

Project Android Intent

eXtensible



Markup



Language



I know how to...

This project will demonstrate the following:

- Create a working Android application.
- Build User Interface (UI) screens with buttons and input fields
- Add Activities to the Android Manifest file.
- Set up event listeners to trigger code when users click different buttons
- Create an implicit intent using existing resources
- Create an explicit intent calling a specific activity
- Pass information from one activity to the next

The project is designed so you can demonstrate what you know and understand about creating Android apps and using the Intent class.

You may even want to include it on your website as part of your portfolio, showing potential employers that you know and understand how to create a basic Android app.

File Management

Create an eclipse project folder named: prjAndroidIntent

- This is the folder that you will zip up and submit to your instructor.

Every code file must have a comment block near the top with the following information:

- Name of the file - purpose of the file
- Your name and email and student ID
- The date written and a place for future revision notes

For XML documents and web pages the first line must be the doctype or XML declaration. Put the comment block after this.

Specifications

1. Visualize your app.

Create an app that will ask the user for input and then calculate a finished result.

For example, one student created an app for her husband that allowed him to put in the dimensions of a bridge column. The app calculated the area so he knew how much concrete to order.

Draw out the screens of your app showing the names of each UI object. Include sample data in any input fields as part of your drawing. You will be including this drawing in your video so make sure you have a digital version that you can display on your computer.

On one of the activities include a text input field and button that will allow the user to look up information on the Web.

2. Create a basic Android project with at least two activities

Name this project: prjAndroidIntent

Create two activities/screens to gather data and show results.

Include default information in the text input fields.

Using Google as a resource, find a suitable images and add them as the backgrounds to your screens. Use images with lots of open space so the text of the app is not obscured in any way.

<http://stackoverflow.com/questions/16135984/full-screen-background-image-in-an-activity>

Only use images that have a creative commons license.

3. Create an intent that will take the data from one activity and use it to populate the second activity.

Add an intent that will take the data from the first screen/activity, do the

calculations, and then send the results to be displayed on a second screen/activity.

4. Add a textfield and button that will allow the user to display a web page on their Android device.

On one of the activities include a text input field and button that will allow the user to look up information on the Web. Using the appropriate Intent display the web page when the user types in a valid URL and clicks the button.

Include a sample URL in the text input field.

5. Create a video using this script, in this order:

1. Show your visualization diagram. Make sure to highlight the object names
2. Show how your program works by inputting information and calculating a result
3. Show how your program can access a web page on the Internet.
4. Briefly explain the three steps to using an Intent showing sections of your code.
 - What are the three code changes needed to make Intents happen?
 - What code did you add to the AndroidManifest.xml? What does this do?
 - What line(s) of code did you use to determine when the user clicked a button?
 - Describe what happens in the onClick() method.
 - Show the code that handles the Intent. How is extra information gathered from the other screen?
5. Describe any problems you encountered and how you solved each one.

Notes:

- ✓ This video should be 2 minutes or less.
- ✓ Have all the validation programs up and running before you start the video.
- ✓ Do a dry run before recording the video.

- ✓ Pause the recording often while you get things set up for each step.
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What to submit to D2L

1. Zip up the Eclipse folder named: prjAndroidIntent
2. Name this file: prjAndroidIntent.zip
3. Submit this zip file to D2L.
4. In the "Notes" section of this drop box add the link to your video.
 - View the video in a browser.
 - Copy your URL address. (Highlight and use CTRL c)
 - Paste this into the "Notes" area of the dropbox (Position the cursor and hit CTRL v)

Grading Checklist

Total Points Possible: 55 points

Create a 2 min (or less) video using this script

10 points - Show your visualization diagram. Make sure to highlight the object names

5 points - Show how your program works by inputting information and calculating a result

5 points - Show how your program can access a web page on the Internet.

30 points - Briefly explain the three steps to using an Intent showing sections of your code.

- What are the three code changes needed to make Intents happen?
- What code did you add to the AndroidManifest.xml? What does this do?
- What line(s) of code did you use to determine when the user clicked a button?
- Describe what happens in the onClick() method.
- Show the code that handles the Intent. How is extra information gathered from the other screen?

5 points - Describe problems you encountered and how you solved each one.

Points will be subtracted for:

- Not following these specs, especially with filenames and folders.
- Misspelled words or poor grammar on the web page.
- Not having a complete comment block at the top of each page of code.

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