

Software Development Project - April 2021
League Of Legends - Match History Using The Riot API
Richie Motorgeanu

Idea:

Create an application that can analyze the data of a game and sort it in a way that's user-friendly. Could be extended to also interpret the data from the game to give tips and advice to the player based on their performance.

Purpose:

_____ To inform players about the statistics of a game, and potentially their strengths and weaknesses.

Current Progress:

Since the last writeup, I've been able to implement the ability to show a player's last 25 games, the ability to check any of those games into more detail, the ability to show player's games from other regions, and added more visuals and data.

I've mainly focused on the page displaying the last 25 games, as this would be the most used page.

Once data is retrieved from the servers, it is stored locally on the machine to speed up the program and minimize interactions with the API.

Things Still To Be Done:

Although there have been many features implemented, there's still a lot left to do. I still need to add a back button to return to the previous menu, show more data in the match history as well as the match details, and implement a sorting feature to search for certain games.

In the future, it would be nice to either compile it up as an application for myself, or develop it into a web app.

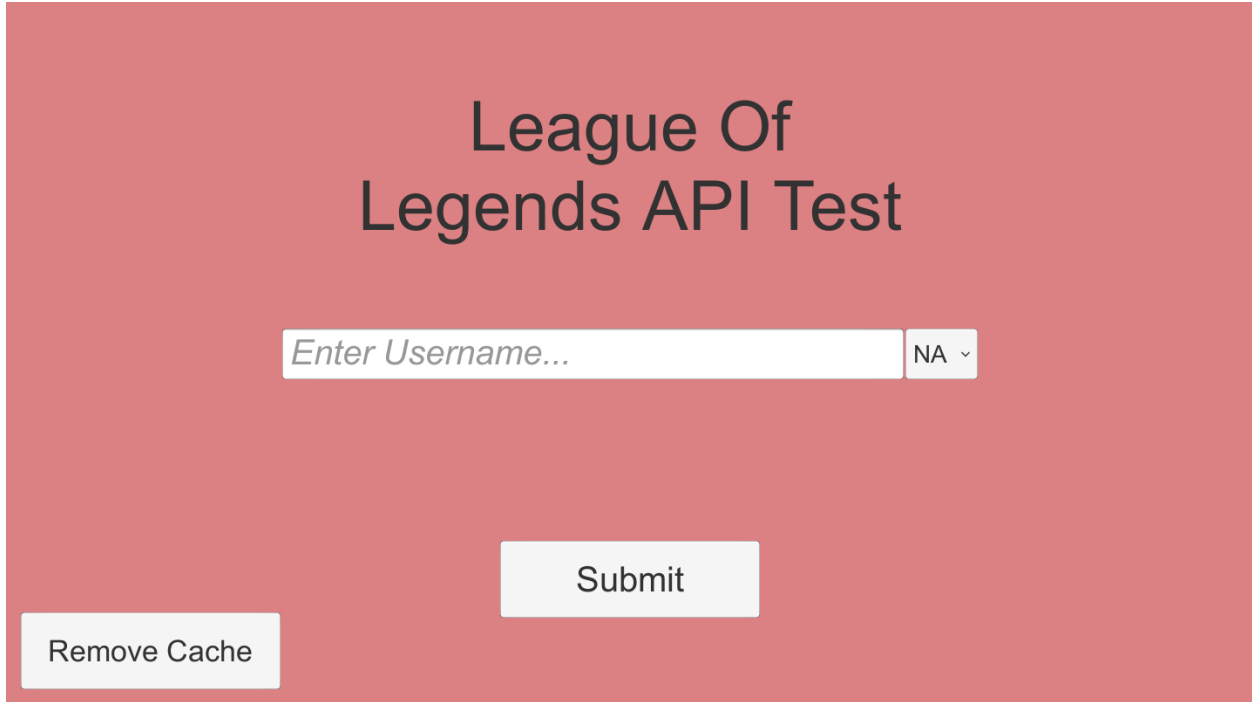
Difficulties:

It was a pain to figure out how to store the data. The API key only allows so many calls per minute before it denies it. The solution that I ended up using was to store the JSON files locally. With that I needed to create methods to quickly translate JSON from the API or local files to usable objects or from objects to JSON and save it to file.

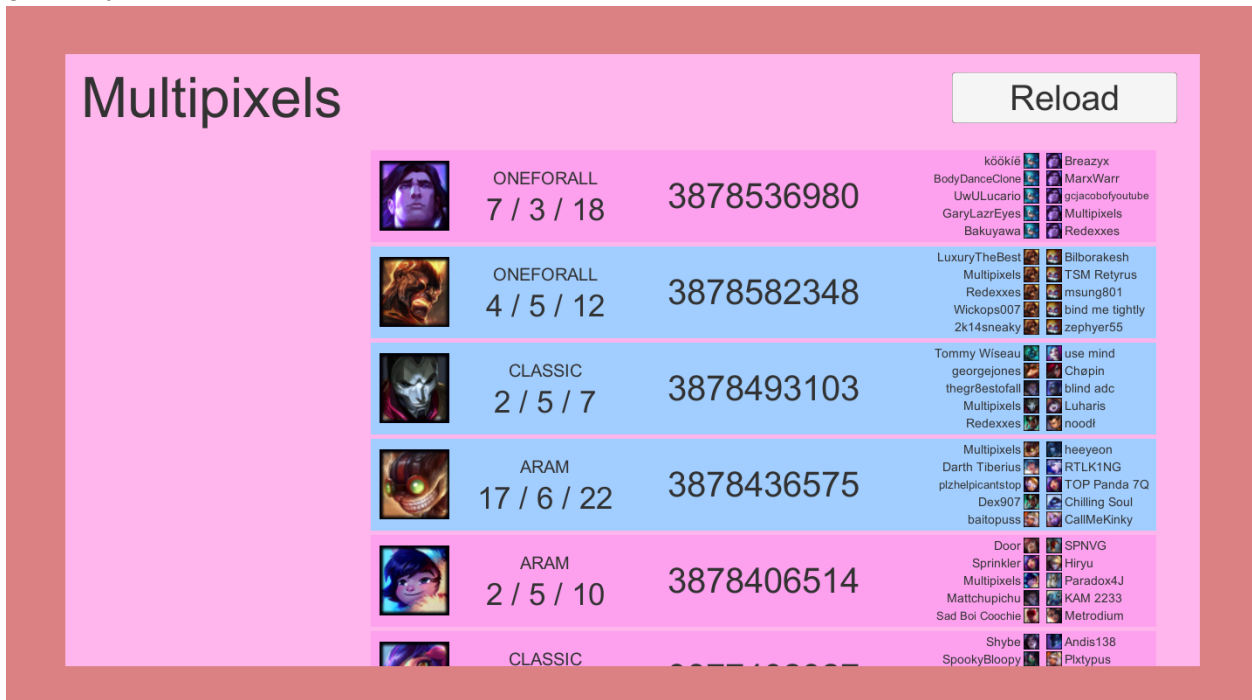
As well, I had many issues getting images from the API as well, which was solved using coroutines.

A Small Demo:

This is the main menu of the program, not visually appealing but that was the least of my worries. The user has the option to enter their username and submit, change their region from the dropdown box, or clear their cache.












Once the user enters their username, a history of the latest 25 saved matches appears. If there's no games saved, it calls the API to get it. The user can scroll through the matches, or reload to grab any recent matches.



Once the user clicks on any of the matches listed, the match details pop up. This menu hasn't really changed since the start of the project, outside of the character images.

GameID: 3878493103
Game Duration: 27:52

CLASSIC

 Tommy Wiseau 3 / 3 / 6	5 / 4 / 4	use mind 
 georgejones 6 / 0 / 8	3 / 5 / 5	Chøpin 
 thegr8estofall 7 / 4 / 3	0 / 3 / 8	blind adc 
 Multipixels 2 / 5 / 7	2 / 5 / 4	Luharis 
 Redexxes 3 / 2 / 7	4 / 4 / 4	noodt 