## JAV1001 App Development for Android

# Lab 4.1 — Layouts and Views

## Purpose

This lab is meant to get you started with creating layouts in Android Studio.

## Value

4%

## Course Outcomes

5. Design a user interface for the Android platform.

## Task

Start to create a score keeping app using the Android Studio project from Lab 4.0. Your app should have (at least):

* An appropriate layout (**1 mark**)
* Two team names (TextView) (**1 mark**)
* Two scores (TextView) (**1 mark**)
* Buttons to increase and decrease the scores (**1 mark**)
  + You can either have two Buttons for each team, or
  + Two Buttons with a way to determine which team is currently scoring (Switch or ToggleButton)
* An amount to change the score by (RadioButtons or Spinner) (**1 mark**)
  + There must be at least two scoring options
  + The scores can be any values you choose. Here is some inspiration but feel free to use your own scores:
    - American Football: 1, 2, 3, 6
    - Basketball: 1, 2, 3
    - Freestyle Wrestling: 1, 2, 3, 4, 5
    - Cricket: 1, 2, 3, 4, 6
    - Your own game that you make up your own scores; 1, 50, 99
* Anything else you feel will be important to include
* For this lab the buttons *do not* need to do anything. This is only a layout.

## Time Commitment

This lab should take approximately 2 hours.

## Grading

Code that does not compile will be marked at 50%. Marks may be deducted for additional reasons (ie inefficient or difficult to read code)

* Views/ Layouts (**5 marks** see above)
* Documentation
  + Meaningful View IDs (**1 mark**)
  + XML comments to identify parts of the layout (**1 mark**)
* GitHub
  + Code is correctly added to the repository (eg: JAV1001-ScoreKeeper) (**1 mark)**
  + Commit message(s) inform the reader of code that has been updated (how, why) (**1 mark**)
  + A README file with your name and student number (1 mark)
    - You can use [PurpleBooth's README](https://github.com/PurpleBooth/a-good-readme-template) template as a starting point
  + A gitignore file to exclude common files
    - You can use [GitHub's gitignore](https://github.com/github/gitignore/blob/master/Android.gitignore)
    - If you're using a MacBook, consider [GitHub's Mac gitignore](https://github.com/github/gitignore/blob/master/Global/macOS.gitignore)

## Submission

Upload your code to a new GitHub repository and put the link in the comments or a .txt file. If you work in pairs, only submit one assignment per group.

If you are submitting a .kt file, submit it in a .zip file (Windows: Right Click folder/file > Send To > Compressed Folder; OS X Right Click folder/file > Compress) and follow the instructions above. Marks will be deducted.

If you worked in a group:

If somebody else is submitting on your behalf, you must use the text box to indicate your contributions. *This should be in your own words*

If you are submitting on behalf of someone else, you must also indicate your contributions, and list the names of other students in your group.

Failure to list contributions, or if the contributions are not significant, may result in a score of 0.