

Development Plan

Features we plan to implement this quarter:

- Dynamic Chatbot Functionality
 - We want to make the chatbot more dynamic so that it can interact with the patient to better understand their symptoms and concerns prior to their consultation.
 - At the moment, the chatbot is very deterministic as it asks a handful of predetermined questions but does not allow for the patient to have an open conversation.
- Error Handling
 - We want to make sure that our project is robust and can handle edge cases.
 - For example, only one pre-consult should be filled out per appointment. At the moment, a patient can fill out a pre-consult for a given appointment an unlimited number of times.
 - Additionally, problems with insertion or selection from the database returns an error message but there are no steps to try again or figure out what went wrong.
- User Interface Improvements
 - Add provider and patient view for appointment information and chat logs
 - Create patient registration flow
 - Add the ability for users to input basic information such as pre-existing health conditions
 - Research mobile-ready design
 - Implement feature to resume old chatbot sessions
 - Display “tags” for appointments to relay high-level information, such as “headache,” “new patient,” or “general consult.”
 - Add new appointment flow
- Text/Chat summarization
 - Find a way to summarize messages between patient and chatbot using chat logs using NLP tools such as Huggingface.
 - Use chat logs in Amazon Comprehend Medical to identify conversation tags.
- Display collected information
 - We have the symptom and diagnosis information collected from the chatbot pre-consult, but need to display this, along with chat logs, chat summaries, and tags, on their respective appointment information pages.

Timeline:

Sprint 1 (1/3 to 1/18)	<ul style="list-style-type: none">● Research how to implement a more dynamic chatbot● Retrieve chat logs from Cloudwatch● Build component for tags● Tests and error handling
Sprint 2 (1/18 to 1/31)	<ul style="list-style-type: none">● Create patient registration flow● Create new appointment flow● Add async commenting interaction for appointments● Tests and error handling
Sprint 3 (2/1 to 2/14)	<ul style="list-style-type: none">● Text summarization of chatbot conversation● Tests and error handling
Sprint 4 (2/15 to 3/1)	<ul style="list-style-type: none">● Integrate poster● Run dry feedback● Practice presentations● Tests and error handling
Final Details (3/2 to 3/8)	<ul style="list-style-type: none">● Finalize poster (4'x3' landscape)● Finalize presentations