



CS 307 Team 3

Project Name: simplif.ai

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PROBLEM STATEMENT

The initiative of simplif.ai is to aid any student with efficient studying by condensing notes and saving time to prepare for exams. With limited applications utilizing new NLP technology, simplif.ai will focus on benefiting students by condensing and summarizing notes, lectures, and academic papers. By reducing the amount of content a student needs to review, we will improve their studying habits, and increase comprehension.

BACKGROUND INFORMATION

Problem, Domain, and Targeted Users

Students consistently receive information from various types of media and require a way to efficiently go through all their assignments. With online saturation of notes, sources, homework for each subject, it is essential for the modern student to have a solution for quickly finishing their tasks and filtering through important information.

Other Existing Solutions & Limitations

Although there are many applications for efficiently taking notes, such as OneNote and Evernote, there do not exist solutions to automatically simplify readings and notes and prioritize information for the user. There are also no solutions for interpreting and condensing information from several different media types, such as video or .pdf, and condense information from those sources. Our application will provide our target audience a way to quickly evaluate information while encompassing all of the above features.

REQUIREMENTS

FUNCTIONAL

1. As a user, I would like to create an account.
2. As a user, I would like to be able to reset my password if I forget it.
3. As a user, I would like to edit my account, sign out, and delete my account.
4. As a user, I would like to have a place to input text.
5. As a user, I would like to generate a list of condensed information from text.
6. As a user, I would like to delete irrelevant sentences/bullets from my generated summary.
7. As a user, I would like to modify the text of sentences/bullets from my generated summary.
8. As a user, I would like to adjust the brevity of my summary by generating more or less sentences.
9. As a user, I would like to save my summaries to a database.
10. As a user, I would like to export my summaries to text files or Google drive.
11. As a user, I would like to organize my files into folders.
12. As a user, I would like to add collaborators to different folders.
13. As a user, I would like to be able to use this service on a spotty Internet connection (offline mode).
14. As a user, I would like to be able to report issues to the developer.
15. As a developer, I would like user feedback.
16. As a developer, I would like to have an optimized algorithm for summarizing text.
17. As a developer, I would like users to be able to securely login.
18. As a developer, I would like to have users store their contact information.
19. As a user, I would like a tutorial or a help system for me to learn how to use the app.
20. As a user, I would like to use a text editor to finalize the summary of my text.
21. As a user, I would like to use a Slack bot that uses simplif.ai.
22. As a user, I would like to record lectures or speech and input the dialogue into our summarize application.
23. As a user, I would like to receive email updates about important upcoming dates extracted from my notes.
24. As a user, I would like to be able to toggle the option to receive email updates.
25. As a user, I would like to be able to add important upcoming dates to my Google Calendar upon receiving an email update.
26. As a user, I would like to summarize information from plain text.
27. As a developer, I would like to scan a web page and input the parsed information into my database.
28. As a developer, I would like to implement an API for our service.
29. As a user, I would like to summarize information from online articles.
30. As a user, I would like to have an option to display my summaries in night mode.
31. As a user, I would like to change my web page color scheme.
32. As a developer, I would like to obtain a profile picture for the user.
33. As a user, I want the web application to have an easy-to-read font.
34. As a user, I would like to summarize information from pdf files, if time permits.
35. As a user, I would like to summarize information from ppt files, if time permits.
36. As a user, I want to have fine-grained control over the length of the summary, such as limiting it to 140 characters, or just slightly condensing the information.

37. As a user, I would like to summarize information from video captions, if time permits.

NONFUNCTIONAL

Architecture and Performance

This application will be developed with a

1. Must be able to host the web application through AWS.
2. Must be able to integrate with Slack.
3. Must be able to integrate with Google Drive.
4. Must be able to integrate with Twitter.

Usability

5. Must be able to use this application on a mobile device.
6. Must be able to use this application on a desktop using Chrome.
7. Simplicity within the interface is important as the app should simplify study habits.

Security

8. Must be able to secure login authentication using Multi-Factor Authentication.
9. Parse input for security issues before we send to the summarizing API.

Scalability

10. The system must be able to handle at least 100 users at once.