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CS4100 Term Project Team Self Assessment

       With regards to what went well: first, we think our goal was fairly ambitious and we met it. Implementing a tool to keep track of a 4-player UNO game which could follow every play as well as changes to the deck and discard pile, then using that data to inform the user of logical plays went very well, performing all of the above with no found bugs or stuttering loading periods. Secondly, we completed this relatively large project in a small amount of time- although our free time to work on the projects was crowded by delays, we managed to make good on the original pitch of a useful tool with a functional interface. Lastly, our text based implementation is fairly intuitive, which exceeded our requirements. We did have areas we could have improved on- the card input could have been made easier using macros or buttons. Perhaps an external text file from which cards could be easily copied would have saved some gametime. In addition, while the computation of suggested card choices never slowed the game, our testing showed that updating the bot during plays slowed the game down as such we would have liked to streamline the input process for the player. Said testing was also very minimal- under ten full tests- and the opportunity for more time to test the tool would have been welcome.

       We learned a lot over the course of this project. For one, it was valuable to learn how a completely optimal strategy is unnecessary when simply providing information to a player. For another, there is a lot of value in implementing intuitive text based projects without delving into graphics, allowing for quicker but more extensive future projects. Lastly, the balance of scoping was unlike anything we had ever done before, effectively separating the complex task of creating a machine which plays UNO to the far more doable and equally useful creation of a machine which *helps humans* play UNO. We think we deserve an A; not only did we finish a fairly large project in a short time, but we also perhaps more importantly, learned a lot about scoping, interface implementations, and conclusions about tools for assisting game players that will surely be useful to our future projects.