













# Power Play

Mati Abayneh, Luca Chaia, Victoria  
Davis, Brendan Fisher, Cam Mars,  
Bodhi Rubinstein



# Project description

- **Collect and Trade Cards:** Build your collection with digital trading cards featuring real NBA and WNBA athletes.
  - **Real Stats, Real Strategy:** Each card's power is based on actual player performance stats like points, assists, and rebounds.
  - **Battle and Progress:** Create a 5-card deck and compete in turn-based battles influenced by strategy and optional dice rolls.
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

# Tools Used in Development of Powerplay



## IDE

We used VSCode as our editor, and mostly worked in JavaScript for our backend



## Deployment

We used Render to host our website



## VCS Repo

We used Github to track and push changes



## PostgreSQL DB

We used PostgreSQL for our player database



## UI Tools

Hbs, HTML, CSS, bootstrap



## Testing

We used mocha and chai to test our website



## Application Server

NodeJS was our application server



## Framework

Express in Node



## Ezgif

We used EZgif to convert video demonstrations of the website into gifs for the tutorial.



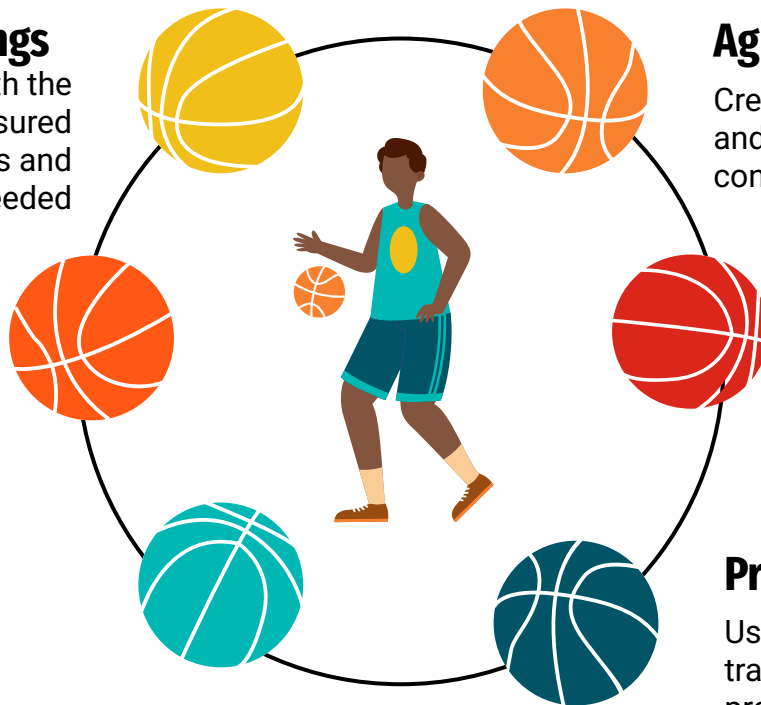
# Our Development Strategies

## Consistent Team Meetings

Weekly meetings with the team that ensured consistent progress and assistance where needed

## Slack

Used Slack as primary means of communication. Different channels for different features/functionalities.



## Agile & Iterative Approach

Created and push features and improvements continuously to Github.

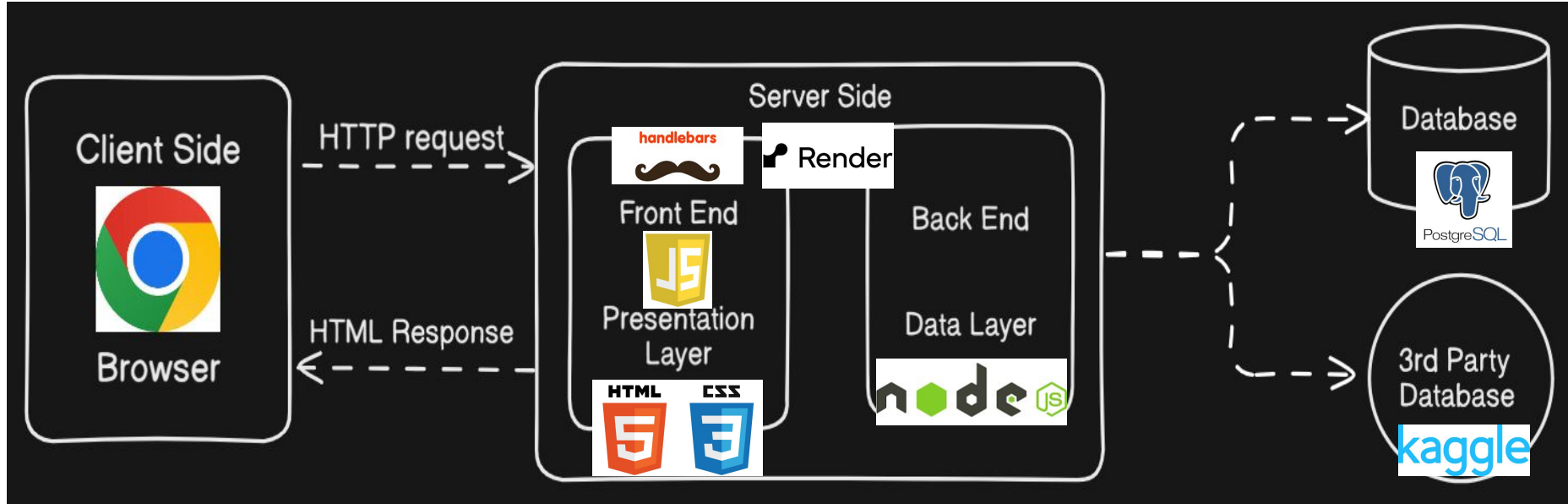
## Peer Code Reviews

Pull requests made on Github regularly insured that our changes to the website were peer-reviewed and good to go. Protected 'main' branch.

## Project Board

Used a Kanban board that tracked tasks and progress on features.

# Architecture Diagram



# Challenges

## Password Verification

When we added password verification, we had to rewrite unit tests

## VSCode

Improper rebasing and challenging merge conflicts

## Github

Accidentally pushing `node_modules` (.gitignore)

## DB Population

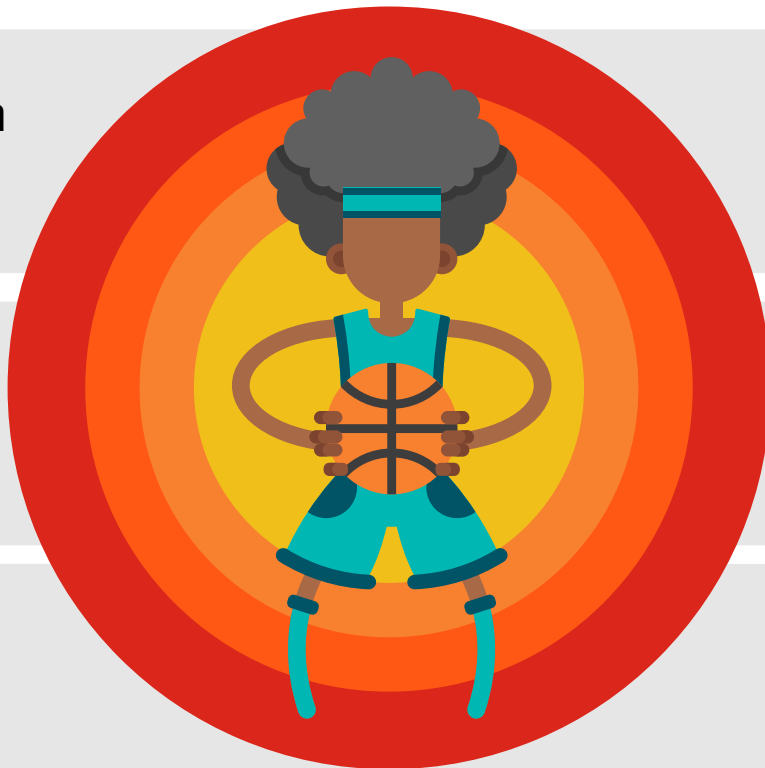
ESPN API endpoints were unfinished, so we used a local Kaggle DB instead.

## Live Battles

Battles between 2 human players still a challenge, bots only for now.

## Creating Cards

Couldn't automate card creation, so had to make playing cards by hand.



# Future Scope

1



## Live Battles

Battle against a human, while you're both logged in

2



## Social Page

Add friends and followers

3



## 3-Way & Multi Trades

Be able to trade multiple players between 3 teams (up from 2)

4



## More Data

Add other sports such as tennis or soccer as playing cards.

# Demo of Project

