

Introduction

HealNest is a web-based mental health platform that allows clients to book virtual therapy sessions with licensed therapists. It was developed to address the inconvenience of traditional therapy bookings, aiming to minimize stigma, increase accessibility, and enhance therapeutic experiences.

Aims and Objectives

- Simplify online therapy booking.
- Enable remote therapy sessions via Google Meet.
- Provide a stigma-free digital mental health space.
- Support therapists with client reach and session tools.

Academic Question

How modern web technologies can solve to traditional way of booking appointment for mental health services while making it accessible to individual living on different parts of the world?

Literature Review Insights

- e-CBT rivals in-person CBT in effectiveness (Nazanin Alavi, 2023)
- Virtual platforms enhance access in education (Blessing, 2024)
- DMHIs show promise but face engagement and privacy challenges (Leo, 2022)
- Therapist acceptance hinges on training and platform stability (Rathenau, 2022)

Core Features

- Role-Based Authentication:** Clients, Therapists, Admins.
- Appointment Booking:** Therapist availability, calendar sync.
- Secure Payment:** Khalti integration.
- Role-Specific Dashboards:** Tools for journaling, mood tracking, session management.
- Anonymous Forums:** Mental health discussion space.
- Real-Time Notifications:** Appointments, forum interactions, payment alerts.

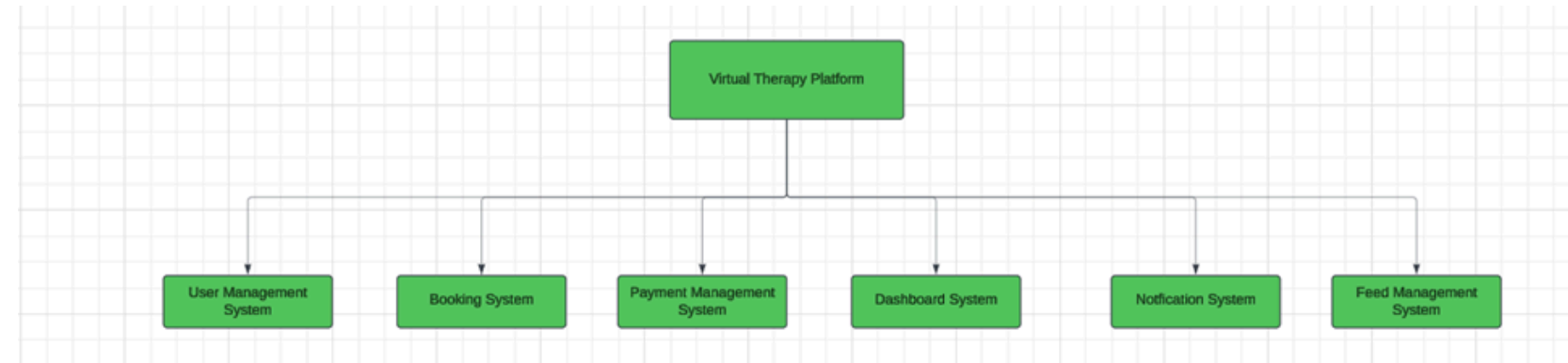
Similar Web Applications

- betterhelp
- talkspace

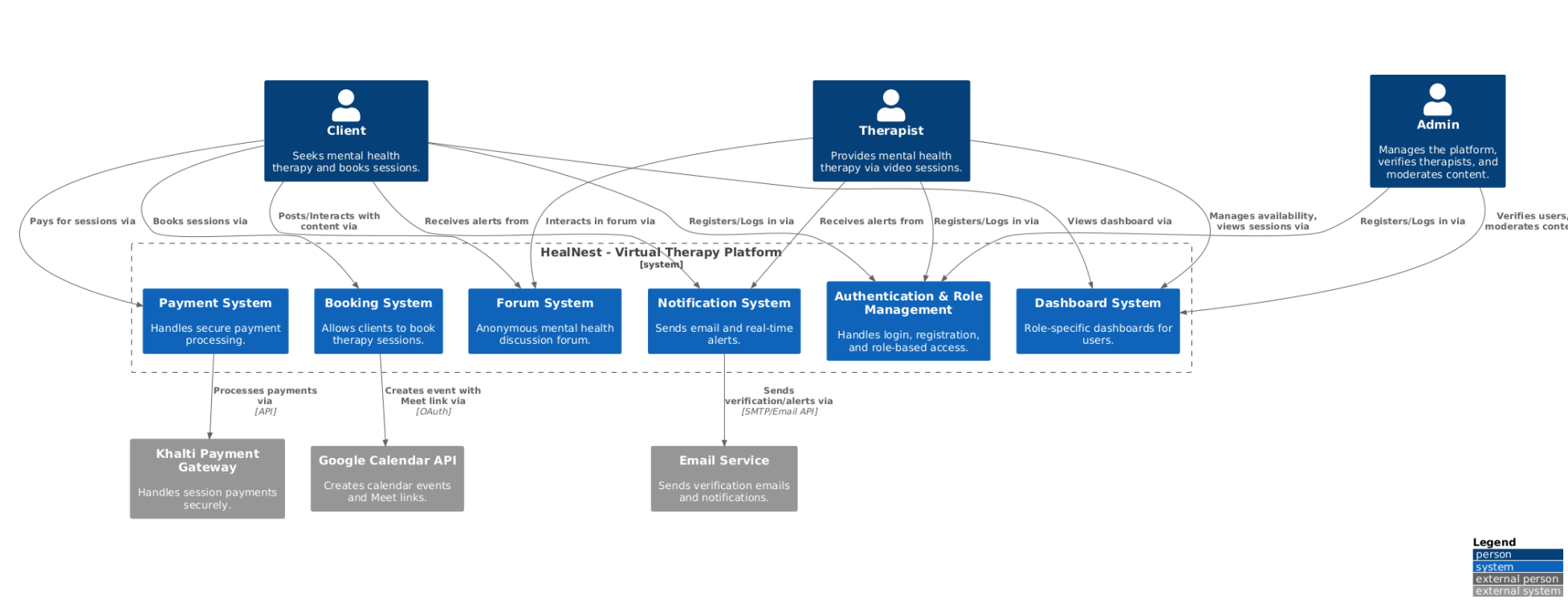
Methodology

Agile – Kanban Approach
Adopted for incremental development, with visual task tracking and rapid adaptability. Enabled efficient integration of complex features like real-time sync and Google Meet link generation.

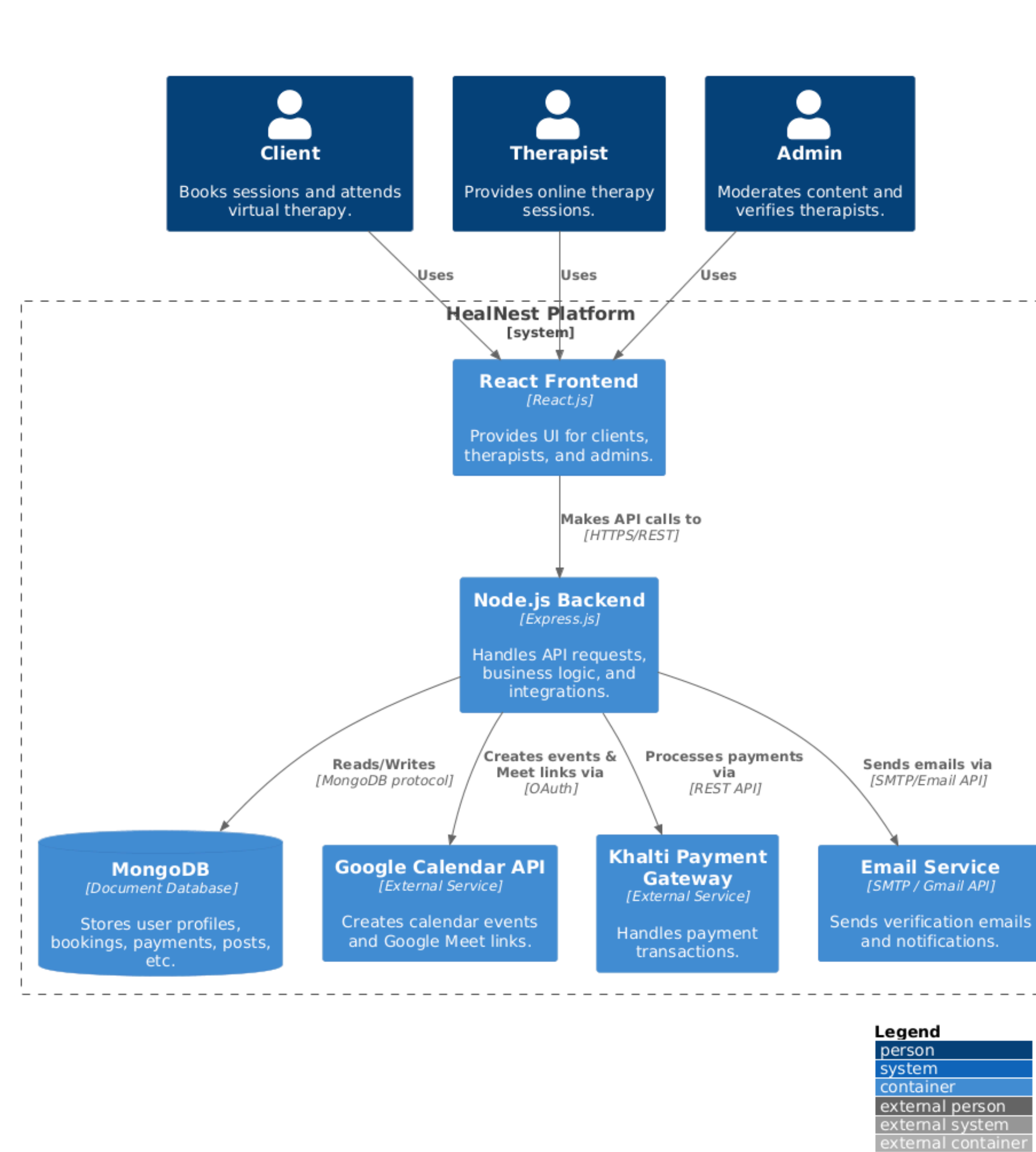
System Architecture



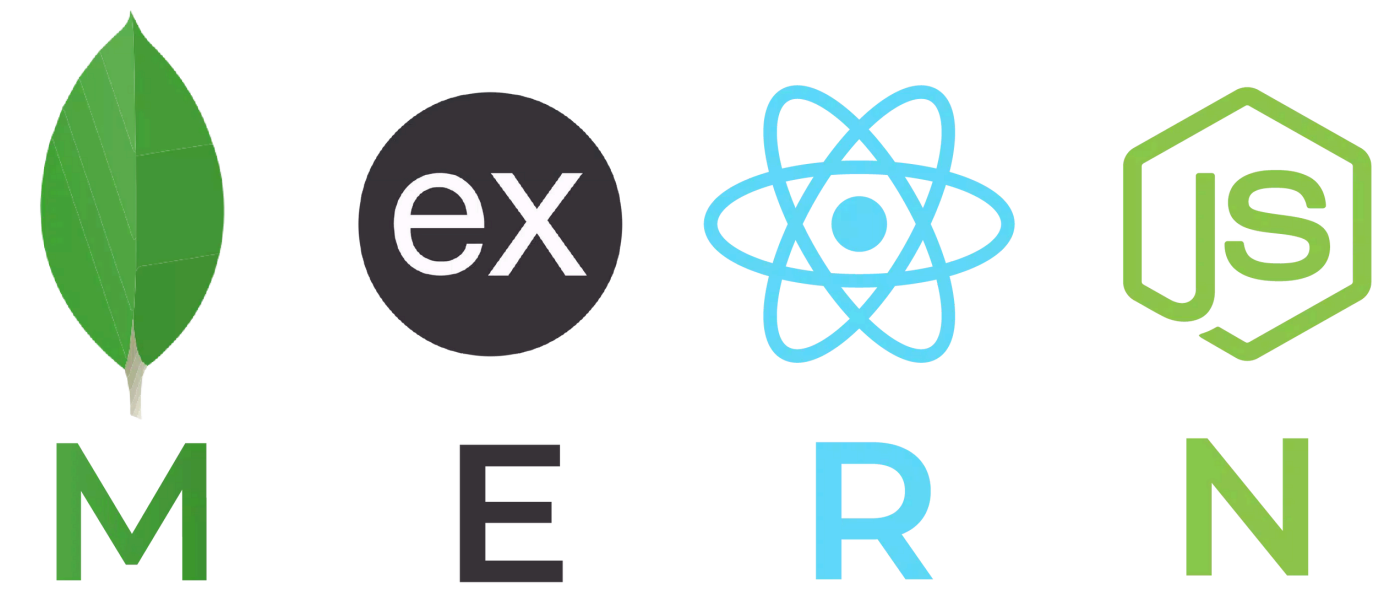
System Context Diagram



Container Diagram



Technology Stack



Test Cases

Module	Test Case	Scenario	Expected Result
Authentication	User Registration	User signs up with email and password	Account created, verification email sent
Authentication	Role Selection	User selects Client or Therapist role	Role saved permanently, access granted
Booking	Session Booking	Client books an available therapist slot	Session saved, Google Meet link generated
Booking	Session Cancellation	Client cancels before allowed deadline	Session status updated, notification sent
Payment	Payment Processing	Client pays via Khalti	Transaction recorded, booking confirmed
Forum	Post Submission	User submits an anonymous post	Post appears on forum feed
Notification	Appointment Reminder	Upcoming session scheduled	User receives email and in-app notification
Dashboard	Therapist Availability Update	Therapist adds new time slots	Slots updated and visible to clients

GANTT Chart

