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About LearnMaster

LearnMaster is an application where users can upload terms and definitions, and we generate an interactive learning experience. We are there to help students learn material through a wide array of intellectual challenges.

Mission Statement:

We wanted to provide students with a platform that personalizes and enhances their learning experience.

Project Tracker and Repository:

- Github Project Board
- Was useful in visualizing what stage of the project we were in, along with knowing what each person was supposed to be working on
- 5/5 - It was also very useful that it was accessible with our repository
- We also used github for our VCS Repository
- Everyone had experience working with it and it is the most widely used for project like these
- 4/5 - The merge and pull requests along with branching took a while to get used to

More Tools

Database:

- We chose PostgreSQL as we had experience integrating and working with it in previous labs
- It also worked perfectly for the terms, definitions, and user data that we needed to store
- 5/5 - It worked just like we needed it to with little issues

IDE:

- VSCode was perfect for what we wanted, as it has amazing source control working with git as a programming environment
- 5/5

UI Tools

HTML, Bootstrap, CSS, Handlebars

- For our UI tools we used HTML, Bootstrap, CSS, and Handlebars
- HTML was used for the framework of our pages while CSS and Bootstrap was helpful in making our pages look nicer and more professional
- We used Handlebars to dynamically generate HTML pages by combining HTML templates with data from the server. This approach keeps our code organized and separates the presentation layer from the logic layer.
- 5/5 - There were a lot of resources at our disposal to design our website the way we wanted to

More Tools

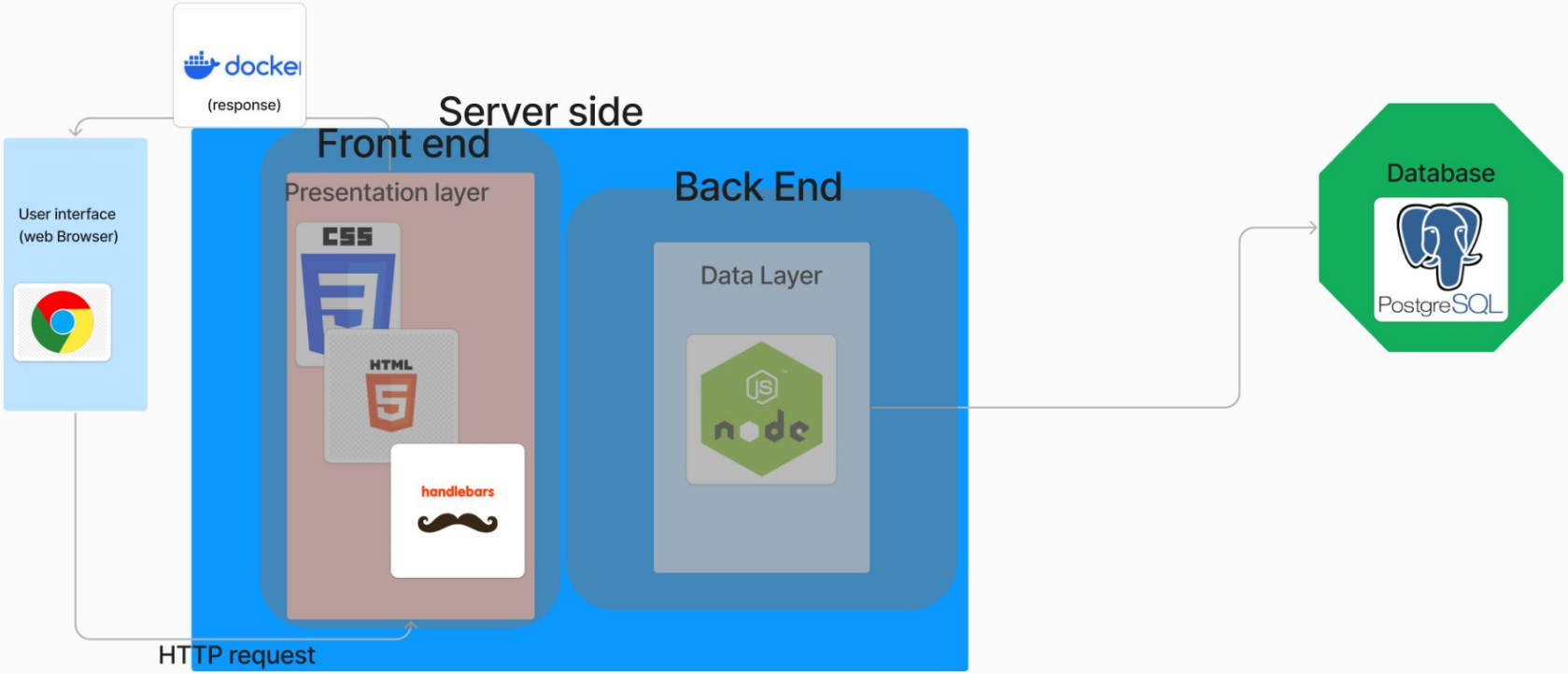
Application Server:

- For our application server we went with the most familiar program to us which was node.js
- It was perfect for our use in collecting data from the user, along with our server side needs
- 5/5 - Worked just like we needed it to

Deployment Environment:

- We used LocalHost through the Docker environment for our deployment method
- Docker allowed us to easily test features from our local devices
- 3/5 - We ran into a lot of Docker issues along the way, which took the most time out of all our problems to resolve

Architecture Diagram



Challenges faced

- Branches, merge conflicts, and pull requests took a bit to get used to but we got the hang of it after a while
- Docker was giving us a lot of different issues, some of which were local issues, others had to do with our project
- Database connection issues with having a separate script file that need to use routes to our index file for database connections.

Future Scope/Enhancements

- Mobile Application
- A classroom feature for students to be able to download or study the same set
  - Allow teachers to track student progress
- Create a Leaderboard to track highest scores on a study set
- Progress tracking for an individual user
  - Track how many times they have studied a set, or some sets/terms that they need to work on

Demo!

Questions?