

Mobile Computing Assignment 1

Functions implemented:

Memory

MS - Memory Stores everything before the first operator on the screen.

MR - Memory Recalls the stored value in memory.

MC - Clears the value that was stored in the memory.

Parenthesis

() - allows user to modify the order of operations.

Formula Entry

Since this function is implemented, the user will be to enter an entire expression until the equals button is pressed to calculate the entered expression.

Landscape and portrait views

Landscape and portrait view layouts were designed to try to fit all the buttons on the screen as efficiently, and visually pleasing as possible. The Landscape view layout was semi-inspired by the base android calculator app, where the numbers appear on the left most side, and the operators appear on the right side. The landscape file is stored in the resource layout-land called activity_main.xml.

Buttons

Button style was made for the buttons in the values resource. This can be found in the styles.xml file. Additional to the styles, a feedback feature was implemented called, the "ripple" effect. This will make the button create a small animation on the button that was clicked to give user additional feedback on the button.

Basic Program Design

The Java is written in two classes, MainActivity to mainly initialize everything on the screen, and Operators to implement the functions. All of the design decisions were commented inside the java code.