

## How to Use this Template

1. Make a copy [ File → Make a copy... ]
2. Rename this file: “**Capstone\_Stage1**”
3. Replace the text in green

## 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](#)

**GitHub Username:** indiandollar

# 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

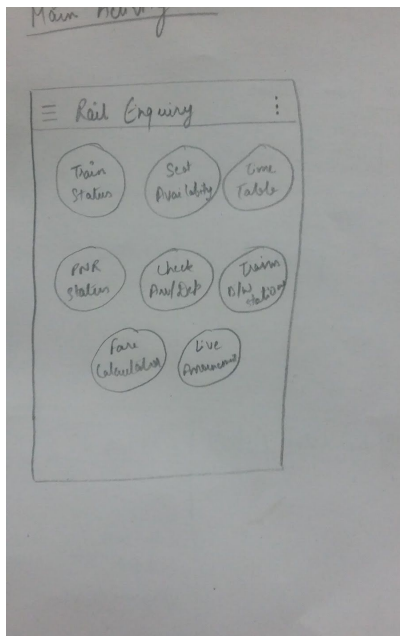
List the main features of your app. For example:

- 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

The image shows two hand-drawn UI screens. The top screen, titled 'Train Station Activity', contains a header 'Train Station', two input fields labeled 'Train No.' and 'Start Date', and a 'Find' button. The bottom screen, titled 'Train Station Detail Activity', features a back arrow and a 'Details' header. It displays train information: 'Train Name', 'Started on', 'Station name', 'Arrived at', 'Station age', and 'Arrived at'. Below this is a section for 'Upcoming Stations' with a table listing 'Station 1' and 'Final Station' with their respective times.

Upcoming Stations	
Station 1	6:10 AM
Final Station	11:10 AM

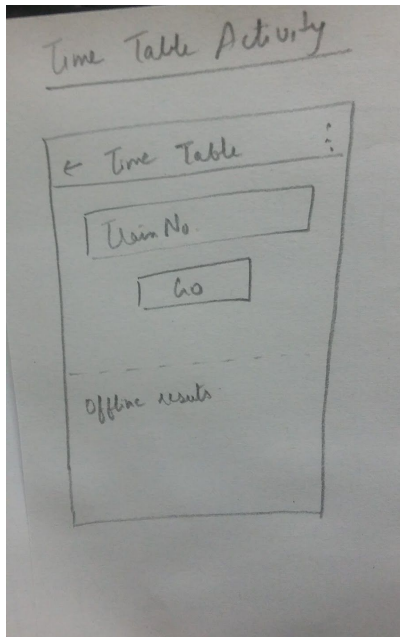
Users can check the train status by providing the train number and the departure date.

## Screen 3

The image shows a hand-drawn UI screen titled 'Seat Availability'. It includes a header 'Seat Availability', two input fields labeled 'From Station' and 'To Station', and a 'Check' button. Below the button is a dashed line followed by the text 'Based results'.

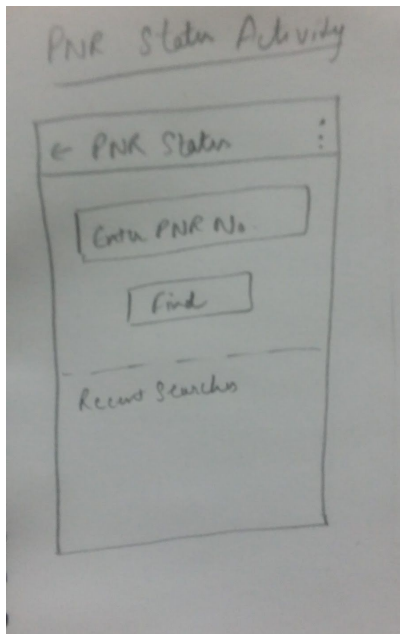
This activity provides the option to check the seat availability of trains by providing the from/to station information.

## 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.

## 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.

## 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.

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

---

### 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**"