Introduction:

We are JK_7, our members are Rogelio Alvarado-Diaz (reachable via email at rogelioa@iastate.edu) and Nathaniel Thomas (reachable via email at natethom@iastate.edu), both of us are Software Engineering majors in our sophomore year taking SE/COMS 3190. As we attempt to hone our web development skills in this course, we do have some recognizable skills that allow us to progress efficiently. As Rogelio has a deep understanding of debugging, and Nathan specializes in constructing readable, structuralized code. For our final project, we decided to build off of our midterm project because we initially planned on building off of it in order to polish it up and construct a functioning website worthy of being presented in our resumes. Our idea was to create a resource for sports bettors to refer to when sports betting. We planned to provide up-to-date data, displayed by a neat and interactive UI/UX design. The motivation for this project was due to the increased and developing industry of sports betting, especially in the college scene, but also as big sports fanatics, we loved the idea of building something useful that has the potential to make us money watching the games we enjoy watching.

Purpose of the Proposal:

The purpose of this project was to not only develop skills in web development but to also solve a problem in the sports betting scene. There is debate that popular sports betting websites that provide the platform to place bets, like DraftKings or FanDuel, are intensely pushing subscription based services like resources to refer to when betting too much. This develops the betting scene to be a pay-to-win landscape, where lower income individuals, like ourselves (being broke college students), cannot afford to pay additional charges to be able to obtain accurate information on the bets we plan to set. In the industry those who cannot afford to pay are often left with outdated information to refer to when placing the sports bets. There is also another problem where these sports betting companies and organizations are pushing the subscription based services so much that they forget to develop impactful services that draw users to their sites. Therefore, we strive to create accessible information to those who intend to increase their winnings, but not have to pay these outrageous subscription prices in order to do so.

Goals & Objectives:

Our overall goal is to build off of our partially functional website that is already created and develop the website to be able to be fully functional with a better UI/UX design that grasps the users attention. We intend to add certain features to develop our back-end knowledge, like an account creation/login system. In order to achieve this we plan on getting a head start on the project by developing the front-end design and rendering within the first week and a half, allowing us to focus on the back-end aspect of the website in order to develop a proper website. This motivation is due to our strong foundation in front-end development, therefore we expect more time to be needed in the back-end integration/development of the website.

Project Description:

As we use web development technologies like React and NodeJS with Express, we plan to not only build our current website to have a better design but also add certain features for users. For example, we intend to implement login and filtering features in addition to a smoother and better designed website.

Project Path Selection:

We will be choosing option 1, to build off of our midterm project, because we initially approached the design and implementation of the project to be buildable. As we originally decided to build a website that provides sports betting resources, we knew the knowledge and skills in order to create a fully functioning website would be something that is considered applicable in our future careers. Though, most importantly we had a lot of fun creating the initial midterm project therefore it only made sense to build off of it.

Feature Ownership & Responsibility:

Front-end and back-end of login and authentication: Rogelio Front-end and back-end of filtering feature + search bar : Rogelio

Front-end and back-end of player betting odds: Nathan Front-end and back-end of team information: Nathan

Resources and Tools:

We intend to build in VSCode, while using Git, GitLab, Excalidraw, React, MySQL or MongoDB, NodeJS, Tailwind, and [insert APIs we plan to use here]. We plan to each dedicate 10-15 hours a week to this project.

File Structure and Project Organization:

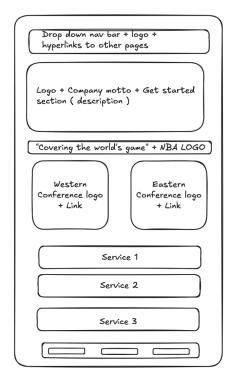
Considering we will be using both front-end and back-end technologies, in order to eliminate confusion we will have 3 main folders, one dedicated for the front-end named frontend, one for the back-end, named backend, and lastly one named documents, containing important documents like our project proposal and demo video.

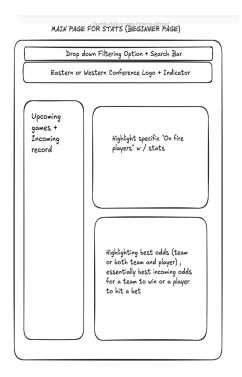
Data Sources and Management:

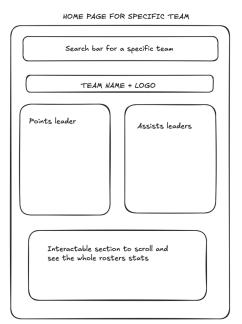
There is a free API Nathan found that contains all the necessary data for these athletes, even in the future, when we want to add data for other sports leagues around the world. Tailwind CSS will mainly contribute to UX enhancements, such as responsiveness.

User Experience Views:

Below is our improved plan / layout that we will execute in order to create a better UI/UX.







Final Comments:

The overall purpose of this project is to hone our backend development skills and familiarize ourselves with a formal process of creating a website in a team based environment. We intend to learn how to work with others, through developing efficient ways of communication, and to gain insightful knowledge on industry lead technologies and processes to help us become better

software engineers. You can contact us at rogelioa@iastate.edu or natethom@iastate.edu for any further questions.