

Team Members and Roles

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Role: Captain (Single Member Team)

Topic Selection and Relevance

Topic: Contextual Insights Browser Extension

Reason & Problem Statement:

- While browsing the internet people often come across information that needs clarification or more context. Searching manually can be tiresome. An intelligent browser extension can save time provide insights and improve the browsing experience.

Relevance to Theme and Class:

- The project aligns with the theme of "Intelligent Browsing" by expanding browser functionality to offer driven insights. The application of techniques learned in our class on information retrieval will power the functionality.

Datasets, Algorithms, and Techniques

Datasets: User-generated annotations, publicly available articles, and resources related to highlighted text.

Algorithms/Techniques:

- NLP for content summarization and context understanding.
- Search algorithms for extracting related articles or multimedia content.
- Algorithms for cross-checking the authenticity of dubious facts and statements.

Approach Verification

I will create a demo to showcase how the extension works. User testing will be conducted to gather feedback and make improvements, to the system. Furthermore I will compare the search process with the output of the extension for validation purposes.

Programming Language

JavaScript will be used primarily due to its compatibility with browser extension development. I may also employ frameworks and libraries like Node.js and Express for functionalities.

Workload Justification

Total Hours: 20

- **Research & Planning:** 3 hours
- **Front-end Development:** 5 hours
- **Back-end Development:** 7 hours
- **Integration & Testing:** 3 hours
- **User Feedback & Iteration:** 2 hours

Final Deliverables

- **Documented Source Code:** Thoroughly commented code detailing each functionality.
- **Demo:** During the demonstration I will showcase how the browser extension functions. Compare it with search results. My demo will cover successes, limitations and potential areas, for improvement.