Baguette Grabbers

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Framework:

Foundation

Roles

Tyler: Project Manager

William: Front end

Ethan: Back end

Jiong Hao: Back end

APIs Used

Deck of Cards API-create games that requires the usage of a deck of cards (Blackjack)

Sudoku API-use a template of sudoku games for one of our minigames

Diceful API-create games that requires the usage of dice (Dice rolling, Craps)

Core Functionality:

A site where a user can play many different games, such as blackjack, roulette, broccoli clicker, craps, dice roller, and sudoku. Roulette, blackjack, craps, and dice roller will cost coins to play. A user can gain coins by logging in everyday, playing broccoli clicker, or winning a sudoku puzzle. A timestamp will be used to keep track of when a user logs on, which will determine if they can claim their daily reward.

Databases

Users

id	username	password	coins	streak	timeStmp	farmLvl
Integer	Text	Text	Integer	Integer	Text	Integer

- Information used to keep track of accounts
- Stores a user's username and password
- Coins will be a user's amount of money they can spend on games
- Streak is used to keep track of how many consecutive days a user's logs in
- timeStmp is the date of the last login, which is used to determine a streak
- farmLvl is the level of the farm to generate free coins

Info

gameName	description	howTo	image
Text	Text	Text	Text

- gameName is the name of the game
- Description stores a brief description of the game
- howTo stores instructions to play the game
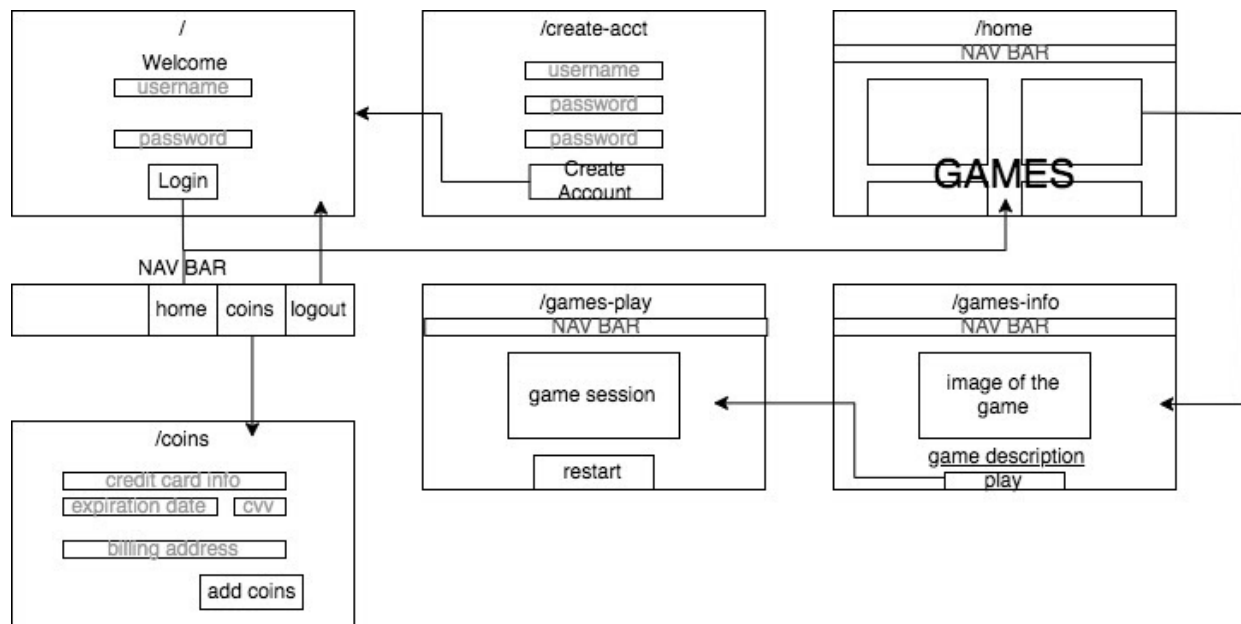- Image is an image of the game

Front End
- **index.html**
  - Landing page
  - Buttons for register or login
- **login.html**
  - Form for login
  - Redirects to "/home" when login is successful and "/login" when not
  - Redirects to "/register" if user wants to create account
- **register.html**
  - For for creating account
  - Redirects to "/" when account is successfully created, else flashes error messages
- **homepage.html**
  - Home screen that users always return to when they want to view the list of games.
- **bjStart.html**
  - Start page for blackjack to place a wager
  - Redirects to "/blackjack"
- **blackjack.html**
  - Page to play blackjack
  - Can hit, stand, play again, or change wager
- **craps.html**
  - Page to play craps
  - Rolling dice game
- **dice.html**
  - Page to a simple dice game
  - Button to place wager, change wager, and roll
- **makeItRain.html**
  - Page to play a simple clicker game
  - Buttons to grow broccoli, sell broccoli, and upgrade farm to produce
- **sudoku.html**
  - Page to play sudoku

- ○ Button to check the board
- **wheel.html**
  - ○ Page for a simple roulette game
  - ○ Buttons to bet on a color and get a random number and color combo
- **games-info.html**
  - ○ Contains game description, which is unique for each game, as well as directions on how to play

Back End:
- app.py
  - ○ **"/"**: renders landing page
  - ○ **"/login":** renders login page
  - ○ **"register":** renders register page
  - ○ **"/update":** renders a page to update info
  - ○ **"/auth":** handles register, login, updating info, and redirects to the correct pages
  - ○ **"/logout":** logout and redirects to "/"
  - ○ **"/home":** renders homepage
  - ○ **"/about":** renders how to use page
  - ○ **"/blackjack":** renders blackjack page
  - ○ **"/loadDeck":** starts the blackjack game and redirects to "/blackjack"
  - ○ **"/blackjack/hit":** handles when a user hits in blackjack and redirects to "/blackjack"
  - ○ **"/blackjack/stand":** handles when a user stands in blackjack and redirects to "/blackjack"
  - ○ **"/blackjack/reset":** resets the game and redirects to "/blackjack"
  - ○ **"/blackjack/bjstart":** renders bjstart page
  - ○ **"/wheel":** renders wheel page
  - ○ **"/roulette/change":** handles when a user wins the roulette
  - ○ **"/craps":** renders craps page
  - ○ **"/blackjack/changeWager":** handles when a user changes wager for blackjack and redirects to "/blackjack"
  - ○ **"/makeItRain":** renders makeItRain page
  - ○ **"/sell":** handles when user sells broccoli
  - ○ **"/upgrade":** handles when user upgrades broccoli farm
  - ○ **"/dice":** renders dice page
  - ○ **"/dice/roll":** handles when user rolls the dice and renders dice page
  - ○ **"/dice/setWager":** sets the wager for dice game and renders dice page

Site Map

/	/create-acct	/home
Welcome	username	NAV BAR
username	password	GAMES
password	password	
Login	Create Account	

NAV BAR

| | home | coins | logout |

/games-play	/games-info
NAV BAR	NAV BAR
game session	image of the game
restart	game description
	play

/coins

credit card info
expiration date cvv
billing address
add coins

Component Map

User Interface

Login/Register → Users

Withdraw/Deposit → Card

Winning/Losing → Currency

Database

```
                          │
                          ▼
              ┌─────────────────┐         ┌─────────────────┐
              │    LANDING      │────────▶│    REGISTER     │
              │                 │         │                 │
              └─────────────────┘◀────────└─────────────────┘
                 │         ▲              │         ▲
                 ▼         │              ▼         │
        ┌─────────────┐    │         ┌─────────────────┐
        │    LOGIN    │──────────────▶│    USERS DB     │
        │             │    │         │                 │
        └─────────────┘    │         └─────────────────┘
                           │                  │
                           │                  ▼
        ┌─────────────┐    │         ┌─────────────────┐
        │   LOGOUT    │◀────────────│   HOME/GAMES    │
        │             │              │                 │
        └─────────────┘              └─────────────────┘
                                 │     │      │       │
              ┌──────────────┐   │     │      │       │
              │  DEPOSIT/     │◀──┘     ▼      ▼       ▼
              │  WITHDRAW     │   ┌──────────┐ ┌──────────┐ ┌──────────┐
              └──────────────┘   │ SUDOKU   │ │ DECK OF  │ │ DICEFUL  │
                 │       │       │ API      │ │ CARDS API│ │ API      │
                 ▼       │       └──────────┘ └──────────┘ └──────────┘
        ┌─────────────┐  │            │          │           │
        │   CARD DB   │  └────────┐   │          │           │
        │             │           ▼   ▼          ▼           ▼
        └─────────────┘      ┌─────────────────────┐
                             │    CURRENCY DB      │
                             │                     │
                             └─────────────────────┘
```