1. **Briefly describe the artifact. What is it? When was it created?**

This artifact is a game written in C++ called Left Center Right. It was created for IT312: Software Development With C++.NET that I enrolled in to learn the .NET platform and practice a C language because that is what the company I worked for at the time did their web development in. The game is a simply game of rolling dice and passing chips. The last player with chips left wins.

1. **Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in software development? How was the artifact improved?**

I selected this item because it is something I wrote from scratch so it really showcases my abilities to not only write code, but plan a project. It shows my coding style, my use of best practices as well as my knowledge of the language and the platform. In particular, this game shows by knowledge of good code comments, use of the DRY (don’t repeat yourself) principle, encapsulation and object oriented programming.

1. **Did you meet the course objectives you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?**

Requirements from module one:

|  |  |
| --- | --- |
| **Requirement** | **Met and Tested?** |
| Create a time keeping system that tracks beginning, ending and total game time. | Complete |
| Output time to players when the game has been won | Complete |
| Created the algorithm to calculate spaces between name and time to align leaderboard (added in week four) | Complete |

1. **Reflect on the process of enhancing and/or modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?**

I’m facing the challenge of test data at the moment. I have written some code and tested what I can with data inputted directly into the application code, but I won’t know if what I have written works with “real” data until the database has been created and integrated. My plan for creating the time-keeping system was to reuse some code to randomize the dice rolls since that uses the system clock and that worked out perfected. I tested runs of the game several times and the output times were reasonable so I think that portion is working correctly. I also wrote and tested the space calculation algorithm so the leaderboard stays aligned and that also seems to work correctly if I give it different length names, but I left that code commenting out for running the game since it will depend on inputs from MySQL. The final enhancement to the game will be the largest and will also need integration testing so I am starting that today (7/25) to give myself an extra weekend to work out the kinks.