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Pokerrrr2

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Software Requirements Specification

Document

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1. Introduction

Pokerrrr 2 is a multiplayer poker app designed to be played with friends or fellow poker players online. A variety of exciting poker games- no limit hold'em, open face chinese poker, short deck poker, pot-limit omaha, round of each, MTT, and sit-and-go are available for play. If the user is feeling up to the challenge they can create a club and compete with their friends by keeping track of their winnings and high scores on a leaderboard. No one to play with? Take it online in one of three online match modes, including NL Hold'em, PLO, and OFC Progressive and participate in global rankings.

Purpose

The purpose of this Software Requirements Specification (SRS) is to give application developers, business partners and shareholders a thorough description of Pokerrrr 2. It will cover the specifications of the many games available, how to play them, a detailed guide to the graphical user interface and programming specifications.

Scope

The Pokerrrr 2 app is designed as a standalone app to be played on mobile devices.

This application is designed to allow users to play the following seven games:

- No Limit Hold'em
- Open face Chinese poker
- Short Deck Poker
- Pot-Limit Omaha
- Round of Each
- Sit-and-go
- Multi-table tournament

Users are able to play these games by:

- Randomly joining games with other users
- Hosting their own games for friends
- Joining games hosted by friends
- Creating a club
- Join a club

The app also allows players to track their in-game wins and losses for statistics.

This app also allows players to increase how many chips they have by offering purchasing options for gold which is used to purchase chips and host games. There are also options to earn chips by watching videos, inviting friends, or by logging into Facebook.

Definitions, Acronyms, and Abbreviations

app	Application
gui	Graphical User Interface
GLI	Gaming Laboratory International
MTBF	Mean Time Between Failures
PRR	Pokerrrr advance ranking system
RNG	Random Number Generator
Standalone application	Application installed for each user
User	Person Playing The Game

References

Privacy Policy. <https://www.pokerrrrapp.com/terms>

Pokerrrr Attribution: <https://www.pokerrrrapp.com/attribution>

2. Overall Description

Pokerrrr 2 is an online multiplayer mobile application that allows every user to play poker with each other. It allows the user to play various poker games on their phone, without the physical needs of shuffling and obtaining/setting up a playing cards. The app offers seven different game types. There are single-table and multi-table tournaments are available for these games. Users will be able to level-up based on the “PRR” rating system. The factors for leveling up include win-rate/finish position,

blind/by-in factors, opponents' strength and aging factor. These seasons last for 30 days and algorithm and game rules are being optimized frequently.

This section contains an overall description of Pokerrrr2 detailing the application interfaces, hardware interfaces, software interfaces, game modes and user classes.

User Interfaces

Users are given the option of signing up using their name and email, or by connecting through their facebook account. User name changes are allowed two times every four weeks. Facebook logins are encouraged with extra gold given.

Once users sign up and log in, there is no option to log out and log in as a different user. This cuts down on players abusing the ranking system as multiple people.

Once a user has completed the sign up process, launching the app allows the user to select from different menus and game choices. This allows the user to go from app launch to gameplay quickly.

The Pokerrrr 2 app has a menu based GUI that allows users to easily navigate between different screens. On each screen, only the appropriate user information is shown at the top of the screen. At the bottom of the screen is the menu bar that persists between menu choices, but disappears during gameplay.

The five menu buttons and their functions are:

- Play Now: navigates users to the main landing page when the app is launched, shows the PRR* level and three join now buttons, allowing the user to join a public game in progress. It also displays user name, chip amount, and gold amount. There are buttons for messages, settings, game history, blog and free coin offers.
- Private: navigates users to a screen with two options, Host Game and Join Game. This screen also displays user name and chip amount, along with settings, messages and blog buttons.
 - Host Game brings up menus to choose type of game, game settings and then allows the user to host the game to anyone with the Game Code
 - Join Game prompts the user for the Game Code to an existing game.
- Club: shows a listing of all the private clubs a user has joined
 - Each individual club has its own chat interface and host button
 - Private Poker Clubs allow up to 1,000 members per club.

- Record: shows statistics from the 20 most recent games that the user has played, including game type, date, time and amount won or lost.
 - Clicking on a single game allows the user to export their stats in a .csv file for one gold.
- Store: allows users to buy chips, hosting fees and game records in different amounts using gold, and allows users to purchase gold with cash. This also displays the amount of chips and gold the user has.

The app automatically dims and performance is adjusted whenever the game is left open and running for five minutes to save on battery.

The gameplay GUI is the same in private, club or public games. The top of the screen has an overlay with an information button, a frame with game type and user name, and a menu button. The top of the game shows a poker table with options to sit around the table. There is a bar that the user can slide up or down to show the game code and stats, or to show their cards. The cards are face down and the user must slide their thumb to show the cards. There is a help button that shows information about the different actions that can be performed and how to do them (by tapping or sliding). Each player has 30 seconds to complete their turn, before play passes to the next player, as indicated by a countdown bar.

*PRR: Rating system that is computed based on win rate/finish position, blind/buy-in position, opponents strength, and aging factor(amount of time between games).

Game Modes

The app has 7 game types: Texas Hold'em, Short Deck Poker/OFC, Omaha/Omaha Hi-Lo/5 Card Omaha, and Sit n' Go/Multi-Table Tournaments. All poker games can be played simultaneously with two to ten players per table. The game provides a tutorial in order to teach new users the controls and the rules but nothing more. Users are expected to know how to play the different game modes independently from the app.

1. In Texas Hold'em, players are trying to make the best five-card poker hand according to *traditional poker rankings* (<https://www.pokerstars.net/poker/>). Each player is dealt two cards face down (called hole cards), then over the course of the rounds five more cards are eventually dealt face up (called community cards) in the middle of the table. The five community cards are dealt in three stages. The first three community cards are called the "flop". The "turn" card is dealt and one more card (river) is dealt. Players need to

construct the best available five cards out of their deck of seven. If betting causes everyone but one player to fold, that lone player wins the pot.

2. Short Deck Poker/Short Deck Hold'em is a variation of Texas Hold'em. It follows the same rules, but uses a 36-card deck rather than the full 52-card deck. To make the 36 card deck, every card two through five is removed.
3. OFC/Open-face Chinese poker is primarily a 2 or 3 person game, but can be played with 4 people. Each player must use thirteen cards consisting of 3 cards in the front hand, 5 cards in the middle hand, and 5 cards in the back hand. Plays are made in clockwise order and starts with the player to the left of the dealer. The back hand must be "stronger" than or equal to the middle hand and the middle hand must be stronger than or equal to the front hand (strength determined by poker hand rankings linked above). The middle and back can make the best three-card hand. The best front hand is three aces. Straights, flushes, and straight flushes are not legal front hands. The goal of the game is to achieve more units, or points, than your opponents by winning more hands(rows) and/or collecting royalties on premium hands without fouling (an illegal hand is made). Rows are won by higher hand ranking than your opponents.
4. Omaha is very similar to Texas Hold'em but with some key differences. Each player is dealt four cards face down, as opposed to the two cards that are dealt in Hold'em. Five community cards are then dealt. Players must choose two of their four cards and are required to use both of them in order to make the best hand possible. You must also use 2 of your hole cards when forming the best possible hand.
5. In Omaha Hi-Lo, the "high" hand is determined by poker hand rankings. For the "low" hand, whatever cards used to make the right hand makes no difference making the low hand. Any two cards you use can be from the four-card hand plus three of the community cards to build the five-card poker hand. The low hand has to be ranked 8 or lower.
6. 5 Card Omaha is similar to regular Omaha games, but with a fifth hole card dealt to each player.
7. Sit N' Go has between 6-10 players which take between 20 and 60 minutes to play. They pay a fixed buy-in and all get the same amount of poker chips. The last 3 or 2 players at the table win the prize money which is made of all the buy-ins.
8. MTT/Multi-Table Tournaments are tournaments where play is occurring across multiple tables at once.

User Classes

Pokerrrr 2 contains several user classes:

Host Mode (upon hosting a game)

- a. Allows user to backout to club while maintaining host
- b. Allows user to access the game settings
- c. Allows user to terminate the session
- d. Allows user to assign a manager
- e. Allows user to kick players

Packages:

Ruby VIP Package (30 days): 90 gold (~\$15.97)

- a. Changes max capacity of game records from 20 to 100
- b. Changes max capacity of creating clubs from 3 to 5
- c. Changes max number of club members from 2 to 100
- d. Changes host game capacity from 1 to 5

Game Records (30 days): 18 gold (\$2.99)

- a. Increases users max capacity of game records from 20 - 50 for 30 days.

Game Records (30 days): 60 gold (~\$9.99)

- a. Increases users max capacity of game records from 20 - 250 for 30 days.

Concurrent Hosting: 60 gold (~\$9.99)

- a. Increases users max game hosting capacity from 1 - 3 for 30 days.

3 HOUR PASS: 8 gold (~\$2.99)

- a. Removes hosting fee for 3 hours (Not including MTT)

Hardware Interfaces

Pokerrrr 2 runs on Android and Apple platforms:

- (1) Apple iPhone, iPad, iPod Touch
- (2) Android phones running Android OS 4.1 and up

Pokerrrr 2 has access to:

- a. Location - GPS and network-based
- b. Microphone - Recording audio
- c. Wi-Fi connection information - views Wi-Fi connections
- d. Other:
 - i. Receive data from the internet
 - ii. View network connections
 - iii. Run at startup
 - iv. Control vibration
 - v. Prevent sleep mode

Software Interfaces

Apple Phones

Requires iOS 8.0 or later.

- (1) Name: Apple iOS
- (2) Mnemonic: Ap·ple /^lapəl/ i·O·S
- (3) Version: 8.0 or later
- (4) Source: Apple App Store

Android Phones

Requires Android 4.1 and up.

- (1) Name: Android OS
- (2) Mnemonic: An·droid /^lan droid/
- (3) Version: 4.1 and up
- (4) Source: Google Play Store

Third party companies and API's:

- (1) Flurry Analytics: Used to understand users and improvement of Pokerrrr 2 applications performance.
<https://developer.yahoo.com/flurry/legal-privacy/terms-service/>.
- (2) Fabric.io: Analyzes Pokerrrr 2's application data. Also used Fabric.io's Crashlytics to help optimise Pokerrrr 2's gameplay. <https://fabric.io/terms>.
- (3) Appsflyer: Helps with marketing. <https://www.appsflyer.com/terms-of-use/>.
- (4) OneSignal: Assists in Pokerrrr 2's application messaging and notification deliver. <https://onesignal.com/tos>.
- (5) SDKBOX: Facilitates the development of Pokerrrr 2.
<http://www.sdkbox.com/privacy>.
- (6) Branch.io: Allows users to connect with other users and their friends on Pokerrrr 2. <https://branch.io/policies/#terms-and-conditions/>.

External Interfaces

This system has no external interfaces.

3. Specific Requirements

The specific requirements section contains information on user characteristics and app constraints. It also contains network requirements, database requirements and standards compliance.

User Characteristics

There is no required educational level, technical expertise, or experience required in order to use the app. Users should be 17 years of age or older. Intended users should be able to process basic information presented to them on-screen.

Design Constraints

The design constraints are dependent upon mobile hardware limitations and keeping the user engaged and spending time using the app.

Client Side Storage is kept at a minimum, ensuring that users keep the app installed on their devices for a long amount of time.

The application is optimized for mobile devices, keeping most of the controls in the prime area for mobile thumb use.

Gameplay is kept at a fast pace to minimize distraction from outside factors. The user is prompted with an exit screen and warning when they try to exit the app by pressing back on their device.

Broken Data passing is eliminated by not referring users to any outside pages or apps, aside from the Pokerrrr2 webpage. When users uninstall the app, the information is stored. When they reinstall the app, it logs them right in with no logins needed.

The Pokerrrr2 app has no control or responsibility over the actions and policies of their third-party services and websites they use in the app.

Pokerrrr2 abides to the RNG (random number generator)-specific requirements of the following technical standards: GLI-19 – V2.0 Interactive Gaming Systems.

Purchasing Constraints

In order to purchase anything within the app, credit card information is required before the virtual items are given.

Sometimes, items are mispriced, described inaccurately, or unavailable. Since they are constantly applying updates to various parts of the app, they reserve the right to change such information without prior notice.

They have no control or responsibility over the actions and policies of their third-party services and websites they use for the app.

Memory Constraints

The iOS version requires 131.4 MB of free space to run, and the Android version requires 99 MB.

Assumptions and Dependencies

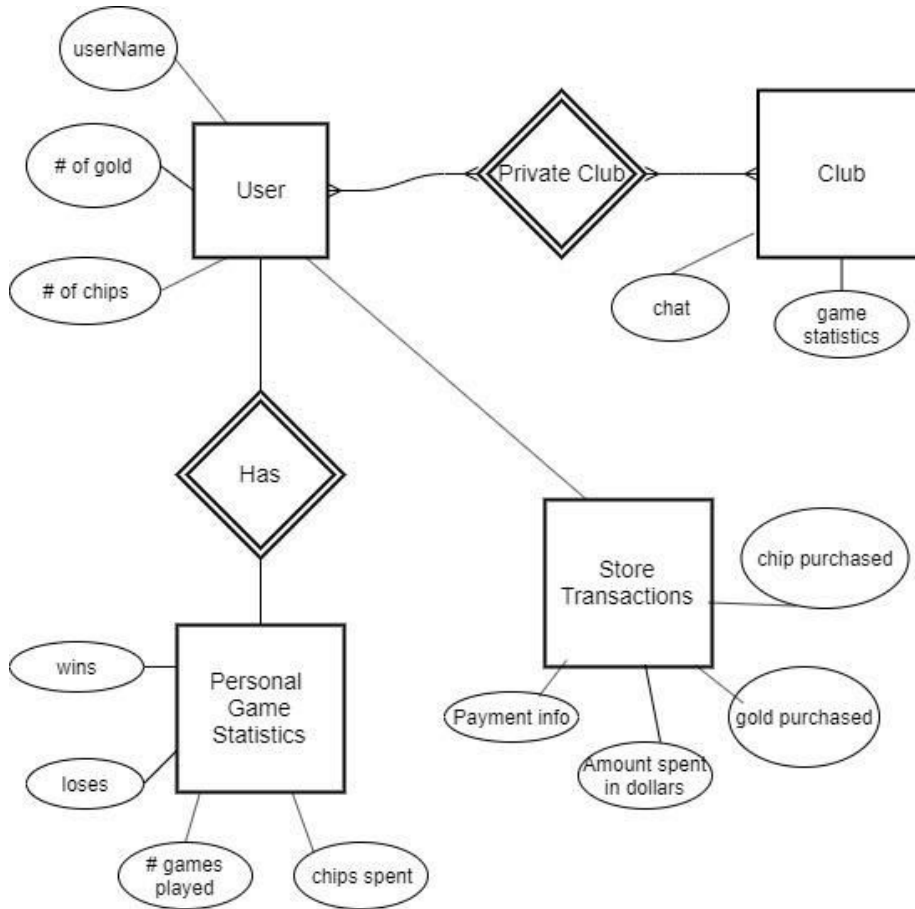
The app will not run on iOS versions below iOS 8.0 and Android versions below 4.1.

Network Communication Requirements

Pokerrrr 2 requires an internet connection to run. Users can choose to use wifi or a cell network connection. There are no options to create games with nearby players using bluetooth.

Logical Database Requirements

A user database is necessary to hold all user information, chip and coin amounts, game statistics and purchases. Pokerrrr 2 allows users to pay to download their game statistics as a .csv file.



Standards Compliance

Pokerrrr 2 complies with the GLI-19 – V2.0 Interactive Gaming System standards set by Gaming Laboratory International. Gaming Laboratories International, LLC (GLI) is a fully independent and accredited testing laboratory and product certification body contracted by gaming industry operators and software and hardware suppliers to perform third-party testing, auditing and certification services.

GLI has done an independent source code review and assessed the random number generator seed to ensure it is in compliance with RNG specifications. Pokerrrr 2 has been issued a compliance certificate good until October 4, 2022.

Pokerrrr 2 complies with all Google App store policies. This includes user data protection, appropriate ads, doesn't spam, and no restricted content.

Pokerrrr 2 also complies with all Apple App store policies. This includes parental controls, user data safety and does not have objectionable content.

Apportioning of Requirements

There are no identified requirements that may be delayed until future versions of the app at this time.

4. Software System Attributes

This section contains information on the software systems including reliability, availability and security. It also contains information on portability, system modes and objects.

Reliability

The app's MTBF requirements must be near 100% so that users can play games at any time during the day, no matter their time zone. Reliability should be at 98% over 100,000 games played.

Availability

App is available for the user 24/7 assuming user has internet access.

Crashes are recorded on Crashlytics, a third-party software. Crashlytics is a lightweight, realtime crash reporter that helps track and priorities issues that erode app quality. App crashes are reported in real time and shows what issue is impacting users the most.

Security

This app utilizes AppsFlyer which has security measures in place for marketing analytics, mainly protects from fraud.

Maintainability

This app uses Fabric, which is a third-party app development platform. It provides insight on many things necessary for developers like user activity, lightweight crash reporting and various other statistics.

SDKBOX is also used for continuous development of the app.

Portability

Pokerrrr 2 app contains local files needed for the GUI (Graphical User Interface), it is intended to be connected to the internet to allow gameplay. The app must be able to connect to Pokerrrr 2 servers to allow game functionalities.

System Mode

Pokerrrr 2 does not have a system mode. This means that the user cannot change things the way a developer can.

Objects

Objects are used like building blocks in Object Oriented Programming to group like types of data together. These are the objects that Pokerrrr2 might have.

User: *name, num_of_chips, num_of_coins, game history, settings, messages,*

Personal_Record_Rating

Game: *game_type, buy_in, num_of_seats_taken*

Player: *user, chips_buyin, amount_bet, amount_lost*

Table: *players, dealer_hand, pot, player_turn, player_won*

Hand: *cards, bet, action*

Private Club: *chat, games, members list, club_information*

