



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### CSE 489: Mobile Application Development Assignment 2

Practice Android application development, specifically fragments, the navigation drawer widget. Also, try to learn and practice the Android Jetpack design and coding philosophy. Create flow with help of drawer widget and their designated activities to achieve the flow as described below.

Drawer Menu:

#### A. Broadcast Receiver

Shows a spinner list where one can select the type of broadcast operation wants to perform. There will be a button to proceed to the next activity after selection.

The list contains the following elements:

1. Custom broadcast receiver.
2. System battery notification receiver.

Next Activity depending on selection:

1. For the first option this activity will take input from the user. The input will be a plain text which will be passed to the next activity for custom broadcast receiver.
2. If the user selects the second option in the first activity then receives the battery percentage broadcast.

Third Activity:

1. If the user selects the first option in the first activity then in this activity create the custom broadcast receiver which will receive the text message given in the second activity.
2. If the user selects the second option in the first activity then do nothing here.

#### B. Image scale:

Load an image from the internet and scale it with a pinch gesture (load image and use gesture).

#### C. Video:

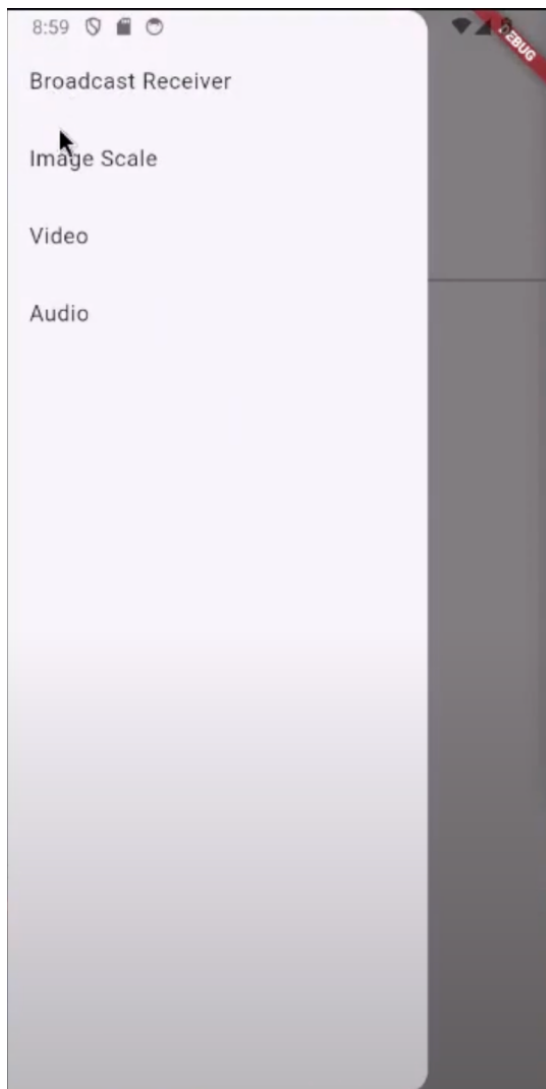
Play one video within app (media player)

#### D. Audio:

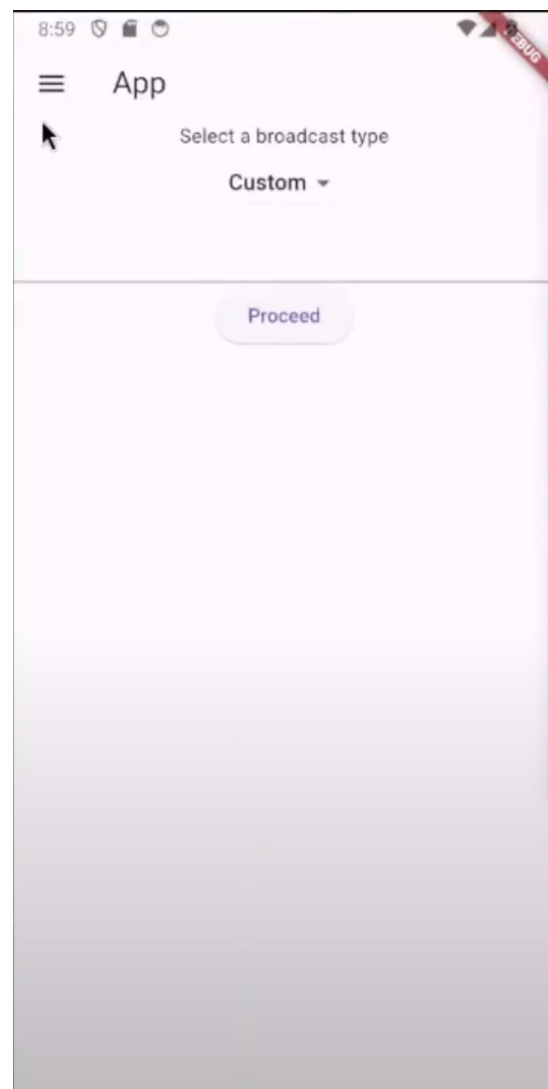
Play one audio within app. (media player)

Links:

- <https://developer.android.com/guide/components/broadcasts>
- <https://www.vogella.com/tutorials/AndroidBroadcastReceiver/article.html>
- [https://developer.android.com/reference/android/content/Intent#ACTION\\_BATTERY\\_CHANGED](https://developer.android.com/reference/android/content/Intent#ACTION_BATTERY_CHANGED)
- <https://github.com/androiddevnotes/awesome-jetpack-compose-learning-resources>



*Menu options*



*Broadcast Receiver*