

Declaration

I Zechen Xu, declare that this assignment, titled "Youth Mental Health and Wellbeing Web Application - Design Report", is my own original work and has not been copied from any other source except where explicitly acknowledged. I have not engaged in plagiarism, collusion, or any other form of academic misconduct in the preparation and submission of this assignment. All sources of information and data used in this assignment have been properly cited and referenced in accordance with the prescribed guidelines. I have not used unauthorized assistance in the preparation of this assignment and have not allowed any other student to copy my work. I am aware that any breach of academic integrity may result in disciplinary action as per the policies of Monash University, which may include failing this assignment or the course, and further academic penalties.

Signature: Zechen Xu

Date: 2025/8/14

Github Check

Enter your Github details here.

| | |
|--|--------|
| Github Username <i>Enter your username here</i> | xzc516 |
| Repository Shared? <i>Have you started and shared your assignment repository with your tutor yet?</i> | No |

Self-Evaluation

Rate your performance for each criteria. Put a c(tick) in the box where you think your work belongs.

| Criteria | Exceeds Expectations | Meets Expectations | Needs Improvement | Fail to meet expectations |
|-----------------------------------|----------------------|--------------------|-------------------|---------------------------|
| Executive Summary | | ✓ | | |
| User Personas | | ✓ | | |
| Sitemap | | ✓ | | |
| Wireframes/Low-fidelity Prototype | | ✓ | | |

Section 1: Executive Summary

The youth mental health crisis has reached unprecedented levels globally, with one in seven adolescents aged 10-19 experiencing a mental health disorder according to the World Health Organization. In Australia, Beyond Blue reports that 35% of young people aged 16-24 experience high or very high levels of psychological distress. This project addresses these alarming statistics by developing "YouthWell" - a comprehensive web application designed to support youth mental health and wellbeing through accessible, engaging, and evidence-based digital interventions.

Client Objectives and Vision

Our distinguished Not for Profit (NFP) client in Melbourne is dedicated to improving the health and well-being of underrepresented communities, specifically focusing on youth mental health and wellbeing. The organization has identified critical gaps in youth mental health service delivery, particularly around accessibility, early intervention, and peer support. Their primary objectives include leveraging technology to expand their reach beyond traditional service boundaries, enhance their existing services, and streamline operations to better serve their target audience. The NFP seeks to create a modern web application that serves as a critical driver for their business success and community impact through superior user experience (UX).

Target Audience Analysis

Through extensive research of leading platforms like Headspace Digital, ReachOut Australia, Lifeline's crisis support services, and Kids Helpline, three primary user segments have been identified: young people aged 12-25 experiencing mild to moderate mental health challenges, mental health professionals and volunteers working with youth, and parents/caregivers seeking resources to support young people in their care. Research into existing platforms reveals common pain points including complex navigation, limited mobile optimization, and lack of role-based personalization that our application will address.


Technical Framework and Innovation

The web application will be developed using Vue.js 3 framework as specified in the technical requirements, ensuring modern, responsive design compatible with various devices. The platform will implement comprehensive security measures including XSS protection, role-based authentication supporting minimum two user roles, and client-side data validation. Key innovative features will include external authentication via Firebase, interactive data tables with search and pagination capabilities, geolocation services for finding local mental health resources, and cloud deployment for public accessibility.

The application will integrate advanced features such as email services with attachments via SendGrid API, serverless functions through Firebase Cloud Functions, and WCAG 2.1 AA accessibility compliance. Success will be measured through user engagement metrics, successful implementation of all technical business requirements, and positive feedback from the target youth demographic indicating improved access to mental health resources.

Section 2: User Personas

Persona 1: Alex Chen - The Overwhelmed University Student



Alex Chen

The Overwhelmed University Student

"I need support that fits my crazy schedule and understands what I'm going through as a student."

| | | | |
|--------------|---------------------|-------------------------------|-------------------------------------|
| Age | Location | Occupation | Income |
| 20 years old | Melbourne, Victoria | Psychology Student (2nd year) | \$400/week (part-time + Centrelink) |

Background

Alex moved to Melbourne from regional Queensland for university and is experiencing their first significant period away from family support networks. They maintain a 75% average but struggle with perfectionism and imposter syndrome. Alex identifies as non-binary (they/them pronouns) and is navigating identity exploration alongside academic pressures. They live in shared accommodation with three other students and spend 4-5 hours daily on their smartphone for social connection.

Goals

- Find flexible mental health support that fits around irregular schedule
- Learn evidence-based strategies for managing anxiety and stress
- Connect with peers who understand university pressures
- Access LGBTQ+-affirming mental health resources
- Build coping skills for exam periods and academic challenges


Wants and Needs

- Anonymous support options initially, with gradual personalization
- Mobile-friendly platform for access between classes
- Interactive content over lengthy articles
- 24/7 availability to fit unpredictable schedule
- Peer connection with other students facing similar challenges
- Integration with productivity tools they already use

Pain Points

- Long waiting lists for university counseling (4-6 weeks)
- High costs of private therapy (\$150-200 per session)
- Limited operating hours conflicting with work schedule
- Decision paralysis from conflicting online advice
- Stigma concerns about accessing campus mental health services
- Feeling overwhelmed by too many resource options

Persona 2: Sarah Thompson - The Concerned Parent



Sarah Thompson

The Concerned Parent

"I want to help my daughter, but I need to understand what she's going through and how to support her properly."

| | | | |
|--------------|---------------------|------------------------|----------------------|
| Age | Location | Occupation | Income |
| 45 years old | Ringwood, Melbourne | Primary School Teacher | \$95,000 (household) |

Background

Sarah has noticed significant changes in her daughter Emma's behavior over the past eight months, including social withdrawal, declining academic performance, and increased irritability. Emma recently disclosed experiencing anxiety and depression but refuses traditional counseling. Sarah feels equipped to support students' emotional needs professionally but struggles to help her own child effectively. She's married with two teenagers and uses Facebook for social connection while preferring expert-authored content over peer advice.

🎯 Goals

- Learn about adolescent mental health and warning signs
- Acquire evidence-based parenting strategies for mental health support
- Help Emma access age-appropriate professional support
- Connect with other parents facing similar challenges
- Understand when to seek professional intervention
- Improve family communication about mental health


💡 Wants and Needs

- Structured, expert-created educational content
- Clear guidance on professional vs. home-based support
- Parent support groups with moderated discussions
- Resources that respect teenager's autonomy and privacy
- Simple navigation without complex technology requirements
- Recommendations from trusted sources like schools

😞 Pain Points

- Daughter's resistance to traditional help-seeking
- Fear of damaging relationship through forced intervention
- Difficulty distinguishing typical teen behavior from concerning symptoms
- Information overload from conflicting online parenting advice
- Feeling judged as a "failed parent" by others
- Hesitation to discuss concerns with friends or colleagues

Persona 3: Jordan Williams - The Young Mental Health Professional



Jordan Williams

The Young Mental Health Professional

"I want to use innovative tools to better engage my young clients and make mental health support more accessible."

| | | | |
|--------------|--------------------|--------------------------|------------------------|
| Age | Location | Occupation | Income |
| 27 years old | Fitzroy, Melbourne | Provisional Psychologist | \$65,000 annual salary |

Background

Jordan completed their Master of Professional Psychology in 2023 and is passionate about improving mental health outcomes for young people. They chose community mental health over private practice to increase accessibility for disadvantaged populations and are completing their final year of supervised practice. Jordan actively seeks innovative approaches to engage young clients who may be resistant to traditional therapeutic modalities, managing a caseload of 35-40 active clients while dealing with high administrative burden.

Goals

- Enhance therapeutic practice with digital tools
- Improve client engagement between sessions
- Access evidence-based resources for clients and families
- Stay current with digital mental health innovations
- Efficiently track client progress and identify warning signs
- Reduce administrative burden to focus on client care

Wants and Needs

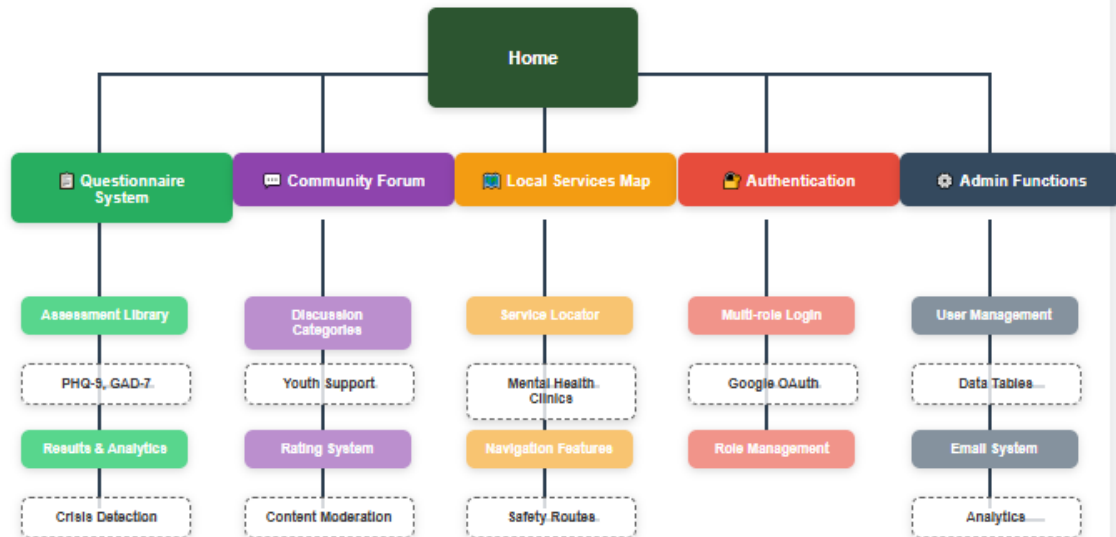
- Digital tools that integrate with existing health systems
- Client progress tracking with automated alerts
- Library of therapeutic resources to share with clients
- Professional development opportunities in digital health
- Peer consultation and networking features
- Tools that engage digital-native young clients

Pain Points

- Limited resources in community mental health settings
- High caseloads preventing intensive support for all clients
- Difficulty engaging clients who prefer digital communication
- Administrative burden reducing direct client care time
- Challenges maintaining between-session contact with clients
- Need for better tools to detect client deterioration early

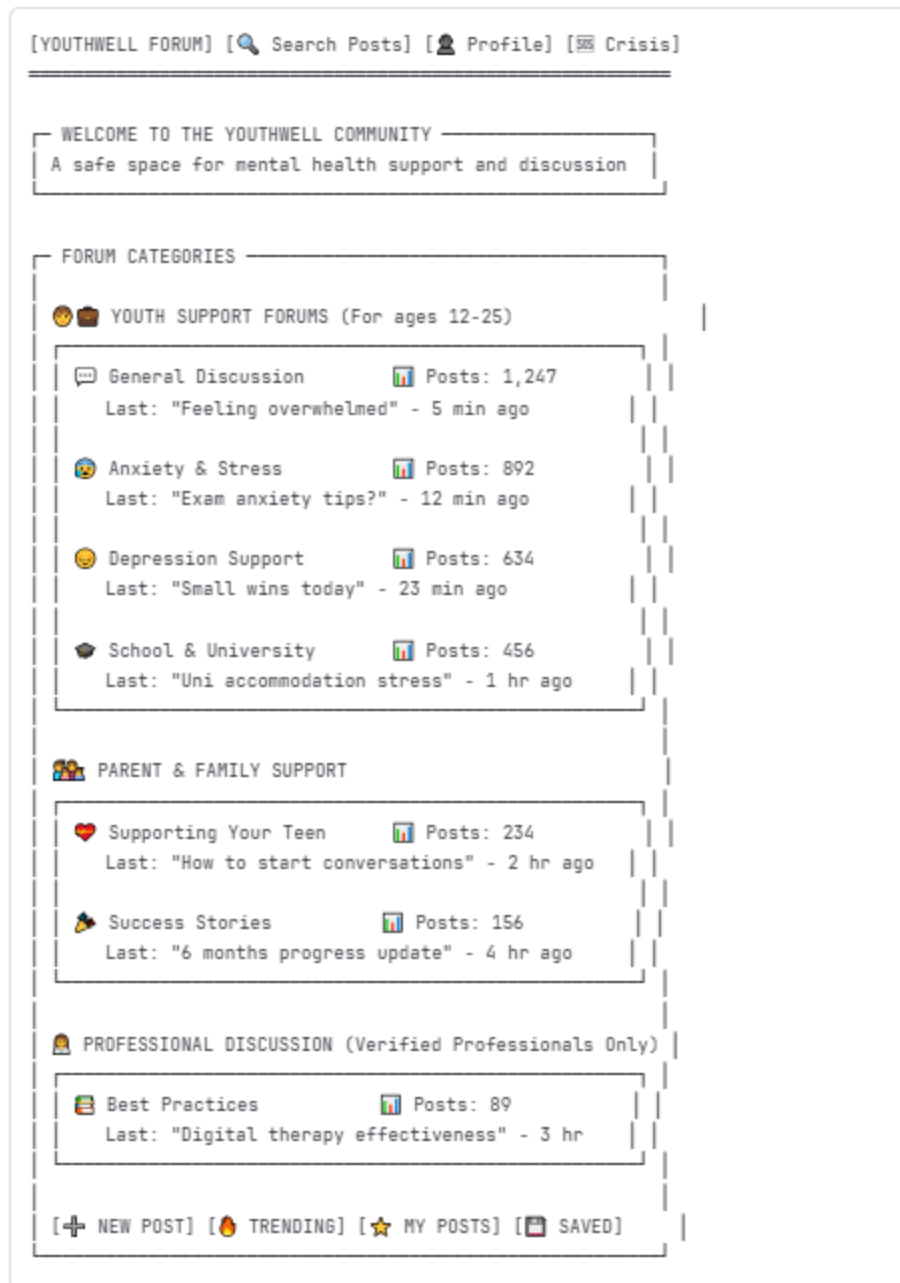
Section 3: Sitemap

YouthWell Platform - Site Architecture



Section 4: Wireframes/Low-fidelity prototype

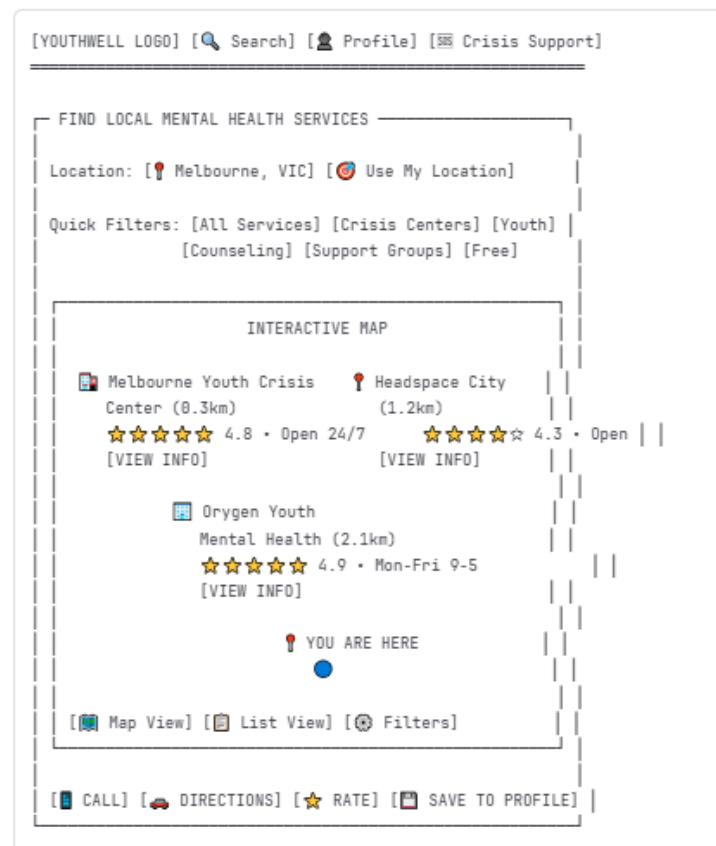
Forum Homepage with Categories



Individual Forum Post with Rating System



Main Map Interface



Declaration: Additional Help

| Name | Description |
|------------------------------|--|
| Claude AI for brainstorming | Used Claude AI to brainstorm user persona development and sitemap structure when feeling uncertain about information architecture for mental health platforms, and to ensure comprehensive coverage of business requirements |
| Declaration: Additional Help | Used AI-powered image generation tools to create visual mockups and wireframe illustrations for the map interface and forum layouts when traditional wireframing tools were insufficient for conveying the interactive nature of the platform features |