

## How to Use this Template

1. Create a new document, and copy and paste the text from this template into your new document [ Select All → Copy → Paste into new document ]
  2. Name your document file: “**Capstone\_Stage1**”
  3. Replace the text **in green**
- 

[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:** **Zukka**

# Flickr Tourist

## Description

The Virtual Tourist app downloads and stores images from Flickr. The app allows users to drop pins on a map, as if they were stops on a tour. Users will then be able to download pictures for the location and persist both the pictures, and the association of the pictures with the pin.

## Intended User

Virtual travelers

## Features

- App is written solely in the Java Programming Language
- App utilizes stable release versions of all libraries, Gradle, and Android Studio:
  - Picasso version: 2.5.2
  - AdMob version: 15.0.1
  - Firebase Auth version: 4.0.0
  - Room database version: 1.1.1
- Download Images from Flickr
- Display images for a virtual tourist experiences

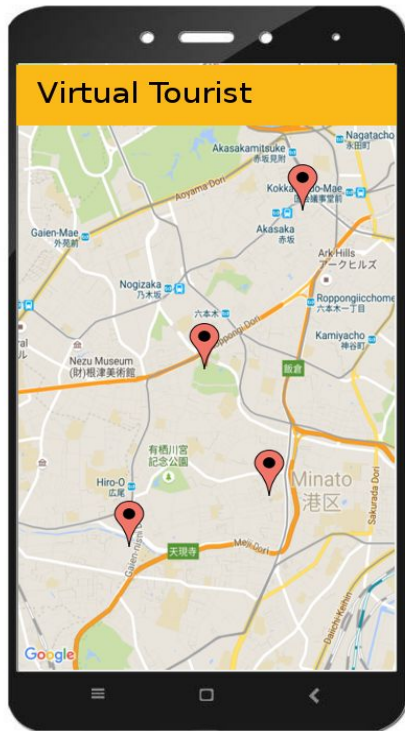
## App design specification (required for Capstone - Stage 2)

- All strings are stored into string.xml file
- App support RTL layout switching on all layouts
- App include support for accessibility
- App use AsyncTask

## 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 Google Drawings, [www.ninjamock.com](http://www.ninjamock.com), Paper by 53, Photoshop or Balsamiq.

## Screen 1



App start from user location, then user can scroll the map and can add pins to map, when user tap on a pin app download images from pin coordinates and display in second screen

## Screen 2



Grid list on the images, user can tap on image for open image detail and can pull to refresh for load differts images.

### Screen 3

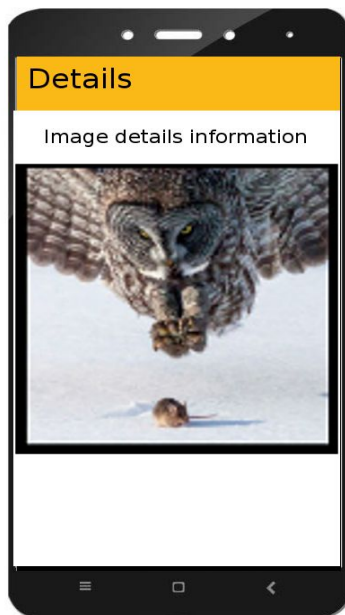


Image details.

### Widget Screen



Widget display images stored into Room database.

## Key Considerations

How will your app handle data persistence?

Store data into a Room database

Use Firebase login

Use Admob for display banner

Describe any edge or corner cases in the UX.

Back button return to main screen

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

Picasso because is easy to use and have a lot of features.

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

App use Flickr API for download images requested.

## Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

### Task 1: Project Setup

- Read Flickr developer documentation
- Create Developer account
- Register new app
- download keys for build request
- Read google maps documentation for use maps

### Task 2: Implement UI for Each Activity and Fragment

- MainActivity : add google maps

- ImagesActivity: add RecyclerView with grid layout for display images
- DetailsActivity: add ImageView and TextView for display selected image with image information

### Task 3: Initial step

- Create class for store constants app and keys for flickr
- Create Room database for store last images downloaded and maps PIN

### Task 4: activity\_main

- Add function for add pins to maps
- Add function for delete pins to map (Reset)
- Add functions for download images from server and add it to room database before show the image list (activity\_images), if pin tapped is the last tapped don't download images but use stored images.

### Task 5: activity\_images

- Add function for pull to refresh images, start a new download and update database images.
- Add function for open image detail (activity\_detail)

### Task 6: activity\_detail

- Display image detail information and image

### Task 7: widget

- Display images stored into Room database

---

### Submission Instructions

- After you've completed all the sections, download this document as a PDF [ File → Download as PDF ]
  - Make sure the PDF is named "**Capstone\_Stage1.pdf**"
- Submit the PDF as a zip or in a GitHub project repo using the project submission portal

If using GitHub:

- Create a new GitHub repo for the capstone. Name it “**Capstone Project**”
- Add this document to your repo. Make sure it’s named “**Capstone\_Stage1.pdf**”