### **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**

- After you've completed all the sections, download this document as a PDF [ File → Download as PDF ]
- 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

<u>Features</u>

**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: Network Call to Google Map Api to retrieve info

Task 4: Network call to Google Map Api to post Data

Task 5: Improving UI and Bugs

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# Privy Finder

## Description

Privy finder is specifically useful for Indians who're committed for Swachh Bharat, Clean India as now they can not only locate and use but also help fellow to do the same by submitting privy near them. The listed toilets are ranked nearby to current location.

The app encourages you to give feedback and submit new toilets for public use and thus making world in becoming cleaner and healthier.

## Intended User

General audience, traveller, volunteer etc

### **Features**

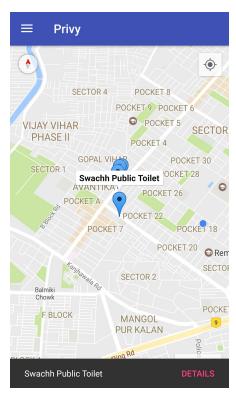
The main features of app:

- Show Privy (toilets) near your location
- See details of Privy
- Delete Privy (if user find wrong info)
- Feedback
- App comes with widget

# **User Interface Mocks**

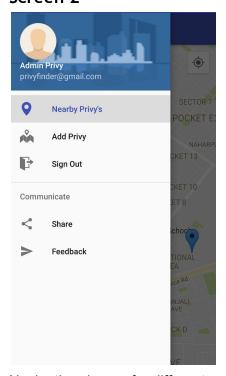
### Screen 1





Home screen to display current location with Privy nearby (Markers)

## Screen 2

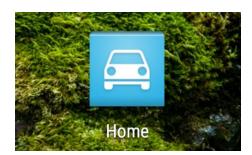


Navigation drawer for different options

### Screen 3



## Privy Details Screen



Home screen widget

# **Key Considerations**

How will your app handle data persistence?

Shared Preference, content provider

Describe any corner cases in the UX.

Capstone\_Stage1 : Privy Finder

Currently, cannot think of anything as such.

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

- Gson for Json Parsing of request/response data
- Volley for network calls
- Glide for media caching

Describe how you will implement Google Play Services.

- Google Maps API services
- Google Location services
- Google Sign in

## **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

List of subtasks:

- Create Project
- Configure libraries
- Get Google API key from console
- Enable api services
- Get configuration file for google services (google-services.json) and add it to app

# Task 2: Implement UI for Each Activity and Fragment

List the subtasks:

- Build UI for MainActivity
- Build UI for Navigation Drawer
- Build UI for Map Fragment
- Build UI for Privy Detail Screen

## Task 3: Network Call to Google Map Api to retrieve info

#### List the subtasks:

- Load Map in Map Fragment using getMapAsync
- Use Google Location service to get current location
- Use AsyncTask to create on demand networking
- Use Volley to create network call to Google Map Places API to get info near location
- Use Gson to parse and show data
- Store data into sharedpreference, content provider

### Task 4: Network call to Google Map Api to post Data

### List the subtasks:

- Add Google sign in (required to add new Privy)
- Provide option to user to request/add Privy (Using Place Picker)
- Provide option to user to Delete Privy (if user find info wrong)
- Call to Google Map Place Api to delete Privy (will go under moderation)

# Task 5: Add widget and Improving UI and Bugs

### List the subtasks:

- Build widget to show near by privy as a list and launching direction when on clicked
- Using loader to pass data between views
- Create Icon pack for rich UI/UX
- Handle critical cases like gps off, internet off etc. and solve bugs
- Make App production ready