CSC 667   
Term Project

API Submission

**Team Name:** Applejacks

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**Github Repository:** <https://github.com/SFSU-CSC-667/term-project-spring-2017-applejacks>

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5. Endpoint Overview  
     
   This API is for an online multi-player blackjack game. There are three main pages that users will interact with. Each page has API endpoints that support the functionality of that page. Below is a basic description of what each page will do:  
   1. Signup Page:   
        
      This is the initial page the user will see, the root page. It’s purpose is to allow a user to log into the game, or create an account so that they can log into to game. It’s primary purpose is to allow the user persistence, so that if they accidentally close the game window they can logon and return to a game in progress. After logging into the system the user will be directed to the Lobby Page.
   2. Lobby Page:  
        
      This is the location where an authenticated user can either select a game in progress to join, or create a new game. It will list the games that are in progress, so that a user can select one and click the join button. If the user clicks on the create new button a new game will be generated. In both cases the next page the user will be directed to is the game page and will become a player in the selected game.
   3. Game Page:  
        
      This is the location where the user will interact and play the blackjack card game. There are three interactions that the user will perform. Initially all users will click on a bet button to commit money to this hand, and is the entry point in the game for each player. Once all the players have completed the bet cycle the dealer will deal cards to the players. Two Cards will be dealt to each player face up after the bet button is clicked for each player. The dealer will receive one card face up and another card face down. Then each player will choose between the hit button to receive an additional card, or the stay button. Once all the players have clicked the stay button the dealers turn begins, which determines who wins or loses money and is the end of this cycle of the hands. The process repeats after this.
6. Signup Page

|  |  |  |
| --- | --- | --- |
| HTTP Method | Endpoint | Function |
| POST | /login | Authenticate user  hash.password get db. password compare hash.password and db.password if match redirect to /lobby page  If no match display error and redirect to /signup page |
| POST | /signup | Create new user  check that passwords match hash.password check db for uniqueness db.addUser tablename users values email, hash.password, lastlogin, isadmin |

1. Lobby Page

|  |  |  |
| --- | --- | --- |
| HTTP Method | Endpoint | Function |
| POST | /creategame | create a new game  db.addGame tablename games values id, create\_date, is\_active, current\_player\_turn |
| POST | /selectgame | Select a game from the list  db.addPlayers tablename players values game\_id, user\_id, bet\_placed, bank\_buyin redirect to games page |

1. Game Page

|  |  |  |
| --- | --- | --- |
| HTTP Method | Endpoint | Function |
| POST | /game/:id/bet/:playerid | Player clicks the BET button  money transferred from bank\_buyin to hand\_bet in db  Increment active player to next player  If all players have bet deal cards to players and dealer  Set active player to first player Update game state |
| POST | /game/:id/stay/:playerid | Player clicks the STAY button  Increment active player to next player  If all players have stayed then transition to dealer turn  Update game state |
| POST | /game/:id/hit/:playerid | Player clicks the HIT button  Pop a card from the deck  Assign the card to the playerid in the DB  Check hand for bust  If bust notify player and update game state and then go to next player |
| POST | /game/:id/leave/:playerid | Player clicks the LEAVE button  Move Bank\_buyin money back to user\_bank  Remove player from game in DB Redirect to lobby page |
| POST | /game/:id/dealerturn | Dealer Plays hand and pays out winners  If dealer hand is 16 or less then dealer HITs If dealer bust then payout bet to winners If dealer blackjacks then take bet money from players that do not also have blackjack hands, players that have blackjack keep their bets Dealer stays if hand reaches 17 If dealers hand is larger than players hand then take bet money from players  If players hand is larger then dealer pays out on bet.  Update players bank in DB Collect cards from players and push back to deck Clear all cards in DB under this gameID Shuffle Deck Deal Cards to players  Set to player 1  Update game state |