#### **CSE 134B HW #1**

Steve Wang A11371300 Tony Xu A10447459 Zhongting Hu A99056145 Jiangfeng Yin A99078579

#### Topic:

League of Legends champions "LeagueDex"

#### **Executive Overview:**

In League of Legends, there are over one hundred champions (characters) to select from, which is a lot to keep track of. To summarize a traditional game, there are five players on a team, and there are five roles to choose from. Each champion fits in a traditional role, though some champions may have more than one traditional role that they may fit in. A very new player may not know about many of the champions, so this basic information as well as some others including tips on how to play the champion is included. In more depth, each champion has its own particular set of skills, order of leveling up these skills, and set of items (item build) that they need to buy in various situations in order to be successful in the game. In addition, some champions may be weak when going up against another champion and when you select the stronger champion in this case, it is called "countering". This TopixDex will show the user all the data for a champion's skills, how the user should level up these skills, and which items the user needs to buy to be successful and efficient in the game. Another problem that users have is to determine what masteries and runes fit a particular champion. Masteries and runes are two customizable features that a player selects before entering a game. A new player of a certain champion may have no idea what to set the masteries and runes to. This can be addressed in the TopicDex by giving the user a set of recommended masteries and runes for each particular champion. With all of these complicated details to take into account for, a TopicDex that displays all this data of champions will be very useful for a League of Legends player. This application also addresses the convenience of accessing a champion's data especially when the user is already in game. With this application, they may be asked to create an account account so they can favorite their most-played champions so that they can easily come back to the champion profile to see the details again and check for updates.

### **User Thinking:**

The user target would be towards players who want information and want to favorite their most used champions. Users will want to see the aspects of each champion. Certain aspects may include basic information such as whether the champion is ranged or melee, what type of role the champion plays, and tips on how to play the champion if the user is new. In more depth aspects include their item build, play styles, different types of skins (for aesthetics), statistics of their data, what skills each champion has, when to level up these skills (ability sequence), and more. They will want to know how each champion can be built knowing the data ahead of time before they start playing a new character. These include:

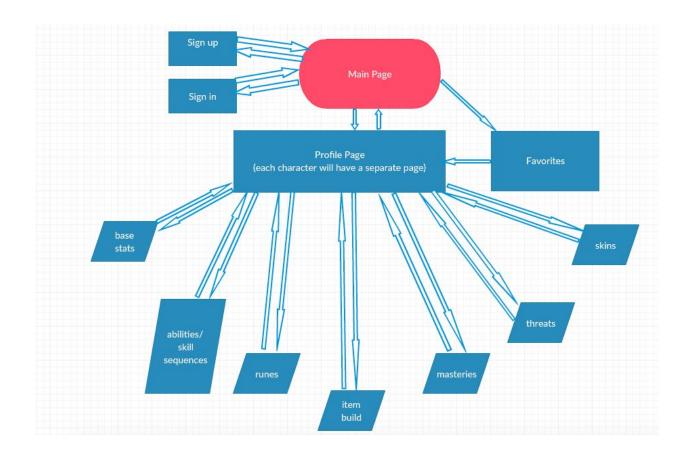
- Users may want to keep track of how to level up each character's different abilities with an ability sequence where they can follow what steps to take.
- There is also something called a mastery tree that may enhance the champion's performance in the game. 30 points are allocated for the user to set the masteries that they want.
- Similar to a mastery tree, there is also a feature called "runes" that may enhance the champion's performance in the game.
- Users will want to see the recommended mastery tree and runes to be used for a particular champion ahead of time in this application.
- Users may also want to find out different combinations of items to buy in certain game situations.

Because it may be hard to remember most of this information, especially when the users are already in a game, users may want to keep track of their favorite characters for easy access to this information.

As our boolean field, we will also let the user determine which tier (Tier 1,Tier 2,Tier 3) each champion falls into in terms of the performance and power of a champion currently. All the total votes for every user of this application will be added and displayed on the screen. A champion may be modified during game updates when Riot Games decide to make a champion less powerful or more powerful against other champions. This gives the user as well as others an idea of how well a champion may perform.

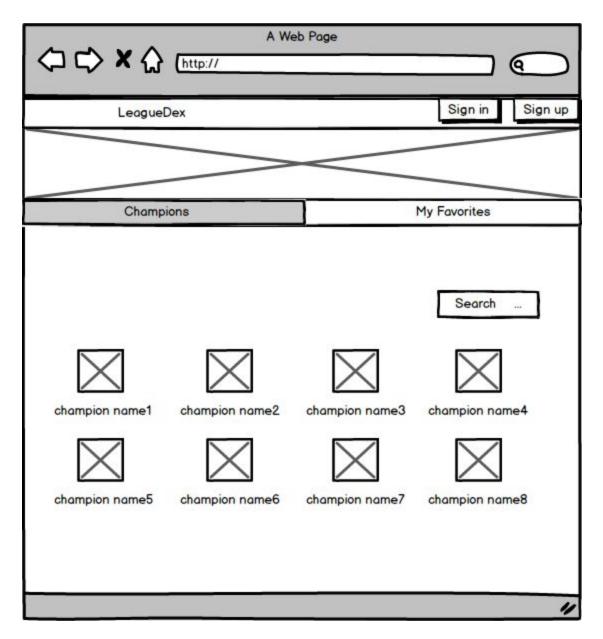
### System/interface flow diagrams/discussion:

When the user enters the application, they will be placed in a home page and at the top, it will show a sign in and sign up button if the user is not already signed in. Clicking these buttons will direct them to the sign in and sign up page respectively, as they can always go back to the home page by clicking back. In addition to that, each page will have a home button at the very top to redirect the user back to the home page. Once they signed in or signed up, they will be redirected to the home page where the top bar will now change to Welcome Username and a sign out button. On the main page it will display a list of champion's pictures and their names. Clicking on one of these will direct them to the champion profile page. On the homepage, there is also a my favorites button that will direct them to a page where they saved all their favorite champions. This favorites page will have a similar layout as the home page, where the user can click on a champion's picture to take them to the profile page. On the champion profile page, there will be seven links that direct them to a subcategory page. Once on one of these pages, the user can always go back to the champion profile page with the browser's back button.

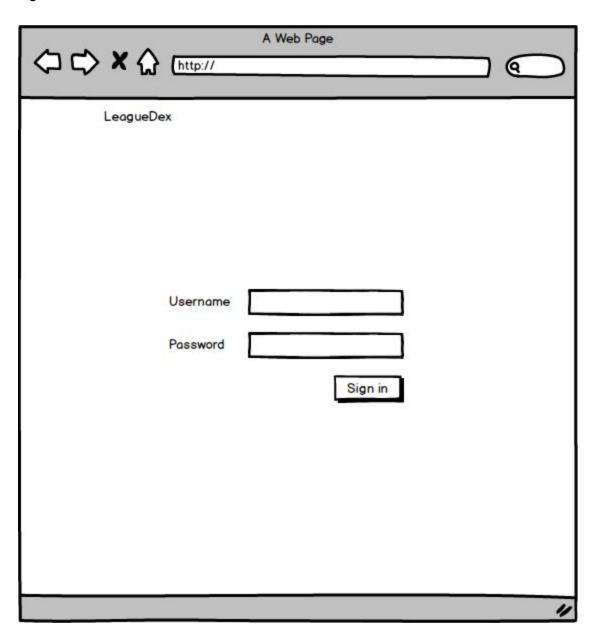


## Wireframe:

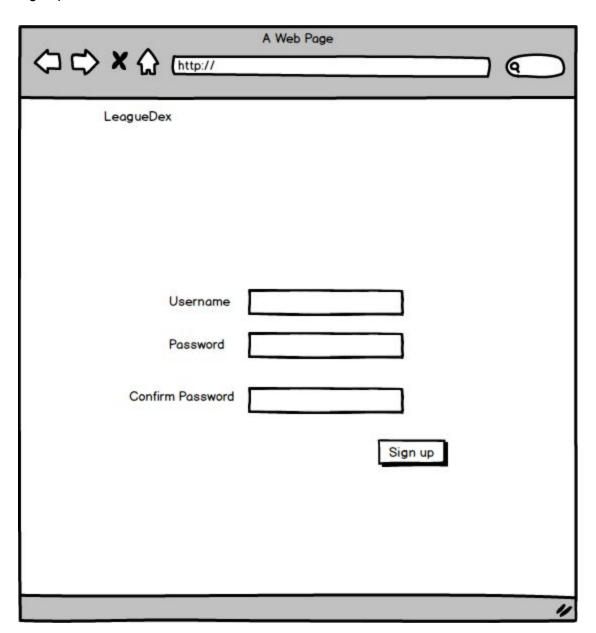
# Main Page



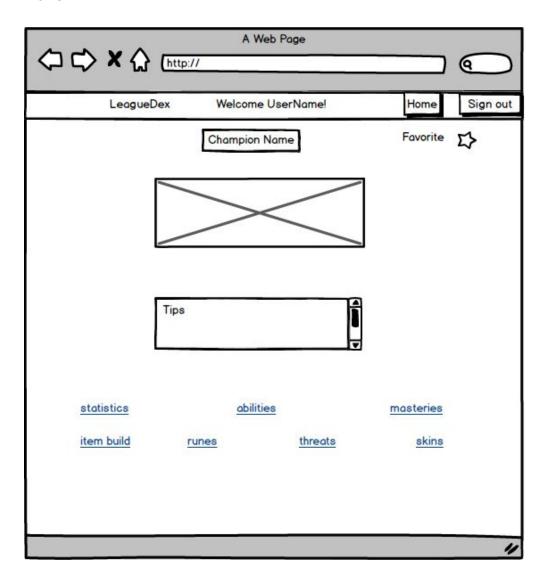
# Sign in



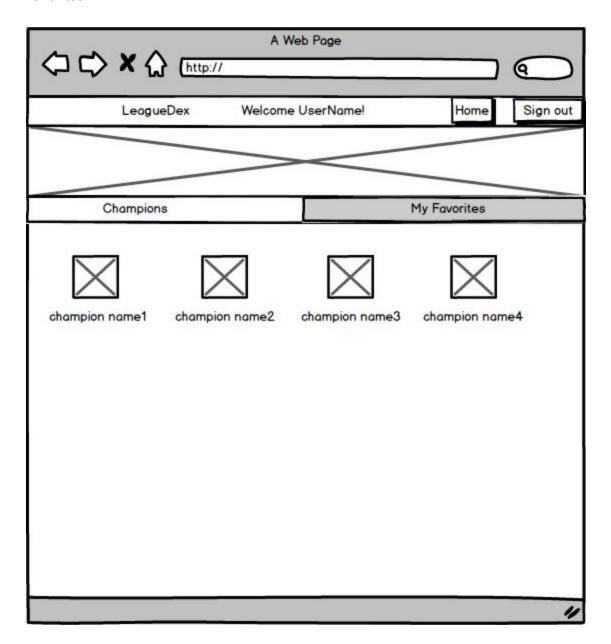
# Sign up



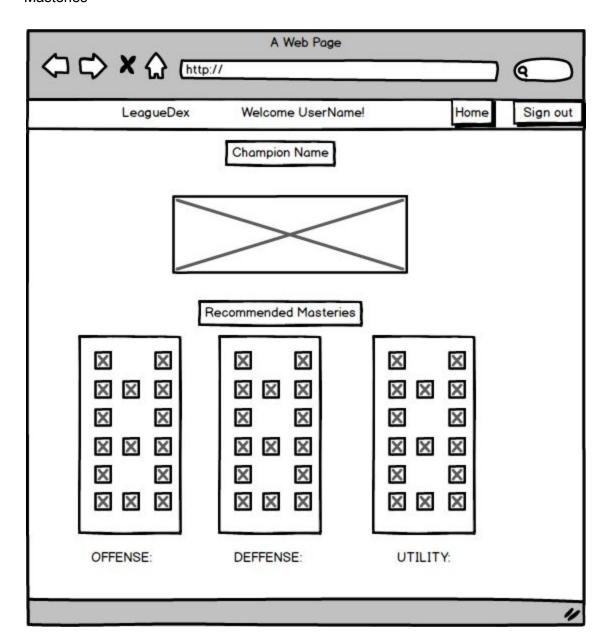
## Profile



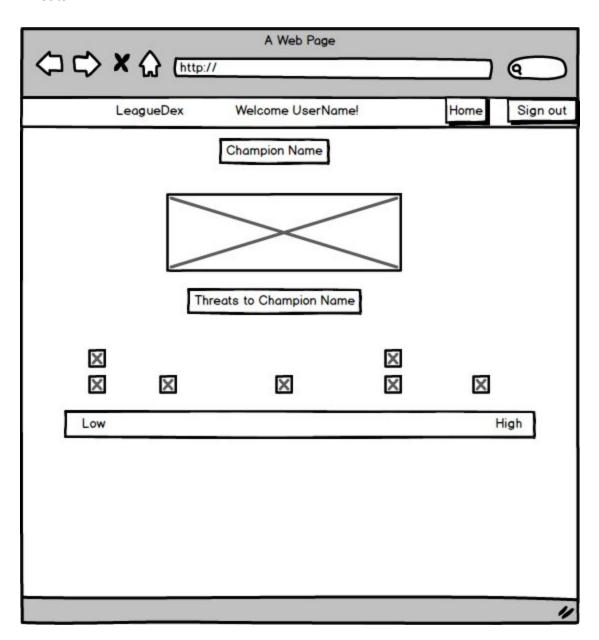
## Favorites

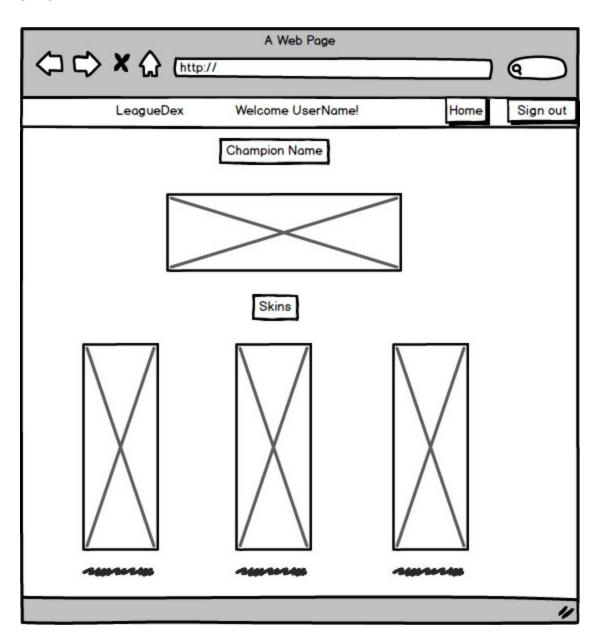


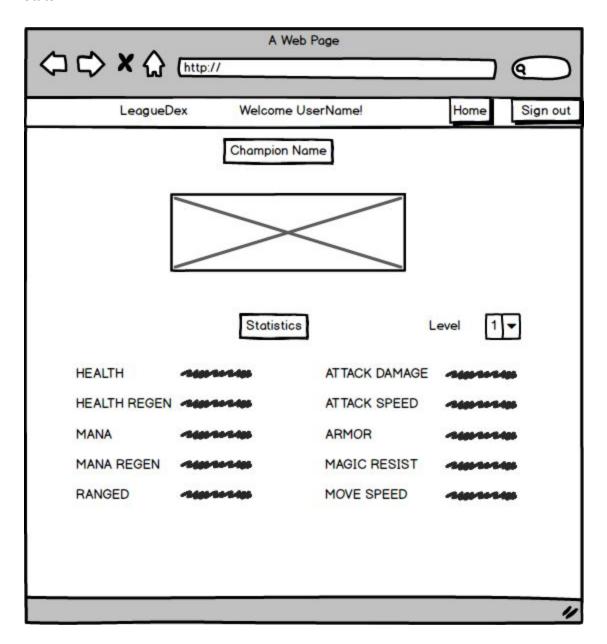
### Masteries



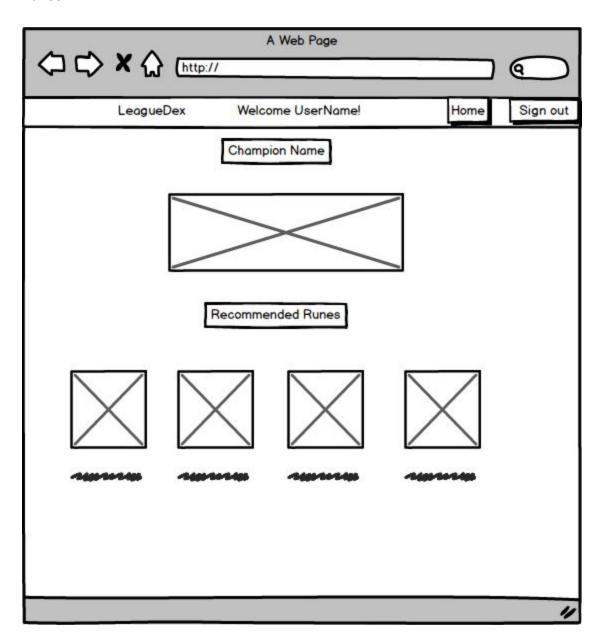
## Threats

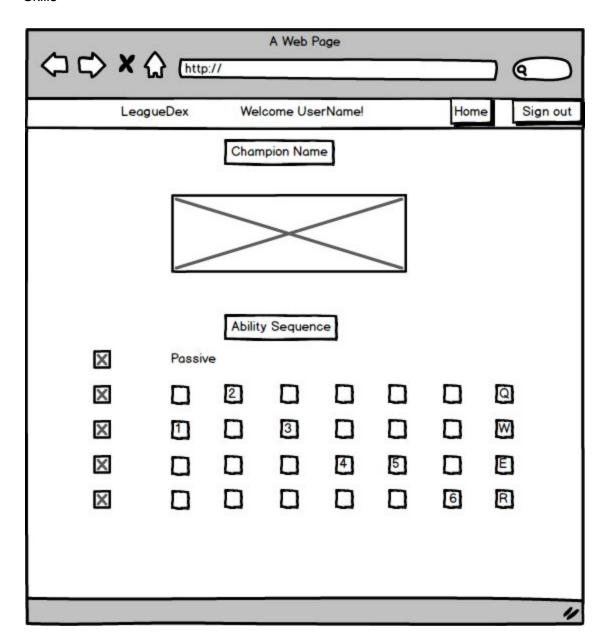




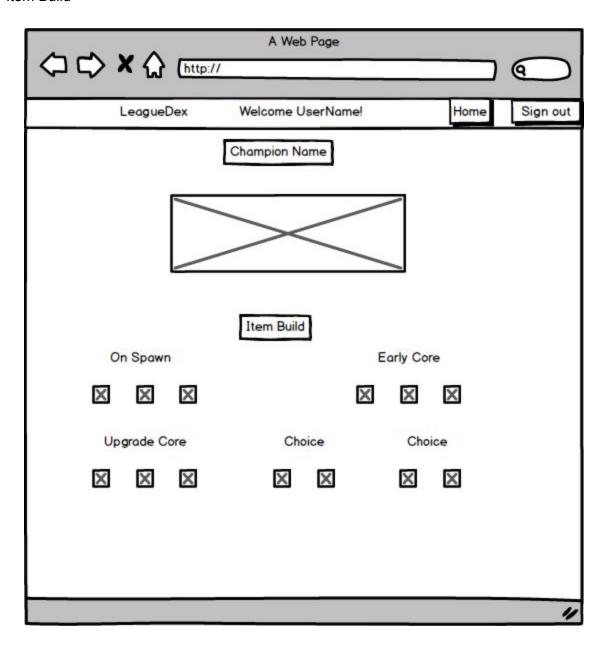


## Runes





### Item Build



### Strengths/weakness/risks/execution evaluation:

A strength of this application is that it includes the database of all the champions, displayed on the main page in alphabetical order and having a search bar so that the user can easy filter out the champions. The user can also favorite their champions for quick future reference. All the necessary categories that needed to play a champion is also included.

A weakness is the information that we provide in this application is whether the recommended set of data is the best set of data and from whom the data is provided by. The information provided would also be from the ones that are already currently on existing websites. Another weakness is whether the additional features of favoriting your champions and the tier-voting system would stand out enough for the user to use since some users just go on certain websites to look at information.

For risks, as mentioned in a weakness, a true accuracy of provided data (recommended items build, runes, masteries) cannot be determined because of the flexible customizations of how these are picked by each different user, but the data would be as close to best as possible. Another risk is whether or not this data, including pictures, can be taken and used from a different source. As always, security is a risk so that people don't hack into other people's accounts, in this case, to mess with people's favorited champions and the tier voting system, but that doesn't involve high consequences as of now.

Execution of the web application will be towards both web and mobile applications for rendering purposes to fit the screen. The backend may either be in Ruby or Python for the infrastructure and Firebase to store data in the database. The frontend of the web application would be coded in Javascript and HTML. The front end parts would include the user interface of the website and the interactions such as the search bar and linking websites together. The backend will do saving and searches for champions for either favorites or in general as well as a server that will keep track of the Tier voting system's results. The data will be saved in a database for user's favorites and their login information.