Capstone_Stage1

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Project name: Place Picker

Description

Select a location on the map and search for nearby fun places like Casinos, Parks, Nightclubs or essentials like Gas, Food and many more.
Tell the app your search preferences only once and it knows how to personalize the search everytime.
Share a place with your friend .
Favorite any number of locations and you can view them again later even without network.
Let this app be your travel planner...

Intended User

This app is of use to travellers, explorers, people who maintain a "*Places To Visit"* list planning to visit in future or even different place surfers.

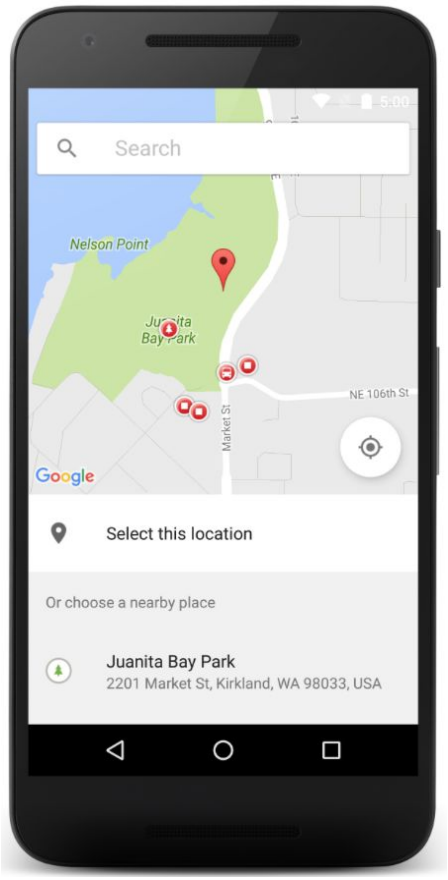
Features

- Allows user to select a location on map.
- User can select points of interest or essentials near the selected location available in categorized lists.
- Allows user to favorite a location and relevant details are stored locally for offline display.

User Interface Mocks

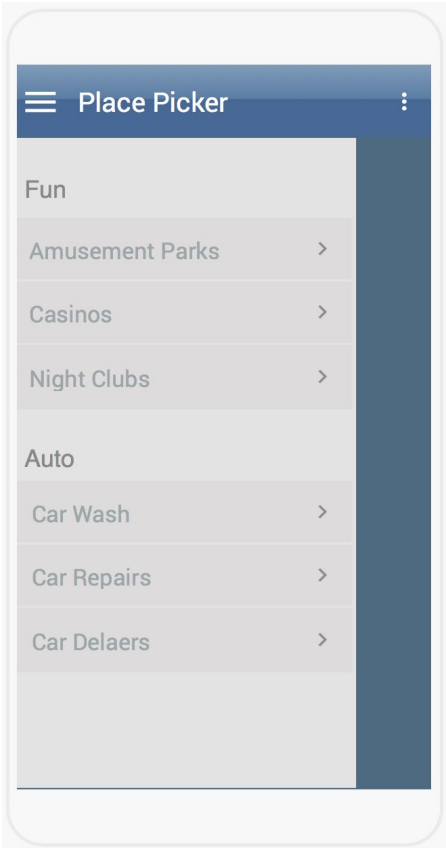
Screen 1

Activity allowing user to select a location to proceed.
(Source : Pic taken from Places API documentation for idea and reference)



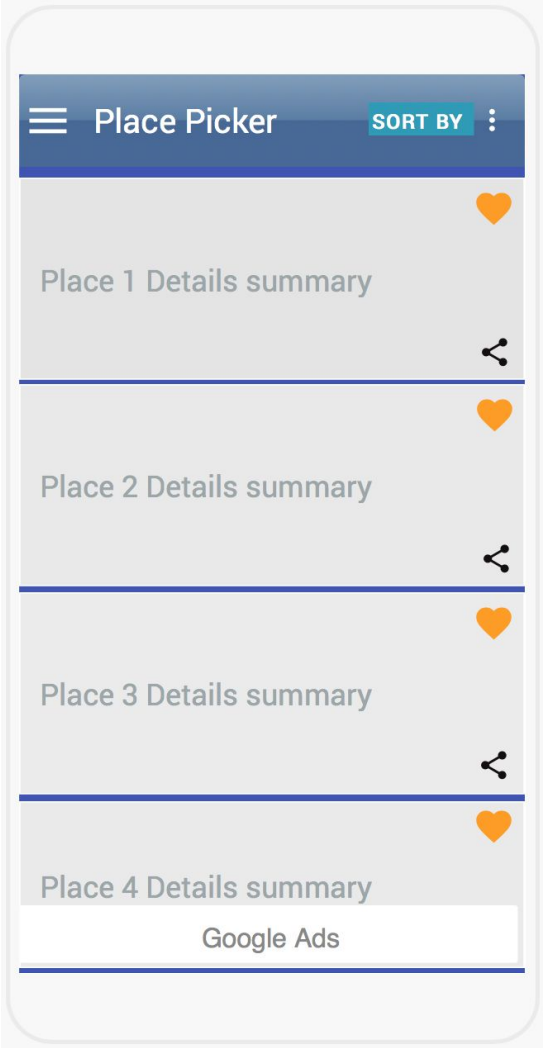
Screen 2

Navigation drawer would contain categorized titles like Fun, Auto, Essentials with relevant specific selections like Casinos, Clubs for Fun.



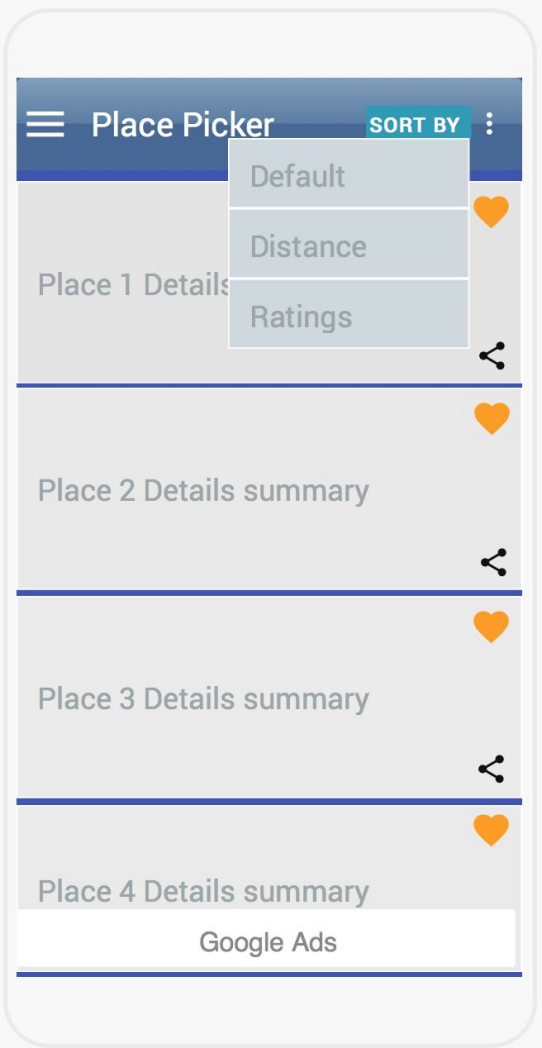
Screen 3

Activity which displays a list of nearby relevant locations based on selection above. This will include sharing and adding a location to favorite functionalities. Google Ads will be displayed on this page for free variant. Ads won't be displayed for paid variant.



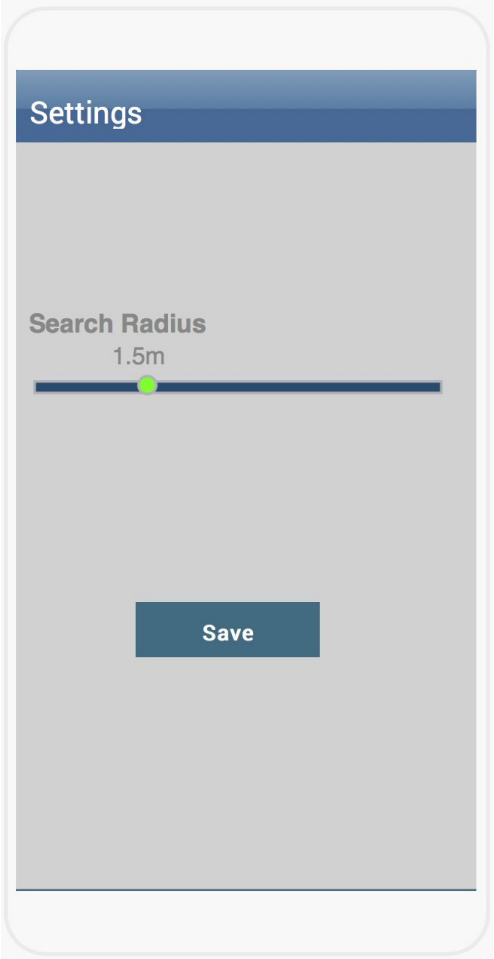
Screen 4

ToolBar will have a small "Sort By" menu that users can quickly select to change how they want the locations to be sorted.



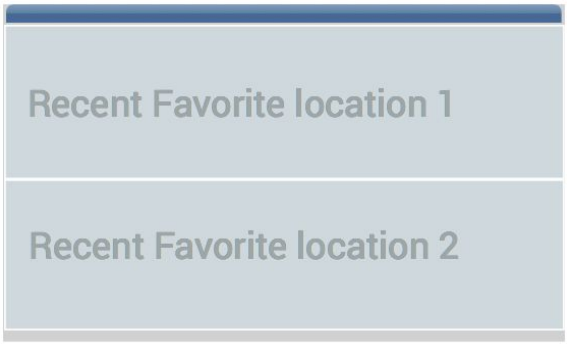
Screen 5

A Settings screen where user can change the search radius preference.



Screen 6

A Widget which displays recent two favorite locations



Key Considerations

Describe Software used. App should use stable versions of all libraries.

- App will use solely **Java** for development purposes.
- Using Android Studio 3.1
- Using Gradle 2.7
- Using Picasso V2.71828, ButterKnife V8.8.1, RetroFit V2.4.0

How will your app handle data persistence?

Favorited places will be stored locally using a Content Provider

Describe any edge or corner cases in the UX.

Initial selection of the location will be users current location by default. User doesn't have to click current location every time if searching nearby.
If user doesn't have network, favorites will be displayed, letting the user know that network's not available.
Sorting order will be default and search radius will be 2 miles by default.

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

Planning to use:

- Picasso to handle the loading of images.
- Retro fit to handle Network requests
- Butter Knife to handle view binding

Describe how you will implement Google Play Services or other external services.

- This app will use the Google's Place Picker to allow the user to select a location.
- Uses Google's Places API to retrieve relevant locations and display to the user.
- Google AdMob to display Ads for free variant.

Next Steps: Required Tasks

Task 1: Project Setup

- Get API Key required for this app
- Configure libraries
- Setup App Theme colors and icons.
- Study all Google APIs being used deeply and make UI better with more useful information.

Task 2: Implement UI for Each Activity and Fragment

- Building all UIs with Fragments and efficiently using the Fragments on Tablet screens to take better advantage of UI.

Task 3: More Technical Specifications

- Communication between app and backend will be handled on a background thread, and making sure UI is fluidly clean.
- All resources will be handled as dictated by Android design guidelines. For example, all strings will be handled in strings.xml and nowhere inside the layouts or code.
- Content Provider will implemented (Using Sqlite Database) in the following way:
    - A record with relevant location's information will be inserted into the database when the user clicks the favorite button on a location.
    - Existing location record will be deleted if the user unfavorite a location.
    - Favorite button will be self explanatory by expressing if it's already favorited or not. (For example, Gradient color for favorited. Just outline colored for non favorite)
    - Database versions will be managed efficiently.
- Coming to the design and architecture, all layouts will be using Fragments inside them for ease with Tablet screens as well. Communication between Fragments on same Activity will be handled by the Activity enclosing the Fragments.

Additional requirements as per Capstone stage 2:

It performs short duration, on-demand requests(such as search), and this will be achieved in the app uses an AsyncTask.