

## CSCI 3308 Milestone 2

**Team Number:** 103-2

**Team Name:** Team = [hip, hip, array];

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### Project Features List

- User Login
  - The user login will allow the patient to enter their credentials and access their profile. The login will have an option to recover/reset a password if it is forgotten via email. It will also have an option to create an account for new patients.
- Appointment Scheduling
  - This feature is essential for allowing patients to be able to book appointments without having to go through the trouble of driving to the clinic/hospital or being kept on hold during a phone call. Through both the website and phone application, patients will be able to see their provider's availability as well as cancel appointments. For the healthcare workers, they will be able to easily list available times for appointments and monitor who is booking appointments.
- Lab Results
  - This feature will allow the user to check results for any recent or past tests they've done. Accommodating this would be any suggested course of action based on the given results. This could range from simple home remedies or suggesting to come in to the clinic.
- Patient-to-Provider chatting service
  - Chatting interface for patients to communicate with their primary care provider or on call healthcare workers. There will also be an option where patients can ask simple questions to an AI.
- Prescription management & ordering
  - This feature will allow the user to see their prescriptions and fill dates. It will also have the users local pharmacy on file, and allow the user to contact their pharmacy. It will allow the user to change their pharmacy as well.
- Billing and Insurance
  - In this tab the patient should be able to manage their billing payments. This would include checking any balances due whether it be appointment cost or prescription costs. The user should also be able to connect any insurance they have. Following that, the provider should be able to validate the patient's insurance on file.

## User Stories

*Note: User stories commonly require a brief description of the feature. Although it is not included here, brief descriptions of features are given in the previous section.*

<b>Feature</b>	User Login
<b>Who will benefit from this feature?</b>	Patients and healthcare providers will benefit from having this feature.
<b>Why have this feature?</b>	All patients will benefit from this feature because it provides them with security regarding their personal health information. Healthcare providers will also benefit from this feature because it will allow them to protect their patients as well as abide by HIPPA laws.
<b>When?</b>	This feature will be implemented as soon as possible because it provides a basis for the rest of the project.
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"><li>• The application will validate the user's login and password if it is correct</li><li>• If the user login information is incorrect, the website will let the user know this and allow them to try again</li><li>• Users will be able to sign up for an account or login to an existing account</li></ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"><li>• The application should not take longer than 3 seconds to login</li><li>• The application should be able to handle and support multiple logins</li><li>• In the case of any failure, existing login information should be saved</li></ul>

<b>Feature</b>	Appointment Scheduling
<b>Who will benefit from this feature?</b>	Patients and healthcare providers will benefit from having this feature.
<b>Why have this feature?</b>	This feature is critical to allowing patients to easily schedule appointments. This will make the feature a great selling point for healthcare providers. This also allows healthcare providers to have more flexibility with making appointments as well as tracking them.
<b>When?</b>	April 22nd
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"> <li>• Users should be able to click and interact with an appointment calendar</li> <li>• Users should be able to see available appointments</li> <li>• Users should be able to cancel appointments</li> <li>• Only managerial level users can create appointments on the calendar</li> </ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"> <li>• When booking an appointment, the user should not have to wait more than 3 seconds for a confirmation</li> <li>• The application should be able to handle multiple appointments at one time</li> <li>• Users should still be able to book appointments when the calendar is being edited by a managerial user</li> </ul>

<b>Feature</b>	Lab Results Interface
<b>Who will benefit from this feature?</b>	Patients who would want to view results of their tests
<b>Why have this feature?</b>	This is a streamlined avenue of communication - patients will be able to view, download and print their lab results in a secure interface. This prioritizes confidentiality by removing the need for real-world documents, keeping documents and information assigned to the patient displayed in a secure user interface
<b>When?</b>	April 22nd
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"> <li>• Be able to view documents related to lab tests as requested by the user (simulated)</li> <li>• These documents are tied to users - so there is no access to other users' records by unrelated users. Providers can access and upload documents</li> </ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"> <li>• Users can scroll using their mouse to view a list of documents related to their lab results</li> <li>• Clicking on the document downloads that document!</li> <li>• Providers can upload documents to user interface, allowing users to view, download and print</li> </ul>

<b>Feature</b>	Patient-to-Provider chat service
<b>Who will benefit from this feature?</b>	Patients who would want to chat with their provider without the constraint of having to meet with the provider at a clinic.
<b>Why have this feature?</b>	Scheduling an appointment and allocating time to travel and meet with a healthcare provider over sometimes trivial cases is always a constraint that discourages visits and the retrieval of helpful medical advice. This patient to provider chat system rectifies this obstacle, allowing patients to communicate with a doctor over a chat interface from the convenience of their computer.
<b>When?</b>	April 22nd
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"> <li>• Patients and providers send messages or media to one another</li> <li>• They can reference the history of their current chat but once it exits that chat and its history is deleted, which is great for confidentiality. Again, this chat system is not to be used for emergencies but rather simple matters that warrant medical advice without the need for an official visit.</li> </ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"> <li>• The Enter/Return key sends the message the user or provider is typing</li> <li>• The attachment icon allows the user or provider to attach a form of media from their device and send that</li> <li>• Scrolling with the mouse up and down will allow the user or provider to navigate the contents of the chat similar to a text message application.</li> <li>• Exiting the chat deletes the chat history</li> </ul>

<b>Feature</b>	Prescription management
<b>Who will benefit from this feature?</b>	The user will benefit from being able to manage their prescriptions with more ease. Instead of having to go to many different places to see what they need and where they can get it, they can see all the relevant information in one location.
<b>Why have this feature?</b>	The reason to have this feature is because prescriptions are an integral part of a patient's medical life. If someone has numerous prescriptions, the ability to manage all of their prescriptions in one place would make their quality of life much better.
<b>When?</b>	April 22nd
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"> <li>• The user will be able to see a list of their prescriptions and the fill dates associated with each.</li> <li>• They will also be able to contact their local pharmacy if they have a question about their prescriptions</li> <li>• They will be able to change their local pharmacy to another one that better suits their needs <ul style="list-style-type: none"> <li>◦ Change pharmacy link to list of nearby pharmacies</li> </ul> </li> <li>• The prescription list will have hyperlinks for each drug taking the user to a website with relevant information on that drug</li> <li>• The page should have a phone number and an email for the pharmacy</li> </ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"> <li>• The drug links should open a new tab on their browser <ul style="list-style-type: none"> <li>◦ Or open their browser on their phone</li> </ul> </li> <li>• If any of the links fail, they should notify the user after five seconds of loading</li> <li>• Scrolling should work</li> </ul>

<b>Feature</b>	Billing and insurance
<b>Who will benefit from this feature?</b>	This will ease the process of managing any balances due through the easily accessible portal for the patient.
<b>Why have this feature?</b>	Managing bills is always a tedious task so we want to ease this process for the user by allowing them to access any billing related queries within a matter of clicks. As well as allowing the provider to keep track of who owes what to make sure they are compensated for their work.
<b>When?</b>	April 22nd
<b>Acceptance Criteria</b>	
<b>Functional Requirements</b>	<ul style="list-style-type: none"> <li>• The patient will be able to see any bills due, what they are for, and when they are due</li> <li>• The patient will also be able to connect their insurance</li> <li>• The provider will be able to check and validate any patient insurance on file.</li> </ul>
<b>Non-Functional Requirements</b>	<ul style="list-style-type: none"> <li>• Submitting a payment should take no longer than 3-4 seconds</li> <li>• Patient insurance should be saved on file if entered once</li> <li>• Encryption on any sensitive bank information for privacy purposes</li> </ul>

## Project Plan

The team's chosen project plan is shown below in a gantt chart created in Microsoft Project. It details four different main stages: front end, back end, integration, and refining and reflecting. Within each main stage, the gantt chart does not have defining arrows because the team is following the Agile method. Iterations will occur throughout each main stage and as needed between stages. The team has designated tasks to team members, but are open to having other members who are not assigned to the task help as needed. With this project plan, the group will have a presentable project by April 22nd.

