**Software Requirements and Design Document**

**For**

**Group 4**

Version 1.0

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# Overview (5 points)

*“Project Deck”, is a mainly single player focused Poker recreation that allows a user to play against Bots. The Menu User Interface allows the user to go through a tutorial and read up on how the game is played and everything they will need to do to succeed in Practice Deck. Given that, the game is tailored for beginners to Poker allowing them a good environment to learn the game and have fun!*

# Functional Requirements (10 points)

***High Priority***

1. *Menu Screen*
   1. *Must have a button that transfers User to Single Player*
   2. *Must have a button that allows the User to quit the game*
2. *Asset Sourcing*
   1. *Chip colors / stacks must be sourced and ready for use*
   2. *Card Faces / backs must be sourced and ready for use*
3. *Single Player Functionality*
   1. *User*
      1. *Must be able to ‘Fold’*
      2. *Must be able to ‘Check’*
      3. *Must be able to ‘Call’*
      4. *Must be able to ‘Raise’ bet (with input of new raised amount)*
      5. *Must be able to go ‘All-in’*
   2. *Dealer*
      1. *Dealing of cards must be randomly generated*
   3. *Game Flow* 
      1. *Cards are dealt to all players (User + Bots)*
      2. *Rounds of betting are done*
      3. *Community cards are revealed after each round*
      4. *Players continue to make actions until a winner is chosen with the best hand*

***Medium Priority***

1. *Menu Screen*
   1. *Must have a button that transfers User to a Tutorial*

***Low Priority***

1. *Menu Screen*
   1. *Must have a button that transfers User to Settings*
2. *Audio Implementation*
   1. *Click actions should be accompanied by a clicking sound*
   2. *Card dealing should be accompanied by a card dealing sound*
3. *User Interface*
   1. *Must be polished and aesthetically pleasing to the eyes on top of being functional*

# Non-functional Requirements (10 points)

*For the time being, there are no outstanding non-functional requirements that are known of besides:*

* *Ability to download the game as a .exe once the game is complete*

# Use Case Diagram (10 points)

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*A diagram of a person's figure

Description automatically generated*

# Class Diagram and/or Sequence Diagrams (15 points)

*A diagram of a game

Description automatically generated*

# Operating Environment (5 points)

*The software will operate in the following operating systems:*

* *Windows*
* *Mac*

*In the following platforms:*

* *Desktop*
* *Laptop*

*The software created will be capable of coexisting with all other software applications as it does not require external cooperation.*

# Assumptions and Dependencies (5 points)

*Assumes that the development team will be able to provide the full, downsized scope of the project upon the final due date.*

* *The project, as it currently stands, does not require a Multiplayer option.*