Milestone Two Narrative

My first artifact is open source C++ code that was created on June 24, 2016. It is a simple program that allows a user to enter any integer they want, and then it tells them if the number is even or odd. I chose this artifact because it is an example of software engineering, and I saw an opportunity to add functionality to the existing program. I added the functionality of allowing a user to enter a second integer, and then checking to see if the first integer is divisible by the second integer. I also converted the code to Java to demonstrate skill in another programming language. These enhancements highlight the skills of adding functionality to an existing program, expanding a program’s complexity, and having proficiency in multiple coding languages.

I successfully met the course outcome of CS-499-04 that I outlined in Module One. I also met a new outcome, CS-499-05, because I had to take into account design and security flaws. I realized that if the second number the user entered was “0”, that would crash the program. I had to figure out a way to deal with the situation if a user entered “0”, or just prevent a user from entering “0”. I ended up finding a way to still allow the user to enter a “0” and output the correct message without crashing the program. This was the largest challenge I faced, and it forced me to account for a unique case that I didn’t originally anticipate. I also changed the wording to tell the user to enter an “integer” and not a “number”, because the variables were type “int”, and type “double” will not work with the “%” operator.