

# Software Requirement Specification

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## 1. Project Description

The project we are working on is essentially a prescription management system. This prescription management system would allow the prescription process to be somewhat streamlined for the customer to help avoid all the time and frustration a typical prescription would take. The system would allow for the customers to see their prescriptions progress in real time such as whether it has been approved by the doctor or not, if the approval is on the way to the pharmacists or if it has arrived, the pharmacists working on it, and the prescription finally being ready to pick up.

## 2. Functional Requirements

<b>FR01</b>	The system should allow the customers to be able to create and update their profiles
<b>FR02</b>	The system must allow the customer to be able to request a prescription.
<b>FR03</b>	The system must showcase the availability of the prescription to the pharmacy, doctor, and patient
<b>FR04</b>	The system must allow the customers to be able to select a prescription to learn more about it.
<b>FR05</b>	The system must allow communication between the patient, pharmacy, and the doctor.
<b>FR06</b>	The system must allow the customers to search for their prescriptions as well as view prescription history.
<b>FR07</b>	The system must allow the pharmacist to be able to approve, reject, as well as edit prescription requests.
<b>FR08</b>	The system must allow the patient to change what pharmacy prescriptions go to
<b>FR09</b>	The system must allow the customer to be able to get notified when their prescription is ready.
<b>FR10</b>	The system must allow doctors to enter new patient information and update old patients information as well as delete or create new patient profiles.

## 3. Non-Functional Requirements

<b>NFR01</b>	The user interface should be able to be navigated in 5 clicks
<b>NFR02</b>	The system should be able to process the requests of the customers and update their statuses in approximately under 1 minute
<b>NFR03</b>	Application loading times should have a latency no longer than 5 seconds
<b>NFR04</b>	The system should be able to use no more than 1GB of storage
<b>NFR05</b>	The system should send alerts in intervals tailored to specific medication schedules

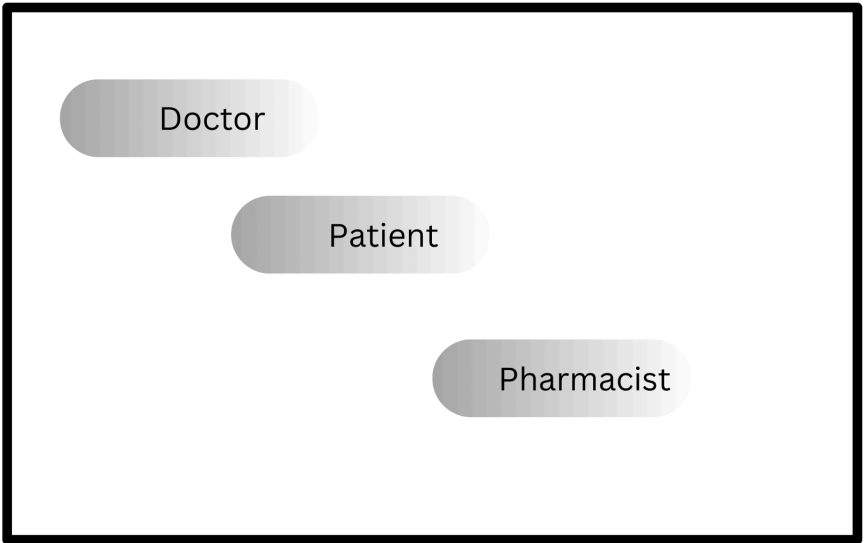


## 4. Use Case Specification

<< Select **three** functional requirements and describe them in detail using use cases.>>

<b>UC01 Name:</b>	Managing Prescription
<b>Description:</b>	The system must showcase the availability of the prescription to the pharmacy, doctor, and patient
<b>Actor:</b>	Patient
<b>Entry condition:</b>	Customer logs in to check their prescriptions
<b>Basic path:</b>	<ol style="list-style-type: none"> <li>1. The system asks the user who they are <b>[PRO01]</b> <ol style="list-style-type: none"> <li>a. The options <ol style="list-style-type: none"> <li>i. Patient</li> <li>ii. Doctor</li> <li>iii. Pharmacist</li> </ol> </li> </ol> </li> <li>2. The actor selects the option Patient</li> <li>3. The system presents a screen asking for the patient's login information: <b>[PRO02]</b> <ol style="list-style-type: none"> <li>a. Username</li> <li>b. Password</li> <li>c. Back Button <b>[E02]</b> or <b>[A02]</b></li> <li>d. "Forgot Username/Password" <b>[A01]</b></li> </ol> </li> <li>4. The system verifies the patient's account exists <b>[E01]</b></li> <li>5. Once logged in they can view their related information <b>[PRO03]</b> <ol style="list-style-type: none"> <li>a. designated prescriptions</li> <li>b. doctors</li> <li>c. prescription status</li> <li>d. pharmacy</li> </ol> </li> <li>6. The use case is concluded</li> </ol>
<b>Alternative paths:</b>	<p><b>[A01] No current account</b></p> <ol style="list-style-type: none"> <li>1. If the patient doesn't have an account, they have the option to make an account.</li> </ol> <p><b>[A02] Forgotten login</b></p>

	<div>1. If they forgot their login information, they have the chance to change it. refer to the specific action</div> <div><b>[A03] Back Button</b><div>1. Takes user to previous screen</div></div>															
Exception paths:	<div><b>[E01] Invalid entry</b><div>1. The system displays an error message and requests corrections. 2. The use case returns to step 4 of the basic path.</div></div> <div><b>[E02] Invalid choice</b><div>1. If the customer makes the wrong choice, an error message will pop up displaying the account does not exist in this choice. 2. In this case, they would be returned back to the <i>type of user</i> screen to pick another type of user.</div></div>															
Business Rules:	<div><b>[BR01]</b> Customers must have an active profile to request a prescription.</div> <div><b>[BR02]</b> Pharmacists must verify all prescriptions before approval.</div> <div><b>[BR03]</b> The username must uniquely identify a system user.</div>															
Data description	<table><tr><th>Name</th><th>Type</th><th>Length</th></tr><tr><td>Username</td><td>String</td><td>20</td></tr><tr><td>Password</td><td>String</td><td>minimum of 6 no more than 26</td></tr><tr><td>Prescription Name</td><td>String</td><td>30</td></tr><tr><td>Prescription Status</td><td>String</td><td>20</td></tr></table>	Name	Type	Length	Username	String	20	Password	String	minimum of 6 no more than 26	Prescription Name	String	30	Prescription Status	String	20
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Password	String	minimum of 6 no more than 26														
Prescription Name	String	30														
Prescription Status	String	20														
Prototype:	<div><b>[PRO01]</b></div>															



[PRO02]

←  
Back

Username

Password

[Create an account](#)

[Forgot Username or password](#)

[PRO03]

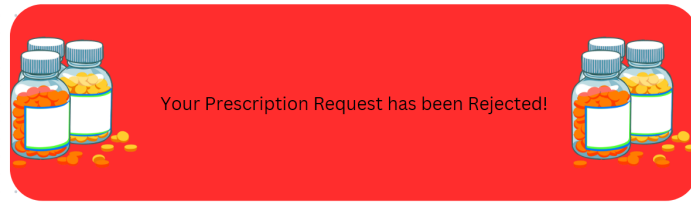
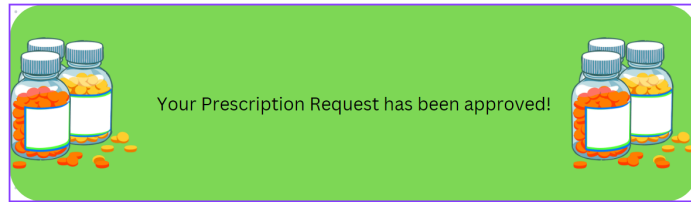
Prescription	Status	Doctor	Pharmacist
Metha-Promorphizolam	Ready	Dr. Elaine Hisco	Walgreens
Fenta-Amchlorodra	Recieved by Pharmacy	Dr. Macy Hostell	CVS
Stenane	Processing	Dr. Bertha Pallot	Rite Aid
Nicosaliipine	Ready	Dr. Shane Araujo	Walmart

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<b>UC02 Name:</b>	Requesting a Prescription
<b>Description:</b>	Would allow the customer to request a prescription through the application
<b>Actor:</b>	Patient
<b>Entry condition:</b>	The patient would be logged into their account and would need to request a prescription
<b>Basic path:</b>	<ol style="list-style-type: none"> <li>1. The system would present the patient with an option to request a new prescription.</li> <li>2. The patient would select the "Request Prescription" button.</li> <li>3. The system would display a form which would request details about the prescription: <ul style="list-style-type: none"> <li>• Prescription name</li> <li>• Doctor</li> <li>• Status</li> <li>• Action</li> </ul> </li> <li>4. The patient would then fill the details in to submit the form. <ol style="list-style-type: none"> <li>a. If the details are incomplete an error message is give[E02]</li> </ol> </li> <li>5. The system would then send the request over to the doctor and pharmacist for their approval [PRO01].</li> <li>6. The system would then confirm the prescription request which had been submitted and would be pending approval. <ol style="list-style-type: none"> <li>a. If there is an issue with processing the prescription error message is given[E01]</li> </ol> </li> <li>7. The patient would then be notified whether the prescription is approved or rejected. [PRO02][A01]</li> <li>8. The use case is concluded.</li> </ol>
<b>Alternative paths:</b>	<p><b>[A01] Prescription Rejected</b></p> <ol style="list-style-type: none"> <li>2. If the prescription request is rejected by the pharmacist or the doctor, the system would display the reason and then allow the patient to modify the request and resubmit.</li> </ol>

Exception paths:	<div>[E01] System Error<ul style="list-style-type: none"><li>If there is an issue processing the request, the system would then display an error message and prompt the patient to try again later.</li></ul></div> <div>[E02] No Prescription Details Provided<ul style="list-style-type: none"><li>If the patient does not enter the required information, the system would then prompt the user to end up filling the missing details.</li></ul></div>																								
Business Rules:	<div>[BR01] Customers must have an active profile to be able to request a prescription.</div> <div>[BR02] Pharmacists and doctors must be able to verify and approve all prescriptions before fulfillment.</div>																								
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Prototype:	<div>[PRO01]</div> <table><tr><th>Prescription Name</th><th>Doctor</th><th>Status</th><th>Action</th></tr><tr><td>Refill for blood pressure medication</td><td>Hugh Richards</td><td>Pending</td><td>View details</td></tr><tr><td>Antibiotics for ear infection</td><td>Kenneth Pearson</td><td>Approved</td><td>View details</td></tr></table>	Prescription Name	Doctor	Status	Action	Refill for blood pressure medication	Hugh Richards	Pending	View details	Antibiotics for ear infection	Kenneth Pearson	Approved	View details												
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**[PRO02]**

<b>UC03 Name:</b>	Viewing Prescription History
<b>Description:</b>	Allows the patient to be able to view their prescription history and details about their individual prescriptions
<b>Actor:</b>	Patient
<b>Entry condition:</b>	The patient is logged into their account and would like to view their prescription history.
<b>Basic path:</b>	<ol style="list-style-type: none"> <li>1. The system would display a menu which would hold options for viewing prescriptions.</li> <li>2. The patient would select the “View Prescription History” Option. <ol style="list-style-type: none"> <li>a. If the patient has no history a message is displayed <b>[A01]</b></li> </ol> </li> <li>3. The system would display a list of all the past and current prescriptions with relevant details: <ul style="list-style-type: none"> <li>● Prescription Name</li> <li>● Doctor</li> <li>● Date Prescribed</li> <li>● Pharmacy</li> <li>● Status (Active, Inactive, Completed) <ul style="list-style-type: none"> <li>○ If there is an issue retrieving any of the information an error message is given <b>[E01]</b></li> </ul> </li> </ul> </li> <li>4. The patient can select a prescription to be able to view more details about it <b>[PRO01]</b></li> <li>5. The system would present additional information which would include dosage, refills, and prescription notes <b>[PRO02]</b>.</li> <li>6. The use case is concluded.</li> </ol>
<b>Alternative paths:</b>	<b>[A01] No Prescription History</b> <ul style="list-style-type: none"> <li>● If the patient has had no previous prescriptions, the system would display a message stating there are no prescriptions on record.</li> </ul>
<b>Exception paths:</b>	<b>[E01] Invalid Request</b> <ul style="list-style-type: none"> <li>● If there is a problem in retrieving the patient’s prescription history, the system would then display an error message and make the patient try again later.</li> </ul>

<b>Business Rules:</b>	<b>[BR01]</b> Only customers who have valid accounts can view their prescription history. <b>[BR02]</b> All the prescription details must be kept up to date and remain accessible.																																					
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