

Software Requirement Specification

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1. Project Description

The Baddie Health Trackers: Mood Tracker is a mobile health app designed to help patients track and improve their emotional well-being. Patients will be able to sign up, set goals, and log their daily moods on a scale of 1 to 5. The system can then generate weekly mood trends, encourage consistency through streak tracking, and provide supportive tips when patients report low moods.

2. Functional Requirements

FR01	The software must enable the patient to create an account
FR02	The software must enable the patient to log in securely
FR03	The software must enable the patient to set a goal by choosing from predefined goal options
FR04	The software must enable the patient to log their daily mood on a scale of 1–5
FR05	The software must enable the patient to view a weekly mood trend based on logged entries
FR06	The software must enable the patient to maintain a streak of consecutive daily log entries
FR07	The software must provide personalized tips when the patient reports a low mood (score 1–2)

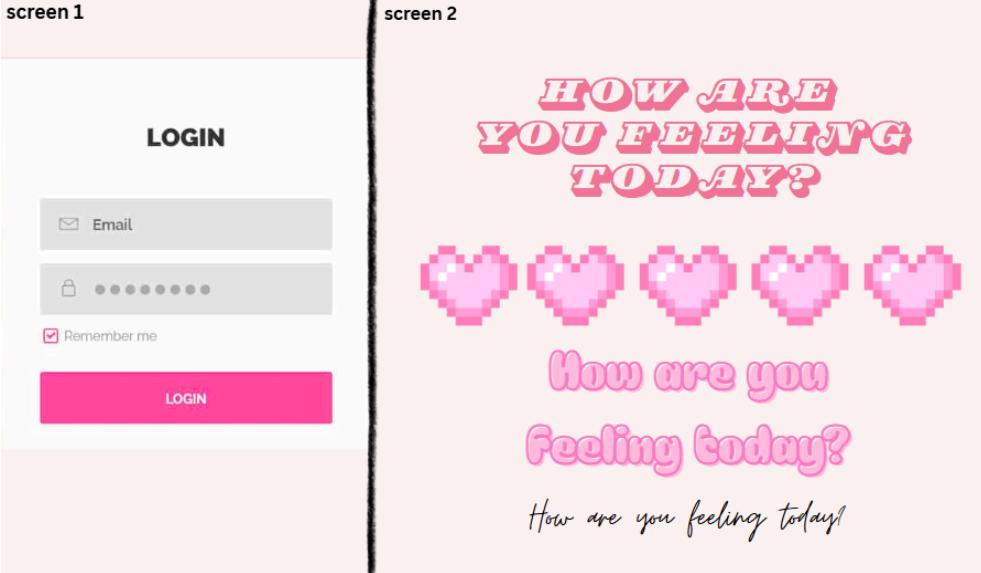
3. Non-Functional Requirements

NFR01	The system must process and save a mood entry within 2 seconds
NFR02	The weekly mood trend must be generated and displayed within 5 seconds of the request
NFR03	The system must be available 99% of the time during a given month
NFR04	The system must support at least 1,000 concurrent users
NFR05	The streak feature must update 1 second after a mood log entry is submitted
NFR06	The system must encrypt all patient data using industry-standard security protocols Can't risk patient info getting out, that's a HIPAA violation

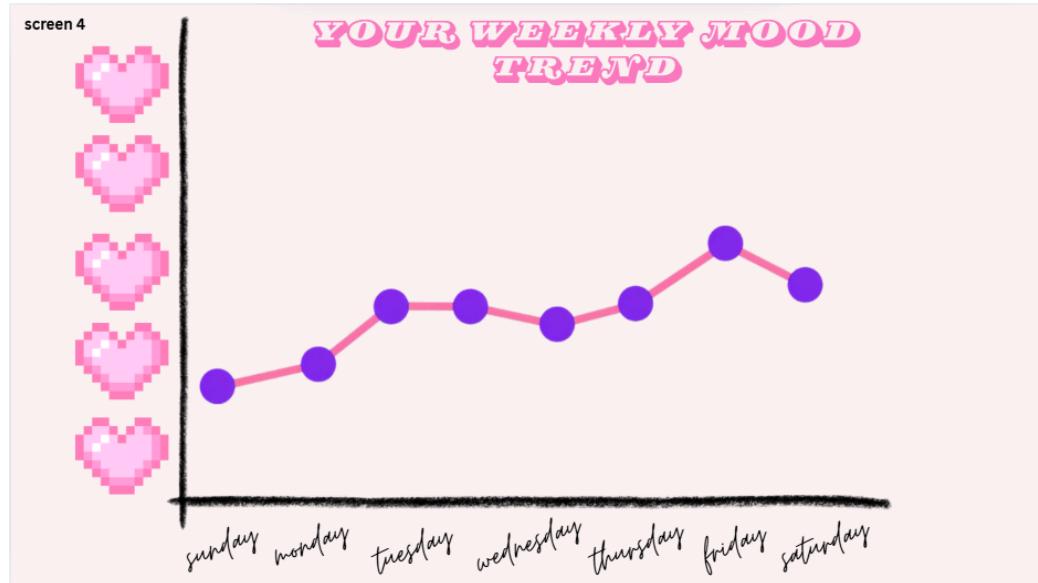
4. Use Case Specification

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

UC01 Name:	Log Daily Mood																									
Description:	The software allows the patient to log their daily mood on a scale of 1–5																									
Actor:	Patient, System																									
Entry condition:	Patient has logged into their account and selects “Log Mood”																									
Basic path:	<ol style="list-style-type: none"> 1. Patient selects “Log Mood.” [A01] [PRO01] 2. System displays scale (1–5). 3. Patient selects a value. 4. System saves the mood entry. [E01] 5. System updates streak counter. 6. System confirms successful entry. 																									
Alternative paths:	[A01] <ol style="list-style-type: none"> 1. Patient forgets to log for one day: streak resets to 0. 																									
Exception paths:	[E01] <ol style="list-style-type: none"> 1. Internet connection lost: system saves entry locally and uploads when reconnected. 																									
Business Rules:	[BR01]: One account per email. [BR02]: Streak increases with consecutive logs. Password must be at least 8 characters.																									
Data description	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Length</th> <th>Mask</th> <th></th> </tr> </thead> <tbody> <tr> <td>mood</td> <td>int</td> <td>1</td> <td>N</td> <td></td> </tr> <tr> <td>streak</td> <td>int</td> <td>1-3</td> <td>NNN</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name	Type	Length	Mask		mood	int	1	N		streak	int	1-3	NNN											
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UC01 Name:	Log Daily Mood
Description:	The software allows the patient to log their daily mood on a scale of 1–5
Actor:	Patient, System
Entry condition:	Patient has logged into their account and selects “Log Mood”
Prototype:	<p>[PRO01]</p> 

UC02 Name:	View Weekly Mood Trend																									
Description:	The software must enable the patient to view a weekly mood trend based on logged entries																									
Actor:	Patient, System																									
Entry condition:	Patient has logged into their account and selects “View Weekly Trend”																									
Basic path:	<ol style="list-style-type: none"> 1. Patient selects “View Weekly Trend.” [PRO0] 2. System retrieves mood data for the past 7 days. [A01] [E01] 3. System generates graph/chart of mood scores. 4. System displays the trend to patient. 																									
Alternative paths:	<p>[A01]</p> <ol style="list-style-type: none"> 1. Patient has fewer than 7 entries: system shows partial trend with message “Log more days to complete your weekly trend.” 																									
Exception paths:	<p>[E01]</p> <ol style="list-style-type: none"> 1. Data retrieval error: system displays error message and retry option. 																									
Business Rules:	<p>[BR01]: Shows last seven mood entries.</p> <p>[BR02]: Displays partial trend if under seven logs.</p>																									
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Prototype:	[PRO02]  <p>The graph displays a weekly mood trend with five data points. Each point is represented by a pink heart icon. The mood starts at a low point on Sunday, rises to a peak on Friday, and ends at a moderate level on Saturday.</p> <table border="1"><thead><tr><th>Day</th><th>Mood Score (approx.)</th></tr></thead><tbody><tr><td>sunday</td><td>1</td></tr><tr><td>monday</td><td>2</td></tr><tr><td>tuesday</td><td>3</td></tr><tr><td>wednesday</td><td>3</td></tr><tr><td>thursday</td><td>2</td></tr><tr><td>friday</td><td>4</td></tr><tr><td>saturday</td><td>3</td></tr></tbody></table>	Day	Mood Score (approx.)	sunday	1	monday	2	tuesday	3	wednesday	3	thursday	2	friday	4	saturday	3
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UC03 Name:	Receive Tips When Feeling Down																									
Description:	The software must provide personalized tips when the patient reports a low mood (score 1–2)																									
Actor:	Patient, System																									
Entry condition:	Patient has logged into their account, and logs a mood less than 2 from “Log Mood” (UC01)																									
Basic path:	<ol style="list-style-type: none"> 1. Patient logs a mood of 1 or 2. [PRO03] 2. System detects low mood. 3. System retrieves appropriate motivational tip or coping strategy. [A01] [E01] 4. System displays tip to patient. 																									
Alternative paths:	<p>[A01]</p> <ol style="list-style-type: none"> 1. Patient opts out of tips: system does not display tips. 																									
Exception paths:	<p>[E01]</p> <ol style="list-style-type: none"> 1. Tip database unavailable: system shows generic supportive message (“Remember, you’re not alone. Try a relaxing activity today.”). 																									
Business Rules:	<p>[BR01]: Shows tip for mood 1–2. [BR02]: Skips tip if user opted out.</p>																									
Data description	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Length</th> <th>Mask</th> <th></th> </tr> </thead> <tbody> <tr> <td>tip</td> <td>String</td> <td>50</td> <td>-</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name	Type	Length	Mask		tip	String	50	-																
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Prototype:	[PRO03] screen 3 <i>Tip/Quote (after selecting mood)</i>
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