# Project Title: Calculator App for Android

# **Project Description:**

This project involves the development of an advanced calculator application using Android Studio. The app will be designed to perform a wide range of mathematical operations, making it suitable for both educational and professional use. The application will feature a custom user interface with distinctively colored control keys and a personalized initial display, enhancing usability and user experience.

## **Project Example:**

(This is an example for a calculator app, but your settings may slightly different.)



# **Key Requirements and Features:**

#### 1. Numeric Keypad:

- The calculator will include numeric keys for digits 0 through 9 and ".", accommodating the basic requirements of numeric entry.
- The '0' key will be highlighted with a background color of #FF8033.

# 2. Arithmetic Operations:

- Functional keys for basic operations such as addition (+), subtraction (-), multiplication (\*), and division (/) will be included.
- Keys for opening "(" and closing ")" brackets will also be provided to support complex mathematical expressions.

- Each operation key will have corresponding functions assigned, ensuring accurate calculations and user-friendly interaction.
- The equal key "=" is used to display the result of a calculation.

## 3. Clear Functions:

- An 'AC' (All Clear) key will be incorporated to clear all contents of the input panel. This key will be distinctly colored with #FF3377 for clear visibility and quick access.
- A 'C' (Clear) key, designed with a #337DFF color, will allow users to delete the most recent entry or calculation, facilitating error correction and adjustment without needing to clear all input.

#### 4. Input Panel:

- The input panel will serve as the display area where users can see the numbers they input and any results or error messages. This panel will record all interactions for reference.
- Upon initialization, the input panel will display the developer's last name and CWU ID, personalizing the app to the developer and serving as an initial default view.

## 5. Usability and Aesthetics:

- The application will feature an intuitive layout with large, easy-to-press buttons to accommodate users on devices of various sizes.
- Attention will be given to the aesthetic presentation of the calculator, with color-coded keys to distinguish between different types of operations and functions, enhancing the overall user experience.
- 6. Comments: All code needs to be commented as Javadoc format and uploaded to GitHub.

#### **Technical Specifications:**

• Platform: Android

• Development Environment: Android Studio

• Programming Language: Java

• User Interface: XML for layout design, ensuring a responsive and attractive interface.

#### **Submissions:**

- 1. Your project has to be uploaded to GitHub. You will provide a GitHub link on Canvas.
- 2. Screenshot 1, initialization screenshot. Shows your last name and CWU ID.
- 3. Screenshot 2, calculate (1+3.02)\*5/4 and display the results.