Calc

Calc contains many android studio generated files that pertain to the GUI aspect of the program. It also contains a MainActivity class that controls all the functionality of the calculator. That is the file that this readme will cover.

MainActivity

Classwide variables

double firstOperand: The first operand. Also acts as an accumulator when the user is chaining operations.

double secondOperand: The second operand.

String operation: The operation being performed.

String currentEntry: What the user has entered so far.

String displayText: The text to be displayed in the view window.

boolean firstFlag: A Boolean flag used to detect if the user has moved to the second operand yet. This starts as true.

boolean decimalUsed: A Boolean flag used to detect if the user has entered a decimal in their current operand. This starts as false.

Functions

onCreate(Bundle savedInstanceState) : Invoked when the class is created. Sets up the android toolbar and an OnClickListener.

buttonClicked(View v) : Accepts the View or button that was clicked and preforms a task depending on the button. For addition, subtraction, multiplication, and division, the function invokes another function corresponding to which operation was chosen. For percent, the function tells the user what percent of the first number the second number is. For sign, the function switches the sign of the current operand. For clear, the function resets back to the original position. For sqrt, the function takes the square root of the current entry. For equals, the function performs an operation between the first and second operands. For decimal, the function adds a decimal point to the end of the current entry.

executeFunction() : checks the current operation and performs it between the first and second operands when the user taps the equals button.

functionChosen() : This function will allow the user to use the first operand as an accumulator to chain operations together.

onCreateOptionsMenu(Menu menu) : Brings up the options menu.

onOptionsItemSelected(MenuItem item) : Handles clicks in the options menu.