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Description of Project

- We created a chess-playing website where you can play against another user or against the chess AI.
- For this website, users create an account and start out with zero chess points, gaining chess points from making 'smart' moves against the AI or the other player.
- The moves are ranked by our AIs, and as you earn points you are then ranked on the leaderboard that lists the users with the highest points in a table.
- A user can also view their profile to find the number of matches won/lost, their point total, and update their profile pic and bio.
- Our vision was to have users redeem these points for skins to put on their chess pieces

HandleBars, bootstrap

- Purpose: templating use to generate the website
- Rating: 4
- Methodology: iterative, peer code reviews





Github

- Purpose: version control, keeping track of what we did, project board, Kanban board
- Rating: 5
- Methodology: peer code review, agile`





PostgresQL

- Purpose: Make database and store data
- Rating: 5
- Methodology: API





VS Code

- Purpose: Where code was written, where conflicts were resolved (merge conflicts)
- Rating: 5
- Methodology: Iterative, pair programming





Postman

- Purpose: interface with the SQL database for get and post requests, interface with the ChessDB API for get requests
- Rating: 4
- Methodology: code testing





Figma

- Purpose: Prototyping and brainstorming ideas
- Rating: 3
- Methodology: iterative





Discord

- Purpose: Communication and organization
- Rating: 5
- Methodology: commutative and file sharing





NodeJS

- Purpose: the server and backend
- Rating: 4
- Methodology: pair programming





Express

- Purpose: Request handlebars
- Rating: 5
- Methodology: pair programming





Axios

- Purpose: An HTTP sender
- Rating: 5
- Methodology: talking to external APIs





Docker

- Purpose: A container to manage imported packages
- Rating: 4
- Methodology: ran every time to visually inspect the website





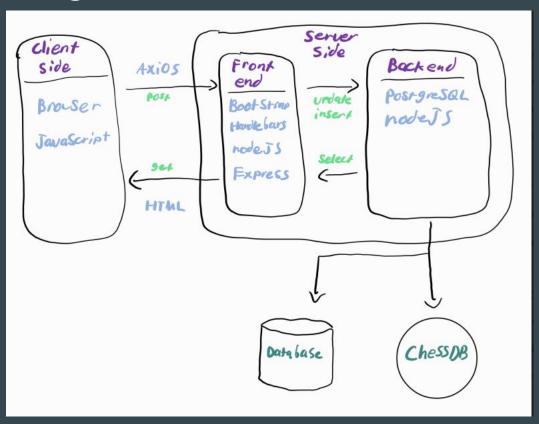
Local Host

- Purpose: local machine that makes requests to display the website
- Rating: 5
- Methodology: Private IP address pointer





Architecture diagram



Challenges

- Endpoints: Figuring out how to apply them to our project design. This was overcome by trial and error as well as constant testing.
- Chess AI API: Some APIs that we used shut down their servers, were going to charge us, or blocked our requests. Had to keep changing and rewriting code to use different APIs.
- SQL queries: The syntax and joining tables. This was overcome by research and iterative design
- Points: Storing, tracking, and generating. This was not overcome yet and has affected the original project plans by not allowing us to have skins or a leaderboard

Future scopes/enhancements

- If we were to continue to this project, we would add the ability to track and store points.
- Add a leaderboard and skins that come from the points.
- Improvement to the design of the website.
- Matchmaking to be able to play on multiple computers.

Demo



Questions?