

"Inner Ease" Adult Mental Health & Wellness

An innovative web app built using Next.js and MySQL with Node.js backend. Empowering adults to assess their well-being and offering comprehensive mental health support.

by Dhruv Rana

Under Guidance of Dr. Madhu Bhan





Content

- Problem Statement
- Overview
- Literature Survey
- Key Features
- Requirement Gathering
- Diagrams
- Design
- Testing
- Result
- Further Enhancement
- Summary



Problem Statement

Adult mental health care systems now in place are not designed to provide comprehensive, easily accessible, and individualized assistance, which makes it difficult for people to comprehend, take advantage of, and manage their mental health. Problems include insufficient funding, poor feedback systems, uneven access to experts, and a deficiency of unified platforms that successfully address a range of mental health issues.



Overview



Introduction

"Inner Ease: Adult Mental Health & Wellness" is a platform providing mental health support, personalized feedback, and, analysis for easy consultation with specialized doctors, ensuring platform integrity and fostering a responsive community.



Technologies Used

Next.js, MySQL, and Node.js power the seamless integration of frontend and backend.



Literature Survey

- Mental health and mental disorders—A rural challenge: A literature review
- Adult mental health services in the 21st century
- Diabetes and cardiovascular care among people with severe mental illness: a literature review
- Causal modelling for supporting planning and management of mental health services and systems:
 a systematic review
- Peer support in mental health: literature review
- Study on technologies implemented in the area of mental health for older adults
 Post-COVID-19(IEEE)



Key Features

Personalized Resources and Tools

Tailored content such as self-assessment quizzes, goal-setting features, and personalized recommendations for articles, exercises, or coping strategies based on individual mental health needs.

Secure Communication and Teletherapy

A secure platform enabling confidential communication between users and mental health professionals, offering options for text-based chats, video calls, or scheduled appointments with therapists or counselors.

Community Supportand Peer Interaction

Integration of forums, support groups, or moderated discussions where users can connect, share experiences, and provide mutual support, fostering a sense of community and reducing feelings of isolation.



Requirement Gathering

System Requirements

Functional Requirements

Hardware: Server infrastructure, adequate storage.

Software: OS compatibility, web server, database system.

Network: Reliable internet, secure data transmission.

User Management: Registration, login,

password recovery.

Resource Database: Categorization, search,

filtering.

Assessment Tools: Quizzes, surveys,

personalized feedback.

Community Features: Forums, chat, crisis

intervention.

Security Measures: Data encryption, secure

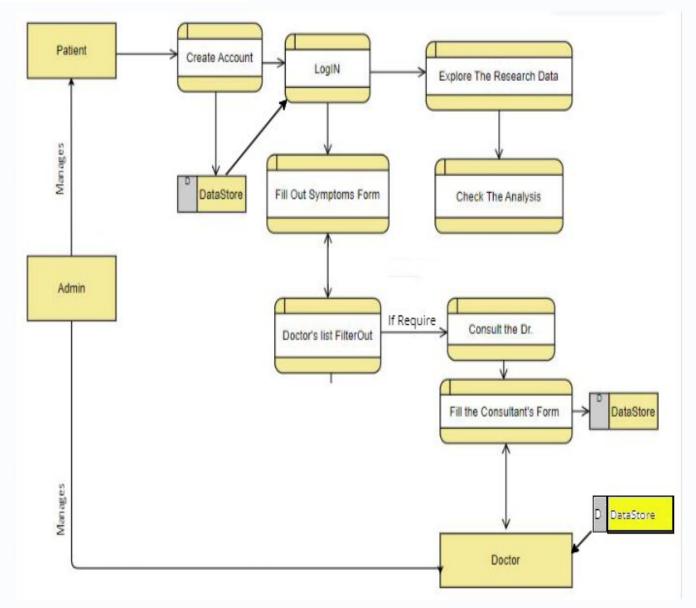
authentication.

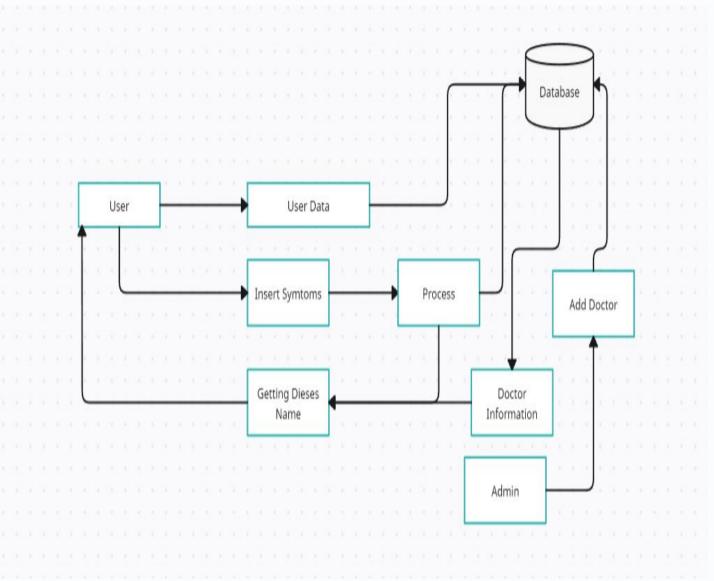
Feedback Mechanism: User forms, analytics

monitoring.



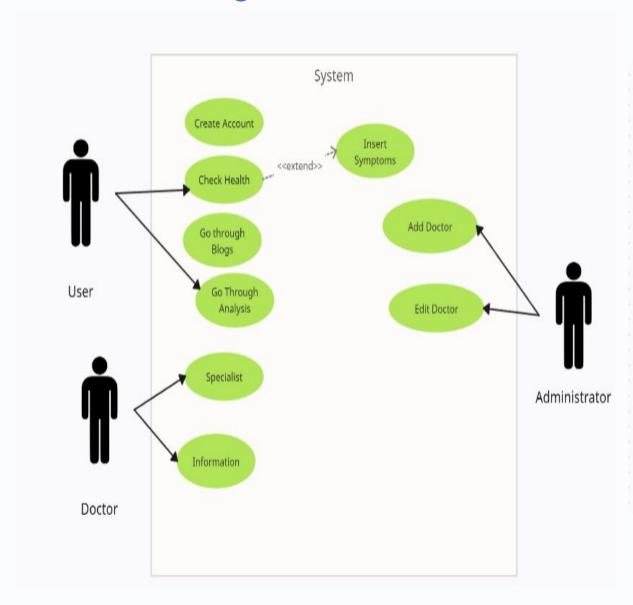
Architectural Diagram



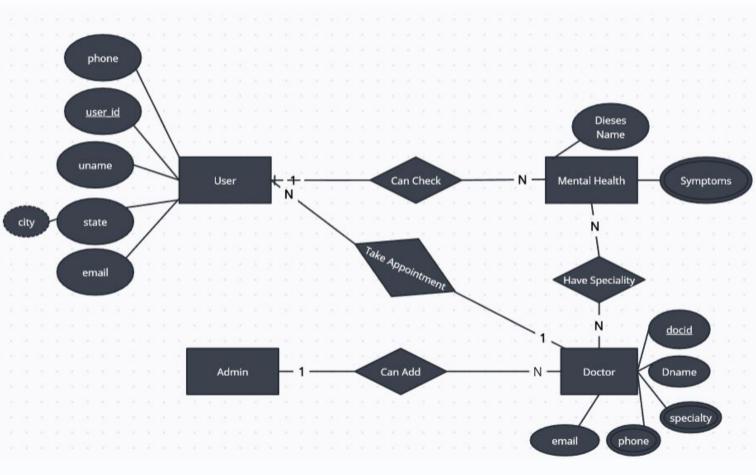




Use Case Diagram



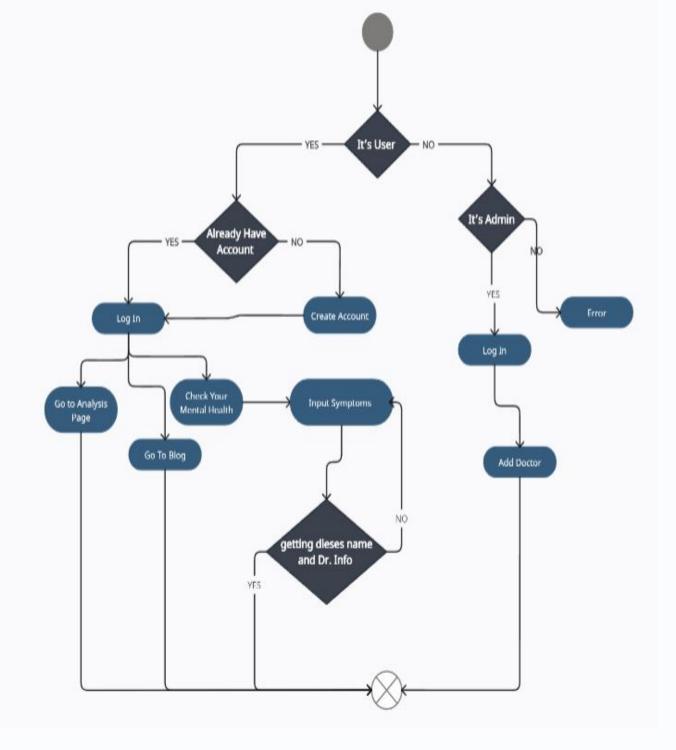
ER Diagram





Activity Diagram

Before logging in, users of the platform must create an account. The system checks to see if the user is an admin or an ordinary user once they log in. Frequent users can evaluate their mental health, read the blog, and investigate analysis. Conversely, administrators have extra rights, like the ability to manage doctors from the platform. This arrangement guarantees users access to a range of mental health resources while preserving administrators' authority over the platform's features and information.





Basic UI with Backend Connection

To kickstart the project, we develop a captivating landing page for the web application. This page is carefully crafted to be visually attractive and easy to use, serving as the starting point for users. It features a responsive navigation bar that adapts seamlessly to different devices, ensuring a consistent and user-friendly experience.

Within the navigation bar, proper navigation facilities are implemented to guide users efficiently through different sections of the application. This includes intuitive menu items and links to essential features, fostering ease of use and exploration.

The next crucial component is the implementation of a secure and user-friendly login system. Users are provided with a designated login credential section where they can input their username and password. The system validates these credentials to ensure secure access to personalized features and data.

Simultaneously, the project involves the development of a robust Sign-In page with a focus on secure data storage.

This page allows new users to create accounts by providing necessary information. The data entered during the sign-in process is securely stored, adhering to best practices in data protection and privacy.



Milestone

In our mental health care project for adults, we follow a structured approach to ensure their well-being. Our process consists of several key milestones:

Planning: We start by thoroughly understanding the needs of adults and identifying the areas where our project can make a positive impact.

Design: Next, we meticulously design the structure of our web application, ensuring a user-friendly and intuitive experience.

Prototype: We create a simplified version of our app to gather feedback and evaluate its functionality and usability.

Development: Once we have refined the prototype and received validation, we proceed to build the full-fledged application, incorporating all the necessary features.

Testing: We conduct rigorous testing to ensure the app functions flawlessly and is safe for use.

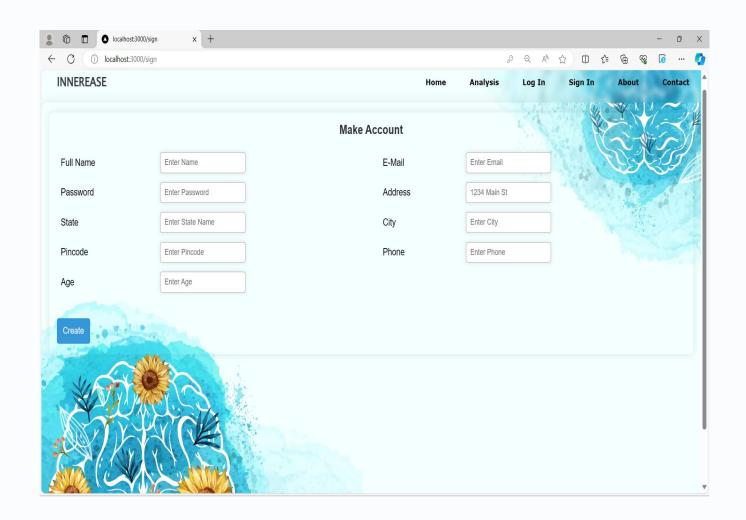
Release: Once we are confident in the app's stability and performance, we release it to the public, making it accessible to everyone.

Support: In addition to the app itself, we provide comprehensive training and helpful documentation to ensure users can utilize it effectively.

Feedback and Improvement: We actively listen to user feedback and continuously make improvements to enhance the app's effectiveness and usability for adults.



Design



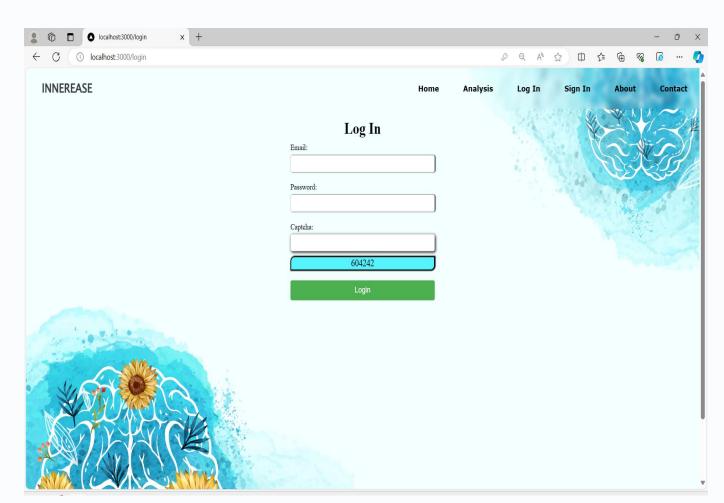


Fig 1 Sign In Page

Fig 2 Login Page



Design

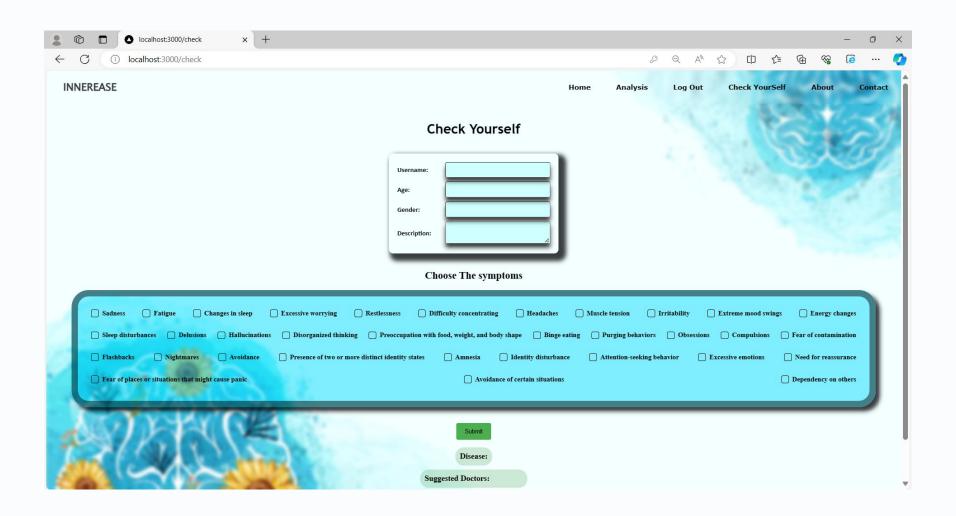


Fig 3 Check Yourself



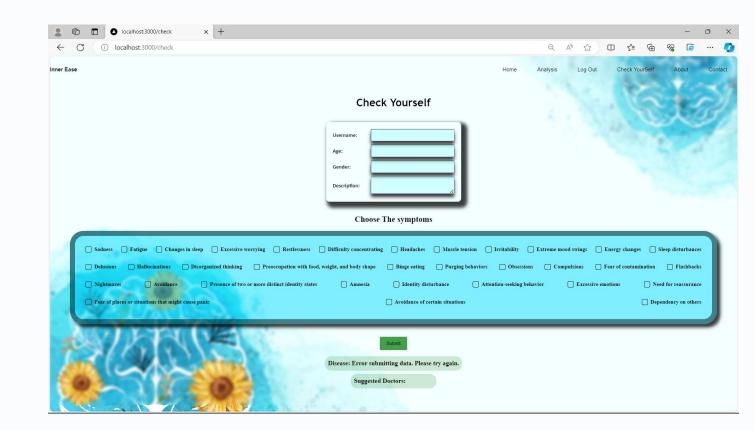
Testing

Test case #	Test case Name	Test case Description	Inputs	Expected Output	Actual Output	Status
1.	Accuracy test	Here we input or check all the symptoms.	10 Symptoms	3 to 4 specific disease name will be display	3 to 4 specific disease name will be display	Successfu 1 in detection
2.	Accuracy test	Here we didn't check any symptoms	0 Symptoms	Error Occur	Error occur Symptoms Must be Selected	Successfu 1



Test Result

© □ ocalhost:3000/check x +		- 0 :
C (1) localhost:3000/check		
	Check Yourself Username: Age: Gender: Description:	
	Choose The symptoms	
	g Preoccupation with food, weight, and body shape Binge eating	Irritability
Disease: Based o	Submit on your symptoms, you might have: Depression, Stress, Bipolar disorder Suggested Doctors: Name: sagar Email: baba@gmail.com Phone: 788873787 Speciality: Depression	er, Schizophrenia



Test Case 1 Test Case 2



Future Enhancement

Introduce the "Doctor Module," which will allow recognized medical professionals to register, upload their credentials, and submit certified certifications. This increases the legitimacy of the site by guaranteeing that customers can get in touch with reliable mental health specialists.

Integration of Chatbots: Provide a chatbot function that allows users to pose simple queries and get prompt answers or recommendations. This improves user experience and accessibility while giving individuals in need prompt assistance.

Introduce telemedicine services so that mental health doctors can consult with you remotely. This enhances access to care, particularly for people in remote locations or with mobility impairments, and satisfies user preferences for online consultations.





The Mental Health Care for Adult online application is an essential resource for fostering mental health and offering consumers easily accessible help. Through the smooth integration of several elements, including user registration, health checks, physician directories, and instructional materials, the platform provides a holistic approach to tackling mental health issues. This application's capacity to produce correct results based on data and symptoms entered by the user is one of its standout features. This shows how reliable and successful it is at helping users comprehend their mental health condition.



THANK THANK YOU