CSC326 – Final Report

Contributors:

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Describe the design of your enhanced search engine in detail.

Our design offers some set of features to ease the user's experience of web surfing. Here are the elements of our GUI:

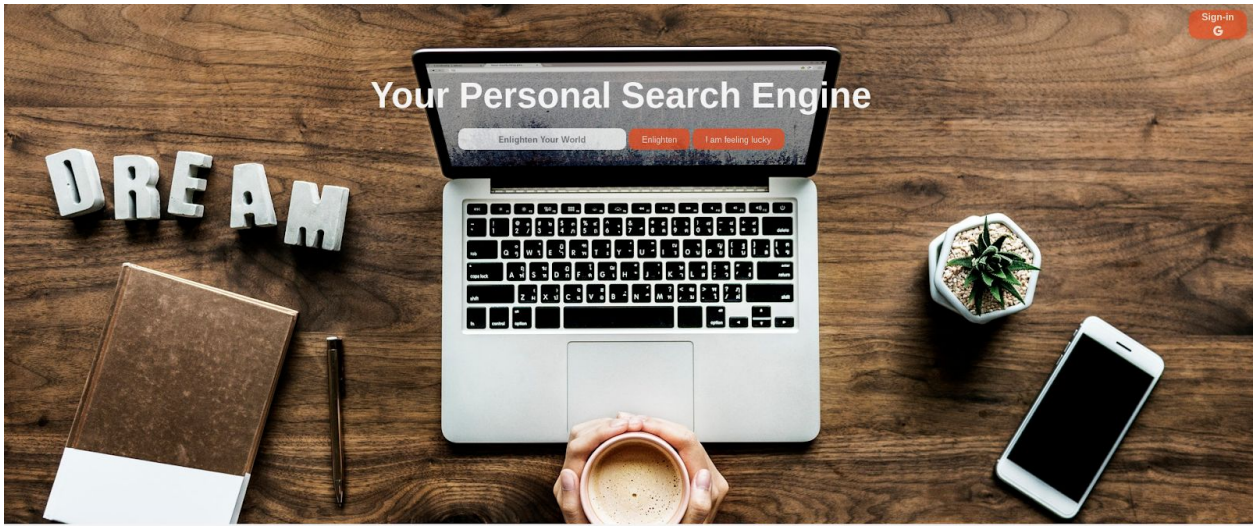
Branding/Nav Bar:

It displays the name of our search engine. Based on which page the user in, it changes the colour of the buttons accordingly to remind the user which page he/she is visiting. The buttons gets older as the cursor moves over to indicate the user which buttons they are about to click. Detailed view can be found in Picture 1.

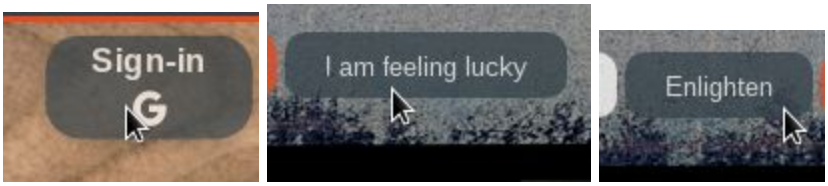
Picture 1:Branding/Nav Bar

Home page:

This is the section that the users interacts the most. It is displayed when the user in the home page. It contains search bar, search button, "I am feeling lucky" button, google sign-in/sign-out button. The buttons changes color and size as the user hovers them to indicate them which button the user about to choose. The detailed view can be found in Picture 2. The hovered view of the buttons can be found in the Picture 3 in detailed. Once the user signs-in into his/her google account, the sign-in button changes to sign-out button. It can be found in Picture 4.



Picture 2: Home Page



Picture 3: Hovered Buttons

Picture 4: Sign-out Button

Note: Please visit our website in incognito mode when using sign-in feature. If you use a regular tab, the sign-in button appears as a faint purple button hanging in the middle of the webpage. However, It does not affect the functionality. We do not have a good idea about why this is happening.

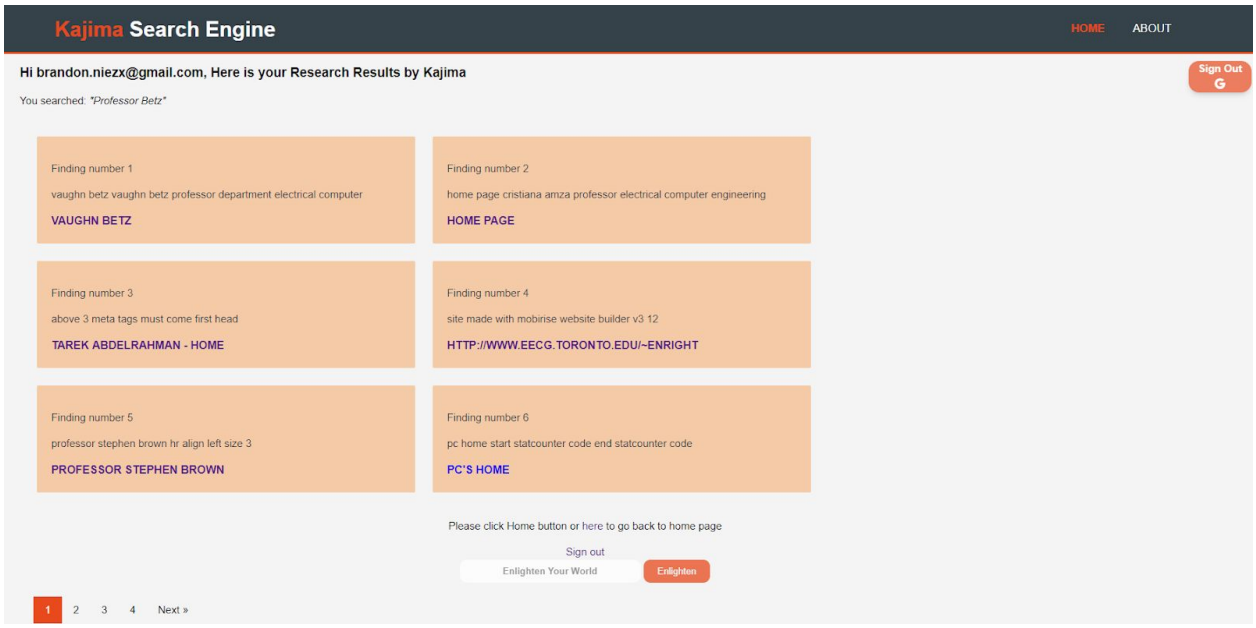
Footer:

Footer contains our copyrights. Detailed view can be found in Picture 5.

Picture 5: Footer

Results:

In this page we display results for the requested search query by the user. If the results are more than 6 websites, the pagination will appear at the bottom of the page to help the user to navigate between different results. There is another search bar at the bottom of the page to provide quick searching capabilities to the user. The result websites will change color and size as the user hovers the cursor. If the user decides to click one of the results, the requested website will be opened in the new tab. The google sign-in button exist in the Results page, in case if the user wants to sign-in to his/her account.



About:

The about page is dedicated to give some insider info about the developers of Kajima Search Engine.

I'm Feeling Lucky button

Our website will redirect user to the top match website if user clicks "I'm feeling lucky" button. THe Backend parttt!!!!!!

Multi-word Search:

We added a feature of searching all the words user input instead of just the first one. We do not only display web pages that have all the key words, we display web pages that contain at least one key word, and the more key words a page has, the higher it will appear in the result page.

Indicate the difference of your proposed design and completed design if there is any.

Explain your testing strategy during the development. Describe how you identify the corner cases.

Both developers have been using some type of search engine over 25 years combined. This brings extensive experience as a user. In order to find corner cases, we used a user's perspective. Different types of input were performed to see what our design will output. We imitated the different combination of functions that user could perform to estimate the website usage.

Lessons learned from this project.

This project was a great experience in terms of completing a product from beginning to the end. Along the journey, we learned a couple of important lessons. In the product, the functionalities should be added one by one not all of them at the same time. In case of an error, it makes debugging harder than it supposed to be. The second lesson we learned is that always design

the features based on the idea of an end product. Keeping the end design in mind reduces the risk of re-implementing the features.

Describe what you would do differently if you had to do it again. What would you do if you had more time. Did any parts take longer than you thought, and Why?

We had plans for an extra couple of features that we could not have a chance to implement due to time constraints. We thought that image search would help our design to stand out among other projects, but implementation and representation of the image data were harder than we thought. Thus, we decided not to implement. In the existing features, Session management took more than we thought it would. We were not familiar with the concept and the problem with sign-in using Google prevented us to get a good grasp of the feature.

How the material from the course help you with the project.

The class material was helpful to complete our project. The general understanding of the language was in our minds while we were coding. This helped us to avoid some errors which would cause us to lose time.

How much time it takes for you to complete each lab outside the lab sections.

We have dedicated around 8 hours each per lab to complete labs.

Which part of the project you think is useful and you believe the labs should spend more time on it.

We think it was a great experience. The timing for the labs was well organized since we needed to spend some time but not too much to conflict with other courses' loads.

Which part of the project you think is useless and you think it should be removed from the labs when this course is being offered in the future.

We don't think any part of the project should be removed since all the parts were necessary.

Other feedback or recommendations for the course.

We think replacing the Google API would be a good choice since it was causing problems for most of the groups. We are suggesting using Facebook login API because it is also widely used like Google. Also, more detailed documentation would be helpful along with some assistance during the lectures.

We also believe that the labs do not really aid our understanding of the lectures. It would be better if the labs have more connections to the lectures.

Responsibilities of each member. If you believe that workload is distributed unequally in your group, you may describe the situation in this section.

Efe was mostly responsible for the Frontend and Brandon(Zixuan) was responsible for the Backend. Both parts had equal difficulties ,therefore, the distribution of the workload was fair.