Project Proposal: LoL Pokedex

1. What goal will your website be designed to achieve?
   * The goal of the LoLPokedex website will be to provide a comprehensive, easy-to-navigate platform for League of Legends (LoL) players and enthusiasts to learn more about the champions in the game. The site will serve as an accessible, interactive, and informative tool, where users can explore champions' stats, abilities, lore, and other related information. In addition, it will have search and filter functionalities to allow users to find and compare champions based on various criteria such as roles or abilities.
2. What kind of users will visit your site? In other words, what is the demographic of your users?
   * The primary users of this website will be League of Legends players of all skill levels - from novices to professionals, gaming enthusiasts, and e-sports followers. The age range may vary significantly; however, based on general gaming demographics, it's expected to be most popular among users aged 13-35. Users will primarily be English speaking, tech-savvy individuals with a keen interest in gaming and the LoL universe. This platform aims to be an inclusive space, welcoming users of all genders, nationalities, and backgrounds who share a common interest in LoL.
3. What data do you plan on using? You may have not picked your actual API yet, which is fine, just outline what kind of data you would like it to contain.
   * The data for the project will be sourced from the Riot Games API. This API provides a wealth of information on LoL champions, including but not limited to:
     1. Basic Information: Champion name, roles, and image.
     2. Stats: Base stats such as health, mana, armor, attack damage, etc.
     3. Abilities: Detailed information about each champion's abilities, including name, description, cost, range, and more.
     4. Lore: Background stories for each champion.
     5. API: <https://developer.riotgames.com/>
   * The website will aim to display this information in a user-friendly format, providing a comprehensive overview of each champion. The search and filter functions will utilize this data to return champions that match the user's criteria. The detailed view for each champion will present the data in a structured and visually appealing way, enhancing user engagement and understanding.
   * Overall, the LoLPokedex website aims to be a go-to resource for anyone wishing to delve deeper into the League of Legends universe, offering detailed champion insights that can enhance gameplay and appreciation for the game's rich lore.
4. In brief, outline your approach to creating your project (knowing that you may not know everything in advance and that these details might change later). Answer questions like the ones below, but feel free to add more information:
   * What does your database schema look like?
     1. A traditional database might not be necessary if all relevant data is pulled directly from the API
     2. However, if there will be features such as user accounts, saved favorites, or user comments, a schema using PostgreSQL could include tables for:
        1. Users: store information about each user that signs up for site
           1. id
           2. username
           3. email
           4. password (hashed)
        2. Champions: store information about each LoL champion
           1. id
           2. name
           3. role
           4. image\_url
           5. Can include other stats/abilities
        3. Favorites: champions favorites by users
           1. user\_id
           2. Champion\_id
        4. Comments: user comments on each champion
           1. id
           2. user\_id
           3. champion\_id
           4. content
           5. date
     3. The Favorites and Comments tables create many-to-many relationships between Users and Champions. A user can favorite many champions, and a champion can be favorited by many users. Similarly, a user can comment on many champions, and a champion can have comments from many users.
   * What kinds of issues might you run into with your API?
     1. Rate limiting
     2. Data Changes
     3. Availability
   * Is there any sensitive information you need to secure?
     1. API key
     2. User information (passwords)
   * What functionality will your app include?
     1. Champion Overview: Display a list of all champions with brief details.
     2. Champion Search: Allow users to search for champions by name.
     3. Filter Function: Allow users to filter champions based on their roles or attributes.
     4. Detailed View: Users can click on a champion to view detailed stats, abilities, lore, and other related information.
   * What will the user flow look like?
     1. User arrives on the homepage, which displays a list of champions.
     2. User utilizes the search or filter functions to narrow down the champion list.
     3. User clicks on a specific champion to view more detailed information.
     4. User navigates back to the homepage or performs another search/filter to explore more champions.
   * What features make your site more than CRUD? Do you have any stretch goals?
     1. Integration with Riot Games API: Interpreting and transforming data from API goes beyond typical “Read” operation.
     2. Search and Filter Functions: Manipulating data to provide a better, more interactive experience for users
     3. Stretch Goals:
        1. As the website develops, there may be opportunities to expand its functionalities. This could include integrating additional data, such as champion skins, user rankings, or recent updates, implementing user accounts where users can save their favorite champions or notes, and potentially creating a community space for users to discuss champions and gameplay strategies.
        2. User Accounts: Allow users to sign up and log in to the site. Once logged in, could save their favorite champions and make comments.
        3. Community Features: Creating a space for users to discuss champions or gameplay strategies could increase user engagement on the site. This could be in the form of a comment section on each champion's page or a separate forum section on your website. Implementing this feature would involve creating a way for users to submit and view posts, and potentially a way for them to reply to or like other users' posts.
        4. Game Updates: Can show recent patch notes or news to keep users informed
        5. Comparison Tool: A feature to allow users to select multiple champions and compare their stats side-by-side.