

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: LukeLinXu

EASYTTC

Description

TTC (Toronto Transit Commision) is our main public transportation in Toronto. This app can help user get live information through Android smartphone. Like arrive prediction. User can save those favorite route and check the status of routes in widget through one simple click.

Intended User

For those people transit by TTC

Features

List the main features of your app. For example:

- Widget to show routes status
- Google map to show current surrounding stops

User Interface Mocks

MainActivity: using a tablayout which contains favorite fragment, surrounding fragment, all routes fragment

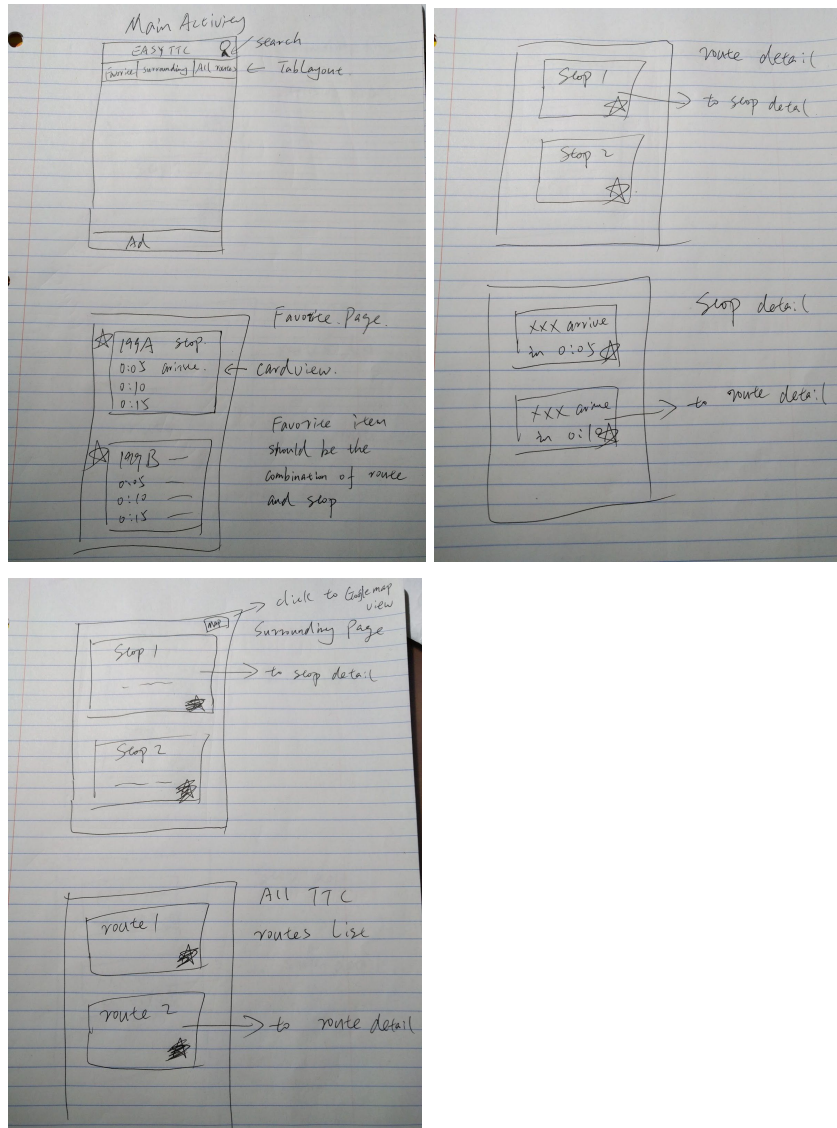
Favorite Fragment: contains a list of favorite items, which should be a pair of route and stop, it should show the following arrive time

Surrounding Fragment: show a list of surrounding stops, it also can lead to a map view to show those stops, each stop can lead to stop detail

All routes fragment: show a list of TTC routes sort by route number, each one can lead to route detail

Route detail page: show a list of stops this route will pass by, it has a favorite button, which can add to favorite page

Stop detail page: show a list of routes coming to this stop, it has a favorite button, which can add to favorite page



Key Considerations

How will your app handle data persistence?

Using Realm to handle sqlite operation.

Describe any corner cases in the UX.

For example, how does the user return to a Now Playing screen in a media player if they hit the back button?

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

Reaml: for sqlite operation

Retrofit: for http request

Rxjava: make aync code more beautiful

Describe how you will implement Google Play Services.

Google ad: show at the bottom of application for free version, it will be removed for paid version

Google map: show surrounding routes stops

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

You may want to list the subtasks. For example:

- Try all the api from opendata of Toronto
- Integrate all api with retrofit.
- Build a IntentService to do query data from web

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity
- Build UI for favorite page
- Build UI for surrounding page
- Build UI for all routes page
- Build UI for route detail page
- Build UI for stop detail page

Task 3: Your Next Task

- Register Google map api, Ad api

- Build UI for Google map
- Build UI for Google Ad

Task 4: Build widget

- Build widget according to favorite page

Task 5: Test

- Test

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

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**"