

Design Proposal

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Description

A handy travel application that would help you organize and plan your trip itinerary. It gives you the opportunity to create different bucket lists for each place you're planning to visit and add all you want to do in the specific place. Not only does it help you plan your trip but it also gives you insights about the top things to do in each city. Finally it helps you to identify monuments through your phone's camera and also sends you a notification when you're near an interest point you were planning on visiting.

Intended User

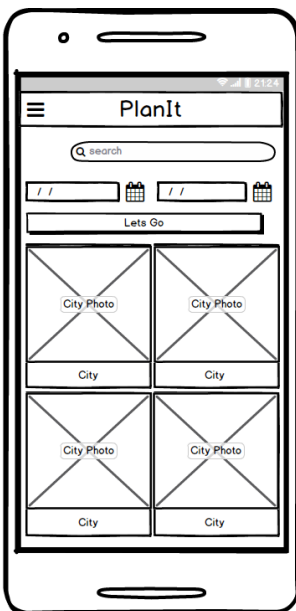
This application is aimed to travelers who want to organize their own itineraries and discover new places in each city

Features

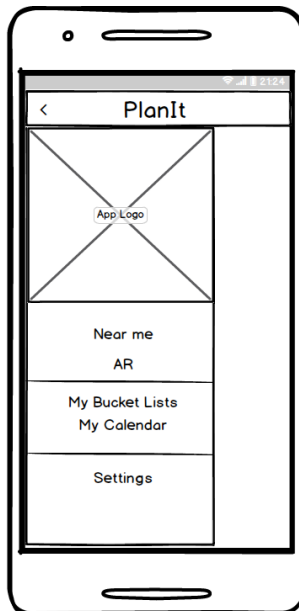
- Browse the most popular destinations
- Browse top things to do
- Details about monuments and interesting activities to do in each city
- Create bucket lists for each city planned to visit
- Organize your bucket lists in a calendar
- AR to identify monuments through the camera
- Get notification when the user is near a point of interest

User Interface Mocks

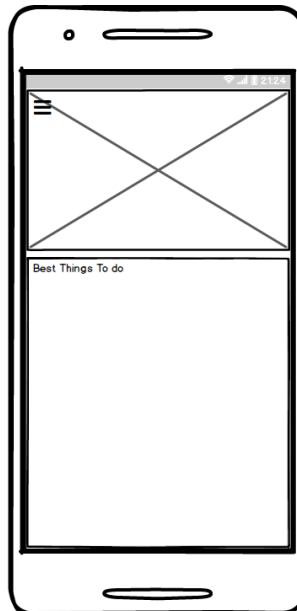
Screen 1



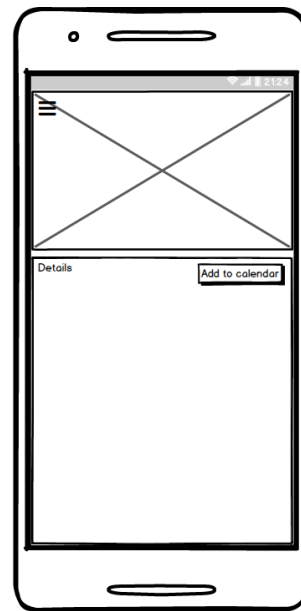
Screen 2



Screen 3



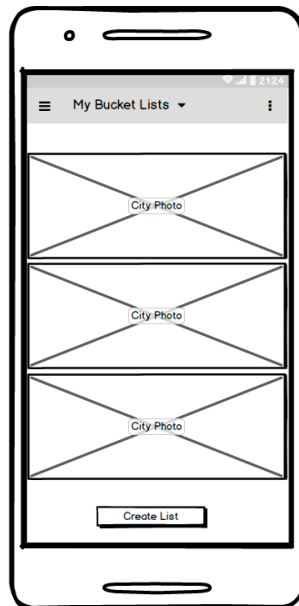
Screen 4



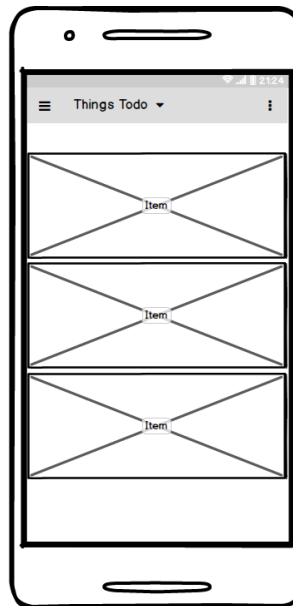
Screen 5



Screen 6



Screen 7



Screen 1: Main Activity shows most popular destinations
Screen 2: Displays main navigation bar with all features
Screen 3: Best things to do in a specific city
Screen 4: Details of specific activity
Screen 5: Calendar activity to manage the itinerary
Screen 6: Bucket List activity to view all activities stored in a bucket list or create a new bucket list
Screen 7: List of items in a bucket list

Key Considerations

How will your app handle data persistence?

- 1- Use Room to store bucket lists information to view it offline
- 2- Use Shared preferences to store apps settings

Describe any edge or corner cases in the UX?

- Unstable or missed network connection
- Device orientation
- Interstitial Ads

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

- **Retrofit:** For network API requests and JSON parsing
- **Material Intro Screen:** For Intro screen
- **Picasso:** For Image loading
- **Firebase:** For analytics and crash reports

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

- 1- **Firebase:** for authentication, crash reporting and analytics
- 2- **Google AdMob:** for showing adds in the app
- 3- **Google Vision:** to detect landmarks using camera
- 4- **Google Place:** to get nearby places using AsyncTask

Next Steps: Required Tasks

Task 1: Project Setup

- Configure libraries
- Create a debug and release variant
- Setup Gradle dependencies

Task 2: Database

- Database (Room)
- Data Models

Task 3: Network

Implement a service which provides all necessary network API requests.

- Data parsing
- Data syncing service

Task 4: Implement UI for each Activity and Fragment

- Setup basic UI structure, Navigation Drawer
- Build top part of each activity/fragment (AppBar)
- String and Image resources
- Setting Navigation Graph
- Gestures/Transitions
- Build UI element

Task 5: Responsive Design

Adapt layout for Tablet support

Task 6: Pull Data

Integrate Retrofit to pull data from different servers

Task 7: Handle Error Cases

- Empty views
- Error message
- No Internet Connectivity

Task 8: Implement Google services

- Google Places
- Google Mobile Vision
- Google AdMob
- Firebase authentication
- Firebase Crash Reports
- Firebase Analytics

Task 9: Implement Test cases

- Write Unit tests
- Write Espresso tests for UI

Task 10: Notification

Implement notification system which notify users when they are near a monument/landmark that they want to visit

Task 11: Others

- Home Screen Widget (To show bucket lists)
- Accessibility
- RTL

Task 9: Final Testing

- Rotation
- Phone vs Tablet (Multiple Devices)
- Performance

Task 10: Generate and Deploy

- Generate app flavor keys
- Create Google Play Account
- Follow steps from Android Developers launch checklist
- Create APK
- Create Google Play image and text
- Push APK