Software Requirement Specification

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1. Project Description

The Mental Health Support App, Best Help, is designed to provide cost-effective tools that empower users to manage and address mental health challenges as they arise. It offers instant access to therapy and various mood-boosting coping mechanisms, ensuring users have immediate support when needed. The app also includes reminders for essential mental health practices, such as yoga, grounding exercises, hydration, nutrition, and taking breaks. Additionally, it features a directory of contact information for useful resources, including therapists, psychiatrists, and various medical services, making it a comprehensive tool for maintaining and improving mental well-being.

2. Functional Requirements

FR01	The app must provide a mood tracker for the customer.
FR02	The app must provide the ability to schedule appointments and meet with a therapist.
FR03	The app must contain a list of mood-boosting coping mechanisms for the customer's mental well-being.
FR04	The app must have a profile interface to save and track the user's information
FR05	The app must have an emergency button if the customer has an urgent need
FR06	The app must have the customer's bank account linked to pay for therapy and app subscription
FR07	The app must have a sign-up and sign-in page upon opening the app (potentially face-id or pin) for customer use
FR08	The app must provide the ability to notify customers when they have appointments/activities/take medicine
FR09	The app must provide security measures to secure the patient data.
FR10	The app should be able to allow the customer to change therapists/reschedule appointments.
FR11	The app should be able to get a periodic (depending on the circumstance) health check with the customer
FR12	The app should be accessible to patients with any disability
FR13	The software manager must be able to maintain customer bank account information

3. Non-Functional Requirements

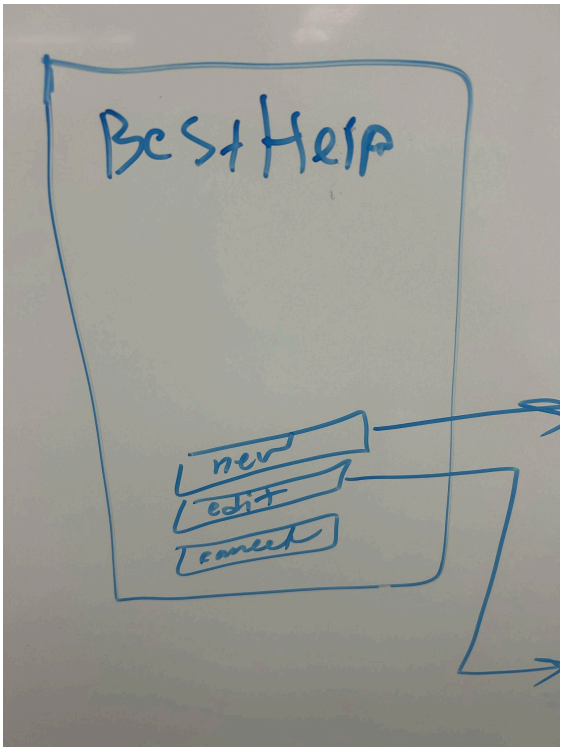
NFR01	The app must send confirmation emails with no latency greater than 5 minutes when haven't logged in a while or making purchases
NFR02	The app must handle at least 1000 concurrent users without performance degradation.
NFR03	User data, including reminders and therapy sessions, must be backed up every 24 hours to prevent loss.
NFR04	Sensitive information, such as therapist or psychiatrist contact details, should only be accessible to authenticated users.
NFR05	Support for multiple languages to ensure global usability.
NFR06	The app should support multiple time zones, ensuring reminders and therapy sessions are delivered at the correct time based on the user's location.
NFR07	The app must be accessible to everybody. It should provide alternative text for images and captions for audio-visual content.
NFR08	The app must be available 24/7 to provide constant support. Users should be able to access resources and services anytime, even during non-working hours
FRN	

4. Use Case Specification

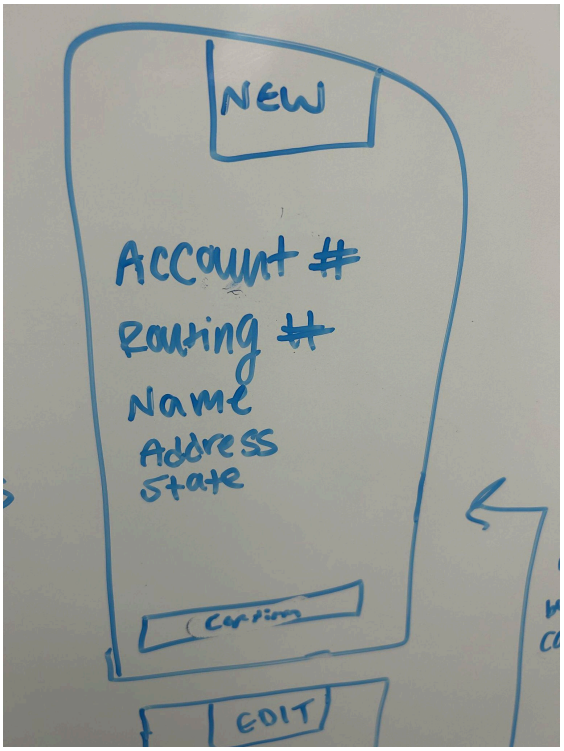
*<< Select **three** functional requirements and describe them in detail using use cases.>>*

UC01 Name:	Bank Account Link
Description:	The software allows the manager to link customers' bank account information in order to pay for services and subscriptions.
Actor:	Manager
Entry condition:	The actor selects the option to link a bank account
Basic path:	1. The system presents the actor with the bank account linking screen containing: **[PRO01]** -The options: --- New --- Edit --- Cancel 2. The actor selects New **[A01] [A02]** 3. The system presents a screen for entering the customer's bank information containing: **[PRO02]** - Name (editable) - Routing number (editable) - Account number (editable) - Address (editable) - State (containing the list of US states) - The options: --- Confirm --- Back 4. The actor informs customer data and selects the Confirm option **[A03]** 5. The system verifies if the information is valid **[BR01] [BR02][BR03] [E01]** 6. The system includes the new customer 7. The use case is concluded 8. The system returns to the home screen
Alternative paths:	**[A01]** The actor selects the Edit option 1. The system presents a form for searching a customer account, considering for each customer **[PRO03]:** - Routing number (editable)

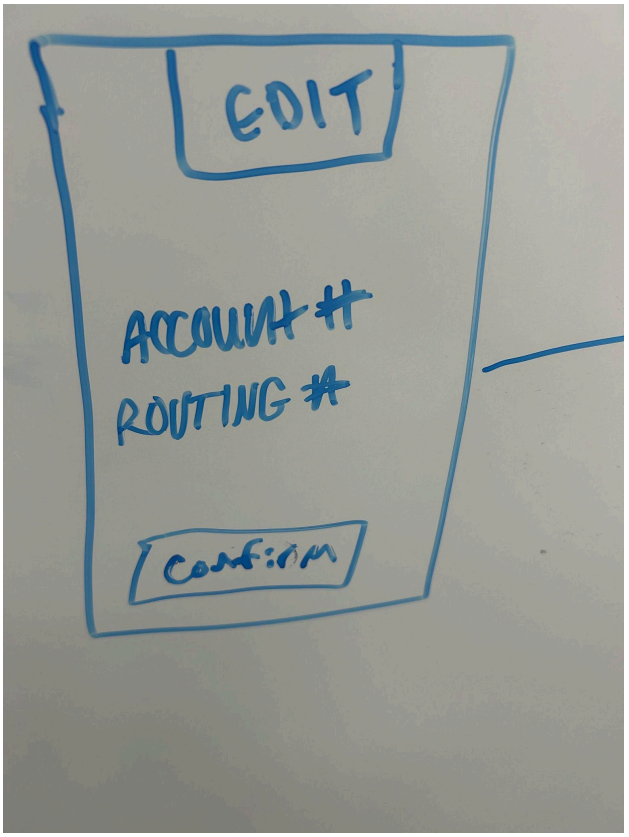
	- Account number (editable) --- Confirm --- Back 2. The actor enters customer account data and selects the confirm option **[A03]** 3. The system presents a form for editing the customer account, considering for each customer **[PRO04]**: - Name (editable) - Routing number (editable) - Account number (editable) - Address (editable) - State (containing the list of US states) - The options: --- Confirm --- Delete --- Back 4. The actor enters customer account data and selects the confirm option **[A03] [A04]** 1. The system verifies if the information is valid **[BR01] [BR02] [BR03] [E01]** 2. The system updates the customer information 3. The use case is concluded 4. The system returns to the home screen **[A02] The actor selects the Cancel option** 1. The use case is concluded 2. The system returns to the home screen **[A03] The actor selects the Back option** 1. The use case returns to step 1 of the basic path, inputted data is not saved. **[A04] The actor selects the Delete option** 1. The system confirms that the customer will be deleted 2. The system excludes the customer 3. The system returns to step 1 of the basic path.
Exception paths:	**[E01] Invalid account information** 1. The system displays message indicating the existence of invalid account information

<table>
<tr><td></td><td>2. the use case returns to step 3 of the basic path</td></tr>
<tr><td>Business Rules:</td><td>[BR01] All attributes are mandatory
[BR02] The routing number must uniquely identify a customer account
[BR03] The account number must uniquely identify a customer account</td></tr>
<tr><td>Data description</td><td>
<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>RoutingNum</td><td>String</td><td>9</td><td>xxxxxxxxx</td><td></td></tr>
<tr><td>AccountNum</td><td>String</td><td>17</td><td>xxxxxxxxxxxxxxxxx</td><td></td></tr>
<tr><td>Address</td><td>String</td><td>50</td><td></td><td></td></tr>
<tr><td>State</td><td>String</td><td>2</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Prototype:</td><td>[PRO01]:
 

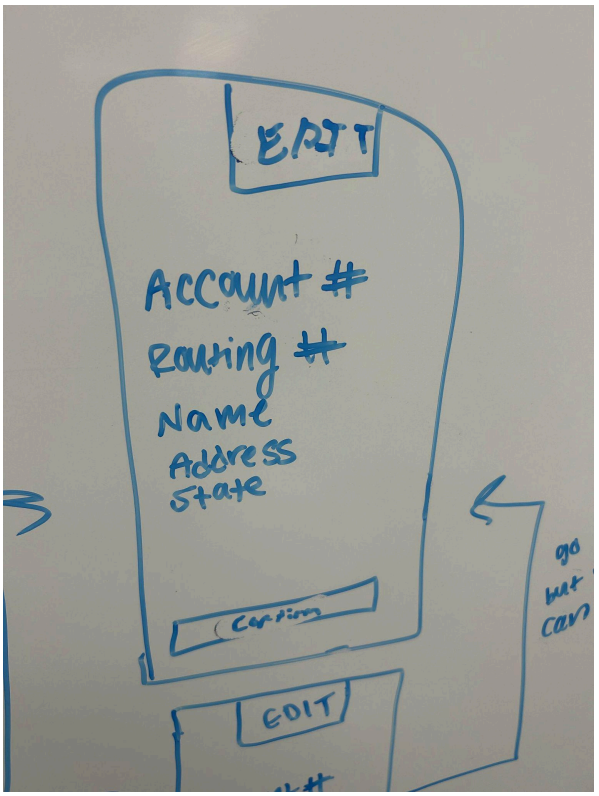
[PRO02]:</td></tr>
</table>


NEW
Account #
Routing #
Name
Address
State
EDIT

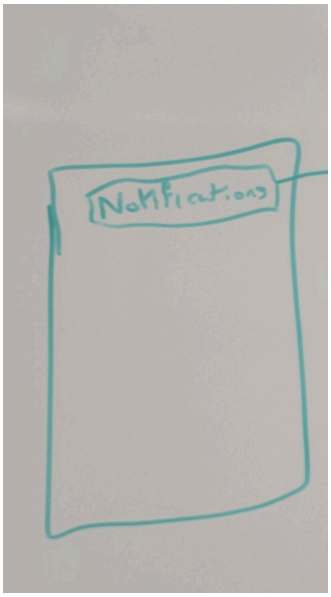
[PRO03]:


EDIT
ACCOUNT #
ROUTING #
Confirm

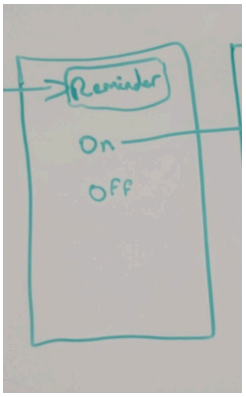
[PRO04]:


EDIT
Account #
Routing #
Name
Address
State
EDIT

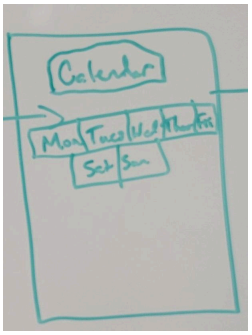
UC02 Name:	Customer Health Check
Description:	The app should be able to get a periodic (depending on the circumstance) health check with the customer
Actor:	Customer
Entry condition:	The actor selects the Customer Health Check
Basic path:	1. The system prompts the user to select a notification option**[PRO01][PRO02]** 2. The actor selections option New**[A01] [A02]** 3. The system presents the actor with a screen for setting notifications **[PRO03] [BR01]** - Time (editable) - Days (editable) 4. The system informs the actor of their set times/days for confirmation **[A01]** 5. The system then presents a “Rate your day” scale **[PRO04][BR02]** 6. The actor selects a number from one to ten **[A04]** 7. The data is stored in the user’s profile 8. The use case is concluded 9. The system returns to the home screen 10. The user is notified the next day at their set date and time via their notification preference
Alternative paths:	**[A01] The actor selects the confirm option** 1. The system presents time (read only) and date (read only) **[A02] The actor selects the cancel option** 1. This case is canceled 2. System continues to the main page **[A03] The actor selects the edit option** 1. The system returns to step 6 of the basic path

<table>
<tr><td></td><td>[A04] The actor selects the back option
1. The system returns to step 5 of the basic path</td></tr>
<tr><td>Exception paths:</td><td>[E01]
1. The actor is informed their data is invalid
2. The user returns to basic path step 3</td></tr>
<tr><td></td><td>[BR01] . The customer must be able to choose when and how they receive the notification
[BR02] . The notification must take them to the survey when interacted with</td></tr>
<tr><td>Data description</td><td>
<table>
<tr><th>Name</th><th>Type</th><th>Length</th><th>Mask</th><th></th></tr>
<tr><td>Time</td><td>Int</td><td>4</td><td>-</td><td></td></tr>
<tr><td>Day</td><td>Int</td><td>2</td><td>-</td><td></td></tr>
<tr><td>Month</td><td>String</td><td>2</td><td>-</td><td></td></tr>
<tr><td>Rating</td><td>Int</td><td>2</td><td>XX</td><td></td></tr>
</table>
</td></tr>
<tr><td>Prototype:</td><td>[PRO01]
 

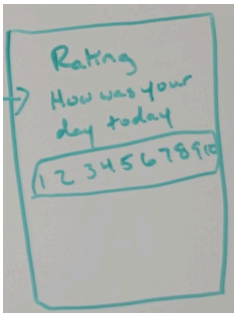
[PRO02]</td></tr>
</table>


Reminder
On
Off

[PRO03]


Calendar

[PRO04]


Rating
How was your
day today
1 2 3 4 5 6 7 8 9 10

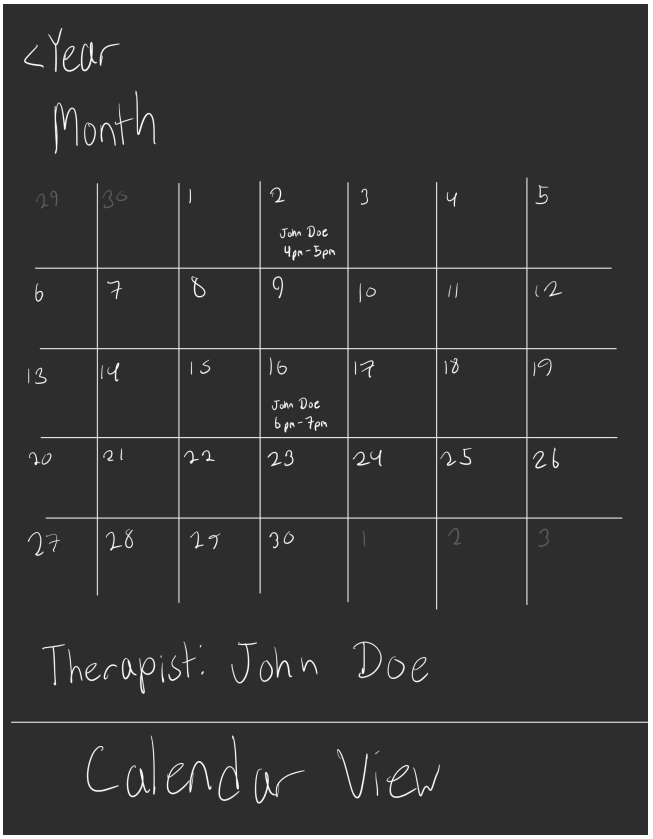
UC03 Name:	Appointment Scheduler
Description:	Schedule appointments with therapists in advance
Actor:	Customer (user of the app)
Entry condition:	The customer logs into the app and selects “Schedule Appointment” button under the therapy category
Basic path:	1. The system displays a screen listing available therapists, their specialties, and time slots. 2. The customer selects a preferred therapist from the list. 3. The system presents a calendar view showing available appointment slots for the selected therapist. **[PRO01] [A04]** 4. The customer chooses a date and time for their appointment. 5. The system verifies if the customer’s therapist is available for chosen date and time. **[A01]** 6. The system asks the customer to confirm appointment details. **[PRO02]** 7. The customer confirms the details. 8. The system verifies if the appointment details are valid. **[E01] [E02] [BR01] [BR02]** 9. The system schedules the appointment and updates the customer’s schedule. 10. The customer can choose to reschedule or cancel their existing appointment. **[A02] [A03]** 11. The system automatically updates appointments for the customer in advance based on the customer’s schedule, also giving the customer the choice alongside reschedule and cancel to confirm if the date and time works for them.
Alternative paths:	**[A01] Therapist is unavailable:** If the selected therapist is unavailable for the chosen time slot, the system prompts the user to reschedule. **[A02] Reschedule:** The customer can navigate to their scheduled appointments and choose to reschedule an existing appointment. The system will prompt the customer with available dates and times for their therapist and allow them choose a different date and time to reschedule.

<table>
<tr><td></td><td>[A03] Cancel: The customer can navigate to their scheduled appointments and choose to cancel an existing appointment. The system will prompt the customer if they want to confirm their cancellation.

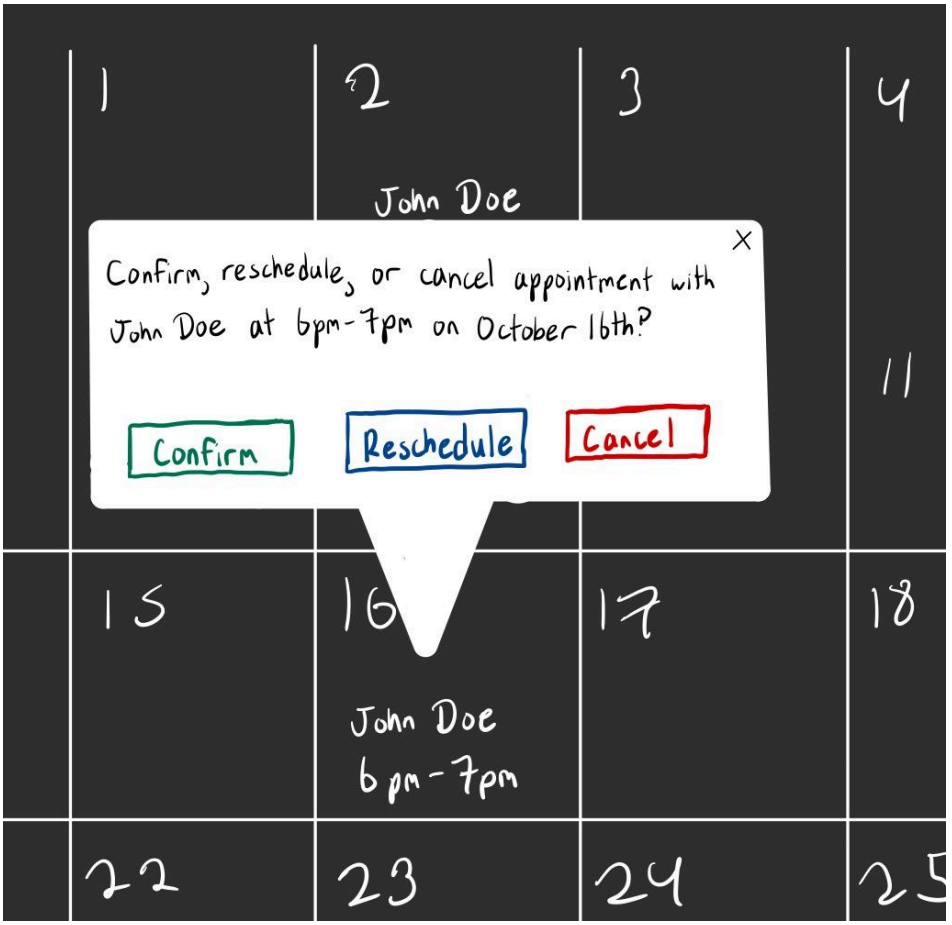
[A04] Back: The customer can back out of the calendar view if they change their mind on scheduling a therapy appointment.</td></tr>
<tr><td>Exception paths:</td><td>[E01] Double booking: If the customer tries to schedule two appointments for same time, the system tells the user there is a scheduling conflict and prompts the customer to choose a different time slot

[E02] Appointment limit: If the customer attempts to schedule more appointments than allowed within a given period (e.g. one session per week or month), the system will display a message that indicates the scheduling limit has been reached.</td></tr>
<tr><td>Business Rules:</td><td>[BR01] Appointment conflict: The system must check no overlapping appointments exist for both the customer and the therapist before an appointment is confirmed.

[BR02] Scheduling limit: Customers can schedule a certain number of appointments within a given period (configurable within app settings)</td></tr>
<tr><td>Data description</td><td>
<table>
<tr><th>Name</th><th>Type</th><th>Length</th><th>Mask</th></tr>
<tr><td>TherapistID</td><td>String</td><td>10</td><td>Alphanumeric</td></tr>
<tr><td>Day</td><td>Int</td><td>2</td><td>DD</td></tr>
<tr><td>Month</td><td>Int</td><td>2</td><td>MM</td></tr>
<tr><td>Year</td><td>Int</td><td>4</td><td>YYYY</td></tr>
<tr><td>Hour</td><td>Int</td><td>2</td><td>HH (24-hour, no AM/PM)</td></tr>
<tr><td>Minutes</td><td>Int</td><td>2</td><td>MM (will be displayed as HH:MM)</td></tr>
<tr><td>UserID</td><td>String</td><td>10</td><td>Alphanumeric</td></tr>
<tr><td>AppointmentID</td><td>String</td><td>12</td><td>Alphanumeric</td></tr>
</table>
</td></tr>
<tr><td>Prototype:</td><td>[PRO01] Calendar View</td></tr>
</table>



[PRO02] Appointment Confirmation Screen


1
2
John Doe
3
4
11
Confirm, reschedule, or cancel appointment with John Doe at 6pm-7pm on October 16th?
Confirm
Reschedule
Cancel
15
16
John Doe
6pm-7pm
17
18
22
23
24
25