

# Progress Report

**Topic:** Chrome “Find in webpage” with auto-correction, stemming, and synonym detection

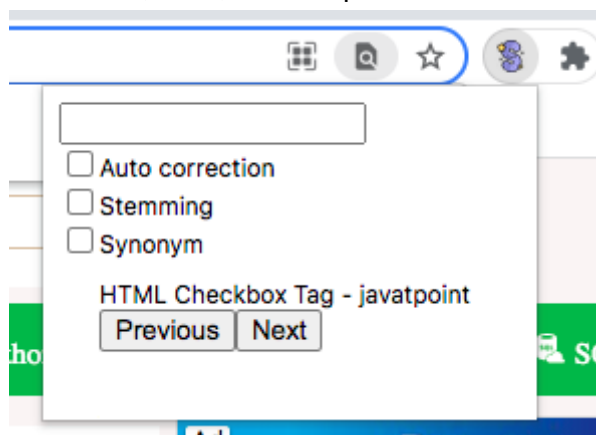
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## Summary

Task	Estimated time	Completion ratio
Set up a Chrome extension that can take user input, read HTML, and control (e.g. highlight the search results)	8 hours	60%
Implement and test basic auto-correction	3 hours	30%
Implement and test basic stemming	3 hours	0%
Implement and test basic synonym replacement	5 hours	0%
Test and further improvement	5 hours	0%

## Current Progress

- In the first half of the project, I have been focusing on building the Chrome extension.
  - Plain UI is ready.
  - Capable of reading and parsing HTML text of the current Chrome tab.
  - Techniques: HTML, CSS, Javascript.



- Tested the auto-correction library. Based on the testing results, I think the library satisfies the needs of this project.

## Remaining work

- Add functionality to the Chrome extension, allowing it to jump around the page and highlight text.
- Implement the auto-correction, stemming, and synonym detection feature.
- Test the extension.
- Prepare documentation and presentation.

### **Challenges**

- For security reasons, Chrome places restrictions on the usage of libraries. Need to make sure the NLP libraries satisfy the requirements.
- Synonym detection seems to be the least-established task among the three. Additional tuning might be necessary.