

How to Use this Template

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[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.](#)

[Next Steps: Required Tasks](#)

[Task 1: Project Setup](#)

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

[Task 3: Database Setup](#)

[Task 4: App Functionality](#)

[Task 5: Run-Time Permissions](#)

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Go There Now

Description

GO THERE NOW allows users to manage many favorite locations in a single app, as well as offering a simplified approach to starting Navigation Mode in Google Maps. With GO THERE NOW, you can start Navigation Mode immediately, without having to go through several steps in Google Maps to get Navigation Mode going. You can also create customized homescreen shortcuts that you can interact with to start Navigation Mode directly from your homescreen!

Intended User

The intended user audience for GO THERE NOW are users that frequently utilize map navigation on Google Maps quickly and efficiently. It is designed for power users that are frustrated with the amount of steps involved to start navigation on Google Maps.

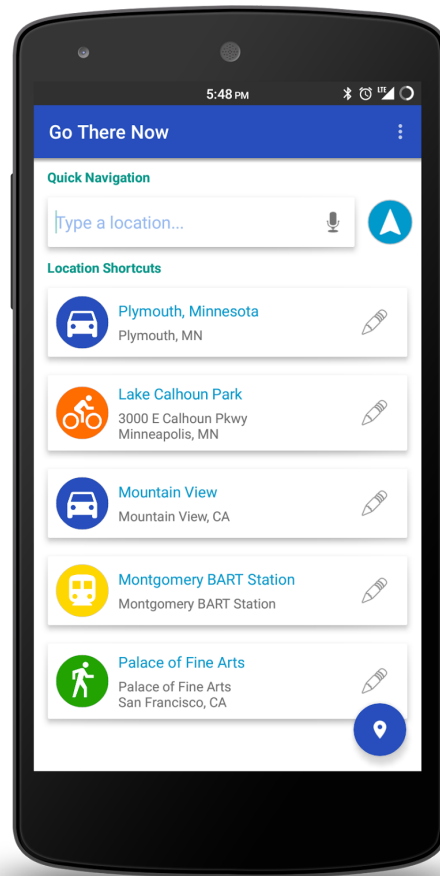
Features

- Start Google Maps in Navigation Mode immediately.
- Bypasses the several steps required in Google Maps to initiate Navigation Mode, saving users precious time.
- Manage favorite locations in a single application.
- Create customized homescreen shortcuts to start Google Maps in Navigation mode immediately.

User Interface Mocks

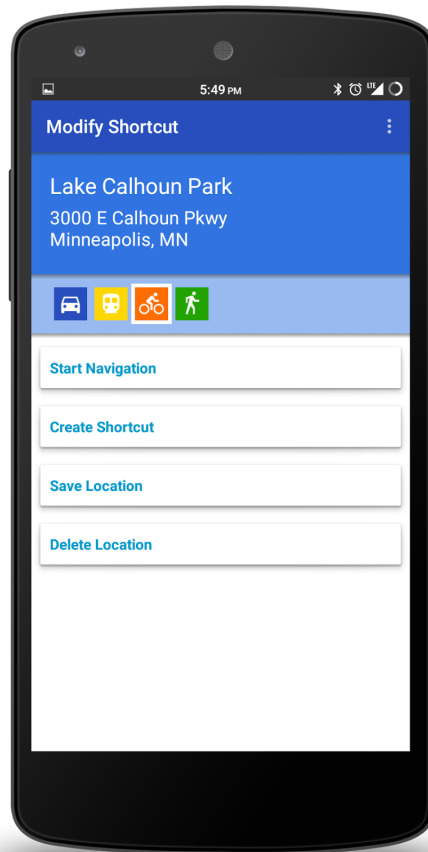
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Primary Screen - Location Dashboard



The primary screen will be a dashboard for a list of the user's favorite shortcuts, as well as a "Quick Navigation" action that launches Google Maps in Navigation Mode with the input designated as the desired destination. Users can tap on their favorite locations to start Navigation Mode quickly, without having to set up navigation in Google Maps. Users can also edit their existing locations to change the different transportation types, such as car, transit, bike, or via walking.

Location Add/Edit Screen



If a user adds a new location with the floating action button or taps the “pencil” icon, a new screen will appear, allowing users to add/edit a new or the existing location. Users can specify the name and the address of the shortcut in the top bar. In the second bar, users can switch between the different transportation types that Google Maps supports.

As for actions, users do the following:

- 1.) Start navigation mode for this location.
- 2.) Create a homescreen shortcut of this location.
- 3.) Save the location to the list of favorite shortcuts on the main screen.
- 4.) Delete the location from the list of favorite shortcuts, if it is an existing location.

Key Considerations

How will your app handle data persistence?

GO THERE NOW will use MySQL Lite in conjunction with a Content Provider to manage the database for the location shortcuts. In addition, SharedPreferences will be used to store the user’s application preferences, such as language settings and preferred transportation type.

Describe any corner cases in the UX.

Since the application uses Google Places API to customize the search query for the Quick Navigation feature, Location permissions are required. For Android 6.0+ devices, a run-time permission window will be shown to request permissions for location.

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

GO THERE NOW will be using the following libraries:

ButterKnife (<http://jakewharton.github.io/butterknife/>)

- o This library will be used for significantly reducing the boilerplate code for initializing views in GO THERE NOW.

FloatingActionButton (<https://github.com/makovkastar/FloatingActionButton>)

- o This library provides additional features over the FloatingActionButton found in the Android Design Support library and will be used to enhance the floating action button on the main screen, such as auto-hiding the button while scrolling.

Picasso (<http://square.github.io/picasso/>)

- o This is a popular library that significantly simplifies image caching and loading. It will be used to smart load images in the app.

RoundedImageView (<https://github.com/vinc3m1/RoundedImageView>)

- o This library provides a convenient way of changing images into a rounded ImageView and works well in conjunction with the Picasso library.

In addition to these libraries, GO THERE NOW will make full use of the Android Design Support library to provide a Material Design compliant app. GO THERE NOW will also use the Google Places API to provide better location search results based on the user's current location.

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

GO THERE NOW will require the use of several libraries, as well as other dependencies such as the Google Play Service libraries. The following dependencies will be added to the project's build.gradle file:

Android Design Support Library
CardView
RecyclerView

Picasso
RoundedImageView
FloatingActionButton
Google Play Services (Base, Ads, Location)

I will also define a separate library module, as I may want to extend support for Android Wear for this project in the future. This library module will feature code and libraries that are likely to be shared for mobile and extension devices in the future.

Task 2: Implement UI for Each Activity and Fragment

- Design and build the UI for the primary activity.
 - The primary activity will swap out fragments for the list of locations screen, add/editing an existing location screen, and settings screen.
 - Implement a fragment loader method that will swap out the fragments on the fly.

Design and build the UI for the location list screen.

- Implement a RecyclerView and the associated adapter for loading the shortcuts.
- Implement a FloatingActionButton that will trigger the add/edit location screen.
- Implement an EditText bar for users to input the location address for quick navigation functionality.
- Implement voice input support for quick navigation functionality.

Design and build the UI for the add/edit location screen.

- Implement EditText fields for the name of the location and address of the shortcut.
- Implement a transportation type selector so that users can set the transportation mode for the location shortcut.
- Add buttons for starting navigation, creating a homescreen shortcut, saving the location, deleting the location.

Design and build the UI for the settings screen.

- Implement a drop-down spinner to change the default language of the app.
- Implement a selector to set the default transportation type.

Task 3: Database Setup

- Implement location shortcut data model that will store the location name, address, and transportation type.
- Implement MySQL Lite helper and Content Provider classes to store the location shortcut data.

Task 4: App Functionality

- Create methods for launching Google Maps in Navigation Mode.
- Create methods for creating shortcuts on the homescreen.

- Add support for Google Places API to provide address suggestions based on user's location.

Task 5: Run-Time Permissions

- Implement run-time permissions handler for Android 6.0+ users to check for LOCATION permissions.

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

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