# Hack BI

## **Android Studio Workshop**

**Get Started :** Open Android Studio and start a new project. For the second part, check out project from Version Control (<a href="https://github.com/annemariecabs/EmptyStroopTest">https://github.com/annemariecabs/EmptyStroopTest</a>)

**Uses:** Android Studio is specifically used for the development of Android applications. Its official language for development is Java.

**Purpose:** By the end of this workshop, participants should be able to effectively design an Android application using layouts, give its components functions using Java, and run their app on either an Android device or the provided Android emulator.

Goal: Use a TextView to keep track of how many correct Stroop responses are collected from the user.

### **Challenges:**

- 1. Insert an opening screen with instructions (e.g. like "In this game, click the button that matches the color of the text").
- 2. Have the Stroop change on a Timer, instead of a button click.

#### How to code a component:

- 1. Give the component an id in the design tab (ex. btnChangeColor)
- 2. Initialize the component as a field or a variable.
  - a. ex. Button btnRainbow;
  - b. The field/variable name does not have to be the same as the id name, but it can be
- 3. Set equal to its view/ID
  - a. ex. btnRainbow = findViewById(R.id.btnChangeColor);
- 4. Create its onClick method with (View view) as its parameter.
- 5. In the design tab, find the onClick attribute and assign the component's onClick method.

### **Resources for Further Learning**

Android Studio User Guide: developer.android.com/studio/intro/index.html

Keyboard shortcuts: developer.android.com/studio/intro/keyboard-shortcuts.html

Android Studio Provided Sample Code: developer.android.com/studio/write/sample-code.html

If you have any additional questions, come find me or contact me at caballeroal@bishopireton.org.