

Project #5 (25 points)

Due Date: Wednesday, December 9, by 11:59pm.

Submission

1. You must designate a submitter (one of the team members) to submit the project to Canvas. The comment block on top of each Java file must include the names of all team members.
2. **Submit the zipped project folder** to Canvas.
 - Write a comment on Canvas identifying the API level you use and the AVD you used to run your app.
 - It is your responsibility to make sure the submitted zipped file includes all the files required to run your Android app. **You will get 0 points if your project does not run!**

Project Description

You will develop an Android app that can estimate the ticket prices for admissions to a list of museums in New York City (, OR in New Jersey if you like.) When your app is running, the main activity will show a list of museums for the user to choose from. Upon the selection of the museum, your app will navigate to a second screen displaying a simple calculator for the cost of admissions to the museum selected. The second screen shall also include a clickable museum image for navigation to the museum's website.

Project Requirement

1. This is a **group assignment**. You **MUST** work in pair in order to get the credit for this program.
2. You **MUST** follow the software development ground rules, or **you will lose points** for not having a good programming style.
3. Your app must meet the following requirements. **-2 points** for each requirement not met.
 - a) The main screen shall display a list of at least 4 museums for the user to select from.
 - b) Upon selection of the museum, the second screen will be displayed (the 2nd activity has been started.)
 - c) The second screen shall display a clickable image of the selected museum.
 - d) A Toast message "Maximum of 5 tickets for each!" shall be displayed when the second screen is displayed.
 - e) Clicking on the museum image will open the web browser and navigate to the museum's website (this is considered as the 3rd activity.)
 - f) The user can navigate back to the second screen from the museum's webpage by clicking the back button.
 - g) The second screen shall also provide the information about the ticket prices for adult, senior and students admissions to the selected museum.
 - h) On the second screen, the user can enter the quantities for each type of tickets, adult, senior and student. The maximum number of tickets for each type is 5.
 - i) The app shall be able to calculate the cost of the admissions based on the quantities entered.
 - j) The total cost of admissions shall be displayed on the second screen, including the ticket price (integer), sales tax (2 decimals) and ticket total (2 decimals). NYC sales tax is 8.875% and NJ sales tax is 6.625%.

- k) The user can navigate back to the main screen from the second screen by clicking the back arrow on upper left of the screen. You need to properly modify the manifest file for the back arrow to display on screen.
- 4. You can use any Android Views or ViewGroups in your app. However, you must use Toast to show any messages to the user, or **-2 points**.
- 5. Your app must NOT have any “hardcoded text” warnings. In other words, you must define all texts in the **string.xml** resource file. **-2 point** for each violation, with a **maximum of 5 points off**.
- 6. You MUST define the launcher icon for your app, or **-2 points**.
- 7. You MUST define the activity titles displayed on top of the activities, **-1 point** for each violation.

Program Testing

Your program must meet all the requirements and always run in a sane state. Your program must not crash under any circumstances. You are responsible to thoroughly test your Android app. You will **lose 2 points** for any exception not caught or any malfunction on the GUI, with a **maximum of 5 points off**.