

Lab 3
125 Points
Sensory Explosion
Chapters 5, 6, & 7
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Lab3classID

In our third lab of the semester we will create an app that incorporates many of the techniques and approaches presented in **Chapters 5, 6, and 7** to create an application that includes:

- 1) a splash screen
- 2) a MainActivity that is a ListActivity with a customized main screen [to include an image icon], as well as Intents that open Websites and other Activities
- 3) an Activity with a large image as the background, a spinner [Chapter3], button and appropriate text output for spinner selection (e.g., "You selected pretzels.").
- 4) an Activity that includes two (2) images and two (2) sounds/songs (using the Media Player Class)
- 5) an Activity that includes a GridView of at least six (6) images with appropriate image displays and Toast messages

You choose the overall theme of your app, but it must be a consistent theme to include the images, audio, and various other items that will be incorporated.

Lab Parameters

We will not use any one of the Case Projects from Chapters 5, 6, or 7 for this lab. However, **in addition to the sample apps in each chapter**, you may want to consult the following Case Projects for guidance:

- Case Projects 5-1, 5-2, and 5-3 (pages 211-216)
- Case Projects 6-1, 6-2, and 6-3 (pages 257-259)
- Case Projects 7-1, 7-2, and 7-3 (pages 294-296)

Your app must include the following items:

- timed splash screen
- consistent title
- custom launcher icon
- ActionBar with icon
- customized **main page with the following list of choices:**
 - o intents to at least three (3) Web sites
 - o an intent to at least one (1) large image (as a background) Activity, with a spinner, button, and appropriate message
 - o an intent to an Activity with at two (2) images and (2) controllable sounds/music via buttons
 - o an intent to one (1) Activity that includes a GridView of at least six (6) selectable images with appropriate toast messages and displays for each image

Your app might include the following extra items:

- detailed toast messages
- additional media types
- other appropriate items

Do make sure to:

- Incorporate approaches and techniques we have learned up to this point in the semester
- Avoid all informational errors on images and elsewhere
- Make appropriate changes in the AndroidManifest and document them
- Use appropriate XML layout choices
- Maintain a theme throughout your app
- Maintain a concept throughout your app
- Make decisions using the correct decision structures
- Create a user friendly app that uses defensive programming and controls to minimize errors

Important items to note

- Follow variable and file naming conventions: self-documentation with variable names is critical
- You could still rely on the Android system return button to get back to the main activity, but adding return buttons in activities is strongly encouraged
- **Use Android 5.1.1 (API 22, Lollipop) as the minimum SDK on setup**
- Use appropriate size settings
- Use appropriate image types and densities
- Document every file that you create and/or change
- Include your classID as appropriate
- **The Lab video has almost all portions except the spinner, button and appropriate text output for spinner selection (e.g., "You selected pretzels."). Check Lecture3 for example code.**

Deliverables

This lab (entire project folder) should be turned in as a .zip file named with the Lab number and your classID. For example, if your classID was **bjones4242** (Bubba Jones), the file would be:

Lab3bjones4242.zip

Refer to the **Documentation Guide** at for guidance on comments and lab preparation.

**When you are finished, make sure to upload
AND
submit your lab in eLearning.**