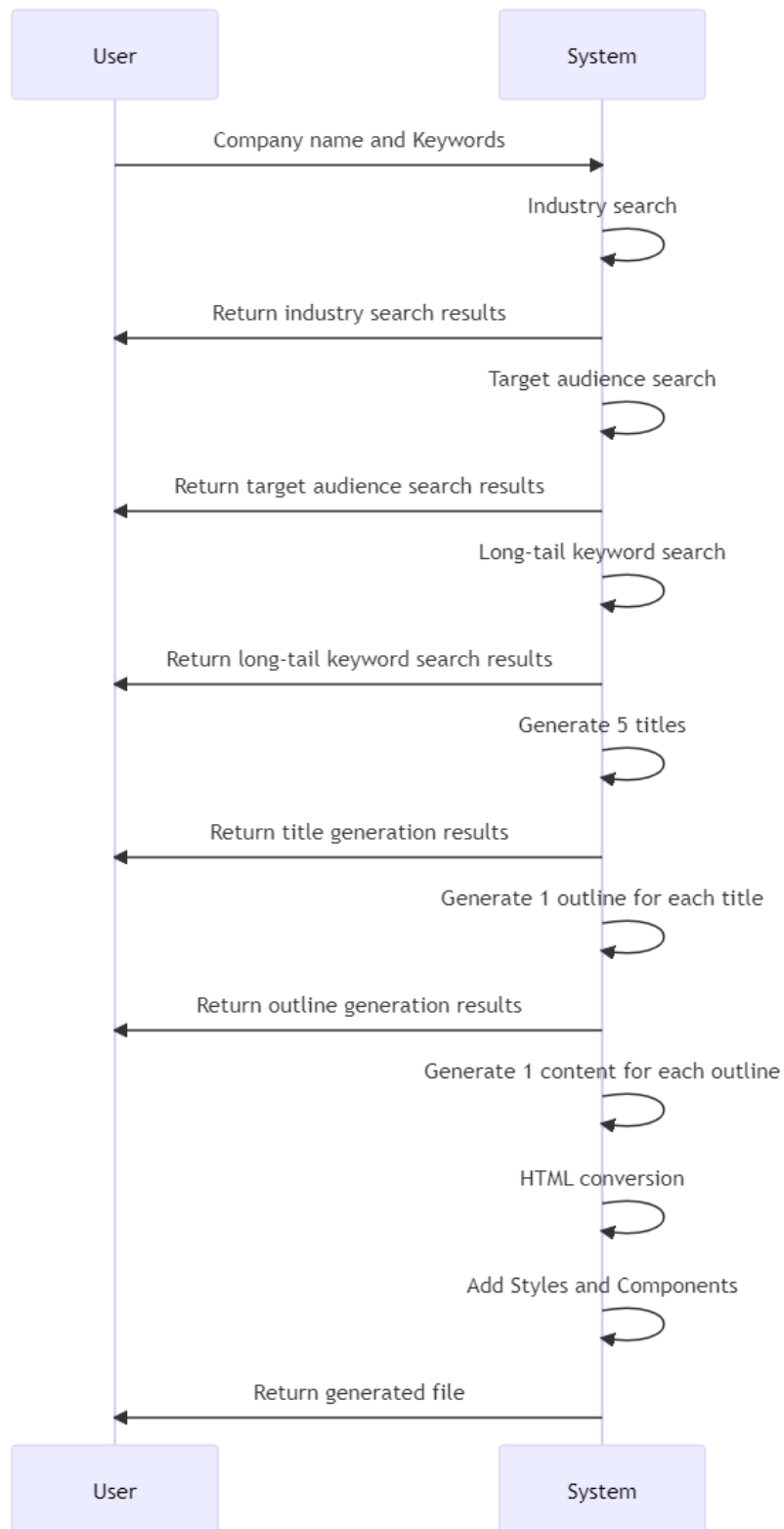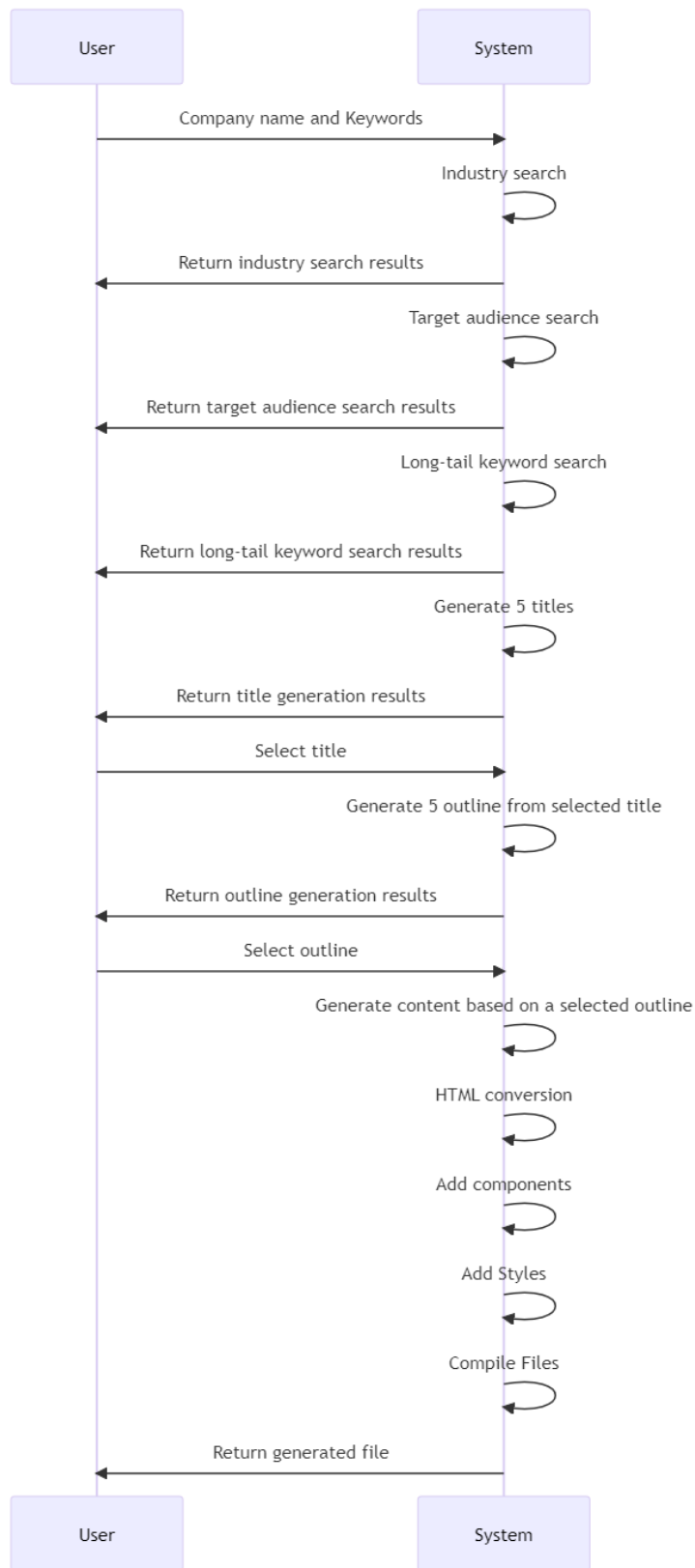# Weekly Report

1. My Task

1. Modularity Improvements: Switched the creation of CSS in the HTML to a CSS file instead to preserve and share the CSS formatting across multiple pages. This allows the user to request for multiple pages to be generated with the same formatting.

2. GPT updates: Since OpenAI just released another update on the models, the new models gives more room for context and content generating, so a transition to the new models give an advantage when it comes to generating content and HTML code.

3. Fail-Safe: With the instability of the GPT model, a fail safe is an ideal solution to ensure that the generated response is a HTML code. SInce the process of adding components and styles are still under refinement process and require a long step-by-step format to complete the addition, the error rate increases exponentially at each step. Therefore, a fail-safe will be called at each step to ensure the linearity of the error rate and prevent failed responses from piling at each step.

4. Redesign: Rate limit error has been a common issue in many API usages during development. To reduce this error, I've redesigned the process of the generating new content and HTML code as follow:

Old Design:

User → System: Company name and Keywords

System: Industry search

System → User: Return industry search results

System: Target audience search

System → User: Return target audience search results

System: Long-tail keyword search

System → User: Return long-tail keyword search results

System: Generate 5 titles

System → User: Return title generation results

System: Generate 1 outline for each title

System → User: Return outline generation results

System: Generate 1 content for each outline

System: HTML conversion

System: Add Styles and Components

System → User: Return generated file

User | System

2nd Design:

Sequence diagram with participants User and System.

- User → System: Company name and Keywords
- System (self): Industry search
- System → User: Return industry search results
- System (self): Target audience search
- System → User: Return target audience search results
- System (self): Long-tail keyword search
- System → User: Return long-tail keyword search results
- System (self): Generate 5 titles
- System → User: Return title generation results
- User → System: Select title
- System (self): Generate 5 outline from selected title
- System → User: Return outline generation results
- User → System: Select outline
- System (self): Generate content based on a selected outline
- System (self): HTML conversion
- System (self): Add components
- System (self): Add Styles
- System (self): Compile Files
- System → User: Return generated file
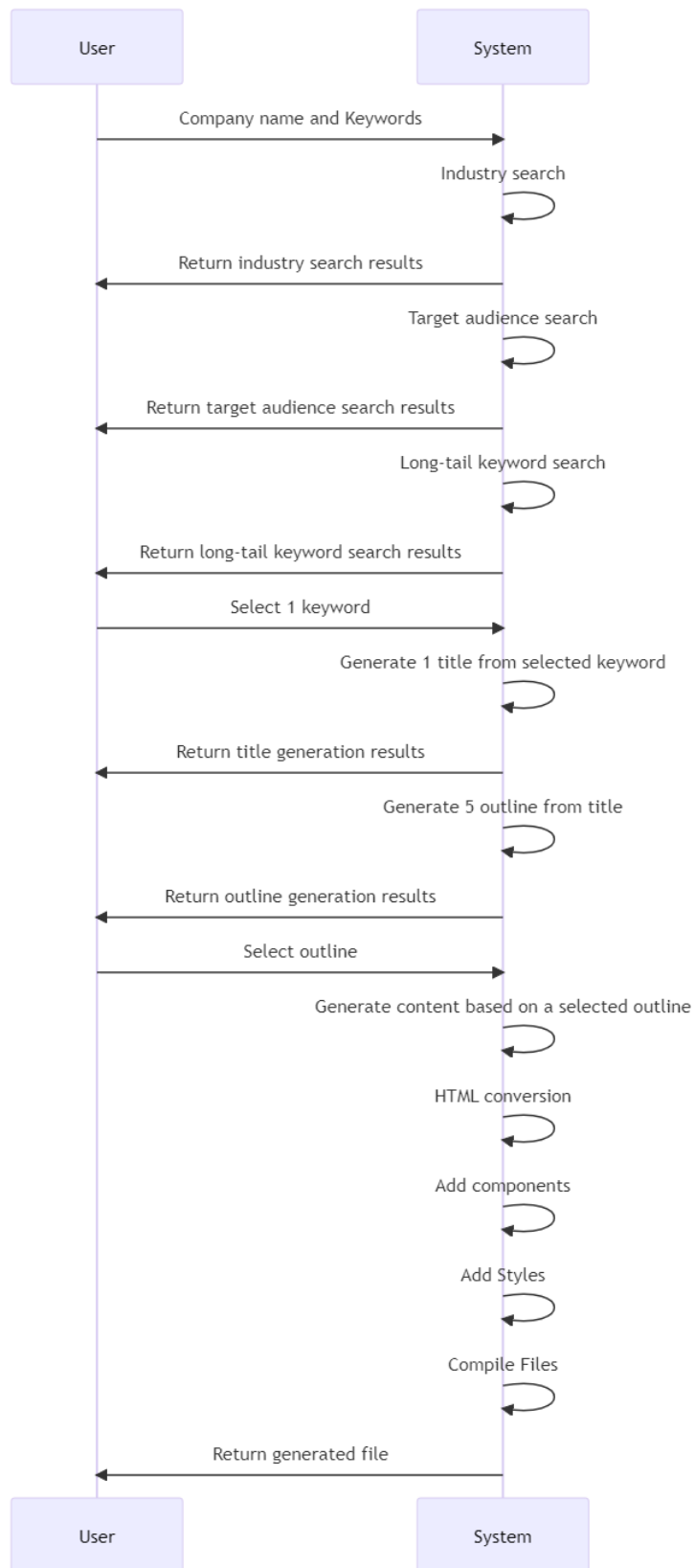
Latest Design:

2. Future Plans

1. Templates: Due to the inconsistency of the GPT model, I've decided to proceed with the new design to generate the webpage. The redesigned flow includes pre-processing of the generated output to filter out the HTML tags and insert them at appropriate spots within the template.

2. Canva: Another implementation of a new API was requested by Mr. Francis into the NexBot (named given by Mr. Francis). Further documentation and research must be done before development can begin on this API.