

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

1. After you’ve completed all the sections, download this document as a PDF [File → Download as PDF]
2. 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](#)

[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: byronap120

VR Viewer

Description

VRViewer will let you explore and share with your friends 360 images. If you have panoramic photos that you taken with your 360 camera and you want to share with everyone, you have an

option to do that with VR Viewer, also you can use a Cardboard or any physical VR Viewer to see how your awesome images look. With this app you can:

- Share images
- Explore images posted from other users
- Give feedback to other users
- Watch your images on the cardboard

Intended User

This app is intended for user who likes to take photos and share with the community or just for any people who have a 360 camera or panoramic images to share.

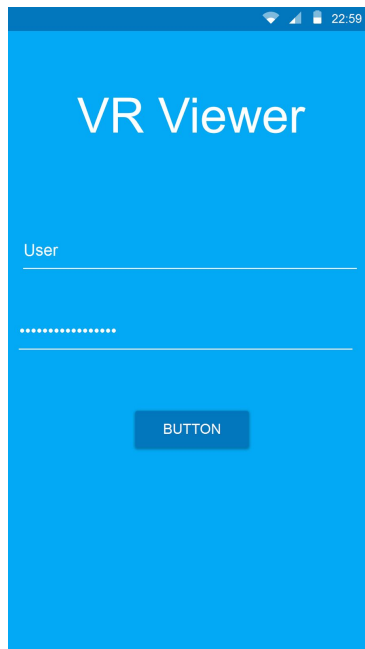
Features

List the main features of your app. For example:

- Explore 360 images
- Share 360 images
- Visualize images on VR mode using a google cardboard

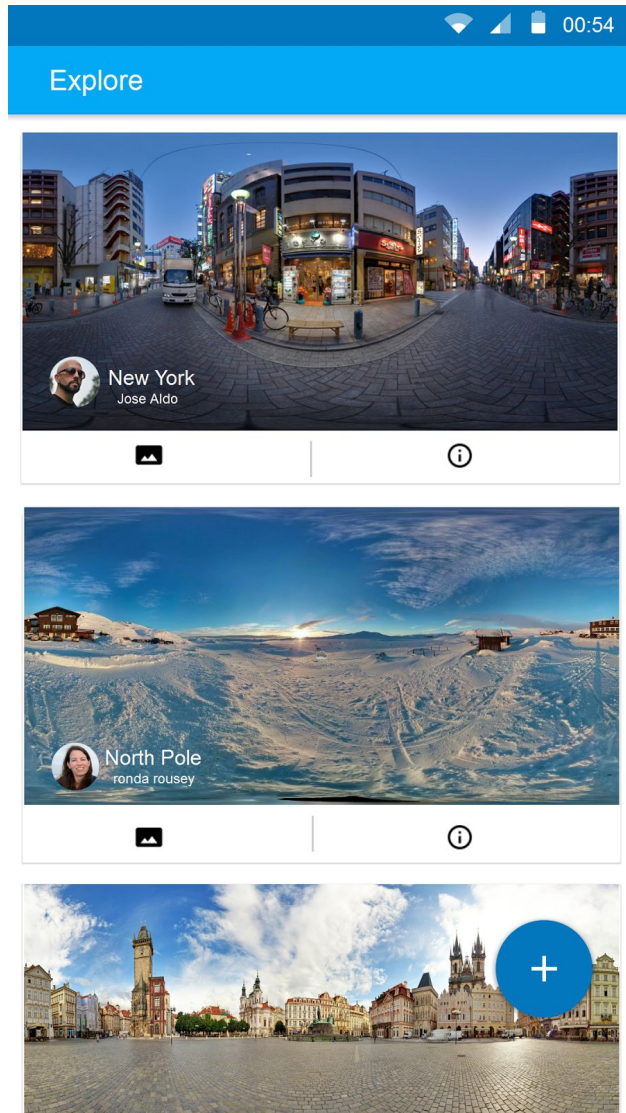
User Interface Mocks

Screen 1 - Login Screen



Users will have an option to Login into the app since every person will have a profile associate to upload images.

Screen 2 - Main Activity (Explore)



Users could explore what other user are posting on real time. This is the main screen where the user have an option to see image on VR Mode or go to a detail activity which show information about the image.

Screen 3 - Add new image

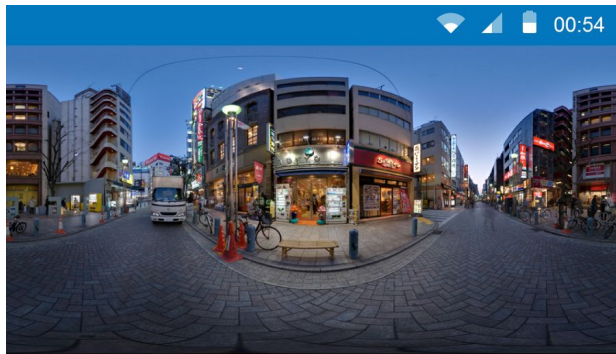


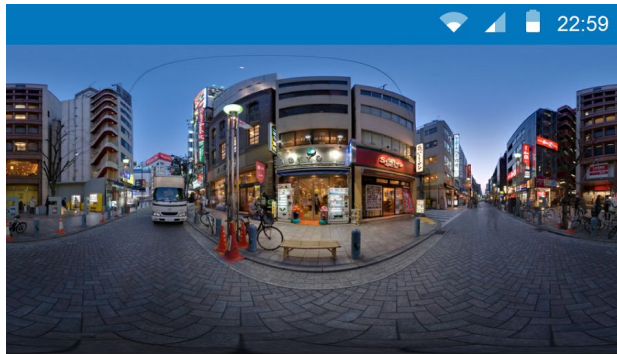
Image Title

Image Description

Add Image

When users tap on the floating button on the main screen then, they could pick an image from gallery and they will be redirected to this screen where should have to add a title and description for image. Tapping on button “add image” the image will be posted.

Screen 4 - Image Detail



New York



Jose Aldo

Description

Lorem ipsum dolor sit amet, ad utamur reformidans mediocritatem eum. Sed cu quando animal, assum discere detracto no eam, per ex etiam sonet. Ad eum nisl facer, mea ne prodesset similique contentiones, iudico persius copiosae mea ne. Clita qualisque salutatus ne mel.

When user select an image from the main screen then they will see a screen which show the description, the user who post the image and also they could bring a feedback to the image using the stars rating.

Screen 5 - VR View (360 image)



From the main screen the user could choose the option to view the image directly on VRView. I will take the approach from Google release an experimental VR View widget <https://developers.google.com/vr/android/samples/vrview>.

Key Considerations

How will your app handle data persistence?

My plan is to use Firebase and a Content provider to load the content to the UI. I'm gonna use the following system:



Firebase: Screen 1(Login), Screen 2(Main Screen - where you see post from other users)

Content Provider: Screen 4(Details) , Screen 5(VrViewer)

So I'll download the data and then read from DB using a content provider.

Describe any corner cases in the UX.

On the Main Screen (Screen 2) Users could decide to follow two path:

1. Go directly to the image pressing the button  and visualize image on 360. When users were on the VRView (Screen 5) which is a full screen they could go back using android back button.
2. Go to details activity pressing the button  and see the information about image, the users could go back using the back android button.

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

Picaso: for handle images

Firebase: For Download and store data

CircleImageView: to show users avatars <https://github.com/hdodenhof/CircleImageView>

VRView: Libraries provided by google to show images on VR

<https://developers.google.com/vr/android/samples/vrview>

Describe how you will implement Google Play Services.

Admob: I'm gonna show ads on some screens

Analytics: The app will be tracked to show the interests from users to see 360 images.

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

Setup project and libraries

- Create and setup project on android studio: choose package name and first commit
- Configure Firebase: add dependencies and create the instances
- Configure google play services: add the respective google play services
- Configure and Import VR View libraries: this libraries are on separate folders so I'm gonna insert those folders on my actual project and test that everything works.

Task 2: Firebase Data Structure and Console

- Planning how data will be structured on Firebase to include user's, posts and images
- Configure Firebase console adding respective permissions and nodes to database and storage.

Task 3: Connect to Firebase and get data

Create a simple UI and started to get data from Firebase

- Create Main Activity
- Call the nodes to test the connection

Task 4: Implement post functionality

Create a simple activity to post images

- Create activity containing an imageview, EditText for title and EditText for description
- Write code to pick image from gallery
- Post image to Firebase

Task 5: RecyclerView on Main Screen (Screen 2)

Once I have data on the firebase database I'll implement a RecyclerView to show the data retrieved from Firebase.

- Create RecyclerView
- Create adapters to show data
- Use Picasso to show images

Task 6: Content provider

I'll create a content provider for detail activity, so I need to setUp the necessary to implement a content provider:

- Contract
- Content provider
- Content loader

Task 7: Detail Activity (Screen 4)

Once I have a Content provider I'll use it and show data on the Detail Activity.

- Load data from content provider
- Create a Simple activity showing ImageView, Title , User Avatar and Image description

Task 8: VR view (Screen 5)

At this moment I have all necessary to setUp the VR Viewer so I'll add to the app this functionality

- Enable options to show full screen view
- Show VR Viewer option on Detail Activity
- Enable option on the Main Screen to go to VR Viewer

Task 9: Login Screen (Screen 1)

It's necessary to show the user an option to log in and start to post images:

- Enable login options on Firebase permissions
- Create a Simple Activity with login options

Task 9: Material design

When the app was completely functional I'll add material design concepts to app.

- Set styles
- Set font size
- Change colors
- Add animations

Task 10: Signed apk. And publish

When the app is ready I need to firm and publish it.

Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. 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**"