**Team Hydroflasksksk

- **Roulette**

Ideal Product

- **Blackjack**
- Texas Hold'em, turn based with refreshing
- **Store (with lottery tickets)**

Extra Features

- Store (with boosts)
- Chinese Poker
- Live updating of poker games
- **Animation** (**Wheel of Fortune**, Roulette, Dice...etc)
- Deal with players deserting multiplayer games
- Adding friends and creating private games (invite-only)
- Chatting within multiplayer games

Component Description

Front End

- Login
  - Enter username + password (stored in DB)
  - Wrong password redirects back to start with printed error message
- Sign up
  - Enter password and username
  - Check DB for existing username. If the username already exists, prompt the user for a new, different username
- User Profile
  - Users can change their username and password
  - Users can view their money and purchased lottery tickets
- Player Store
  - Players can buy lottery tickets
    - Differently priced, with different ways of "winning"
    - Tickets covered by gray block
    - Draggable coin used to erase gray block and show results (Javascript)
- Wheel of Fortune
  - User can spin the wheel of fortune every 24 hours
  - Clicking on icon will show wheel and spin button (Javascript)
  - Spins and lands on a prize that the player can get
- Games
  - Dice Game
    - Player bets either small or big and then clicks to roll two dice
    - If player gets it correct, player wins
    - If player gets it wrong, player loses
  - Blackjack
    - Player plays with Computer as Dealer and gets cards per turn

        - Rules follows as normal blackjack and winnings and losing update accordingly
    - Slot Machine
        - You can click the machine to spin the slots and see whether they all match and you win or if they don't and you lose
        - Might use Javascript to add special effects
    - Roulette
        - Player bets on which slot on a wheel the ball will land on, pays a betting fee
        - The more risky the bet, the higher the multiplier on the reward

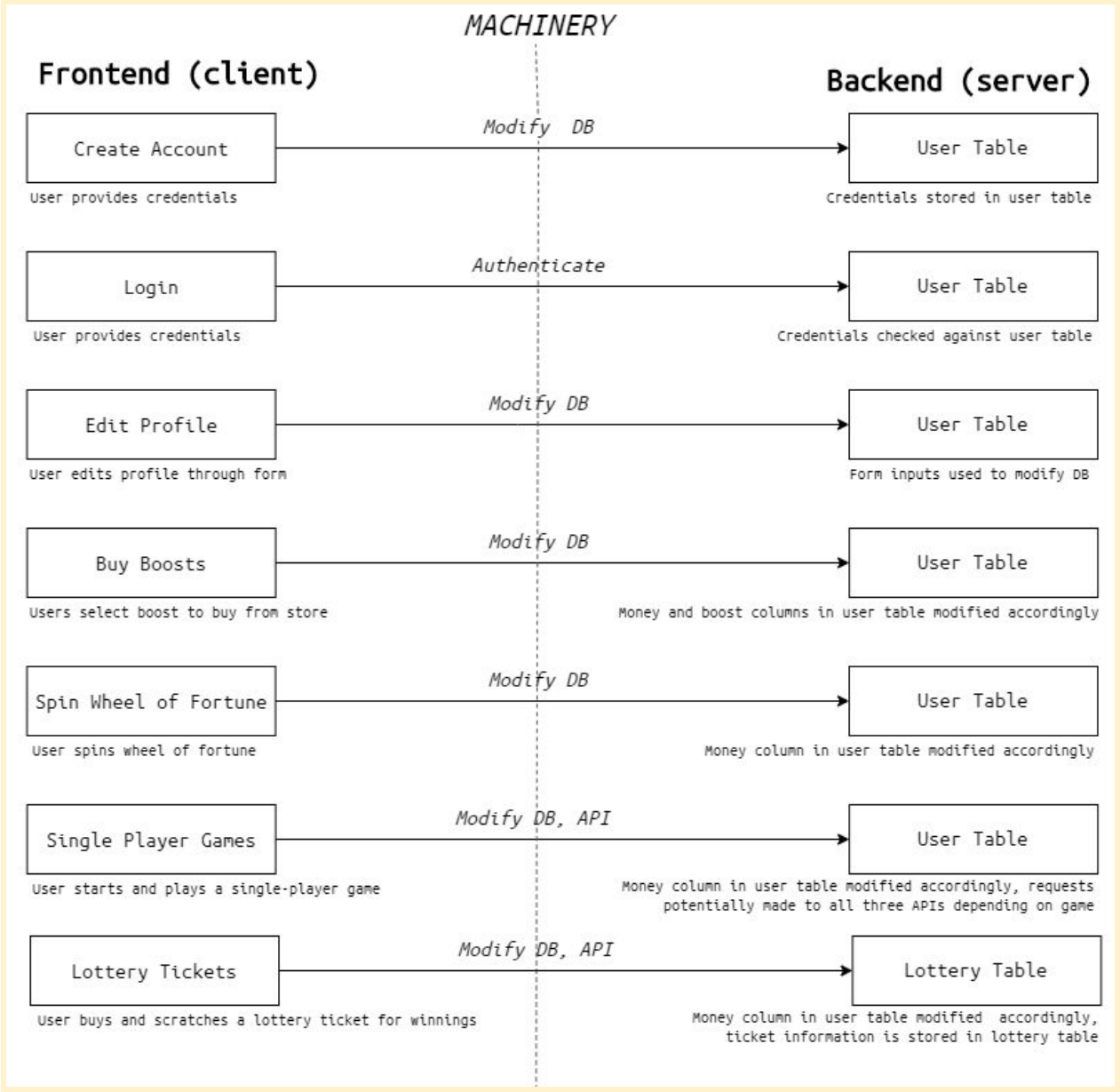
Back End

- User table is used for login; it also keeps track of the player's money, profile picture, boosts and time left the wheel of fortune
    - Username, password, money, Wheel of Fortune timer, profile picture

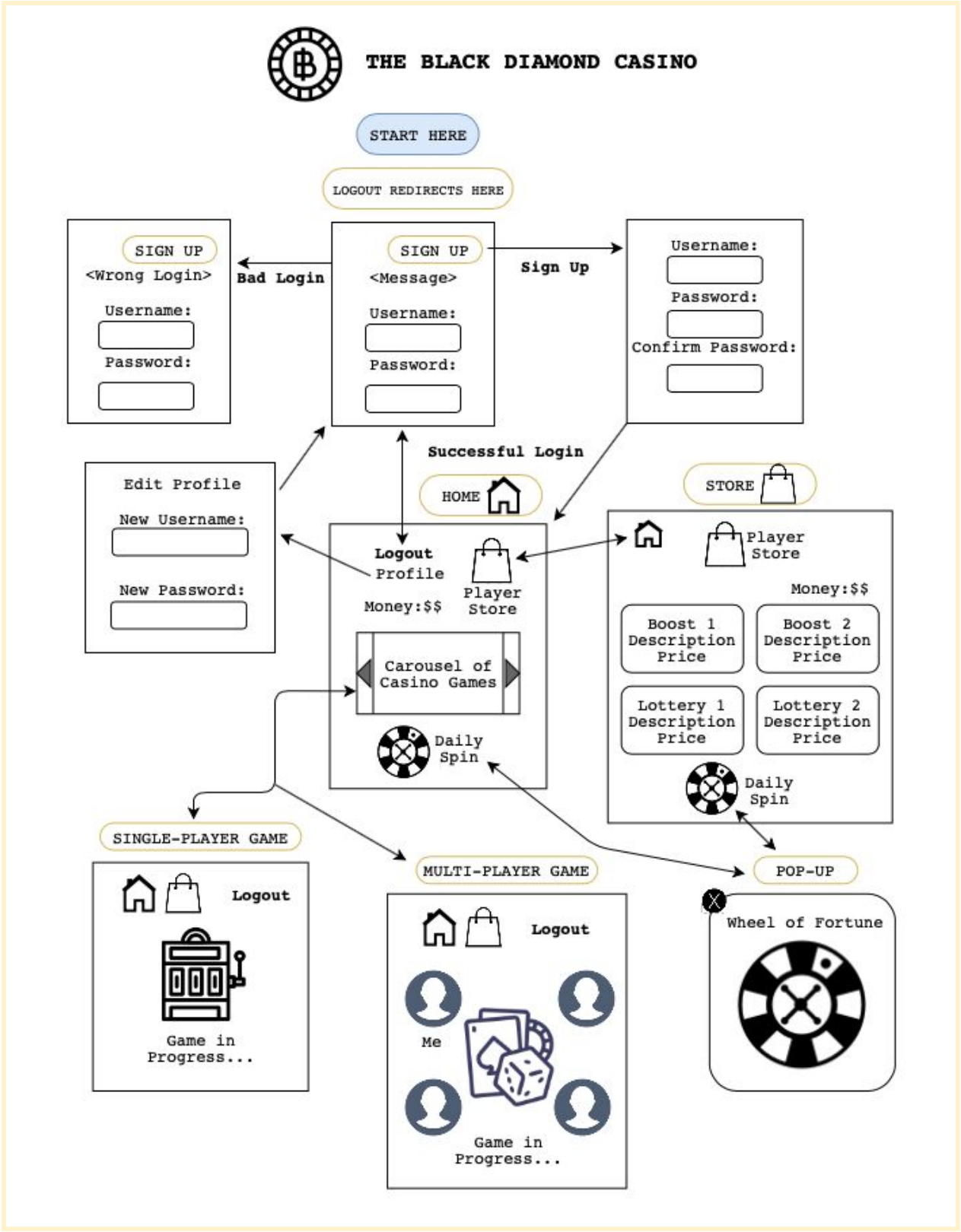
API and Libraries

- Deck of Cards API
    - Images of cards for display on the screen
    - Shuffles cards and keeps track of what cards should not reappear for any given game
- Diceful API
    - Used for Dice Game, simulates throwing of dice
    - Images of dice for display on the screen
- Wikipedia Library (installed through pip)
    - Used for explaining game rules, selecting text from sections labeled 'Rules'

Component Map



Site Map


THE BLACK DIAMOND CASINO
START HERE
LOGOUT REDIRECTS HERE
SIGN UP
<Wrong Login>
Username:
Password:
Bad Login
SIGN UP
<Message>
Username:
Password:
Sign Up
Username:
Password:
Confirm Password:
Successful Login
Edit Profile
New Username:
New Password:
HOME
Logout
Profile
Player Store
Money:$$
Carousel of Casino Games
Daily Spin
STORE
Player Store
Money:$$
Boost 1 Description Price
Boost 2 Description Price
Lottery 1 Description Price
Lottery 2 Description Price
Daily Spin
SINGLE-PLAYER GAME
Logout
Game in Progress...
MULTI-PLAYER GAME
Logout
Me
Game in Progress...
POP-UP
Wheel of Fortune

Database Design

USER TABLE

username	password	pfp	money	time	boosts
TEXT	TEXT	TEXT*	INTEGER	INTEGER	TEXT**

*pfp contains link to user's profile picture
**comma-separated list of boosts owned by user

LOTTERY TABLE

id	owner	numbers	claimed
TEXT	TEXT	TEXT*	INTEGER

*each ticket has a comma-separated list of nine numbers (lotto numbers)

Card Formatting
C-club, S-spade, D-diamond, H-heart
11-jack, 12-queen, 13-king, 1-ace
Card examples: S1 - ace of spades; C8 - 8 of clubs; D12 - queen of diamonds

Role Assignment

KV **Royal Flush (PM)**
Project Manager
(stretch goal) AJAX updating

TCao **Ace of Spades**
Bootstrap Front End Styling - Maintain consistency across website

JL **Jack-of-All-Trades**
Database Management / Interaction

Mandy **Queen Fortunata**
API Call Management
JavaScript Browser-side code