

Overview

For this assignment, write an Android application with a `GridLayout` very similar to what we created for our **TicTacToe** app. Each of the nine `ImageButtons` that matches the parent in size with nine different images, each related to something you like. For example, if you are interested in baseball, your application could display photos of nine of your favorite players or nine different teams. If you are interested in a certain type of pop or rock music, your application could display information about nine different pop or rock bands or soloists or a single band's or soloist's nine hits or nine albums.

No matter what is selected as the topic, find a clear image to go along with each of the nine or more topics that you select. Remember that the images will be quite small on the device but, if chosen well, they can still be clearly seen.

Also, make sure the size of the image is appropriate for a phone. A simple photo program such as *Paint* can be used to resize or crop images if necessary. PNG images are considered the best for Android applications, JPG images are considered acceptable, and GIF images will work but are **not** the best choice.

The second thing that you will need to gather is relevant information about each of the nine images. For example, the player's name, team, age, stats, etc. The amount of information should not require scrolling but should be real information and accurate.

Design and Functionality

The application will consist of two Activities. The main activity will present the `GridLayout` with its nine clear images. When the user selects, or clicks on, an image, they should be taken to the second activity where the same image is displayed larger and relevant information about the subject should be displayed.

Design the main screen of the application to display the grid of images and a single `TextView` above the `GridLayout` stating something like "Please choose your favorite player!" or "Please choose your favorite rock band!" or "Please choose your favorite female vocalist!".

The design for the second activity can be fairly basic. At a minimum, it should have an `ImageView` to display the same image from the `GridLayout` but larger, a `TextView` (or `TextViews`) that displays the information about the subject chosen and, under the information, a `Button` that will return the user to the main activity.

Requirements/Notes

1. When setting up the project, the package name should be **edu.niu.android.appname** as before.
2. Create a class that will hold the information about a single one of your nine subjects. Upon beginning your app, each of the nine objects should be instantiated and, in turn, filled with hard-coded data about each of the subjects of your images that will be displayed when the grid button is clicked on by the user. Be sure you use **gets** and **sets** and you may use a hardcoded Java `Array` of nine elements to hold the nine objects. Do **NOT** store your images in the objects but rather in the correct `.xml` file.

3. Handle any button clicks with either an `OnClickListener` or by setting the `onClick` property for the button object.
4. The code that is submitted must be thoroughly documented. All `ImageButtons`, `Buttons`, `TextViews` or any other component that the Java code interacts with must have a descriptive name. The `TextViews` for labels can be left with the default names assigned by Android Studio. Any submission that does not have enough documentation or documentation that is unclear will lose points.
5. Force portrait orientation only.

What to Turn In

Document any Java classes as described in *322 & 522 Android Coding and Documentation Guidelines* and zip any apps separately.

Attach your zipped file(s) to your assignment submission on Blackboard.