

Medical Journey Log: A Family Care Tracker

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Table of Contents

<i>Abstract</i>	3
<i>Functional Requirements</i>	4
<i>Non-Functional Requirements</i>	5
<i>Technical Requirements</i>	6
<i>Logical System Design</i>	7
<i>System Logical Model</i>	8
<i>User Interface Design</i>	9
Screen 1: Dashboard	9
Screen 2: Log Symptom	10
Screen 3: Appointment Manager	11
Screen 4: Journal Entry.....	12
Screen 5: Reports.....	13
<i>Reports</i>	14
Example: Symptom Summary Report	14
<i>Security Matrix</i>	15

Abstract

This Requirements Specification outlines the structure and expectations for "Medical Journey Log: A Family Care Tracker," a web-based application aimed at supporting families managing ongoing medical care. The system will allow users to track symptoms, treatments, appointments, and personal reflections for each family member. This document includes detailed functional and non-functional requirements, system design diagrams, technical needs, and user interface sketches to guide the development process.

Functional Requirements

The application will include the following key user stories:

- **As a caregiver**, I want to log daily symptoms for a family member so that I can track patterns over time.
- **As a caregiver**, I want to view and filter historical data by symptom type or date range.
- **As a caregiver**, I want to add upcoming medical appointments to a shared calendar.
- **As a caregiver**, I want to record personal journal entries to reflect on daily events.
- **As a caregiver**, I want to export data summaries in PDF format for medical visits.

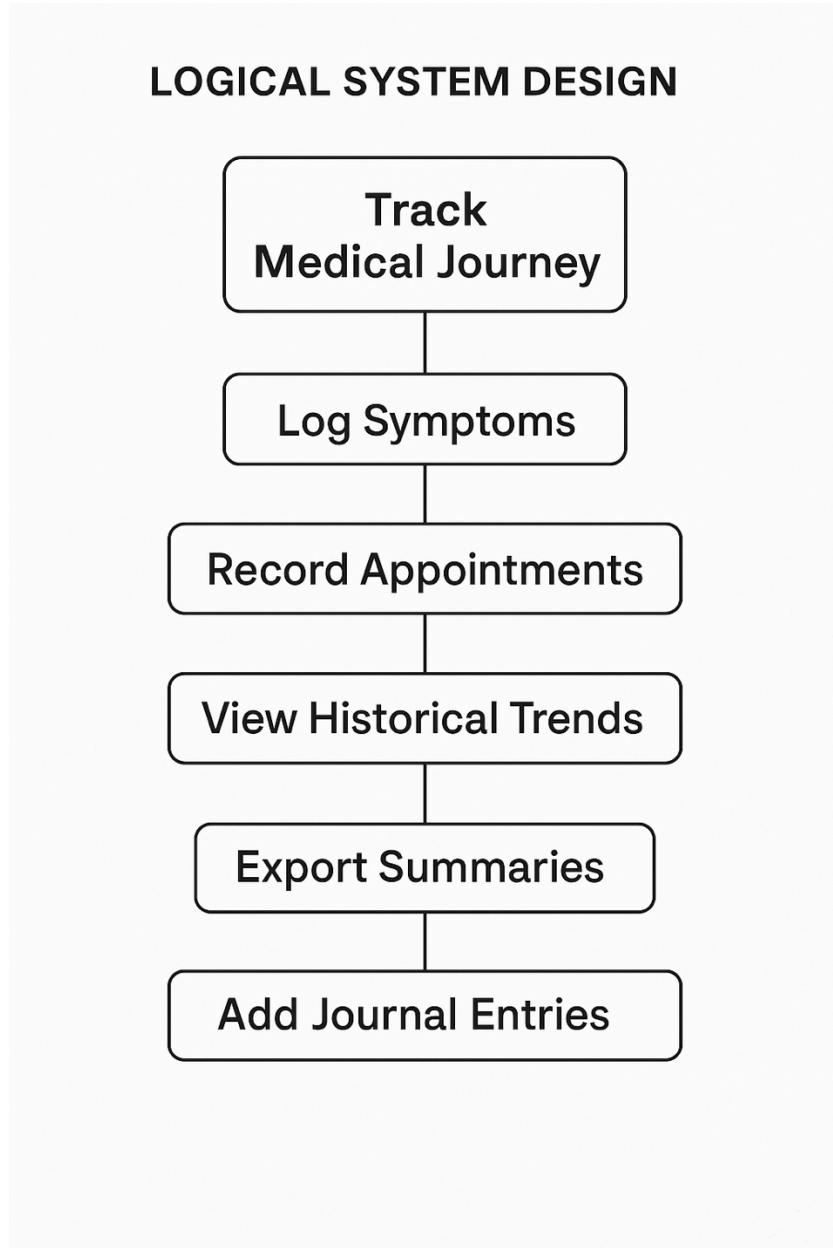
Non-Functional Requirements

- **Performance:** System should load each page within 2 seconds.
- **Availability:** 99% uptime for personal use; offline-friendly features will be included.
- **Usability:** Interfaces should be intuitive and require minimal training.
- **Security:** All personal data must be encrypted at rest and in transit.
- **Portability:** The system should work on mobile and desktop devices.

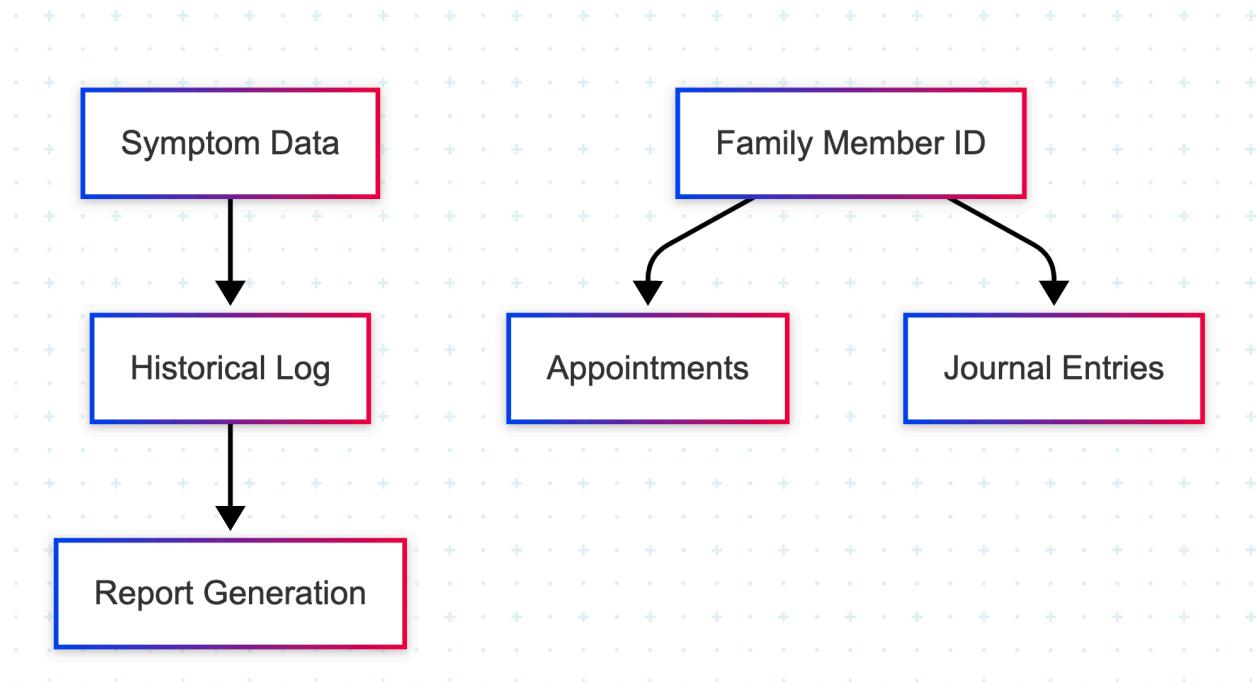
Technical Requirements

- **Frontend:** ASP.NET Razor Pages
- **Backend:** C# with .NET Core
- **Database:** MySQL
- **Development Environment:** Visual Studio for Mac
- **Version Control:** GitHub repository using "main" branch

Logical System Design



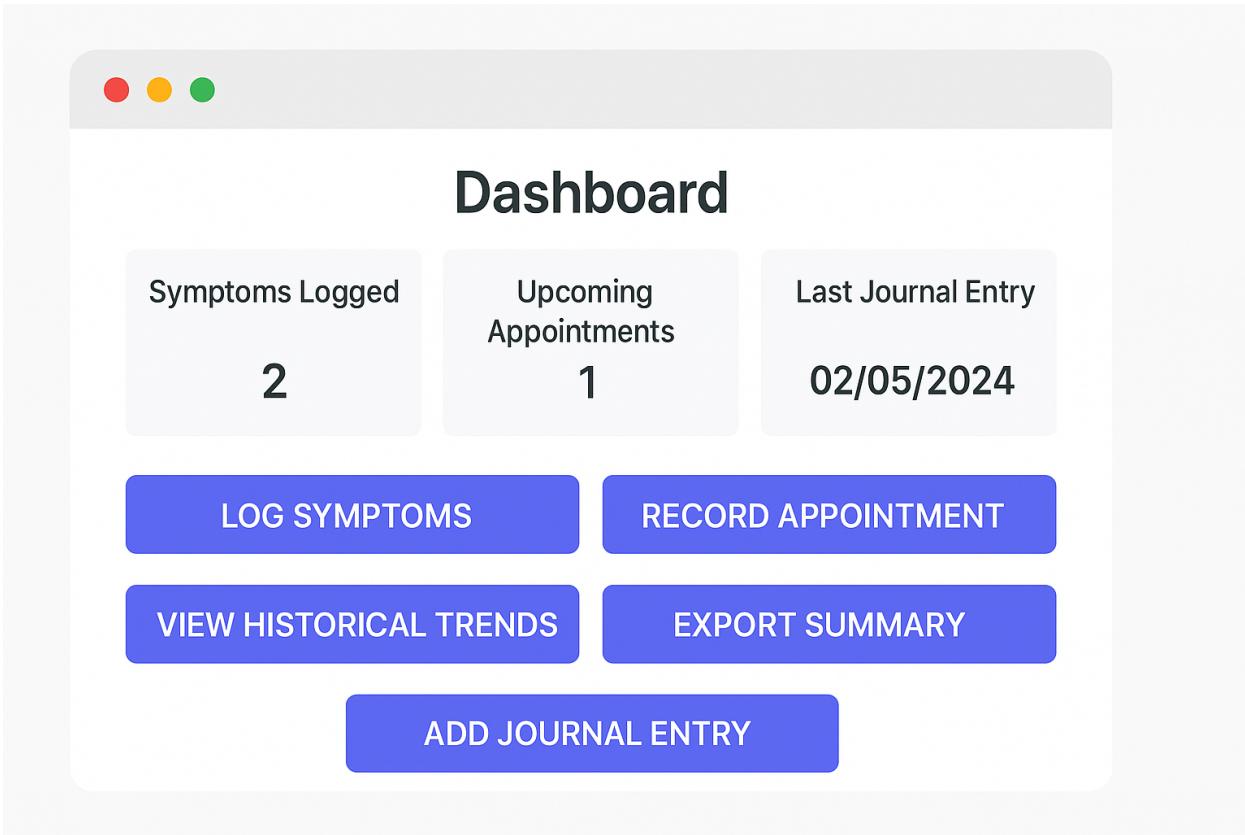
System Logical Model



- Symptom data flows into the historical log and is available for report generation.
- Appointments and journal entries are stored separately but linked by family member ID.

User Interface Design

Screen 1: Dashboard



- Components: Summary Tiles (Symptoms Logged, Upcoming Appointments, Last Journal Entry)

Screen 2: Log Symptom

The screenshot shows a mobile application interface titled "Log Symptom". At the top, there are three small colored dots (red, yellow, green) in a horizontal row. Below the title, there is a dropdown menu labeled "Select..." under the heading "Symptom Type". There is also a text input field labeled "Notes" and a date input field labeled "Date" with a calendar icon. A large blue button at the bottom is labeled "SUBMIT".

Log Symptom

Symptom Type

Select...

Notes

Date

mm/dd/yyyy

SUBMIT

- Inputs: Dropdown (Symptom Type), Text Field (Notes), Date Picker
- Action Button: Submit

Screen 3: Appointment Manager

The screenshot shows a mobile application interface titled "Appointment Manager". At the top, there are three colored dots (red, yellow, green) in a grey header bar. Below the title, the text "May 2024" is centered above a 7x7 grid representing the days of the month. The grid columns are labeled Su, Mo, Tu, We, Th, Fr, Sa. The days are numbered sequentially from 28 to 1, with 28 and 29 in light blue, 30 in light red, and the rest in black. Below the calendar are three large blue buttons with white text: "ADD", "EDIT", and "DELETE".

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

ADD **EDIT** **DELETE**

- Calendar View, Add/Edit/Delete Appointments

Screen 4: Journal Entry

The screenshot shows a mobile application interface titled "Journal Entry". At the top, there is a navigation bar with three colored dots (red, orange, green). Below the title, there is a "Date" label followed by a date picker input showing "02/05/2024" and a calendar icon. A large, empty rectangular area is provided for journal entries. At the bottom, there is a prominent blue "SAVE" button.

- Date Picker, Large Text Area, Save/Update Button

Screen 5: Reports

The screenshot shows a user interface for generating reports. At the top left, there are three small colored dots (red, orange, green). The main title is 'Reports' in a large, bold, black font. Below the title are two input fields: 'Date Range' (containing 'mm/dd/yyyy - mm/dd/yyyy') and 'Member Name' (containing 'Select...'). A large blue button labeled 'EXPORT PDF' is centered below these fields.

Date Range Member Name

mm/dd/yyyy - mm/dd/yyyy

Select... ▾

EXPORT PDF

- Filters: Date Range, Member Name, Export Button (PDF)

Reports

Example: Symptom Summary Report

- **Title:** Symptom Summary for [Family Member]
- **Fields:** Date, Symptom Type, Notes, Severity
- **Format:** Table, PDF Export
- **Frequency:** On-demand

Below is a sample output format for the Symptom Summary Report PDF:

Date	Symptom Type	Notes	Severity
06/01/2025	Headache	Complained of pain after dinner	Mild
06/03/2025	Nausea	Skipped breakfast, looked pale	Moderate
06/04/2025	Fatigue	Slept early, low energy all day	Moderate
06/06/2025	Fever	Temp 101°F, treated with Tylenol	High

Security Matrix

Role	Log Symptoms	View Reports	Journal	Manage Appointments
Caregiver	Yes	Yes	Yes	Yes

Note: The application is designed for a single authenticated caregiver account. In practice, this account may be shared among multiple caregivers (e.g., both parents) within the same family for collaborative tracking. No guest or admin roles are implemented, and all features require login access.

All data will be encrypted using industry standards (e.g., AES-256 for storage and TLS for data in transit).