### Day 1: Initial Setup and Planning

- Define the scope for message content abstraction and select the method (e.g., Doc2Vec).
- Outline the clustering algorithm and automation strategy.
- Haoran: Research message abstraction techniques.
- Yichen: Explore clustering algorithms and libraries.
- Venkatesh: Plan the automation of data collection and processing.

### Day 2: Message Content Abstraction Implementation

- Implement the chosen method to convert messages into vector values.
- Store these vectors in the database alongside cleaned messages.
- Haoran:Implement message content abstraction and running Doc2Vec.
- Yichen: Cluster record.
- Venkatesh: Integrate the data.

# Day 3: Clustering Algorithm Development

- Develop the clustering algorithm to group similar messages.
- Identify keywords associated with messages in each cluster.
- Check on the process.

### Day 4: Automation Process Setup

- Write scripts to automate data collection, processing, and storage at fixed intervals.
- Implement command line interaction for real-time clustering queries.
- Testing and editing based on different needs.

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## Day 5: Final Review and Submission Preparation

- Compile documentation, including code files, readme, and meeting notes.
- Finalize the demonstration video, highlighting key aspects of the solution.
- All Members: Contribute to the preparation of submission materials.
- Ensure all components of the submission package are complete and accurate.
- Submit the assignment as a team, adhering to all guidelines.