How to Run Page & How I Worked on the Assignment

Requirements

- Node.js (v18 or newer)
- npm (v9 or newer)
- Backend: SQLite
- Git LFS (for images)

Setup

1. Clone the repository:

   git clone https://github.com/Seredoum04/washington_nats_web_development_programming_assignment.git

   cd washington_nats_web_development_programming_assignment

2. Install dependencies for frontend and backend:

   cd frontend

   npm install

   cd ../backend

   npm install

3. Run the backend server:

   cd backend

   node server.js

4. Run the frontend:

   cd frontend

   npm start

5. Open your browser at: http://localhost:3001

How I Worked on the Project

Overall Development Process

For this project, I aimed to create a web application summarizing MLB 2025 pitching data by player. I followed an iterative development process, starting with planning the data model and API endpoints for the backend, then designing React components for the frontend.

I chose React for the frontend to quickly create reusable UI components, including the pitcher select dropdown and summary table. Node.js and Express were used for the backend because of familiarity and simplicity in serving API endpoints. SQLite was selected as the database for simplicity and portability.

The packages and technologies used were Axios for HTTP requests between frontend and backend. React Hooks (useState, useEffect) for state management. Git/GitHub for version control. Git LFS for storing large image assets These choices were made based on familiarity, ease of integration, and project requirements.

Most technologies used were familiar, such as JavaScript, React, Node.js, and SQL. I have previously used React in academic projects, which made component-based development more efficient. I learned Git LFS specifically for this project to handle large media files like images.

Regarding AI use, I used Copilot to help write clean CSS/SCSS for page styling and debug git and Git LFS workflow issues. Some effective prompts were "Write SCSS for a page with a blue, red, and white theme with a logo in the corner." Some same Appendix were "Make the home page look nicer with red, white, and blue theme and include nats_logo.png in the corner." And "Write step-by-step instructions for using Git LFS to handle images and push to GitHub."