Conception
Habit Tracker

The aim of this project is to develop an efficient habit tracker that records habits, analyzes progress, and generates detailed monthly and quarterly reports. The tracker will focus on functionality and dynamic usability, offering features such as reminders and motivational content to support users in maintaining positive habits or eliminating negative ones. By combining practicality with user engagement, the application aims to provide a comprehensive tool for habit management.

The concept revolves around creating a multifunctional system with a dynamic database, a reporting feature, and API integration for motivational speeches or quotes. The advantages include increased user motivation, efficient storage for better performance, and a wide range of functionalities. However, potential drawbacks include the risk of overwhelming users with too many features, compatibility issues that may slow down the program, and reliance on internet connectivity for certain functions. These challenges will be addressed through careful design choices such as a user-friendly interface and offline functionality.

To proceed, the development process will begin with brainstorming and mind mapping to outline core features. A UML diagram will then be created to visualize the system's structure and identify potential issues. Afterward, the diagram will be implemented in an editor, followed by debugging and optimization to ensure smooth performance.

For tools and methodologies, Visual Studio Code (VS Code) has been chosen as the primary editor due to its lightweight design and useful extensions. Conda will be used to create a specific environment for efficient task execution. Miro will serve as a platform for sketching and visualizing UML diagrams, while GitHub will be utilized for version control, ensuring flexibility in code management.

This structured approach lays a solid foundation for building a habit tracker that balances functionality with user-friendliness while addressing technical challenges effectively.

My ULM diagram for the habittracker