

Online Card Game System Functional Requirements

- R1** The online card game must be well implemented and easily expandable in the future to include further game types. The product must initially contain at least three implemented games with a relatively large difference in rules in order to both demonstrate the product in working order, and to provide a strong base for continued development.
- R2** User interface.
 - R2.1** The user interface will ideally be web-based with extremely dynamic content.
 - R2.2** The application must operate with a game-like feel, and have an exciting look that competes heavily with existing similar applications.
- R3** User accounts and database interaction.
 - R3.1** Each user must register for an account to use the application, free of charge.
 - R3.2** A database should be used to store account data for each user.
 - R3.3** The database must also store extensive statistics for each user, such number of games played, wins and losses, etc.
- R4** Games involving betting, and chip system.
 - R4.1** The product must include Texas hold'em as one of its initially showcased games, and should be implemented with eventual expansion to other types of poker in mind. Including, but not limited to, other community card based games such as Omaha hold'em, as well as stud and draw based poker games such as seven-card stud and five-card draw.
 - R4.2** Games, such as poker or blackjack, that include betting should all feature a similar betting system to provide familiarity to users participating in multiple games.
 - R4.3** Behind the scenes, the betting system should be developed with use across multiple games in mind.
 - R4.4** The chips won or lost in one game should accumulate into an overall chip count for a registered player in the system.
 - R4.5** A player should be able to reset this value after losing all of their chips. This should be limited to only 3 times per 24-hour period to avoid reckless play.
 - R4.6** Statistics including wins and losses in specific games, biggest wins, and net won/lost should be linked to a player's account and stored in the database.
- R5** Games not involving betting.
 - R5.1** Games that do not involve betting, such as euchre, rummy, and war have also shown interest, and should be just as heavily influenced in the delivered product.
 - R5.2** Statistics involving wins and losses should be more extensively tracked in these games because of their inherent rules. This will also provide a competitive aspect to the games that will hopefully match that of the betting games.
 - R5.3** Playing non-betting games could also involve chips being given to the winner(s) and deducted from the loser(s).
- R6** User communication.
 - R6.1** Standard text chat should also be available for users who do not wish to use video or audio chat, opting for a more traditional online card game style.
- R7** Viewing and joining individual game tables.
 - R7.1** The product must support multiple tables running at once.

- R7.2** Once logged in, the user should be able to view all available tables. This view will be separated by the game type, and stakes if applicable.
- R7.3** A user should be able to join an existing table, or create a new table.
- R7.4** Depending on site traffic, and system resources, the service may eventually have tables that are always running that players can join. This can remain low priority while the number of users is low.
- R7.5** A player is able to play on multiple tables at once.
- R8** Additional features for the future. These features do not need to be implemented in the first release but should be kept in mind for the future.
- R8.1** A small amount of advertising could be done on the site. We would like to make a profit, but we don't want to lose customers. A paid option to remove these ads could also be included.
- R8.2** Rewarding players for frequent play. The rewards could initially involve chips, but could eventually include perks such as being entered in drawings for prizes or an ad-free membership.
- R8.3** Artificial intelligence implementation for games. The users could either allow or disallow AI players when there are not enough players to fill a game. This would be more common in non-betting games where a certain number of players are required. This would be a goal that is further down the road, as it would take a long time to implement an effective system for each individual game.
- R8.4** Voice chat and Webcam video should also be considered. It would put our product above others like it that only allow text chat between players.