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Project Proposal

RoyalPoker

Requirements and Specification Document

20/10/2017, version 1 (Colour code: black), 06/11/2017, version 2 (Colour code: light blue)

Git link: <https://csil-git1.cs.surrey.sfu.ca/group13/RoyalPoker>

Project Abstract

RoyalPoker is an online multiplayer poker game. Game will be made up of five main EPICS; they include the Texas Hold'em poker, the 5-card poker, a chatroom, a private and public gameroom system, and an account system. In the game, players will sign up for a new account or login to their existing account and create new or join existing game rooms. Players will be able to create public, password-protected games, or private games each with custom settings. Games will be chosen between the two types of poker, Texas Hold'em and 5-card. After a game is created, new players can join or they can be invited by other players using Facebook. Other features include an in-game chatroom, a unique experience system, and hints specifically designed for inexperienced players. The Google Analytics Embed API will be used to track and show the distribution of users. Additionally, a Facebook API will be used to allow users to share their current progress or to invite other players into their game.

Customer

RoyalPoker can be used as a poker training application with real people. People suffering from a gaming addiction can benefit from the money-free nature of RoyalPoker. Other potential customers would be those looking to socialize. Card games have been a great way for friends to come together for a night and play a game while chatting with each other. Our simple game rooms will make it easy for friends to come together and play. This removes the need of face-to-face meetings with friends.

Competitive Analysis

Poker is a widely implemented game, but what sets us apart from other online poker games is our gambling currency – player levels are derived from the current amount of money they have. A player can gain or lose their level based how they play. If they lose enough chips, they may

be demoted to lower tiers. Additionally, RoyalPoker implements different variations of poker. Two prominent versions are Texas Hold'em and the Five-card draw.

User Stories

Actors:

- Player
 - This actor represents the customer. A user of this app that is simply looking to play either Texas Hold'em, 5 card poker, or both
- Developer
 - An account for app developers to access real-time debugging features unavailable to regular players, such as having access to a table with the usernames and passwords of all users; but developers will not have complete privileges that admins do.
- Admin
 - An actor with the highest level of authority for the app. This actor will have full access to features not available to both regular users and developers, such as deleting player accounts and removing game rooms.

Registering(iteration 1)

To register properly, a user must not be logged into the RoyalPoker app.

All pages for non-logged in users will have a navigation bar that allows for users to click the "Register" button on the top right.

In the register page, users will input the information for their username and password along with an optional field for emails. Requirements for particular fields will show when the mouse pointer hovers over said text field.

When all fields are filled out and a user presses "Submit", the app will check each field to see if the requirements are fulfilled: usernames must be 5-12 characters long; passwords must have at least one number, one capital letter, and one ; the confirm password textbox must have the same value as the password textbox above. Proper

If not all conditions are met, registration will fail and a textbox stating that the user made invalid inputs will appear.

After clicking "Submit" with proper values for all fields, the user will be redirected to the front page with the top right of the navigation bar showing the user's username instead of "Login" and "Register". In addition, admins and developers will be able to see the newly made entity show up in the user table of the database.

Logging In (iteration 1)

To log in, a user must not be logged into the RoyalPoker app but has gone through the registration process successfully at least once.

All pages for non-logged in users will have a navigation bar that allows for users to click the “Login” button on the top right.

Clicking the “Login” button takes the user to the login page where they will have to fill out the proper information for the username and password fields.

Clicking “Submit” will compare the values in each textbox to a database table containing all users and their associated passwords.

The restrictions on username and password during registration apply to logging in as well. If the values in the username and password text box do not fulfill the requirements of character count or required characters, then a request will not be sent to the database to search for a corresponding entity and a textbox will appear stating which input was invalid.

If the inputs match username and password criteria then a request will be sent to the users table to search for an entity with corresponding username and password. A username and password pair with no corresponding entity will invoke a textbox stating that a user has inputted invalid credentials.

After clicking “Submit” with a corresponding username and password in the users table, the user will be redirected to the front page with the top right of the navigation bar showing the user’s username instead of “Login” and “Register”.

Logging Out and seeing basic account details (iteration 1)

To log out, a user must be logged into the RoyalPoker app. The user can verify this by checking the top right of the navigation bar and see if the user’s username shows up instead of “Login” and “Register”.

In the home page, click the user’s name to bring up a small menu showing basic account details and the “Log Out” button. The user’s username and rank will be shown at the top of this menu. Account balance is shown in bright green numbers, and a bar with the text “Next Level” that, when hovered over, will show the necessary balance a player must achieve to level up in rank.

To log out, a user must click the “Log Out” button on this menu.

Success in logging out is shown by having the navigation bar in the top right show “Login” and “Register” instead of the user’s username.

Finding the list of users (iteration 1)

To see the table that stores all usernames and passwords, a user must be an admin or developer. This can be confirmed by checking whether a user’s username is “admin” or “developer”.

There is no button to find the list of users as it is not something meant to be referenced regularly. An admin or developer is expected to know this.

This page is located at “<https://royalpoker.herokuapp.com/users>”. Non-admin and non-developer accounts will be redirected to a 403 page indicating that they do not have access to that page.

Success is shown by the ability to see a table which has information on all users separated by columns and a column with options to show, edit, or destroy a user.

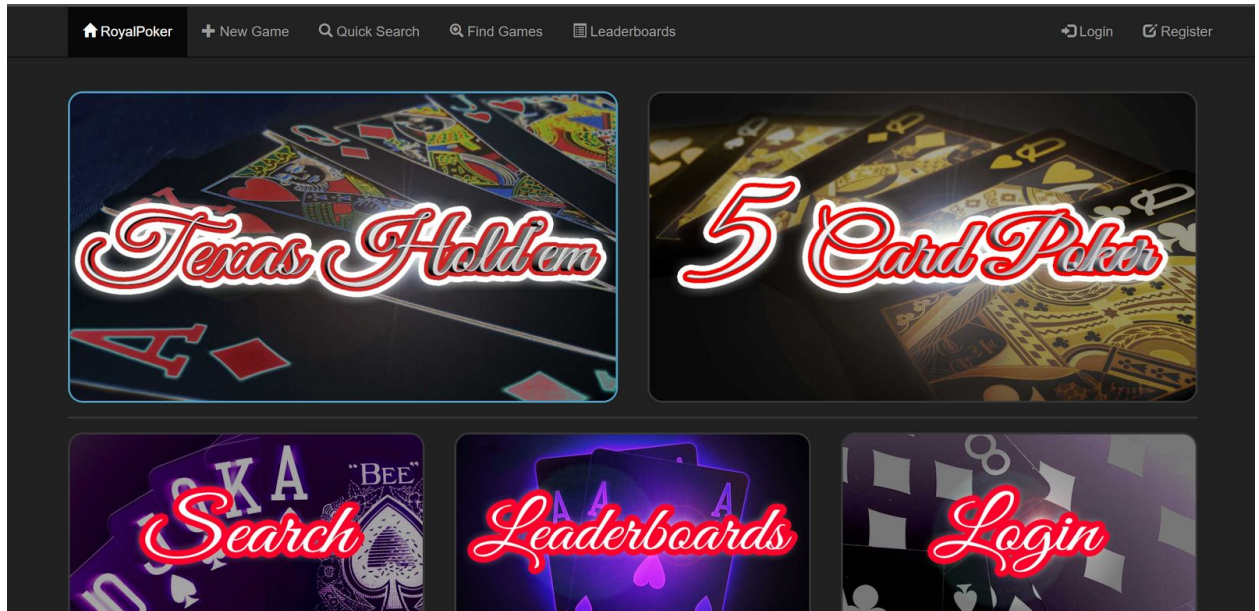
User Stories For Future Iterations

- Searching for Rooms (iteration 2)
 - Redirects users to a page that shows all poker games in progress.
- Joining Rooms (iteration 2)
 - Let users join a game already in progress.
- Creating Rooms (iteration 2)
 - Let users create a room to start a new poker game.
- Viewing User Profile (iteration 2)
 - A detailed page about a particular user including stats such as win/loss, general statistics of win/loss based on country, etc.
- Viewing Leaderboard (iteration 3)
 - Allows users to see the top 20 players ranked by experience points.
- Playing Texas Hold’em (iteration 3)
 - The user will be able to play a fully functional version of Texas Hold’em.
- Playing 5 Card Poker (iteration 3)
 - The user will be able to play a fully functional version of 5 Card Poker

User Interface Requirements

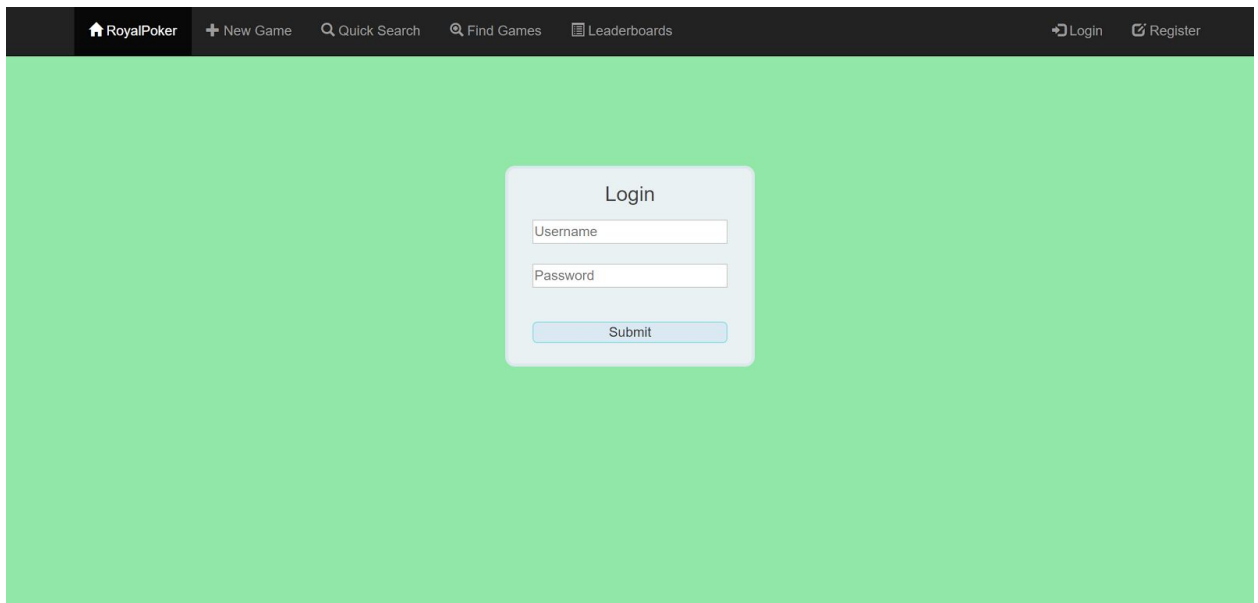
Pages:

- Homepage



- Header with navigation tabs (RoyalPoker homepage, new game, quick search, find games, leaderboards, login, register)
 - Username is shown in place of login and register buttons when user is logged in
 - When clicked, user balance, current progress, log out and share buttons will be shown
- Body will include buttons to their corresponding pages (search for Texas Hold'em games, search for 5 Card Poker games, general search for all games, leaderboards, and login/ profile pages)
 - The login button becomes a profile button linking to the user's profile page if the user is logged in

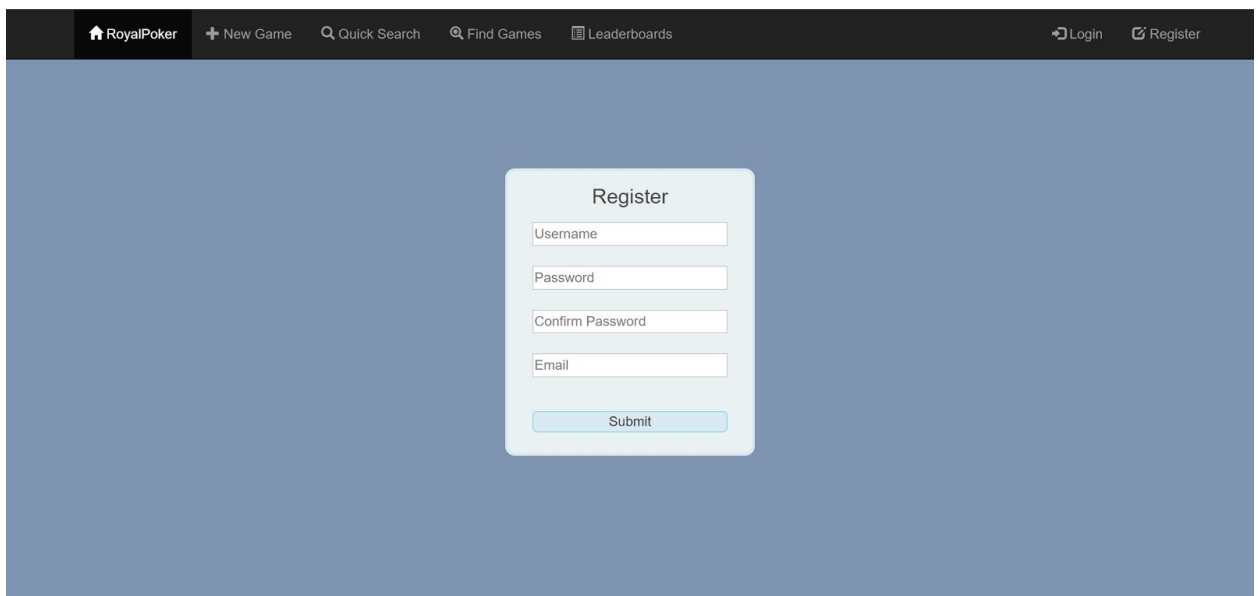
- Login



The screenshot shows a web application interface for a login page. At the top, there is a dark header bar with navigation links: 'RoyalPoker' (with a home icon), 'New Game' (with a plus icon), 'Quick Search' (with a magnifying glass icon), 'Find Games' (with a magnifying glass icon), and 'Leaderboards' (with a document icon). On the right side of the header, there are links for 'Login' and 'Register'. The main body of the page has a light green background. In the center, there is a white login form with a light blue border. The form is titled 'Login' and contains two input fields: 'Username' and 'Password'. Below these fields is a blue 'Submit' button.

- Header with navigation tabs
- Body includes login form
 - All types of users will have the same view

- Register



The screenshot shows a web application interface for a register page. The header is identical to the login page, with navigation links and 'Login'/'Register' links. The main body of the page has a light blue background. In the center, there is a white register form with a light blue border. The form is titled 'Register' and contains four input fields: 'Username', 'Password', 'Confirm Password', and 'Email'. Below these fields is a blue 'Submit' button.

- Header with navigation tabs
- Body includes register form with mandatory conditions shown when hovering over

- Conditions include:
 - Username must be set between the lengths of 5 to 12 and start with a letter
 - Passwords must contain one upper and one lowercase letter, one number, and be at least 8 characters long
 - Password must be confirmed
- Email will be an optional field

- **Game search**

Below: Admin View

The screenshot shows a web browser window with the address bar displaying 'file:///Users/admin/Desktop/index.html#'. The page has a dark navigation bar with links: 'Poker', 'Home', 'New Game', 'Quick Search', 'Find Games', and 'Contact'. The user is logged in as 'admin' with a balance of '\$1,942,129,308' and a 'Log Out' button.

Find Games

The 'Find Games' section displays five game cards, each with a title, a 'Join' button, a 'Remove' button, a game image, and a table of details.

Host	Type	Players	Blinds	Status
some_user	Hold'em	1/4	\$500/\$1K	Lobby

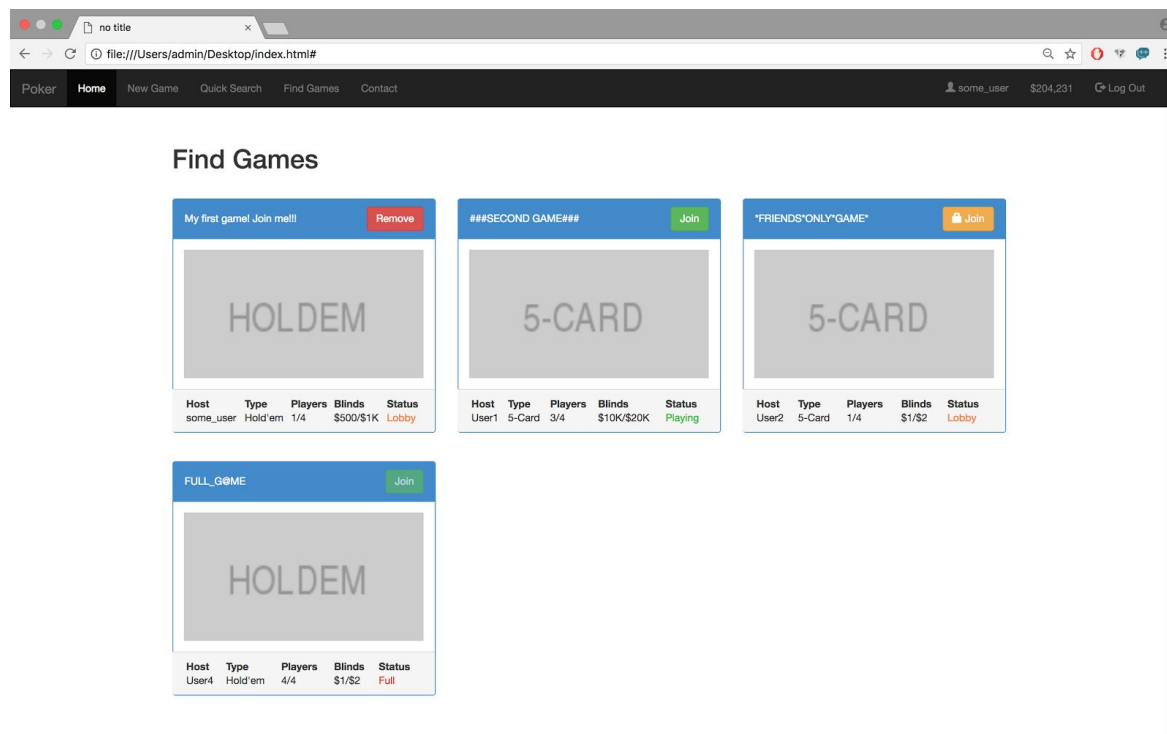
Host	Type	Players	Blinds	Status
User1	5-Card	3/4	\$10K/\$20K	Playing

Host	Type	Players	Blinds	Status
User2	5-Card	1/4	\$1/\$2	Lobby

Host	Type	Players	Blinds	Status

Host	Type	Players	Blinds	Status

Below: User view



- Header with navigation tabs
- Body will include a display of all the current games
 - Each game will include game information (creator's username, type of game, number of players, minimum bet of the game, and status of game)
 - Games will be either Texas Hold'em or 5-card poker
 - A count of the current number of players
 - The minimum bet set by the creator
 - Status of game will be one of the following
 - Lobby - the amount of players is not enough for a game to start
 - Playing - the game is in progress
 - Full - the game room is at maximum capacity
 - Users, admins and developers will have different views
 - Users will have basic permissions such as deleting those created by themselves and joining games that are not hidden
 - Admins will have special permissions such as being allowed to remove games, see all games (including hidden), and join password protected games without entering passwords
 - Developers will have similar permissions as admins except that they must enter passwords to enter password protected games, will not be allowed to remove games except those created by themselves, and will not be allowed to see hidden games

- **New Game**

A wireframe diagram of a 'New Game' form. At the top is a yellow 'Navigation Bar'. Below it is a large white rectangular area containing a form. The form has four input fields stacked vertically, each with a label above it: 'Blind Amount', 'Game type', and 'Create Game' (which is a button). The 'Create Game' button is at the bottom of the form area.

- Header with navigation tabs
- Body will include a form to allow the creator to set the settings for the game they want to create

- **Gameplay**

A wireframe diagram of a 'Gameplay' screen. At the top is a yellow 'Navigation Bar'. Below it is a large white rectangular area divided into two main sections: 'Game' on the left and 'Chatroom' on the right. At the bottom left of the 'Game' section is a row of three small rectangular buttons labeled 'Gameplay Buttons'.

- Header with navigation tabs
- Body will include the poker game in the middle left, chatroom on the right, and gameplay buttons on the lower left part of the screen
 - Gameplay buttons will include those for betting, folding, etc.