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CSS 497

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Fantasy Valorant: Abstract

The purpose of this project was to design and develop a web application that provides users with an immersive and interactive fantasy sports experience based on the rising e-sport, Valorant. The application we built allows users to build a virtual team with the goal of drafting a roster of players that exist within the current competitive circuit of Valorant esports.

Our developmental process included a full-stack approach where we tackled both the front-end and back-end aspects of a website application. To accomplish this, we chose and utilized the MERN (MongoDB, Express.js, React.js, and Node.js) stack to build our application. The back-end consists of Express.js and Node.js, which provided a way to retrieve and manipulate data efficiently from our database, MongoDB. MongoDB stores user information as well as the player information we wanted to display using Valorant esports events. Additionally, we utilized Mongoose, an Object Data Modeling library that helps manage our data.

Our front-end was developed using React.js, which helped provide an easy way to create intuitive and interactive user interfaces that helps enhance the user experience by providing smooth functionalities and tools for our users. We also used Redux and RTK query as a tool to fetch data and manage user states within React.js.

With our Fantasy Valorant web application project, we wanted to provide a platform for a rising competitive community within esports - a platform that could ultimately enhance and integrate a new way of enjoying the competitive Valorant scene. To do that, we had to make sure we used the right tools and had the right approach to provide an interactive and responsive experience that would satisfy the expectations of our audience. While the scope of our project was extensive and thus created many challenges throughout the developmental process, it was ultimately an extremely fulfilling project that taught me how to collaborate and work together with a partner.