## **Software Requirement Specification**

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#### 1. Project Description

<<add here 1 or 2 paragraphs presenting a overall view of your project>>

We're developing a medical adherence app that's all about making it easier for people to manage their medications. The app sends out reminders to users when it's time to take their meds and lets them mark off when they've taken them. It tracks everything in the background, so users don't have to stress about forgetting doses. On top of that, the app automatically sends reports to their healthcare providers, giving them a clear view of how well their patients are sticking to their medication plans.

To make sure everything is secure, the app allows users to set up a username and password, protecting their personal and medical information. The whole idea behind the app is to improve medication adherence, which can be a big deal for health outcomes, and to keep doctors in the loop without users having to do much extra work. It's a simple way to help people stay on track with their treatment and make sure their doctors know what's going on.

### 2. Functional Requirements

FR01	User Authentication	
FR02	Medication Management and Adherence Monitoring	
FR03	Reporting to Healthcare Providers	
FR04	User Profile Management	
FR05	Account and Data Recovery	
FRN		

#### 3. Non-Functional Requirements

NFR01	Security
NFR02	Performance
NFR03	Usability
NFR04	Scalability
NFR05	Reliability
NFR06	Compatibility

# 4. Use Case Specification

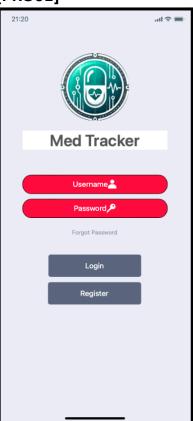
<< Select **three** functional requirements and describe them in detail using use cases.>>

UC01 Name:	User Authentication				
Description:	Users can login or register for a personal account securely				
Actor:	User				
Entry	The actor chooses to either login with their credentials or register				
condition:	for a new account				
Basic path:	1. User Login/Register is presented on app opening screen:				
	[PR001]				
	•The system presents the login screen containing the following				
	options:				
	Username (input)				
	Password (input)				
	Login button				
	Register button				
	If the user is new, they select "Register" to create an account.  [PR002]				
	The system presents a registration form to capture:				
	• Email (input)				
	Date of Birth				
	Password (input)				
	Confirm Password (input)				
	Physician's email				
	The options:				
	Submit				
	Cancel				

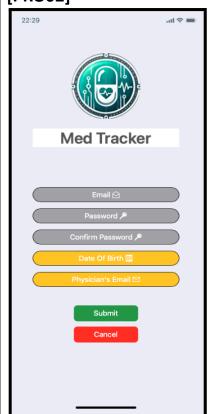
	The user submits the form, and the system creates the				
	account, then redirects to the login screen.				
	If the user a	lready has a	n account, they	enter their credentia	als
	and select "	Login." <b>[PR0</b>	01]		
	21/2				
Alternative paths:	N/A				
patiis.					
Exception	[E01]				
paths:		entials or Re	egistration Erro	ers:	
				credentials, a passwo	rd
					ı
	mismatch during registration, or an already taken username, the system will display an error message.				
		•			
	2. The use case returns to step 1 of the basic path.  [E02]				
	Account Lockout:				
	3. If the user fails to log in after multiple attempts, the system				
	will lock the account.				
	4. The use case will inform the user to try again later or reset				
	their password through their email.				
	,				
Business	[BR01] . All attributes are mandatory.				
Rules:		email would	l be a unique ide	entifier in the system f	or
	the user.				
Data					
description	Name	Туре	Length	Mask	
	Name	String	50	-	
	Email	String	50	-	
	DOB	String	10	DD-MM-YYYY	
	Physician's   Email	String	50	-	
	LEMAN		l	1	

# **Prototype:**

## [PRO01]



# [PRO02]



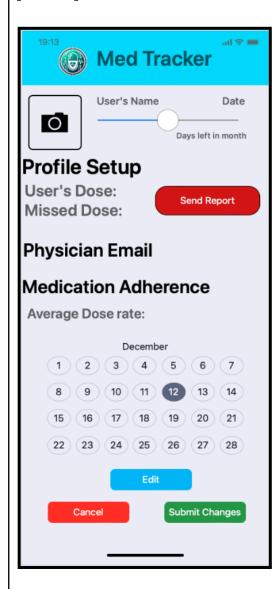
UC02 Name:	Reporting to Healthcare Providers				
Description:	The system automatically generates and sends medication				
	adherence reports to the user's healthcare provider.				
Actor:	User, Healthcare Provider				
Entry	The user has set up their profile with a linked healthcare				
condition:	provider's email.				
Basic path:	<ol> <li>The system periodically checks the user's medication</li> </ol>				
	adherence data.				
	2. The system generates a report summarizing the adherence				
	data over the specified period (e.g., weekly, monthly).				
	3. The system automatically sends the report to the				
	healthcare provider's email linked to the user's profile.				
Alternative	[A01]				
paths:	1. If the user updates their healthcare provider's email, the				
	system verifies the new email and updates the report's				
	recipient.				
Exception	[E01]				
paths:	5. If the report fails to send due to network issues, the system				
	retries sending it at regular intervals until successful.				
	[E02]				
	6. If the healthcare provider's email is invalid, the system				
	prompts the user to update the email address.				
Business	[BR01] The system must send reports in a standardized format				
Rules:	agreed upon by healthcare providers.				
	[BR02] Reports must include critical adherence information like				
	missed doses, average adherence rate, and any flagged issues.				

# Data description

Name	Туре	Length	Mask	
Report	String	N/A	N/A	
Content				
Date	String	10	DD-MM-YYYY	
Provider	String	50	N/A	
Email				

### **Prototype:**

# [PRO01]



UC03 Name:	Medication Management and Adherence Monitoring			
Description:	The system sends timely reminders to users to take their			
	medication as per the prescribed schedule.			
Actor:	User			
Entry	The user has set up their medication schedule on their device.			
condition:				
Basic path:	1. The user enters their medication details, including name,			
	dosage, and schedule.			
	2. The system sets up reminders based on the input schedule.			
	3. At the specified time, the system sends a reminder			
	notification to the user.			
	4. The user acknowledges the reminder by marking the dose			
	as taken.			
	as taken.			
Alternative	[A01]			
paths:	1. If the user reschedules a dose, the system adjusts the			
	reminders accordingly.			
	[A02]			
	1. The system allows users to snooze the reminder for a short			
	period.			
Exception	[E01]			
paths:	7. If the reminder fails to trigger due to app closure or device			
	issues, the system queues the reminder for when the app is			
	next opened.			
	[E02]			
	8. If the user misses a reminder, the system logs it and sends			
	a follow-up reminder.			
Business	[PP01] Pomindors must be non-intrusive but noticeable to ensure			
Rules:	[BR01] Reminders must be non-intrusive but noticeable to ensure adherence.			
itales.	dufference.			
L				

# Data description

Name	Туре	Length	Mask
Medication Name	String	50	N/A
Dosage	String	20	N/A
Reminder Time	String	10	HH:MM:SS
Frequency	String	20	N/A
Start Date	String	10	DD-MM-YYYY
End Date	String	10	DD-MM-YYYY
Dose Acknowledgement	Boolean	1	N/A
Missed Doses	Integer	N/A	N/A
Adherence Rate	Float	N/A	N/A

## **Prototype:**

# [PRO01]

