Buff Games

Group 012-2
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Description

- Buff games makes the classic Wordle puzzle into a fast-paced, competitive gaming experience.
- Players earn rankings based on solve time and number of attempts
- A built-in friends system enables players to compare stats, track progress, and climb leaderboards together.
- Users can create and send custom Wordle challenges
- By blending simplicity, competition, and social interaction, Buff Games makes every puzzle feel fresh, personal, and worth sharing.

Tools used

- Used many different tools to get this project done.
- Here is the list of all of them and then each slide will go into depth
    - Github Project Board
    - Github Version Control System
    - PostgreSQL
    - VSCode
    - HTML
    - CSS
    - Handlebars
    - Mocha
    - Chai
    - Express in node
    - Node.js
    - Render
    - Figma
    - Docker

Github Project Board

Purpose: Project tracking, task management, and kanban workflow

Rating: 4/5 stars

Methodologies supported:

- Agile
- Iterative Development
- Sprint Planning
- Collaboration
- Ownership

Github Version Control System (Git)
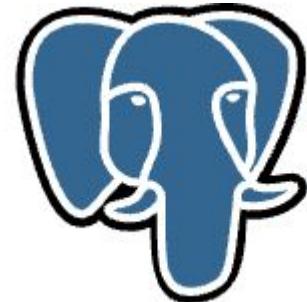
Purpose: Version control, collaboration, code history, and branching

Rating: 5/5 stars

Methodologies supported:

- Pull request workflows
- Collaboration
- Code Reviews
- Branching

PostgreSQL

Purpose: Database for persistent data storage

Rating: 4/5 stars

Methodologies supported:

- Schema design
- Data Normalization
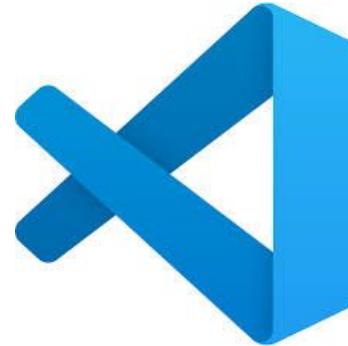
VSCode

Purpose: Code editor for writing code

Rating: 5/5 stars

Methodologies supported:

- Programming
- Debugging
- Git integration

HTML

Purpose: Layout of web interface

Rating: 3/5 stars

Methodologies supported:

- UI development
- Front-end development

CSS

Purpose: Styling language used for visual design of the webpage

Rating: 5/5 Rating

Methodologies:

- Frontend development
- UI development
- Styling

Handlebars

Purpose: Templating engine that generates dynamic HTML pages

Rating: 5/5 stars

Methodologies supported:

- Reusable templates
- UI updates

Mocha

Purpose: Testing framework used for unit testing

Rating: 4/5 stars

Methodologies supported:

- Test driven development
- Automated testing

Chai

Purpose: Assertion library

Rating: 4/5 stars

Methodologies supported:

- Test driven development
- Automated testing

Express in Node

express

Purpose: Web framework used for back-end development

Rating: 5/5 stars

Methodologies supported:

- Back-end development
- Modular routing

Node.js

Purpose: Runtime used to run server-side code.

Rating: 5/5 stars

Methodologies supported:

- Back-end development
- Npm packages
- Iterative development

Render

Purpose: Cloud hosting platform used for deploying and running applications.

Rating: 4/5 stars

Methodologies supported:

- Continuous Development
- Hosting and monitoring
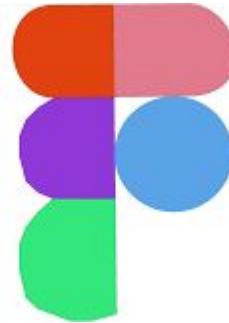
Figma

Purpose: Collaborative design tool for wireframes and UI layouts

Rating: 3/5 stars

Methodologies supported:

- UI design
- Wireframes
- Collaboration
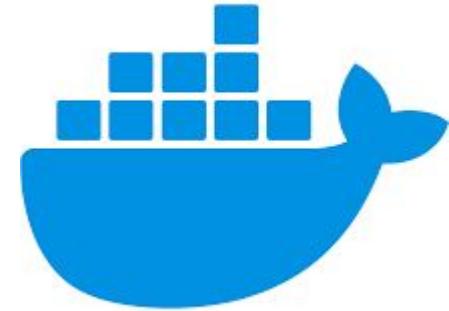
Docker

Purpose: Containerization platform for deployments.
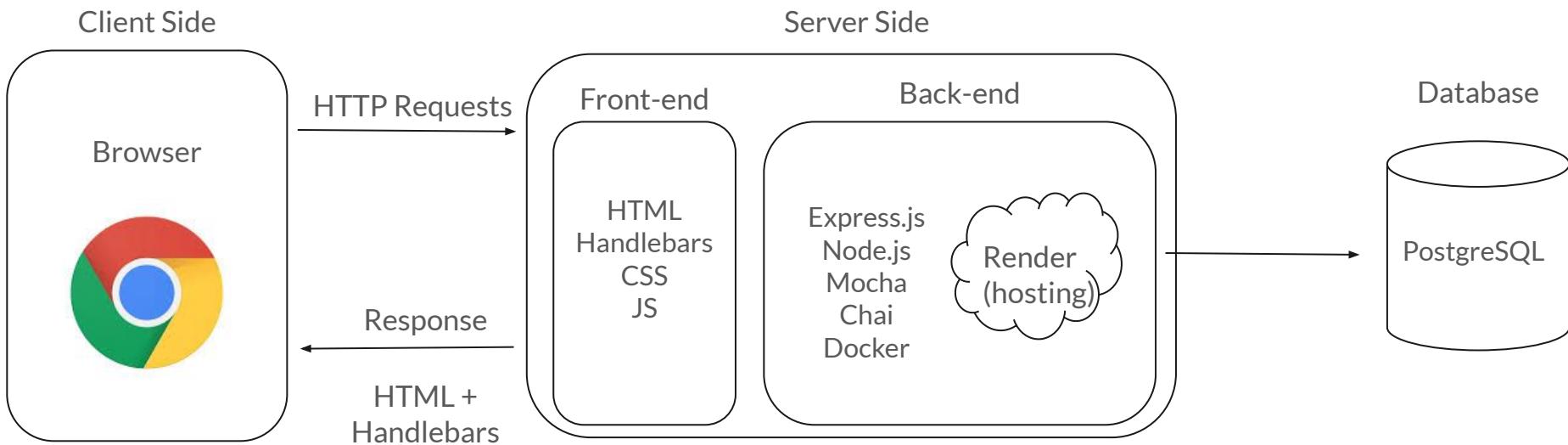
Rating: 5/5 stars

Methodologies supported:

- Deployment
- Containerization

Architecture Diagram

Client Side

Server Side

Database

HTTP Requests

Front-end

Back-end

Browser

HTML
Handlebars
CSS
JS

Express.js
Node.js
Mocha
Chai
Docker

Render
(hosting)

PostgreSQL

Response

HTML +
Handlebars

Challenges

Poor communication:

- Overlapped work, Headed in different directions and it was frustrating
- Overcame by meeting more often in person and being direct with what we need to do
- Affected our original plan by putting us behind schedule a bit

Difficulties with Render:

- Something with our database was getting messed up
- Overcame from help with our TA
- Didn't really affect our original plan

Future Scope / Enhancements

- Score between friends for challenges
- Better Styling / More Visually Appealing
- Add more games, instead of just being wordle
- Messaging between friends
- Notifications for friend requests and challenges
- Remove friend option

Demo

Video In case:

https://drive.google.com/file/d/1xfMIGDpK-GHDWh9sfvUQHUBxBCKgrory/view?usp=sharing

Website:

https://buff-games-group-project.onrender.com/