**Weekly Report**

**Week: 03/03 - 03/07**

**Team Leader:** Unaisa

**Team Member #1:** Brandon

**Total Hours Worked:** 7

**Task Completed:**

**• Backend Development**

* Set up CRUD operations for User and Widgets.
* Successfully tested all API routes to ensure proper functionality.
* Improved API response handling for better error messaging and validation.

**• Database Management**

* Verified schema consistency after implementing CRUD operations.
* Ensured proper indexing and constraints to optimize query performance.
* Reviewed relationships between User and Widgets to accommodate future enhancements.

**• API Integration**

* Set up News API integration for the widget system.
* Implemented data fetching and parsing for news updates.
* Designed API endpoints to provide relevant news content to widgets.

**• Testing & Debugging**

* Conducted unit testing on CRUD endpoints.
* Identified and resolved minor bugs related to data retrieval and validation.
* Enhanced logging for better debugging and monitoring.

**Task for the next week:**

* Extend CRUD operations to additional tables (e.g., Widget\_Interest).
* Optimize database queries for efficiency.
* Implement authentication and authorization for API security.
* Start frontend development and connect it with backend services.
* Enhance API integration by allowing users to customize their news feed preferences.

**Team Member #2:** Vijay

**Total Hours Worked:** 6

**Tasks completed:**

* Implemented Yahoo Finance API into my dataset replacing the sample dataset initially used. With this real world data implementation.
* Found that at most 50-100 stock data would be the most the program can take before it becomes slow (Taking the max 500 in the SMP500 takes a long time) Made it output recommendations based on various attributes of the stock (volatility, sector)

**Tasks for next week:**

* Start with implementation in backend Look into LLM APIs

**Team Member #3:** Aisha

**Total Hours Worked:** 6

**Task Completed:**

* Finished setting project structure and syncing spring boot, databases, dev environment, and version control
* Tested initial API responses using Thunder Client in VS Code
* Connected with peers to get help on a problem with initial setup due to sdk settings
* Researched and selected API’s to us for stocks, weather and news updates

**Tasks for next week:**

* Will discuss with backend team to finalize remaining data sources
* Start designing the data flow and structuring how responses will be processed and stored
* Implementing error handling for API responses.
* Decide between real time updates or periodic fetching of data

**Team Member #4:** Aidan

**Total Hours Worked: 7**

**Task Completed:**

* Learned how to code a jsx file (a function that returns html code)
* Made a react project folder and installed all the necessary dependencies in that folder in visual studio code
  + Re-did the stocks page from scratch in jsx and saved it as an App.jsx file in the react folder
  + Made the page look much better with the bootstrap 5 framework that I added to my IDE
  + Also re-did the html page for the main page that the user would use to go to either music, sports, or stocks.
  + Unaisa helped a bit by adding dark mode styling to the page
  + For both pages I added bootstrap framework styling to same some sleek and useful components such as a carousel (slide show in the main page), cards, and modals in the stocks page

**Tasks for next week:**

* Finish up, with the help of Aamir and Unaisa, all front-end pages for the app
  + New pages may be developed in jsx or html depending on what the backend subgroup wants
* Add JavaScript functionality and routing to the pages and finish moving all pages to my react folder and converting the html ones to jsx
* Start talking to the backend group to see what APIs they’re using so that I can start adding variables to things such as for the data of the graphs in the stocks page

**Team Member #5:** Unaisa

**Total Hours Worked:** 5

**Task Completed:**

* Worked on the music page as per assigned
* Improved the UI/UX for music Hub page
* Added a search bar for “search for music”
* Updated background colors
* Fixed layout of the page and overlapping issue for sleek and presentable design
* Used CSS layout flexbox to improve alignment and spacing

**Tasks for next week:**

* We will divide tasks accordingly to work on for the next week
* Planning on implement the dark mode toggle button for rest of the pages in the frontend
* Will get feedback from other teammates to see what needs to be done differently.
* Work on Image integration (adding images to music page where needs to be)

**Team Member #6:** Aamir

**Total Hours Worked:** 5

**Task Completed:**

* Continued work on the frontend, specifically working on the sports part of the website and trying to see how I can make it look and function better than before
* Worked with other members on the front end to discuss our steps for the week and communicated about how our progress was going and what we can do better and continue to work on

**Task for next week:**

* Will continue to finish working on the front end as we are not entirely done yet and make decisions on how it will look like in accordance to project specifications.
* Finish front end functionality as well with connecting all pages to make sure it works with accordance to backend
* Work with Aidan to implement react in all aspects of the frontend along with
* Will continue researching and learning aspects of the front end along with making sure to help others who may need help