MAD Interest Calculator Milestone 2

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| Alexander Hoke | 11-8-2016 | A.Pierce ATLS 4120 |

# Introduction

The MAD interest application allows users to calculate how much a loan, credit card bill, or savings account will either cost or accumulate with their chosen type of interest applied.

## Basic Parts and Functionality

1. Launch screen and button that both use the icon/image/logo of the application
2. Three button widgets at the top of the screen that allow the user to choose which type of interest they are going to be calculating; simple, compound, or complex.
3. Edit text widgets and labels for each of the following:
   1. Starting Amount
   2. Interest Rate
   3. Compounding Periods
   4. Length of Loan or Repayment Period
   5. Total Amount with Interest
4. Button widgets at the bottom to either clear or calculate what the user has inputted.

### Pseudocode

* Simple interest button widget:
* Uses algorithm for simple interest calculation in private float simpleInterest().
* Amount = Principle \* (1 + Interest Rate \* Time)
* Compound interest button widget:
* Uses algorithm for compound interest calculation in private float compoundInterest().
* Amount = Principle \* (1 + Interest Rate / Compounding Periods) ^ (periods \* time)
* Complex interest button widget:
* Uses algorithm for complex interest (APR) in private float complexInterest().
* Starting Amount edit text widget:
* Use this edit text to populate principle amount for all algorithms/methods.
* Interest Rate edit text widget:
* Use this edit text to populate the interest rate for all algorithms/methods.
* Compounding Periods edit text widget:
* Use this edit text to populate the number of compounding periods for compound and
* complex interest calculations.
* Length edit text widget:
* Use this edit text to set the length for all algorithms/methods.
* Total with Interest edit text widget:
* This edit text is populated with the result from any of the algorithms/methods after
* the user presses the "calculate" button.
* Clear button widget:
* This button clears all the edit text boxes on the screen using private void clearAll()
* Calculate button widget:
* This button calculates the total and populates the total amount edit text with the

user's selected type from previously selected button type (simple, compound, etc.)