

Software Requirement Specification

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1. Project Description

The project is an application that allows users to track their medication (especially mental health medication). The intention is for users of the application to be able to log when they are taking medication, keep track of when they are running out, and this should include a journaling aspect where they can keep track of any symptoms to discuss with their primary care provider. Also includes a reminder system for appointments when to take medication. Another aspect of the application will be getting (non-professional) medical advice to users who may need it.

2. Functional Requirements

FR01	User can Sign up/Log in of accounts
FR02	The software must enable the user to log the medication that they are taking.
FR03	User sets up and has a reminder system for when to take medication and appointments
FR04	System have user input how they are feeling on medication on a scale of 1 - 10
FR05	The software must enable the developer to database user information for easy retrieval.
FR06	The software must enable the user to write notes about their symptoms for later referral.
FR07	Input the amount of pills available and as you take it, it shows how many will be left (inventory tracking)
FR08	The software must enable the user to request (unprofessional) medical advice based on symptoms.
FRN	

3. Non-Functional Requirements

NFR0 1	Emails cannot be reused on a new sign up of an account
NFR0 2	Reminders should be sent a hour, 30 minutes, 5 minutes, and at the set time
NFR0 3	Notify healthcare provider if medication has not been taken for more than a week (serious medications only)
NFR0 4	
NFR0 5	
NFR0 6	
NFR0 7	
NFR0 8	
FRN	

4. Use Case Specification

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

UC01 Name:	Account Accessibility
Description:	The software either prompts the user to sign up for the application or uses the provided user information to search our database and access the user's account
Actor:	New User
Entry condition:	The user selects the option: Sign Up/Login
Basic path:	<ol style="list-style-type: none"> The user is presented with a screen where they can select either: [PRO01] <ol style="list-style-type: none"> Sign Up Log In The user selects: Sign Up [A01] The user is taken to a screen [PRO02] where they enter the following: <ul style="list-style-type: none"> - First and last name - Date of Birth - Email - Phone Number - General area of residence (i.e. city, state) - Current Medication - Current Symptoms - User agrees to terms & conditions of the application — Sign Up — Back The user enters information and chooses Sign Up [A02] The system verifies the user information and proceeds with account sign up process [E01] [E02] [BR01] [BR02] The system adds the user to the database The use case is concluded The system returns to the home screen.
Alternative paths:	[A01] The actor selects the Log-In option <ol style="list-style-type: none"> The system prompts user to enter the following [PRO03]: <ol style="list-style-type: none"> Email or Phone Number

	<p>b. Password</p> <ul style="list-style-type: none"> — Forgot Password — Confirm — Back <ol style="list-style-type: none"> 2. The user enters information and clicks Confirm [A02] [A03] 3. The system verifies user information [E02] [E03] [BR03] 4. The use case returns to step 7 of the basic path <p>[A02] The actor selects the Back option</p> <ol style="list-style-type: none"> 1. The use case returns to step 1 of the basic path <p>[A03] The actor selects Forgot Password</p> <ol style="list-style-type: none"> 1. The system prompts user to enter the email or phone number of their account [PRO04] 2. The user enters their information [A02] 3. The system verifies the user information [E04] 4. The user is sent an email link to reset their password 5. The use case returns to step 1 of the basic path
Exception paths:	<p>[E01] Duplicate Email</p> <ol style="list-style-type: none"> 1. The system informs user that the entered email is already in use with the application 2. The use case returns to step 3 of the basic path <p>[E02] Invalid entry of user information</p> <ol style="list-style-type: none"> 1. The system informs user that a specific required field either has an invalid format or was left empty. 2. The use case returns to step 3 of the basic path <p>[E03] Invalid Email/Phone Number or Password</p> <ol style="list-style-type: none"> 1. The system informs user that the entered email or password is incorrect 2. The use case returns to step 1 of the basic path <p>[E04] Invalid Email or Phone Number</p> <ol style="list-style-type: none"> 1. The system informs user that the entered email or phone number is not in the system 2. The use case returns to step 1 of basic path

Business Rules:	<p>[BR01] Name, email, age, and phone number are mandatory</p> <p>[BR02] The terms and conditions must be agreed upon</p> <p>[BR03] Email/Phone Number and password are mandatory</p>																																													
Data description	<table><tr><th>Name</th><th>Type</th><th>Length</th><th>Mask</th><th></th></tr><tr><td>Name</td><td>String</td><td>50</td><td>-</td><td></td></tr><tr><td>DOB</td><td>String</td><td>10</td><td>MM/DD/YYYY</td><td></td></tr><tr><td>Email</td><td>String</td><td>50</td><td>-</td><td></td></tr><tr><td>Phone #</td><td>String</td><td>12</td><td>XXX-XXX-XXXX</td><td></td></tr><tr><td>Password</td><td>String</td><td>30</td><td></td><td></td></tr><tr><td>Area of Residency (i.e. city,state)</td><td>String</td><td>50</td><td>-</td><td></td></tr><tr><td>Curr Medication</td><td>String</td><td>50</td><td>-</td><td></td></tr><tr><td>Curr Symptoms</td><td>String</td><td>30</td><td>-</td><td></td></tr></table>	Name	Type	Length	Mask		Name	String	50	-		DOB	String	10	MM/DD/YYYY		Email	String	50	-		Phone #	String	12	XXX-XXX-XXXX		Password	String	30			Area of Residency (i.e. city,state)	String	50	-		Curr Medication	String	50	-		Curr Symptoms	String	30	-	
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Prototype:	<p>[PRO01]</p> <div><div>MediTrack</div><div><div><div><div>←</div><div>→</div><div>↺</div><div>🏠</div></div><div></div></div></div><div><div>Sign Up</div><div>Log In</div></div><div></div></div> <p>[PRO02]</p>																																													

MediTrack

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First Name:

Last Name:

Date of Birth:

Email:

Phone Number:

General Area of Residence (i.e. city, state):

Current Medications:

Current Symptoms:

Back

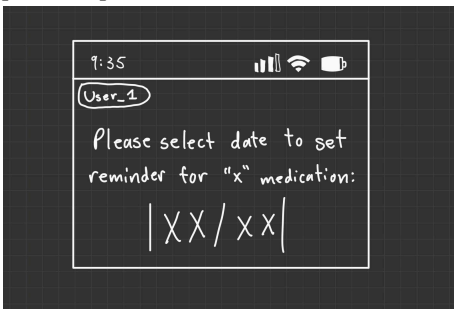
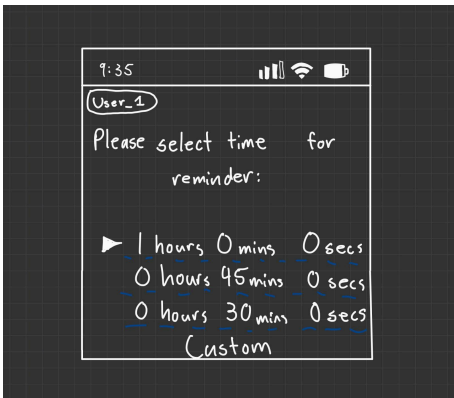
Please click [here](#) to read the terms & conditions.

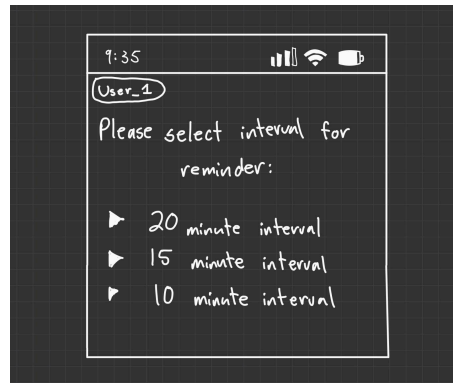
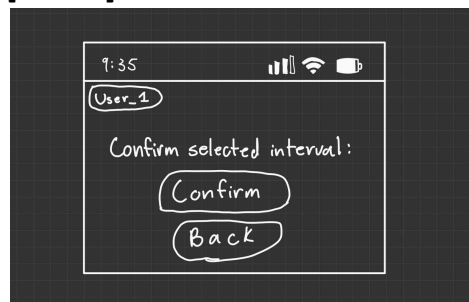
Sign Up

[PRO03]

	<div><div><div>MediTrack</div><div><div><div>←→↺🏠</div><div></div></div></div></div><div><div>Back</div><div>Email/Phone Number: <div></div></div><div>Password: <div></div></div><div>Forgot Password</div><div>Login</div></div><div></div></div>
[PRO04]	<div><div><div>MediTrack</div><div><div><div>←→↺🏠</div><div></div></div></div></div><div><div>Forgot Password</div><div>Back</div><div>Email/Phone Number: <div></div></div><div>Send Recovery link</div></div><div></div></div>

UC02 Name:	Schedule Reminding
Description:	The software allows users to choose the time they want to be reminded to take their medication. It will consistently remind the user about taking their medication at pre-set intervals.
Actor:	New and existing users
Entry condition:	User selects: Schedule reminders
Basic path:	<ol style="list-style-type: none"> 1. Prompt of user choosing when the system should start reminding use of when reminders should start [PRO01] 2. Prompt of choosing when the first reminder should be [A01] [BR01][PRO02] 3. After choosing, a set of intervals are shown depending on the reminder time they chose [A02] [E01] [BR02][PRO03] 4. The system verifies with the user their desired schedule [A02] [PRO04] 5. The user then confirms or denies with the software/system they agree of the reminder schedule [E02] 6. System keeps this in the account's information 7. Use case is completed, confirmed and set
Alternative paths:	<p>[A01] Actor selects when their first reminder should be</p> <ol style="list-style-type: none"> 1. The system prompts the user to choose one of the following: <ol style="list-style-type: none"> a. 1 hour before b. 45 minutes before c. 30 minutes before 2. User is then prompted with intervals they would like to be reminded [A02] <p>[A02] Actor selects their desired interval of being reminded</p> <ol style="list-style-type: none"> 2. The system prompts the user to choose one of the following: <ol style="list-style-type: none"> a. 20-minute intervals b. 15-minute intervals c. 10-minute intervals 3. The system asks user to confirm their interval desire <ul style="list-style-type: none"> - Confirm - Back 4. System adds interval to the users profile
Exception paths:	<p>[E01] User resets application to not have intervals</p> <ol style="list-style-type: none"> 1. Application restarts 2. The application asks user to schedule reminders as it is required [BR01] <p>[E02] User disagrees with confirmation of the scheduled reminder</p> <ol style="list-style-type: none"> 1. Systems ask if they are sure of no confirming

	2. The software goes back to the select intervals [A02]																																							
Business Rules:	[BR01] Selecting a set schedule of reminder is required [BR02] Selecting intervals of reminders is required																																							
Data description	<table><tr><th>Name</th><th>Type</th><th>Length</th><th>Mask</th><th></th></tr><tr><td>User Account ID</td><td>String</td><td>8-30</td><td>N/A</td><td></td></tr><tr><td>Confirmation Status</td><td>Boolean</td><td>0 or 1</td><td>N/A</td><td></td></tr><tr><td>Reminder</td><td>Calendar Time</td><td>N/A</td><td>N/A</td><td></td></tr><tr><td>Reminder Interval</td><td>Integer</td><td>1-3</td><td>N/A</td><td></td></tr><tr><td>Verification Message</td><td>String</td><td>30ish</td><td>N/A</td><td></td></tr><tr><td>User Profile</td><td>String</td><td>100+</td><td>N/A</td><td></td></tr></table>					Name	Type	Length	Mask		User Account ID	String	8-30	N/A		Confirmation Status	Boolean	0 or 1	N/A		Reminder	Calendar Time	N/A	N/A		Reminder Interval	Integer	1-3	N/A		Verification Message	String	30ish	N/A		User Profile	String	100+	N/A	
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[PRO03]**[PRO04]**

UC03 Name:	Check-ins
Description:	The software prompts the user to select a rating for the previous day of medication usage after they log the current day of medication usage to show how a person is feeling on a medication on a scale of 1 - 5, while allowing the user to update their symptoms and access journal prompts.
Actor:	New and Current Users
Entry condition:	The actor confirms that they have taken the medication [BR01]
Basic path:	<ol style="list-style-type: none"> 1. The actor is prompted to “check-in” (automatic) [A01] <ol style="list-style-type: none"> a. User chooses to manually check in from the home screen [A02] 2. If the actor selects yes, they will be taken to a screen with the ability to select a rating between 1 and 5. 3. The actor selects a rating [BR02] 4. A text box will be located below the rating options for the user to provide more information/details on why they selected that particular rating. 5. The user will finally select “Submit Check-in.” 6. The information from the user will be stored in a database for later retrieval.
Alternative paths:	<p>[A01] The user selects “no” when prompted to check-in</p> <ol style="list-style-type: none"> 5. After logging medication the actor is prompted to “check-in” 6. The actor selects no and is returned to the home screen 7. The lack of response is logged in a counter to remember how many days it has been since the actor has logged how they feel <p>[A02] User chooses to check in without an automatic prompt (manually)</p> <ol style="list-style-type: none"> 5. When the actor is in the home screen they will have the option to select from multiple functions. From there one of the options to select will be “check-in” 6. if yes is selected they will be taken to a screen with the ability to select a rating between 1 and 5. 7. The actor selects a rating 8. A text box will be located below the rating options for the user to provide more information/details on why they selected that particular rating. 9. The user will finally select “Submit Check-in.” 10. The information from the user will be stored in a database for later retrieval.

Exception paths:	<p>[E01] The Actor has not logged an entry in 3 days</p> <ol style="list-style-type: none">3. if the inactivity counter is set to 3 then the actor will be sent a reminder4. the reminder will prompt the actor to check-in: "You have not checked-in for 3 days, would you like to now?"5. if the user selects no they will be return to the home screen6. if yes is selected they will be taken to a screen with the ability to select a rating between 1 and 5.7. The actor selects a rating8. A text box will be located below the rating options for the user to provide more information/details on why they selected that particular rating.9. The user will finally select "Submit Check-in."10. The information from the user will be stored in a database for later retrieval. <p>[E01] The Actor has not logged an entry in 5 days</p> <ol style="list-style-type: none">11. if the inactivity counter is set to 5 then the actor will be sent a reminder12. the reminder will prompt the actor to check-in: "You have not checked-in for 5 days, would you like to now?"13. if the user selects no they will be return to the home screen14. if yes is selected they will be taken to a screen with the ability to select a rating between 1 and 5.15. The actor selects a rating16. A text box will be located below the rating options for the user to provide more information/details on why they selected that particular rating.17. The user will finally select "Submit Check-in."18. The information from the user will be stored in a database for later retrieval. <p>[E01] The Actor has not logged an entry in 10 days</p> <ol style="list-style-type: none">19. if the inactivity counter is set to 10 then the actor will be sent a reminder20. the reminder will prompt the actor to check-in: "You have not checked-in for 10 days, please log your activity which will have a button to redirect them to the check-in screen21. they will be taken to a screen with the ability to select a rating between 1 and 5.22. The actor selects a rating
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	<div>23. A text box will be located below the rating options for the user to provide more information/details on why they selected that particular rating.</div> <div>24. The user will finally select "Submit Check-in."</div> <div>25. The information from the user will be stored in a database for later retrieval.</div>																									
Business Rules:	<div>[BR01] . User must confirm they have taken medication for previous cycle</div> <div>[BR02] . User must select a rating before submitting check-in</div>																									
Data description	<table><thead><tr><th>Name</th><th>Type</th><th>Length</th><th>Mask</th><th></th></tr></thead><tbody><tr><td>Rating</td><td>int</td><td>1</td><td>N/A</td><td></td></tr><tr><td>Rating Details</td><td>String</td><td>100 +</td><td>N/A</td><td></td></tr><tr><td>Confirmation</td><td>Boolean</td><td>1 byte</td><td>N/A</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>	Name	Type	Length	Mask		Rating	int	1	N/A		Rating Details	String	100 +	N/A		Confirmation	Boolean	1 byte	N/A						
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Prototype:	<div><div>[PRO01]</div><div><div><div>Select on a scale of 1 to 5 how you are feeling on your medication.</div><div><div><div><div><div>☹️</div><div>1</div></div><div><div><div>😞</div><div>2</div></div><div><div><div>😐</div><div>3</div></div><div><div><div>🙂</div><div>4</div></div><div><div><div>😊</div><div>5</div></div></div></div></div><div>Please enter any additional details about how you are feeling on your medication:</div><div><div></div></div><div><div>Cancel</div><div>Submit</div></div></div></div><div><div>background color</div></div></div><div><div>[PRO02]</div></div></div></div></div></div>																									