

**Team Name = SDK**

**Github Link =** <https://github.com/sdgs72/CourseProject>

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**1. What topic have you chosen? Why is it a problem? How does it relate to the theme and to the class?**

Extension to support users of Wikipedia by offering for any page visited: a summary of content, ability to ask direct questions pertaining to the page and navigated to relevant sections in the page. Many wikipedia pages are dense sources of information for users. For those visiting multiple pages, they should have the ability to obtain quick answers to their questions and summarizing content to better understand the information available from a specific page. By employing techniques built upon the material of this course we intend to create a Google Chrome extension with the ability to provide additional functionality for Google Chrome users of wikipedia pages. The extension will employ Intelligent browsing to further assist the user in information retrieval.

**2. Briefly describe any datasets, algorithms or techniques you plan to use**

We will be using a collection of wikipedia articles as our dataset and the user's article and question as the input. We will be researching and using a type of Question Answering algorithm to process and answer user questions (IE: [BERT](#)). We will be exploring the NLTK library for our needs.

**3. How will you demonstrate that your approach will work as expected?**

We will be doing a video demo of our application deployed locally.

**4. Which programming language do you plan to use?**

Python / Javascript / Frontend Languages

**5. Please justify that the workload of your topic is at least  $20 \times N$  hours, N being the total number of students in your team. You may list the main tasks to be completed, and the estimated time cost for each task.**

- a. Research (Searching for the right library/algorithms for TLDR/Question Answering) ~ 10 hour
- b. Frontend(Extension) design
  - i. Learning how to write and understand extensions how extension works ~ 5 hour
  - ii. Front end design of extensions ~ 15 hour
- c. Backend
  - i. Setup, Create API, Parsing (given a wiki link, download it and perform TLDR and QA) ~ 8 hour (Deployed locally, will need more time for deploying publicly)
- d. TLDR(Summarization) ~ implementation and tuning ~ 8 hours
- e. Question Answering(QA) ~ implementation and tuning ~ 8 hour
- f. Testing, debugging, reporting, administration ~ 6 hour