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 leaderboard. | Complete |
| Display the leaderboard at end of game. | Complete |
| Display the leaderboard optionally at beginning of game. | Complete |

I added an additional algorithm to align the leaderboard so it looks nicer. I will calculate the number of space necessary between the player name and time on the leaderboard so they look better.

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?**

My original plan was to create a new header and cpp file to hold the leaderboard, but I was unable to get the function call to work while running Game.cpp. I did A LOT of research on the error I was getting (non-standard syntax; use & to create pointer to member) and tried to access by reference and use/declare pointers and while I could finally get the code to compile, I was unable to access the DisplayLeaderboard() function from Game.cpp while it resides in the Leaderboard.cpp file so I changed my strategy and put the function in Game.cpp. It wasn’t he original plan, but I needed to adapt to meet the timeline. I’m not sure if I’ll figure this one out by the end of this project, but I will continue researching. I think an argument could be made to put the leaderboard in the Game files, anyway. I also created two versions of the leaderboard so I would be able to test the display. I realized the display would never align with a static number of spaces so I decided to create an algorithm to calculate the number of spaces based on the length of the name, which I will need to test when I have data.