

CS418/518 Project – Milestone 3

In this milestone, you will finalize the website by adding usability and security features.

Base requirements

1. Add reCAPTCHA to the login page.
2. The search engine can prevent XSS vulnerability by sanitizing JavaScript in the queries and showing the actual term (after sanitization) shown on the top of the search results.
3. The search engine can highlight the matched terms in the search result page;
4. On the document summary page, highlight terms identified by Wikifier. When the user moves the mouse over a highlighted, a popup window is shown to display the term, the first sentence of the Wikipedia explanation and a clickable link to the Wikipedia page.
5. A RESTful API is implemented so that users can query the search engine programmatically (from inside a program or on the command line using curl) and obtain a customizable number of results. The system should generate a random string as the key to the user and the user can use this key to make queries to the search engine to obtain information about a system spec. For example, if the user wants to query the CPU usage history in the past 24 hrs, the command can be:
curl [http://localhost/api/search?key=\[key\]&query=\[term1+term2\]&range=24](http://localhost/api/search?key=[key]&query=[term1+term2]&range=24)
For more examples and instructions, see <https://www.semanticscholar.org/product/api> and <https://www.sitepoint.com/rest-api>.
6. Design and implement a favicon for your website. See <https://favicon.io/> for the way to design a favicon.
7. Design and implement a consistent footer that appear at the bottom of all site pages. See the “Good practices on site design” course for examples.
8. A browser compatible design: when shrinking the browser window, the layout of panels can automatically change from a grid (for example 2 rows X 3 columns) to a vertical layout (6 rows X 1 column). See the “Good practices on site design” for examples.

Submission

1. Record a <=6 min demo by noon, Tuesday, December 6, 2022
2. All source codes should be committed to GitHub by noon, Tuesday, December 6, 2022.
3. The report should be submitted to Canvas by Thursday, December 8, 2022.