Goals & Plan

Our goals for week 1 were as follows:

1. Select client
2. Get preliminary extension working
3. Get backend word completion working
4. Get backend next word prediction working

We completed three of the four goals.:

1. We successfully selected a client (see below) and have been using that to direct our design decisions.
2. We also have a functional front end. The extension is able to be installed in Chrome and provides a minimally viable UI.
3. The backend for word completion works. As an added bonus, we incorporated a closest word algorithm into the frontend.

We did not get integrate the next word prediction model. It is trained, but it is not incorporated into the extension due to technical difficulties.

Week 2, Presentation 1:

For the next presentation, we plan to fully integrate the front end and the two bad end models for word completion and next word prediction. We already started on this process, but ran into some difficulties with models. We also plan to modify the backend models so that they pass all of the Jasmine tests when integrated with the frontend.

Week 2, Presentation 2:

For this presentation, we plan to clean up the base application and implement additional features prioritized by the client. This could include some of the accessibility features such as font size and location of suggestion bar. It might also include administrative features like default settings or custom word training databases.

By this point we want to have created metrics for measuring how effective this application is at its desired goal. We want to have a way to measure if it is indeed increasing the WPM of an inexperienced user. We also want to measure if the word prediction is in line with the desired word. These two features will be key for the upcoming human testing

Week 3, Presentation 1:

For this presentation we want to introduce this application to the real world. We want to get comments and criticisms from potential users. We can take their suggestions into consideration for making the application for user friendly and for improving the efficiency and quality of the product by testing with the metrics we created.

Note: Ben suggested that this always takes more time that anticipated. We want to leave ourselves open to have flexibility in this presentation. We don't know exactly how the users will respond to our product.

Week 3, Presentation 2:

We also want to incorporate some of the quality of life user stories to improve the overall process. For example: We want to finish a full settings bar that has both an administrative mode and a individual mode. This means the product can be used effectively by both a library and average user.

Final Demo:

For the final demo, we plan to have a fully working and polished application in the form of a Chrome extension which meets all of the client's expectations and actually improves the speed and efficiency of typing/searches, which will be gauged by means of metric testing with real users. In addition, we want to potentially have implement additional features that would improve the functionality of the product, taken from user stories.

Client

The client is a fictional public library. This organization is a stand in for other libraries which would use this product. It wants TabX to be a tool for its patrons. The most distinct consequence of this is profit. The library is publically funded and its priority is not pulling in the greatest profit. Instead it wants to improve overall experience of its patrons.

Like many real world institutions, this library has patrons that have limited computer experience. They do not have regular access to a computer at home and often depend on their phones for the internet. When forced to use a computer, they often type slowly and hog computer time. The library wants a final product which will help to more efficiently fulfill such people's needs.

The library is also interested in minimizing the amount the amount of time librarians need to invest in assisting patrons with navigating web pages and finding resources, as some of the most frequently asked questions are related to these technological concerns. In addition, the library wants the finished product to be as close to universal as possible; it should be able to function on almost any web page, and especially the most popular ones frequented by its patrons. The library uses Google Chrome as the default browser on all its computers, so it is not overly concerned with the final product being compatible with other browsers.

As it is a public library, the application should be freely available to all patrons, preferably by means of a browser extension that can be added to every computer. While the library does need to stay within its budget, it is not concerned with maximizing profit and does not expect to make money off the product.

Given the intent of the product to be an accessibility tool for patrons, user-friendliness is a priority for the library over speed and efficiency; so long as the application is functional and efficient to the extent to which users do not experience noticeable delays in receiving suggestions when typing in the search bar, seamless functionality of the user interface is most important.

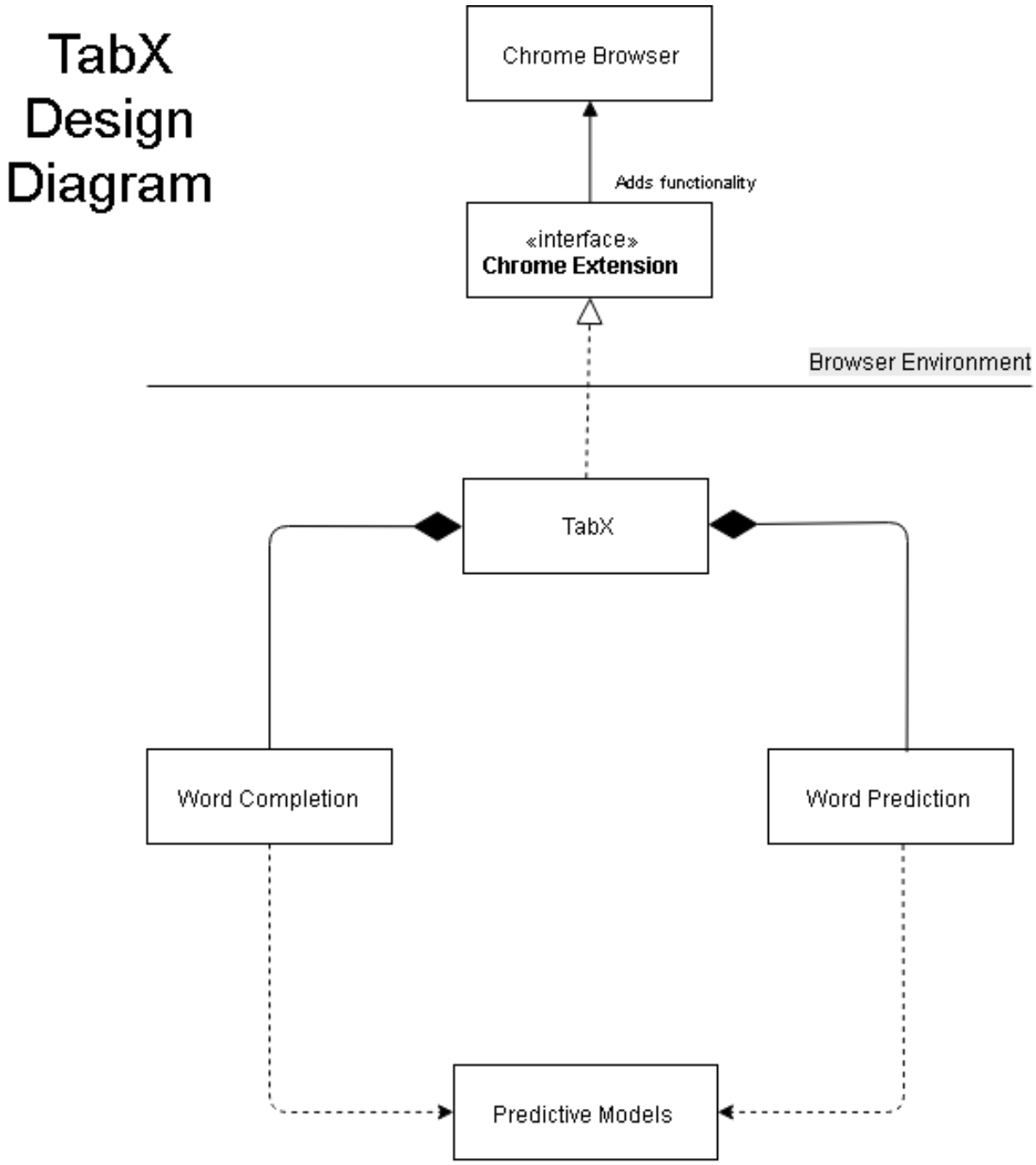
The main priority of the library is to have a easy to use product that expedites the typing process. This means the primary value of the library is accessibility. This means our first priority is to make a simple yet effective product. Additional features are a bonus.

Aside from the base application, the library wants the final product to include additional features to optimize the user experience for its patrons. These features are as follows:

- ability to change font size, color, overall display, etc. in order to improve accessibility and user experience
- setting to use a word suggestion set customized to library (frequently searched terms)
- ability to forget previous searches & not customize to a specific user, given that the computers are for public use by multiple individuals

Specifications

TabX, being a chrome extension, should be compatible with the library's Chrome version and configurations. TabX should minimize version-specific features, resultantly. Installation and setup for TabX should also be minimal, as the extension is expected to be installed on multiple devices.



User Stories

As a person who makes frequent spelling mistakes, I want to be able to have spelling corrections suggested to me, so that I may type more accurately.
As a technologically challenged user, I want the suggestions to be presented in a tabular format, so that I can understand what my options are.
As a slow typer, I want to have suggestions for the word I am typing, so that I can write quicker.
As a layman writer, I want to have suggestions for what the next word would be, so that I can quickly type common phrases.

For complete list of user stories:
https://docs.google.com/spreadsheets/d/1bB_8MeY6MJpx9LINX0IgQ2CnsDY4CAgj11gb9Q9VI5g/edit?usp=sharing