

Milestone #3 Report

LESSONS LEARNED

One of the biggest things we took away from this project was learning how to set rules for an AI. This involved having a deep understanding to the rules for every game we created as well as taking into consideration every possible outcome for each step in a game. Additionally, we learned how to organize and complete a project on a large scale like this.

Time Management was also a huge learning experience during this project. As a group project as large as this one, we learned how to coordinate meeting up without team members at specific times and to be flexible in order to assure that everyone contributed to the project in their own unique way.

Lastly, we gained a great amount of teamwork experience when it came to this project. Between this class and Programming Fundamentals 1, this was the first group assignment that was assigned to us. This project strengthened our ability to be team players in a group. To ensure that the project got done on time, we aided one another when each of us ran into a problem with our specific part of the project, and we also sacrificed our time in order for the greater good of each other and the project. It taught us how to create a project through collaboration and put our minds together to write code that featured all of our ideas. Overall, it strengthened our communication skills and taught us to combine our ideas in order to think outside of the box.

FUTURE WORK

As far as future work goes for the project, there were many things that could have been implemented to improve the project in general. One thing that could have been done to make the game more aesthetically appealing was create a GUI to run the program through. This would have made the game much more user-friendly than running it through a compiler, and could also have possibly kept players more engaged in the game.

The program could also include difficulty modes for each of the games. For example, if there was a player who has never played blackjack before, an 'easy' mode would allow the player to have a more enjoyable experience and learn the ropes of the game. On the other hand, a

‘normal’ and ‘hard’ mode would be for more experienced players who enjoy a challenge and would want to get an even better understanding of the game.

A tips and hints option could have also been another addition to the set of games. If the user is stuck at a certain point in the game and does not know what move to make next, they could select an option for a hint on what to do. This hint will give them input on what would be a good move based on their current situation. This would be another addition that would help newer players, because our current code runs the toughest versions of games, such as blackjack.

One final thing that could have done to add variation to the game would have been adding different variations to the games in the code. For example, with the slot machine game, adding an option to bet on 9 lines as a maximum instead of 7 would have been a worthwhile thing to do. Another example could have been adding a different variation to the game blackjack that could have been played. An example of this would have been “Face Up 21”, which is a version where both of the dealer’s cards are face up and the game is played with 8 decks. Overall, this would have brought more play value into the games and made it more enjoyable.