Assignment #1

Hari Kifle

CS 4800

September 30, 2020

Results

Initial projected time for project was **8 hours**.

Requirements, Analysis, & Design -> 1 hour

Development -> 4 hours

Testing/Debugging -> 3 hours

Actual projected time was **4 hours, 45 minutes**

Requirements, Analysis, & Design -> 1 hour

Development -> 3 hours

Testing/Debugging -> 45 minutes

Requirements, Analysis, & Design

Date	Time Spent	Accomplished
9/26/2020	1 hour	- Deciding what language to code the project in - Prepared the tools to be used: - Languages: Java - Tools: NetBeans IDE - Created repository - Created Java Project

Development

Date	Time Spent	Accomplished
9/27/2020	1 hour	- Created container for the calculator - Designed first few buttons - Added general click functions - Began left and right number functions
9/27/2020	45 minutes	- Started coding for output - Finished left number and right number functions
9/27/2020	30 minutes	- Finalized multiply and divide functions - Work on addition and subtraction functions - Finished said functions
9/27/2020	30 minutes	- Added a Clear button - UI Design complete
9/27/2020	15 minutes	- Cleaned up code - Made first commit

Testing

Date	Time Spent	Accomplished
9/27/2020	20 minutes	• Worked on accommodating for invalid inputs • Fixed multiple operator inputs • For example: inputting -> 5 x x / - 3
9/27/2020	5 minutes	• More testing • Discovered new bug
9/27/2020	20 minutes	• Fixed a bug which allowed the user to input operations when user is not allowed to • Added a constraint • Fixed discovered bug

Bugs / Defects found throughout

- Invalid Inputs:

- Multiple operators bugged the calculator

- User being able to enter unlimited amount of numbers

- User couldn't begin expression with an operation

Screenshots

Calculator

First Number: 10

Operator: +

Second Number: 65

Result: 75.0

Exit   Calculate!   Clear

javax.swing.JLabel jLabel1;

Calculator

First Number: 5

Operator: -

Second Number: 8

Result: -3.0

Exit   Calculate!   Clear

javax.swing.JLabel jLabel1;