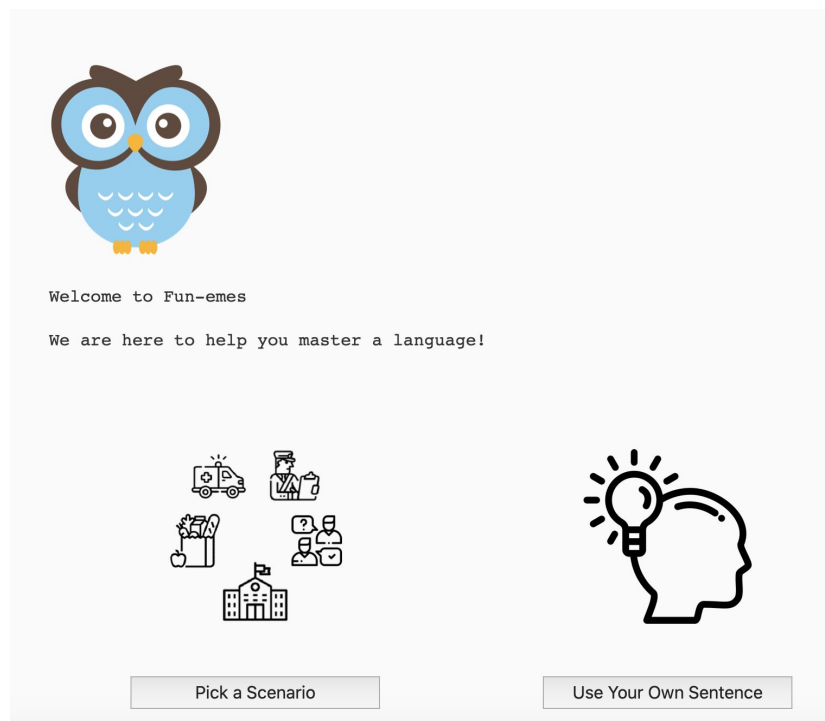# Frontend Design

---- Group 5: Yoyo D., Jiatong S., Nan H., Gary X., Rafa de la TO

This document contains updates from the new iteration, which contains improvements and changes done on the frontend of our system after the user testing phase. In general, there are three major aspects that we thought our design was lacking and will need to implement:

1. There is more information given by the **evaluation** from the backend model that we can display to users (e.g. fluency, pronunciation, etc.)
2. **User history** contains information useful for learning and identifying which words the user has trouble pronouncing; we should have a separate page or popover that displays relevant data like these to the users
3. Users should be given more ways to provide **feedback** on how our system is doing to help them become better individuals and solve problems in their lives

Lastly, we thought that our application needed significant improvement in terms of usability and user directions to improve user-system interaction. To do this, we added messages and a home page to help users better understand what to do when arriving on this webpage without prior experience and other sources of guidance.

Welcome to Fun-emes

We are here to help you master a language!

Pick a Scenario   Use Your Own Sentence

Figure 1- Homepage that prompts users to choose one of the two main features

More Information from Backend

We want to optimize for effectiveness in users' improvement of pronunciation. In our last iteration, we saw that the frontend could display how well the user pronounced each word in a sentence. In this iteration, we want to add other information such as:

1. How well the user pronounced each phoneme within each word
2. Average score across all words in the sentence
3. The fluency score of the entire sentence output by the backend
4. The pronounciation score of the entire sentence output by the backend

To achieve these implementations, we added more visual elements on the page where scoring is done so that users can see these data displayed in a way that is intuitive and easily comprehensible.

User History

We also want to keep track of users' history of using the application so that they may benefit from information such as words that they have the most issue pronouncing. These information will be displayed in graphs that are easily understandable. We are also thinking about adding functionality in personalized prediction for which words the users might struggle with from their personal data.
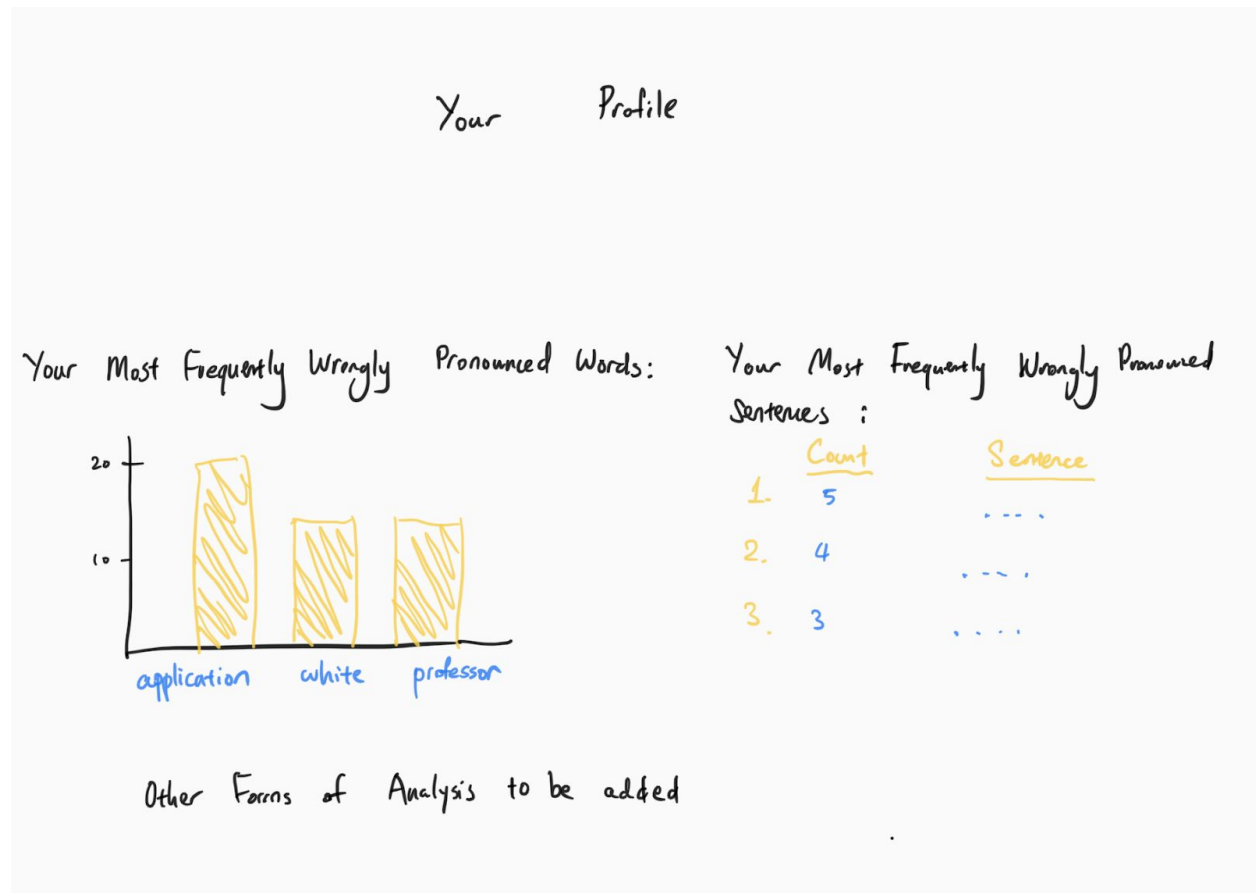
Feedback

For each new feature that we add and for our existing features, we will add ways for users to share their opinions of the application so that we can incorporate them into our system and improve our system's effectiveness in helping users. Our idea right now is to add a feedback prompt after every sentence scoring asking for user feedback. The prompt may ask "Do you think this helped you feel more comfortable in talking to native speakers?"

Also, we are looking to emphasize to users what our system is capable of doing and not doing. For example, the audio capturing may sometimes fail and thus result in a score

that is too low (not reflective of their actual pronunciation). We will try to improve Human-AI interaction by adding messages.

To gauge your environment and give you sentences like you will more likely encounter, please tell us your occupation:

Highschool ⌄

And now, please tell us the scenario that you wish to prepare for:

Classroom (student) ⌄

Generate Sentence

Repeat After Me...

Survey!
Do you think this helped you feel more comfortable in talking to native speakers?

Poor ☆☆☆☆☆ Great   Write a Review

Did you hear that Daniel made the cut to Varsity Track and Field?

Record

89

Click To View Details

Evaluate

Check Out Your History