

Project Milestone 1

Project Title: Sports Discord Bot

Group Members:

1. **Nikhil Khandelwal**
2. **Preeti Subbiah**
3. **Rutuja Kajave**

Design Problem

There is a large community of sports enthusiasts using Discord to discuss, share and learn about different aspects of a game, including, but not limited to, team statistics, fixtures, player stats, etc. However, this is challenging as people find themselves going through several websites, articles, and other resources in search of answers to these questions. To get a better perspective of the wants of these users, we identified specific sports communities on Discord and the results they wished to obtain. In particular, these users wish to receive precise and recent updates for their queries regarding the sport. We aim to ease this process and save time searching for these statistics. To do so, we plan to develop a powerful chatbot to perform searches for the various queries issued and provide accurate and up-to-date results. We wish to create a conversational experience for our target audience in a unique and holistic manner.

Plan for Addressing Design Problem

Timeline:

Week 1:

- In-depth research about the type of data we will be dealing with to create the bot.
- Familiarizing with popular sports-based Discord servers and their bots and analyzing shared information, available channels and roles, and community engagement.
- Laying the groundwork to search, model, and map appropriate APIs for the sport and studying its structure to visualize the functionality that can be added to the bot.

Week 2:

- Having group swarm sessions where we sit and code.
- The bot will be developed using Python.
- We would start with boilerplate code to handle data fetch and parsing using the selected APIs.
- This week will mostly include coding, implementing, and debugging the code for possible errors and failures.

- Add a basic set of commands to create a conversational experience for the user when deployed on Discord.
- Deploying the bot on Discord (if time permits).

Week 3:

- Wrapping up the code by polishing the work.
- Preparing for the demo and creating a slide deck for the same.
- Preparing a project report that will include details about the project, including the motivation, the design idea, code comments, and how one could scale it in the future.

Potential Solutions:

Some of the potential solutions our team came up with to tackle the design problem were:

- Creating a browser extension:
 - Users can install the extension on their browsers and use the extension dashboard/interface to query and interact with the APIs.
 - While the approach did enable the user to visualize the data and provide results for their query, it did not address the community aspect of the problem. Furthermore, it also involved supporting different browser technologies.
- Building a simple search engine
 - Creating a simple web page that internally queries and presents the results to the users.
 - Create different sports groups where users can join and chat with other community members.
 - While the idea did tick off most of the boxes, it would be a technological challenge from the available time frame for the project.
- Build a Discord server bot
 - Discord is a popular service used by members across the globe. Using the platform as a base to build the bot would let us utilize the UI and infrastructure already in place.
 - Discord supports various accessibility features and is a popular choice within the online community for creating chatbots and building communities.