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GitHub Username: nikablaine

MotionDroid

Description

Have an Android phone? Wanna turn it into the motion detector? With MotionDroid it becomes 1-tap-easy! Just choose the camera that is supposed to be detecting motion and you're all set!

Intended User

The app is supposed to help users who have a spare phone to turn their phone into the motion camera. There is a linux app called *motion* - that works perfectly as a home surveillance if you're able to leave your linux computer turned on. With the phone it is much less scary ;)

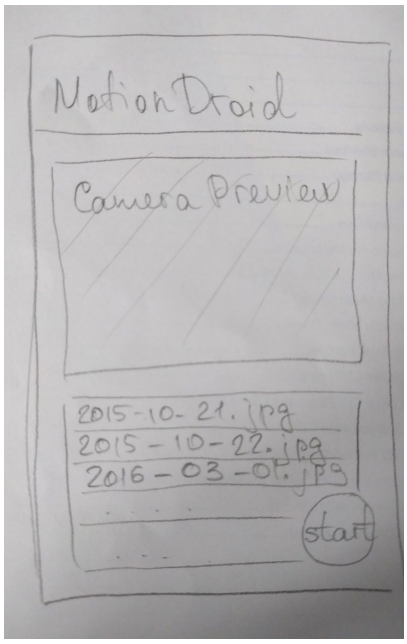
Features

- Takes pictures
- Saves information

User Interface Mocks

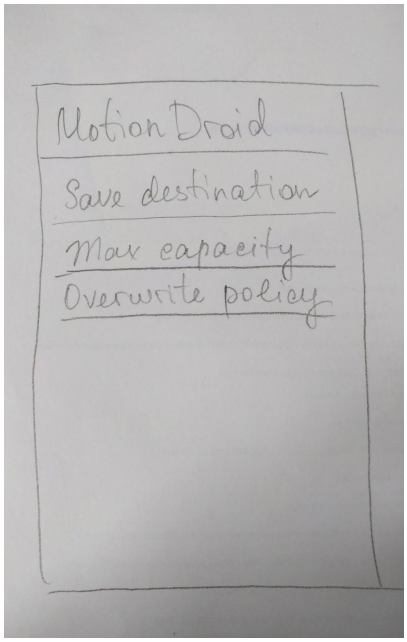
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



The main screen shows the camera preview and possibility to change the camera from front to rear. Below the camera preview there is a list of captured images. If a user clicks on the image name, image will be opened in a default viewer. If the app is already running, the FAB shows "stop".

Screen 2



The settings screen shows the list of settings that can be changed. They are applicable to storage options.

Key Considerations

How will your app handle data persistence?

I would use a shared preferences setting for the setup of a specific folder to save photos to.

Describe any corner cases in the UX.

Setting up the wrong location of photo storage in settings - should jump back to a default one.

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

I would like to use RxCamera library (https://github.com/ragnraok/RxCamera) and RxJava/Android framework.

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

- Create a project in Android Studio with a proper dependencies setup.
- Read about the new permissions strategy and create an activity that is responsible for permissions asking.

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity/Fragment
- Build UI for SettingsActivity/Fragment

Task 3: Create a motion service

- Create a service class
- Write code for starting/stopping the service

Task 4: Create a small widget

- Create a widget icon
- Add widget implementation - it will be responsible for turning the motion service on and off

Task 5: Test the application

- Make a test with a lot of movement and see how the app behaves.
- Test the situation with a storage space running out.

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