simplif.ai

CS 307 Team 3 - Sprint 1 Planning Document

Sawyer Blatz, Ian Renfro, Kevin Xia, Lena Adel, Audrey Vincent, Pretoria (Ria) Chang

Sprint Overview

During our first sprint, our aim is to set up our backend, API, and frontend for use in future sprints. Our backend team will be focusing on setting up Amazon RDS, and creating the framework that will connect to the API we're developing. The frontend team will work on creating the initial features of the webapp such as a login page, account creation, and a basic text editor. Finally, our API team will be working on creating the endpoints for our backend to talk to, as well as working on creating an initial summarization algorithm that we can begin testing and optimizing.

Scrum Master: Audrey Vincent
Meeting Schedule: Monday and Tuesday at 8 PM

Risks & Challenges

We have two major concerns or challenges going into this sprint. The first is that our team is not familiar with using Amazon Web Services, and because of this, setting up the RDS may take more time than we initially anticipated. The other major concern we have is that our algorithm will be difficult to develop. We already have a pretty good understanding conceptually of how to implement it, but coding and optimizing it will likely be very difficult.

This is why we are starting work on the algorithm in our first sprint so we can improve it throughout the rest of the project.

Current Sprint Detail

User Story #1

As a developer, I would like to have proper documentation, coding standards, and version control standards. (User Story #39)

#	Task Description	Estimated Time	Owner
1	Write code templates.	2 hours	Ria
2	Write Github pull request template.	1 hour	Ian
3	Write Github issue template.	1 hour	Ian
4	Write CONTRIBUTING.md.	2 hours	Ian

Acceptance Criteria
- Given that the Github pull request template is implemented properly, when each team member creates a pull request then they will have a clear format to follow.
- Given that the Github issue template is implemented properly, when a team member finds an issue during testing then they will have a clear format to follow when writing an issue report in the version control.
- Given that the Github Contribution guide is written properly, when a team member is going to submit a pull request, make a commit or rebase and squash commits, then they will have a clear guide to help them walk through the process.

User Story #2

As a user, I would like to have functionality for logging into, editing, signing out of, and deleting my account. (User Story #3)

#	Task Description	Estimated Time	Owner	Team
1	Create the signup page	2 hours	Audrey	Frontend
2	Implement ability to log in and maintain a session on web client with cookie	4 hours	Audrey	Frontend
2	Style Sign Up Page	2 hours	Ria	Frontend
3	Implement login page	2 hours	Ria	Frontend
4	Style Login Page	2 hours	Ria	Frontend
5	Implement Logout Navigation flow, updating session cookie	2 hour	Audrey	Frontend
6	Create endpoint for Logout	1 hour	Sawyer	Backend
7	Create and style Profile Page for User	2 hours	Audrey	Frontend
8	Create endpoint for viewing user profile	1 hour	Sawyer	Backend
9	Create endpoint for editing the user	1 hour	Sawyer	Backend
10	Create endpoint for deleting an account	2 hours	Sawyer	Backend
11	Style Profile Page	2 hours	Ria	Frontend
12	Ensure responsive design for both mobile and desktop	1 hour	Ria	Frontend
13	Test the endpoints for getting and editing users	2 hours	Sawyer	Backend
14	Create documentation for user endpoints	1 hour	Sawyer	Backend
15	Test proper functionality for user account functions	1 hour	Ria	Frontend

Acceptance Criteria

- Given that the signup, profile, and login pages are created properly, when the user wishes to create and access their account, then it will be a simple process
- Given that the signup, profile, and login pages are styled well, when viewing the pages, they will then match the aesthetic of our brand as well as the rest of the pages
- Given that the endpoints are created and tested properly, when we utilize the endpoints then they will be simple for us to use
- Given well-written documentation for user endpoints, when we wish to use them, there will be clear and easy to read instructions on how to utilize the endpoints
- Given that the responsive design is created for both desktop and mobile form factors, when users access simplif.ai through both their PC's and phones, then simplif.ai's design will be unified and seamless

User Story #3

As a user, I would like to be able to reset my password if I forget it. (User Story #2)

#	Task Description	Estimated Time	Owner	
1	Implement forget password and reset flow on the webapp	4 hours	Ria	Frontend
2	Set up a mail client	4 hours	Lena	Backend
3	Implement password resetting through the use of the mail client	3 hours	Sawyer	Backend
4	Create an endpoint for forget password	2 hours	Sawyer	Backend
5	Setup change password	2 hours	Sawyer	Backend
6	Create documentation for the mail client and password management	1 hour	Sawyer	Backend

| 7 | Test password management rigorously (resetting, creation, and modifying) to make sure it is secure and bug-free | 2 hours | Ria | Backend / Frontend |

Acceptance Criteria
- Given that the forget password page is implemented properly, when a user wants to retrieve their password they will receive a link through email to update their password accordingly.
- Given that the change password page is implemented properly, when the user clicks the reset link the correct page will respond accordingly.
- Given setup for changing the password, when a user submits a new password the database should immediately update and reflect the change.

User Story #4
As a user, I would like to summarize information from plain text. (User Story #5)

#	Task Description	Estimated Time	Owner	Team
1	Implement the organization structure for classes as outlined in our design document	4 hours	Lena	Backend
2	Transform the text to the needed JSON form	3 hours	Lena	Backend
3	Send out the JSON data to NLP summarizer	4 hours	Lena	Backend
4	Receive JSON data from the NLP summarizer	4 hours	Lena	Backend
5	Test the transformation of text to needed JSON form	1 hour	Lena	Backend

6	Test the JSON data to NLP summarizer	1 hour	Lena	Backend
7	Test JSON received from NLP	1 hour	Lena	Backend
8	Create documentation for Text summarizer using NLP summarizer	1 hour	Lena	Backend
9	Implement receiving the response and app routing correctly	2 hours	Audrey	Frontend

Acceptance Criteria
- Given that the organization structure of classes is implemented properly, then it should be easy to implement the functionality of the classes
- Given that the text transformed to JSON form needed and tested properly, when implemented then it will be simple for us to use the JSON form of the text
- Given that the JSON data sent out to the NLP summarizer and tested properly, when implemented then it will be simple for the NLP summarizer to use and handle
- Given that the JSON data received from the NLP summarizer and tested properly, when implemented then it will be simple for us to use and handle
- Given well-written documentation for JSON text summarizer functionalities, when we wish to use them, there will be clear and easy to read instructions on how to utilize them

User Story #5
As a user, I would like to generate a list of condensed information from text. (User Story #10)

#	Task Description	Estimated Time	Owner
1	Build basic class structure for overall summarization module.	2 hour	Kevin
2	Use NLTK to extract nouns from text.	1 hour	Kevin
3	Implement LexWord class.	1 hour	Kevin
4	Implement LexChain class.	3 hours	Kevin
5	Implement LexChainGroup class.	3 hours	Kevin
6	Write code to build basic chains from nouns.	6 hours	Kevin
7	Use lexical chains to rank relevance of sentences (use basic ranking system, improve later).	6 hours	Kevin
8	Add unit tests and documentation for newly added summarization module functions.	8 hours	Kevin

Acceptance Criteria

- Given that NLTK is integrated properly into the summarization module, when the app sends in a body of text as input, then the algorithm should return a list of nouns from the text.
- Given that the lexical chain classes are implemented properly, when the app feeds nouns into a lexical chain group data structure, then the data structure should automatically begin building lexical chains from these nouns.
- Given that the lexical chain classes are implemented properly, when the app requests for representative words from the lexical chains, then the data structure should heuristically return the most important words of the chains.

- Given that the lexical chains are properly built, when the app decides to extract a summary, then the module will use these chains to prioritize returned sentences.

Users can summarize their notes

User Story #6
As a user, I would like to have a place to input text. (User Story #4)

#	Task Description	Estimated Time	Owner	Team
1	Create Home page	3 hours	Ria	Frontend
2	Create and style an interactive text box that toggles on grouped sentences	2 hours	Audrey	Frontend
3	Animation while summary processes	5 hours	Ria	Frontend
4	Routing application based on JWT authentication	3 hours	Audrey	Frontend
5	Navigation Components	2 hours	Audrey	Frontend
6	Navigation Bar Styling	3 hours	Ria	Frontend
7	Test home page, text box, and navigation UI.	2 hours	Ria	Frontend
8	Ensure responsive design for components	1 hour	Ria	Frontend

Acceptance Criteria
- Given that the home page is created properly, then when users want to easily navigate simplif.ai's home page, then it will be easy for them to do so

- Given that the text boxes are created properly, when a user inputs text, then the text boxes will receive the text input
- Given that the animation is made well, when users wait for information to load, then they will see a cute loading animation
- Given that JWT for authentication are properly implemented, when we want to be able to verify and process requests, then we will be able to identify the user and if the session has expired.
- Given responsive design for text input, when users input text on both mobile and desktop, then their simplif.ai experience should look and feel the same regardless of which form factor they're utilizing

User Story #7/#8

As a user, I would like to modify the text of sentences/bullets from my generated summary. (User Story #13)

As a user, I would like to use a text editor to finalize the summary of my text. (User Story #15)

#	Task Description	Estimated Time	Owner	Team
1	Parse inputted text into an array of sentences, allowing you to edit one sentence at a time	4 hours	Audrey	Frontend
2	Create a simple text editor page that follows our UI mockups	2 hours	Audrey	Frontend
3	Test the text editor	1 hour	Audrey	Frontend
4	Ensure text editor incorporates responsive design	1 hour	Audrey	Frontend

Acceptance Criteria

- Given that the text editor page is implemented properly, when users want to edit their text summaries, it will be easy and intuitive for them to do so
- Given that the text editor page is implemented properly, when users want to finalize their summaries and save them for later, it will be easy and intuitive for them to do so
- Given that the text editor page is implemented properly, when the user views the text editor should be visually appealing to the user, then it will be aesthetically pleasing to the user
- Given that the text editor page is responsive, when users view the text editor on both desktop and mobile, then their experience should look and feel the same regardless of which form factor they are utilizing

Users can easily navigate the application with a comprehensive design
User Story #9
As a user, I want the web application to have an easy-to-read font. (User Story #26)

#	Task Description	Estimated Time	Owner	Team
1	Select a consistent font to use throughout our web app.	1 hour	Audrey	Design
2	Compare the weights of our different typefaces to determine the font for heading, subtitle, and body.	2 hours	Audrey	Design
3.	Get feedback from people on the font, interface, and layout to see if we should change it	1 hour	Ria	Design

Acceptance Criteria

- Given that a suiting font is selected, when integrating the font into the site, then it will be easy for the user to read regardless whether they are viewing simplif.ai from desktop or mobile
- Given different typeface weights, when users view headings, subtitles, and bodies, then it will be visually easy for users to differentiate between them
- Given that feedback is received from the development team, when the development team agrees on an aesthetically pleasing and appropriate font and interface, then it will be incorporated into simplif.ai's aesthetic

Application account functionality

User Story #10

As a developer, I would like user login to be secure. (User Story #33)

#	Task Description	Estimated Time	Owner	Team
1	Hook our web app into the Google Authentication API	3 hours	Sawyer	Backend
2	Use the Google API to securely authenticate the user	2 hours	Sawyer	Backend
3	Test the authentication through Google API and document our usage of it for future use throughout the webapp	2 hours	Sawyer	Backend

Acceptance Criteria
- Given that our web app is able to hook into the Google Authentication API, when a user comes to the web app then they will be able to authenticate their account through Google.
- Given that our web app is able to use the Google Authentication API, when the user logs into the web app then we should be able to use the API to securely authenticate the user.

- Given that our web app is able to use the Google Authentication API, when the user logs in to the application, he will be able to share information among his google account.

User Story #11

As a developer, I would like to have an API for our service. (User Story #32)

#	Task Description	Estimated Time	Owner	Team
1	Create a flask application and research on Dreamhost	5 hours	Ian	API
2	Create a landing page for redirection to the webapp	4 hours	Ian	API
3	Create route for requesting a summarization	2 hours	Ian	API
4	Link the NLP package to the route for the API	4 hours	Ian	API
5	Test landing page redirect	2 hours	Ian	Testing
6	Test pinging the API	2 hours	Ian	Testing
7	Test NLP connection with the API	4 hours	Ian	Testing
8	Smoke test the API for the NLP specific	3 hours	Ian	Testing

Acceptance Criteria
- Given that the Dreamhost application is created, when a user visits the website they will see a landing page.
- Given that the landing page is implemented correctly, when a user goes to the landing page then they will be redirected to the main web application.

- Given that the route for summarization is implemented properly, when a request is made to the route then we will be able to send a basic response back.
- Given that the NLP package is properly connected to the API, when a request is made to the route with text then the API will send back a basic summarized response.

User Story #12

As a developer I would like to have a database where I can store data about the user. (User Story #34)

#	Task Description	Estimated Time	Owner	Team
1	Set up RDS on Amazon Web Services	3 hours	Sawyer	Database
2	Hook up Database with Backend	3 hours	Lena	Database
3	Implement the organization structure for storing data in the database	3 hours	Lena	Database
4	Implement the organization structure for classes as outlined in our design document	4 hours	Sawyer	Database
5	Testing the backend hookup	1 hour	Lena	Testing
6	Testing the organization structure for storing data in the database	1 hour	Lena	Testing
7	Add documentation for this user case	2 hours	Sawyer	Database

Acceptance Criteria

- Given that the database is hooked up with the backend and tested properly, when implemented then it will be simple for us to send and obtain data from the database
- Given that the organization structure for classes creates, then we should easily implement the classes functionality
- Given that the organization structure for storing data in the database, then we should easily and efficiently store and access the database
- Given well-written documentation for this user case, when we wish to use them, there will be clear and easy to read instructions on how to utilize them

Remaining Backlog(27/39)

<u>Users would have an account for the app</u>

1. As a user, I would like to create an account.
2. ~~#3 As a user, I would like to be able to reset my password if I forget it.~~
3. ~~#2 As a user, I would like to edit my account, sign out, and delete my account.~~

<u>Users can summarize their notes</u>

4. ~~#6 As a user, I would like to have a place to input text.~~
5. ~~#4 As a user, I would like to summarize information from plain text.~~
6. As a user, I would like to summarize information from online articles.
7. As a user, I would like to summarize information from pdf files, if time permits.
8. As a user, I would like to summarize information from ppt files, if time permits.
9. As a user, I would like to summarize information from video captions, if time permits.
10. ~~#5 As a user, I would like to generate a list of condensed information from text.~~
11. 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.

<u>Users can edit their summarized notes</u>

12. As a user, I would like to delete irrelevant sentences/bullets from my generated summary.
13. ~~#7 As a user, I would like to modify the text of sentences/bullets from my generated summary.~~
14. As a user, I would like to adjust the brevity of my summary by generating more or less sentences.

15. ~~#8 As a user, I would like to use a text editor to finalize the summary of my text.~~

Users can organize their notes and summaries

16. As a user, I would like to save my summaries to a database.

17. As a user, I would like to export my summaries to text files or Google drive.

18. As a user, I would like to organize my files into folders using Google Drive.

19. As a user, I would like to add collaborators to different folders using Google drive.

20. As a user, I would like to be able to use this service on a spotty Internet connection (offline mode).

Users can use outside application to integrate with summarized notes

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, if time permits.

Users can manage their schedule through their summarized notes

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.

Users can easily navigate the application with a comprehensive design

26. ~~#9 As a user, I want the web application to have an easy-to-read font.~~

27. As a user, I would like a tutorial or a help system for me to learn how to use the app.

Users have option of changing application design

28. As a user, I would like to have an option to display my summaries in night mode.

29. As a user, I would like to change my web page color scheme.

Application summarizing functionality

30. As a developer, I would like to scan a web page and input the parsed information into my database.

31. As a developer, I would like to have an optimized algorithm for summarizing text.

32. ~~#11 As a developer, I would like to implement an API for our service.~~

Application account functionality

33. ~~#10 As a developer, I would like users to be able to securely login.~~

34. ~~#12 As a developer I would like to have a database where I can store data about the user.~~

35. As a developer, I would like to have users store their contact information.

36. As a developer, I would like obtain a profile picture for the user.

Keep telemetry and manage the application

37. As a user, I would like to be able to report issues to the developer.

38. As a developer, I would like user feedback.

39. ~~#1 As a developer, I would like to have proper documentation, coding standards, and version control standards.~~

Total Hours

Name	Hours
Sawyer	32
Ian	30
Kevin	30
Lena	31
Audrey	30
Ria	32