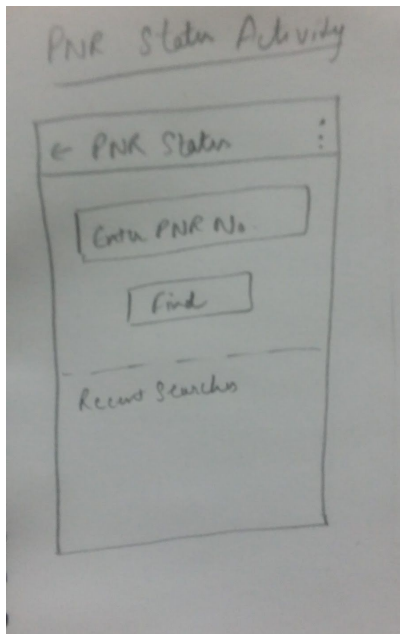
This activity provides the option to check the seat availability of trains by providing the from/to station information.

Screen 4



User can check the timetable of a particular train by providing the train number.

Screen 5



Activity to check the passenger ticket details by providing the PNR number

Screen 6

Trains between Stations

← Trains b/w Stations :

From station

To Station

Date

Find

Activity to find all the trains running between two stations.

Screen 7

Fare Calculator

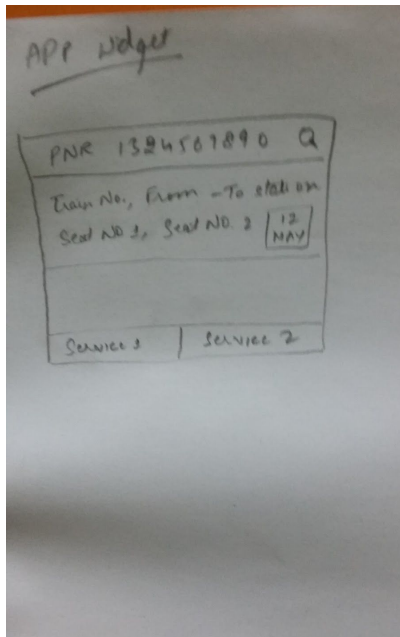
← Calculate Fare :

Train No.

Get Fare

Check the fare details for particular train by providing the train no.

Screen 8



App widget provides the information about the passenger seats.

Key Considerations

How will your app handle data persistence?

The data is fetched from the api and I am planning to save all the searched information to user device for offline view. Users will have option to remove the data if that's of no use. I am going to use content providers for this.

Describe any corner cases in the UX.

Not available.

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

I will be using butter knife mainly.

Describe how you will implement Google Play Services.

Google Mobile Ads for free version.

Google maps to provide live train route.

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: Implement UI for Each Activity and Fragment

Build UI for MainActivity

Build UI for TrainStatusActivity

Build UI for SeatAvailableActivity

Build UI for CheckPNRActivity

Task 2: Data Persistence

Fetch data from rest API when user searches something.

Implementation of IntentService to call the rest API

Create content provider to do database tasks.

Store the data in local database.

Create recyclerviews and adapters to display searched data.

Task 3: Testing

Defining tests

Running tests

Verify results

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