Usability Evaluation

- 5: Prototype is very intuitive and easy to understand
- 4: Model was relatively straight forward but participant was confused about one or two aspects.
- 3: The participant had few questions about what he/she was supposed to do at one or two steps in the process.
- 2: The participant was not able to do multiple (3+) steps but was able to complete with some guidance.
- 1: The participant was totally confused about the prototype and asked multiple questions about what things were and what they should do (became confused 5+ times and had more than 5 questions about the prototype)

Evaluation Plan

Task1: Must be able to navigate through the first screen by choosing a filter for their lane.

- Challenge to the user:
 - Q: Can you identify the win-rate of the second best champion in the support role?
- Criteria
 - How long did the user take to complete the task?
 - Were they able to finish the task? With/without guidance?

Task2: Must be able to select their champion, and the champion they want to compare their stats against then understand the radar visualization.

- Challenge to user:
 - Q: Can you change the selected champions to compare their win-rates?
- Criteria
 - How long did the user take to complete the task?
 - Were they able to finish the task? With/Without guidance

Task3: Select multiple champions that they want to ban from play, select the champions that they want on their team, analyze the results of the radar graph and the win-rate bar graph.

- Challenge to user:
 - Q: Which team has higher expected win rate based on the champions you choose and ban?
 - Q: Can you change the selected champion and see how it affects the win-probability for your team?

Criteria:

- How long did the user take to complete the task?
- Were they able to finish the task? With/Without guidance

Evaluation Results

What you found from your evaluation from the three potential users:

- 1. Users seemed to not realize that the scatter plot and bar chart in the first page are connected. They focussed more on the scatter plot when given a task.
- 2. Toggle buttons in the second page did not make a lot of sense to users as it was not obvious and needed our assistance in getting to the win rate comparison chart.
- 3. All users found the charts to be intuitive and easy to understand.
 - a. The first user especially liked the information presented in the draft simulator and was impressed with the idea of radar charts displaying the team composition
 - b. The third user liked the one vs. one champion comparison page and mentioned that the idea of 1 vs 1 comparison is something unique and will be useful in understanding counter champions and items
- 4. Users need more instructions to understand the selection page

Suggestions to improve design (see appendix for details)

First page:

Scatter plot on the top and specific user information on the bottom

Scatter plot on the side top 10 champions on the right of the scatter plot with the specific champion information on the bottom.

Second page:

Drop the toggle button and show the two charts directly, because the toggle hides important information and the user is interested in speed.

Minimize the amount of clicks that the user needs to perform.

Drop the "role" option from screen because users might want to compare champions across different roles.

Third page:

Bigger win-rate bar because that is the main thing that users are interested in for that page.

Overall:

All the buttons that you can click or toggle should be the same color so it's easier for the user to identify where to interact with.

Things that worked well:

Radar charts

Scatter plots for completing the first task

Insights, quotes, anecdotes from potential users

User 1

(Physics Major, UW - A Casual LOL gamer - Skill level - Intermediate):

Participant's usability score: 4

First page: Instead of clicking the lane roles that we intended users to click on, he clicked a specific champion and directly moved on to the next page.

Second page: The user said that the radar chart is intuitive and helpful.

Third page: He can tell what the interactions will be without our guidance. He totally understands the simulation page.

Comments: "Are you guys going to commercialize this?"

Task 1: The user took some time to figure out there are buttons for filtering specific lane roles.

The user kept work on 'ALL' filter, before we give him some hints. However, after the hint, he was able to figure out the answers quickly.

Task 2: The user was able to complete the task quickly without our guidance.

Task 3: The user had to abruptly leave due to the busy schedule, so we did not have time to ask the third question.

Their rating for us (1-5 based on: Usability, Visualization choice, and Intuitiveness) 5

User 2

(Freshman, Skill level - Beginner):

Participant's usability score: 1

Comments: "I don't know what to do next?"

"Since this is paper, it's a little confusing. It might be easier to understand if it was a web application"

"No extra suggestions it looks good."

This user seemed uninterested in the overall idea of the visualization. He needed us to explain multiple aspects of the visualization and he didn't know what to do next even after we explained the buttons and the major goal of each page.

Task 1: Yes, they completed the task but they needed our assistance.

Task 2: No, they were not able to complete the task.

Task 3 part 1: No, wasn't able to identify the team with the higher expected win rate. Without our help

Task 3 part 2: Yes, was able to change the selected champion and see how it affects the win-probability for their team but needed our assistance.

Their rating for us (1-5 based on: Usability, Visualization choice, and Intuitiveness) 3

User 3

(A frequent LOL gamer, Skill level - Advanced):

Participant's usability score: 5

"Current tools can only compare two champions in the same role"

"The filters (i.e patch, skill) are simple to understand"

Third page: "Do I have to choose champions from the suggestion list?"

We should make it clearer to users that the champion selection page is sorted by win rate and is only for recommendation, users can actually choose any champions they want.

The user seemed very interested in the technology and math behind the concept.

He liked the skill level filter and understood its relevance.

Task 1: Yes, was able to complete the task quickly

Task 2: Yes, was able to complete the task with ease

Task 3: He was able to complete both of the tasks but was worried about the run-time and implementation of it

Their rating for us (1-5 based on: Usability, Visualization choice, and Intuitiveness) 5







