

RIVALYTICS

Progress Report 3

By

Camilo Arias

300356827

For

CSIS 4495 - Applied Research Project

Padmapriya Arasanipalai Kandhadai

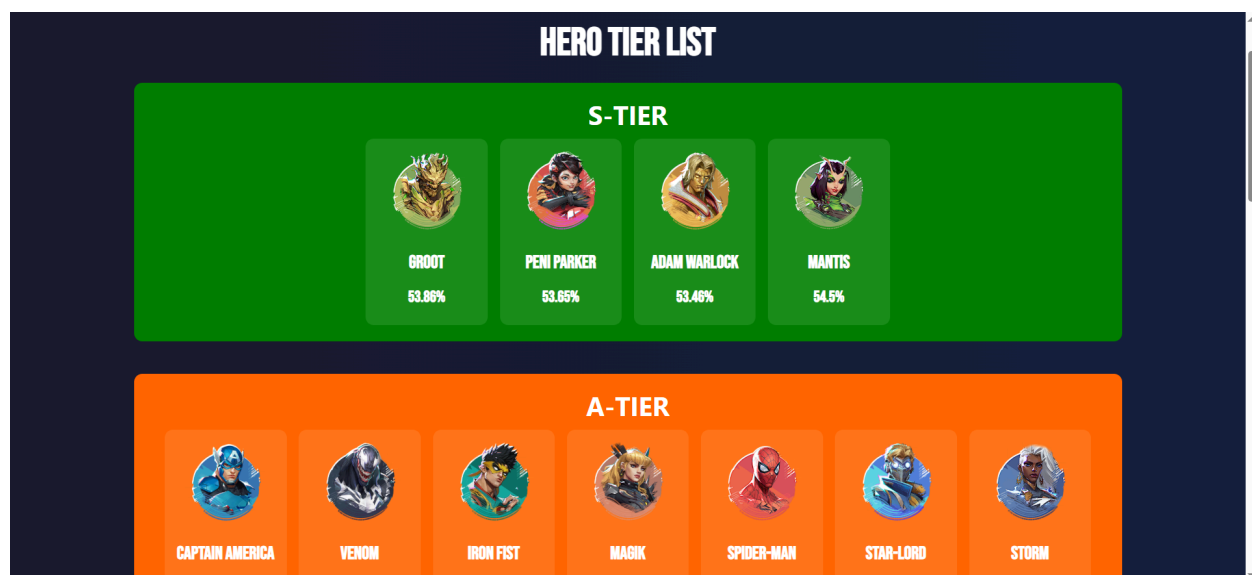
Winter 2025

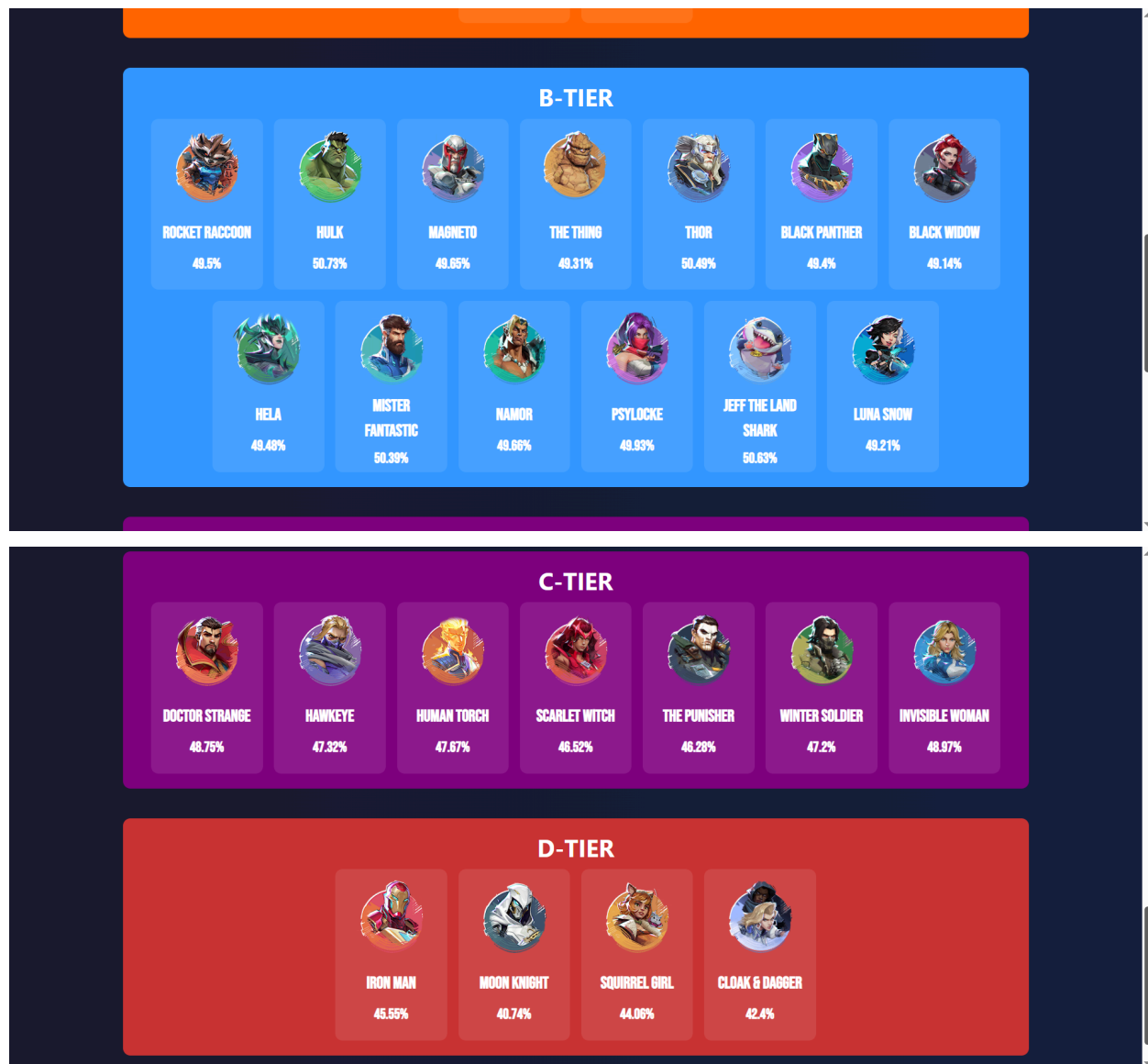
This week I focused on fixing a general issue I had when trying to retrieve data from the API. For features such as the tier list page, I needed to obtain the data corresponding to how often is each hero picked compared to the total number of games played by the entire playerbase, a number otherwise known as pick rate. The API did not provide the total number of matches, but it did provide how many games were played on each hero.

As such, to calculate the pick rate I was trying to make multiple API calls to fetch each hero's data, add it up and finally have the number of total matches. However, even when I introduced rate-limits and significant delays between each call, I was getting rate-limited by the API and could only fetch about 4 heroes' data at a time.

In order to solve this issue, I created a separate backend route to fetch each hero's data one at a time every few minutes, and then cache it using the mongoDB database. This way, the tier list will fetch data from mongoDB instead of making multiple real-time API calls, while still making sure that the data is not outdated since it gets updated one hero at a time every few minutes.

Once the backend issues were dealt with, I proceeded to finish styling the tier list and making sure that each hero is sorted by win rate displayed in the correct category, as you can see below:





In terms of next steps, I will use the same approach when finishing to integrate the API to fetch player data, as initially I aimed to automatically make calls when searching one's profile. Instead, I will introduce an "update" button on each player's profile for them to manually update their data. This way, I can prevent rate limits in the case of multiple players trying to update their data at the same time.

WORK LOGS

Date	Number of Hours	Description of Work Done
January 16, 2025	1	Coming up with ideas for the project
January 17, 2025	1	In-class consultation about 2 different project ideas
January 21, 2025	0.5	Deciding the idea for the project
January 23, 2025	1	Starting the project proposal
January 24, 2025	1	In-class project consultation and initial check-in
January 24, 2025	2	Defining the project's scope and features after consultation
January 25, 2025	3	Continuing project proposal writing
January 26, 2025	4	Finishing project proposal and submitting
February 7, 2025	2	Coming up with the possible endpoints
February 8, 2025	5	Setting up the backend and writing the project report
February 8, 2025	1	Committing to github repo
February 18, 2025	4	Finishing backend work
February 19, 2025	3	Starting the frontend
February 21, 2025	4	Creating the database and populating it
February 22, 2025	5	Continuing frontend work, including heroes page
February 23, 2025	4	Finishing heroes page and starting heroes detail page
February 24, 2025	7	Finishing heroes page, report and video
March 11, 2025	1	Checking out the API documentation and endpoints
March 13, 2025	2	Started work on the tier list page
March 14, 2025	4	Finishing integrating external API to display tier list page
March 15, 2025	3	Developed the search functionality and started player profile page
March 16, 2025	2	Unfinished version of the player profile page
March 16, 2025	2	Progress report
March 20, 2025	1	Testing API calls and finding out issues
March 21, 2025	2	Trying out possible solutions
March 22, 2025	5	Fixed backend-related issues and modified database
March 23, 2025	2	Progress report