Development Info

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Use Case of Complex Idea: The complex idea is implemented by the sentiment analysis and analytics use case since the complex idea finds, filters and tracks relationships between trends in activities and mood. At the request of the user it will return these findings to be displayed in graph form and relationships to be displayed in string form and (eventually in final product) plots form with isolated views of the highlighted relationship.

If you used AI technologies, you must answer the following questions in 1-2 sentences each:

1. Which technologies did you use?

- ChatGPT/Copilot
- Open API

2. What was your goal in using these technologies?

3. What are the advantages for using AI technologies for this goal? Describe your positive experiences.

- Time-Saving: AI can generate and refine large portions of the code quickly. It sped up the process of writing logic and provide insights into handling the integration and developnment.
- Degubbing Help: Troubleshoot and debug some challenging problems, providing immediate solutions or pointing out issues in my code
- Learning Tool: Useful as a learning tool to guide through the syntax and structure and providing code examples for the tasks.

4. What are the disadvantages for using AI technologies for this goal? Describe your negative experiences.

- Incorrect Syntax/ Structure: Code genereted can contain syntactical errors, improper formatting, or incompatible code snippets, especially when dealing with languages or frameworks it hasn't been explicitly trained on. These errors can cause bugs that take additional time to identify and fix
- When implementing features that relies on specific APIs or frameworks, AI generated code may use the wrong libraries or incorrect dependencies, which would require adjusting or replacing portions of code, spend more time fixing errors, and overcomplicating the implementation.

5. How much did you rely on the technology (0 – 100%)? Please quantify the fraction of your requirements and design spec that was fully generated and/or refined with the assistance of AI technology.

- 35%
- 90% (Amod)
- 40% (Kevin)
- 70% (Nyi)

Contributions: Kevin: (80 hours) Designed and implemented complex feature algorithms, datastructures and routines of returning analytics. Also implemented calls and screening of open-api for the sentiment weights and activity log tracking. Updated documentation for non-function requirements, changed some diagrams to

be more clear and rewrote documentation on complex part of project. Testing and debugging of all features except straight to db APIs.

Nyi: (35-40 hrs) Worked on implementing the RASA chatbot and action server, and designing a structured journaling routine for users. This involved integrating the chatbot with the backend to ensure that user inputs were collected efficiently and stored correctly. Contributed to creating analytics frontend, working on the interface that would present sentiment analysis and journaling insights to the users.

Amod: (75 hours): Worked on the calendar view, chat view and journal view, analytics view. Contributed mostly on the front end. Did all the API calls for managing the journal. The logic of application to highlight the date and designed the front end of the app by following the mockups. Also help with reformating the document with sequence diagrams and functional requirements based on the TA's feedback

Christine Jiang (55-65 hours): Firebase cloud messaging reminder, backend for User Management, backend for journaling management, payment component, activities settings frontend, profile settings frontend, Google authentication frontend, Update Requirements and Design documentations