

How to Use this Template

- __ Create a new document, and copy and paste the text from this template into your new document [Select All → Copy → Paste into new document]
- __ Name your document file: “**Capstone_Stage1**”
- __ Replace the text in green

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ScVision

Description

My app is basically helps user to know if there skin spots are dangerous and can cause skin cancer or not by using sending a picture of the skin spot to a backend python server that contains a machine learning model deployed on pythonanywhere and the server send the result to firebase.

Intended User

any person who thinks he or she thinks infected with skin cancer

Features

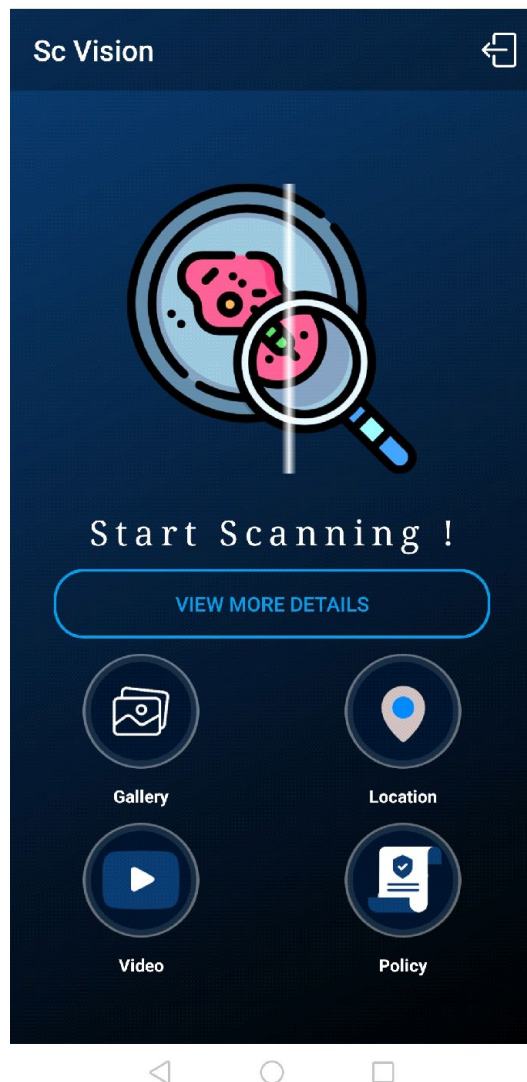
List the main features of your app. For example:

- give information about hospitals locations by using google maps.
- Takes pictures of skin spots.
- gives you more details about skin cancer.
- how to protect yourself from skin cancer.
- give the users how much is case risky and date that they took the picture
- notifications to remind users to for the next skin scanning

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, Paper by 53, Photoshop or Balsamiq.

Screen 1



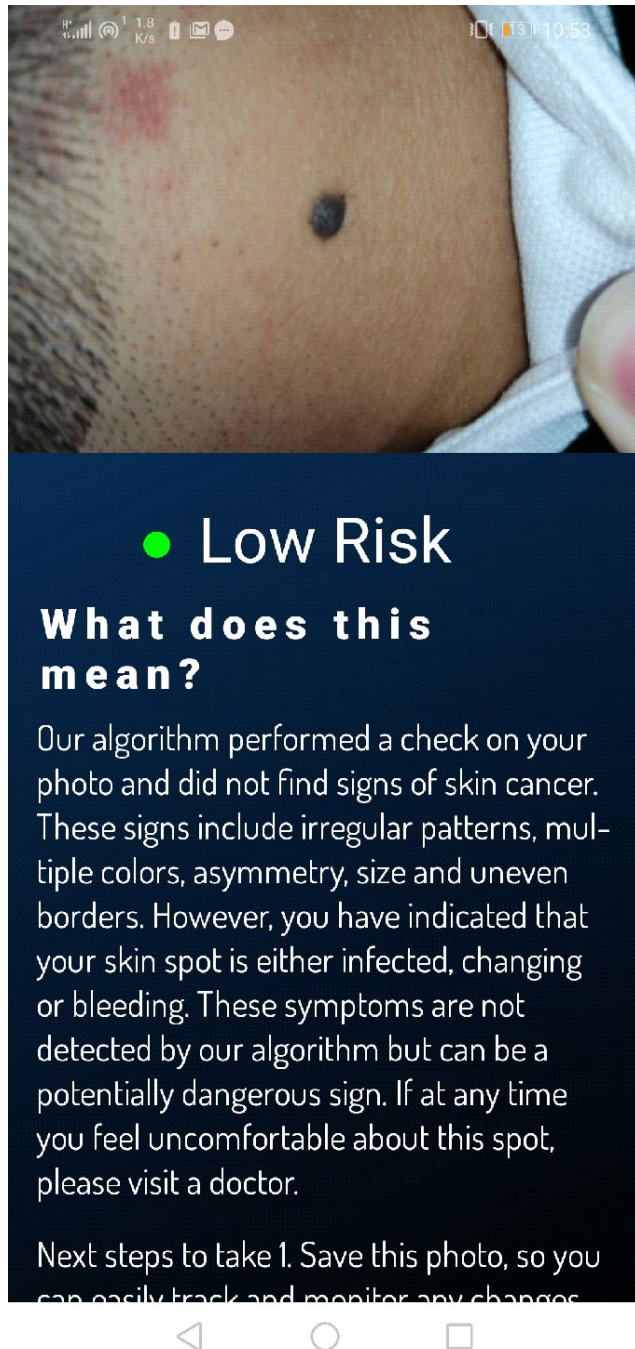
This is the main screen of the app, it contains big animated button used to open the camera and start scanning and it contains gallery (list of the users tests),location(map contains all the hospitals in palestine),video(contain and YoutubeAPI video to learn more about protecting yourself from skin cancer),policy(contain an PDF file generated about using the app)

Screen 2



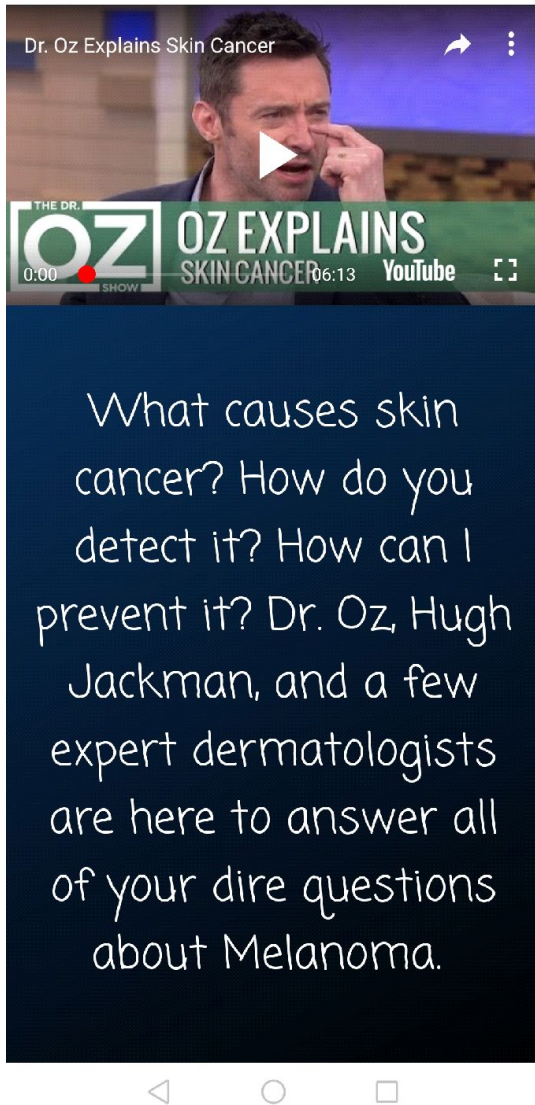
This is the camera activity which contains, a big blue button to take a picture, and a question mark button to show the user how to take the photo to get the best results.

Screen 3



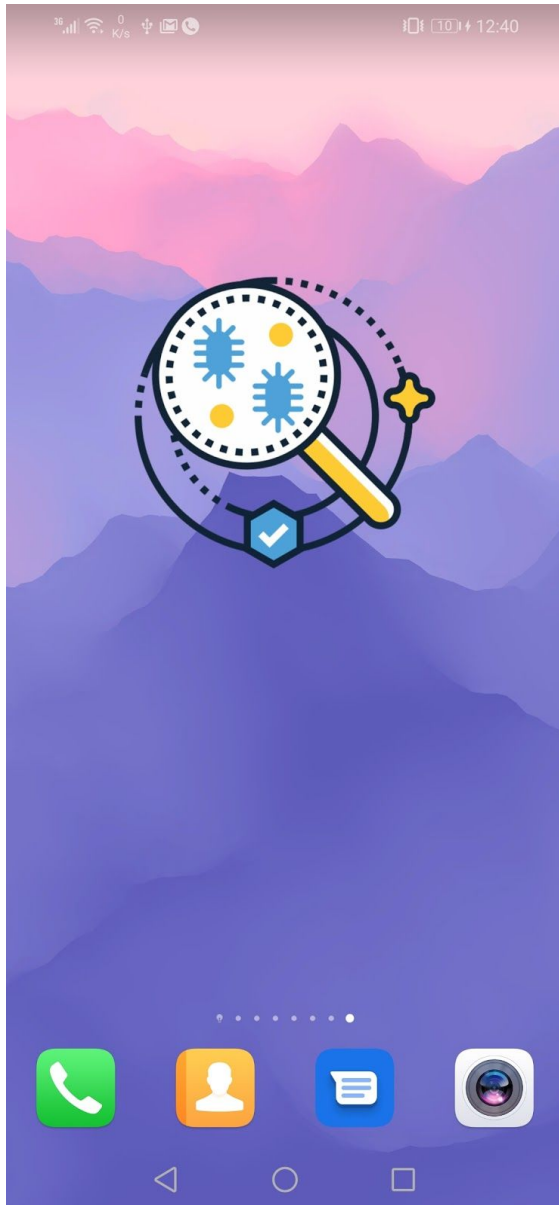
This is the more details activity which is contains, a big picture of the test ,and result

Screen 4



This is the video activity which contains, a YoutubeAPI video to take more about protection of the skin cancer

Screen 5



This is the widget which start camera custom camera for the scan

Add as many screens as you need to portray your app's UI flow.

Key Considerations

How will your app handle data persistence?

i will use Firebase Realtime Database and google cloud storage to get result of the tests and the backend server who is handle saving the data to the Firebase Realtime Database .

Describe any edge or corner cases in the UX.

The user will have the ability to return to the main using the back button or simply by navigating to it from the navigation bar.

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

```
'com.getkeepsafe.taptargetview:taptargetview:1.12.0'
```

to show the new users how to use the app

```
'com.google.firebase:firebase-auth:16.0.3'
```

to sign in and sign up in the app

```
'com.firebaseui:firebase-ui-auth:4.3.1'
```

to build the sign in options in the app

```
'androidx.vectordrawable:vectordrawable:1.0.0'
```

to draw vectors in the app

```
'com.squareup.retrofit2:retrofit:2.3.0'
```

to upload the image test to the back end server

```
'com.marozzi.roundbutton:round-button:1.0.7'
```

a custom rounded image

```
'com.github.traex.rippleeffect:library:1.3'
```

an animation to add to views

```
'com.google.firebase:firebase-database:16.1.0'
```

a realtime database provided by google

```
'com.github.zjywill:OverwatchProgress:1.5'
```

a custom progress bar

```
'org.greenrobot:eventbus:3.1.1'
```

simplifies the communication between components

```
'com.github.bumptech.glide:glide:4.9.0'
```

to cache image in the applicaion

```
('libs/YouTubeAndroidPlayerApi.jar')
```

a Youtube library that to show a youtube view in the same app

```
'com.github.barteksc:android-pdf-viewer:2.8.2'
```

used to show pdf view in the activity

```
'com.google.android.gms:play-services-maps:15.0.1'
```

used to show the location of the hospitals on the map

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

Google maps to display user current location and the list of hospital location in palestine.

YoutubePlayerApi to display a youtube video about the skin cancer.

google firebase auth (Google UI auth) used to sign in or sign up new users.

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

1. I'll use Java as the programming language for this project.
2. i will design the icons and image for the application
3. i will make a custom camera to take the pictures
4. i will the setup the google maps.
5. i will put a guide for new users.

6. i will setup the youtube video.
7. i will use animation and cool buttons and progress bar
8. i will setup a viewpager
9. i will setup an APi connection with the back end of server
10. I'll use Intent Services for launching the phone dial screen for calling the hospital directly

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for MainActivity
- Build UI for CameraActivity
- Build UI for MapActivity
- Build UI for YoutubeActivity
- Build UI for list for tests Result Activity
- Build UI for View Pager
- Build UI for widget

Task 3: Build the Database for users

I'll build the database for saving the users information such Google emails and tests results and the date of tests been taken.

Task 4: Implement The Google Play Services

I'll implement the google cloud services in my app such as the YoutubeAPI & GoogleMaps and make sure it works.

Task 5: QA

i'll test the app to make sure that it's saves the best amount of resources of the mobile and fully optimized .

Task 5: release the app

i'll release the app to the app store so that the user can use it and give me feedback on the app to make sure that we gave the users the UX they need.

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

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**"