Project Timeline for Dr. Walnut's Clinic Voice-Interactive Scheduling Assistant

Initial Concept (3 hours):

- Conducted thorough requirement analysis to define project scope.
- Performed a feasibility study to assess potential challenges and success factors.
- Researched relevant technologies to identify the most suitable tools for the project.
- Selected an appropriate technology stack that aligns with the project goals.

Development Phase (16 hours):

- 1. Setup development environment
- 2. Develop a foundational backend and frontend framework to establish the user interface and ensure seamless backend connectivity.
- 3. Design and implement the database schema for appointment scheduling.
- 4. Progress frontend development for both user and admin interfaces, focusing on usability and aesthetics.
- 5. Implement voice recording and speech-to-text conversion.
- 6. Develop text-to-speech functionality for responding to users.
- 7. Integrate OpenAI's Chat API to handle user queries intelligently and contextually.
- 8. Backend API development for managing time slots and appointments.
- 9. Refine the application, ensuring a smooth and polished user experience.

Testing (4 hours):

- 1. Conduct comprehensive integration testing to validate the complete workflow.
- 2. Test OpenAl's Chat API using manual prompt engineering techniques to fine-tune interactions.
- 3. User acceptance testing with a closed group.

Deployment (1 hour):

- Dockerization of the application
- Create an executable for ease of use and installation.

Conclusion:

This timeline encapsulates the diligent efforts and strategic milestones that contributed to the development of Dr. Walnut's Clinic Voice-Interactive Scheduling Assistant. The project's evolution from conception to deployment showcases my commitment to delivering a user-centric, technologically advanced solution for appointment scheduling.