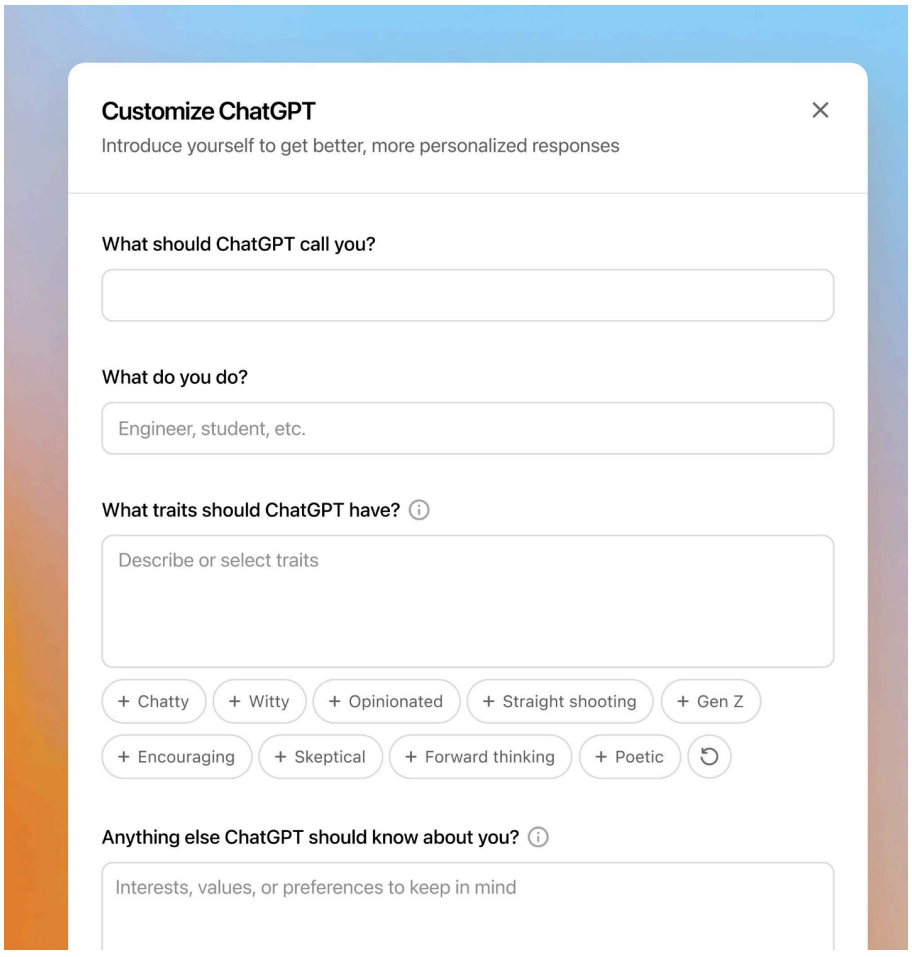
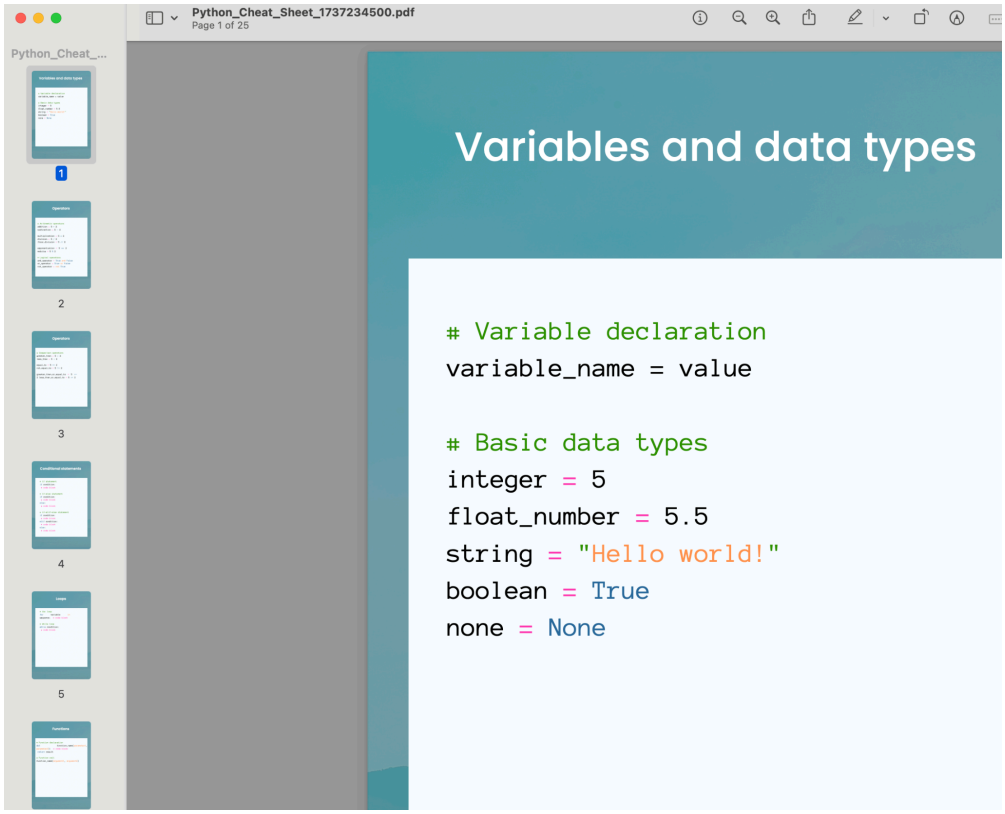
Proposal for AI-Driven Personalized Learning Platform

Introduction This proposal outlines the development of an AI-driven learning platform aimed at transforming the educational experience. The platform will leverage AI to create personalized learning paths, engage students with interactive content, and provide comprehensive assessments. This innovative solution will support a wide range of topics and offer students an adaptive, efficient, and effective learning journey.

Platform Overview

1. **User Story: Learning Python**
    - **Login & Personalization**: A user logs into the platform and provides personal information such as their educational background and learning goals. For example, a student aiming to learn Python for data analysis.
2. 

    - **Ebook Selection**: The user selects an ebook titled "Learning Python" from the platform's library or uploads their own ebook. (25 paged Ebook)



- **AI-Generated Syllabus**: The AI processes the ebook using prompt engineering and RAG (Retrieval-Augmented Generation) techniques to create a customized syllabus. The syllabus is divided into chapters with corresponding quizzes and tasks.

3. **Learning Process**
   - **Module Breakdown**: The syllabus includes modules such as:
     1. Introduction to Python
     2. Data Types and Variables
     3. Control Structures
     4. Functions and Modules
     5. Data Analysis with Python
   - **Interactive Quizzes**: After each chapter, the AI generates quizzes to reinforce learning. These quizzes adapt based on the student's performance.
   - **Cloud-Based Progress Tracking**: All completed tasks and quiz results are saved in a cloud database, allowing students to track their progress.
4. **Assessment and Certification**
   - **Final Assessment**: Upon completing all modules, the student takes a comprehensive assessment.
   - **Certification**: The platform generates a PDF certificate of completion, including the student's grade, a summary of questions answered, and a confidence score.

Benefits

- **Personalized Learning**: Tailored content and adaptive quizzes ensure that each student receives a learning experience suited to their needs.
- **Comprehensive Coverage**: The platform provides a structured approach, covering all essential topics within the chosen subject.
- **Engagement and Retention**: Interactive elements like quizzes and progress tracking keep students engaged and motivated.

Conclusion This AI-driven learning platform offers a revolutionary approach to education by providing personalized, efficient, and effective learning experiences. By leveraging advanced AI techniques, students will gain a deeper understanding of their chosen topics and achieve their learning goals more effectively.

Skills students will learn

- Team work with Masters student and other seniors with Tech/Entreprenurship/Business experience
- AI APIs mixed with prompt engineering and RAG
- Cloud computing to store ebooks and textbooks (Authentication)
- Web development to make company website and deploy