LA GRANDEE INTERNATIONAL COLLEGE

Simalchaur, Pokhara Nepal

A Project Proposal On

“Mind Mend”

Submitted to:

La Grande International College
Bachelor of Computer Application (BCA)Program

In partial fulfilment of the requirements for the degree of BCA under Pokhara University
Submitted by:

Name:	Course	Semester	**P.U. Registration Number**
Sapna Baniya	BCA	8th	2018-01-53-0129
Nabaraj Poudel	BCA	8th	2018-01-53-0116
Mahima Sharma	BCA	8th	2018-01-53-0113

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1.Introduction

MindMend is a mobile application designed to help individuals manage their mental stress and well-being. This app provides support and tools for people who are struggling with anxiety, stress, and other mental health issues.

One of the main features of MindMend is Meditation and mindfulness exercises and its mood tracker, which offers a variety of guided meditations and mindfulness exercises that can help users to reduce stress and anxiety, improve focus, and cultivate a sense of calm and also allows users to monitor their emotions and track their moods over time. This can be helpful in identifying patterns and triggers that may be contributing to their mental health issues, and in developing coping strategies to manage these challenges.

The app also provides community support which includes a community feature that allows users to connect with others who are also using the app. This can provide a sense of support and accountability, and allow users to share tips and strategies for managing stress and anxiety.

Overall, Mind Mend is a valuable tool for anyone looking to improve their mental stress and well-being. With its range of features and user-friendly interface, it is a great choice for those who are new to mental health management, as well as those who are looking for additional support on their journey towards better mental health.

2. Problem Statement

Mental health issues such as anxiety, depression, and stress are prevalent in today's world. People often struggle to find adequate support and resources to manage their symptoms.

- Traditional therapy can be expensive and time-consuming, making it inaccessible to many individuals.
- Additionally, many people may feel hesitant or ashamed to seek help due to the stigma associated with mental health issues.
- Many individuals experience challenges in finding effective mental health resources that cater to their specific needs and preferences.
- This can lead to frustration, confusion, and a lack of progress in their mental health journey.

The MindMend app aims to address these issues by providing an accessible and affordable platform for individuals to receive mental health support. The app offers a range of features such as mood tracking, guided meditations, journaling, and connection with other communities and friends. By providing these tools and resources, the app hopes to empower individuals to take one step ahead towards improving their mental stress.

3. Objectives

The main objectives of this project are:

- Creating a community-driven platform for peer support and mental health advocacy.
- Providing a platform for individuals to improve their mental health and well-being through various features
- Promoting mental health awareness and education to reduce stigma and increase understanding.
- To help user to analyse their thoughts and track their mood
- To recommend different exercises and workouts according to user's mental status.

4. Methodology

In this project we are using Agile Model for the development of our project.

The diagram of iterative model is shown below:

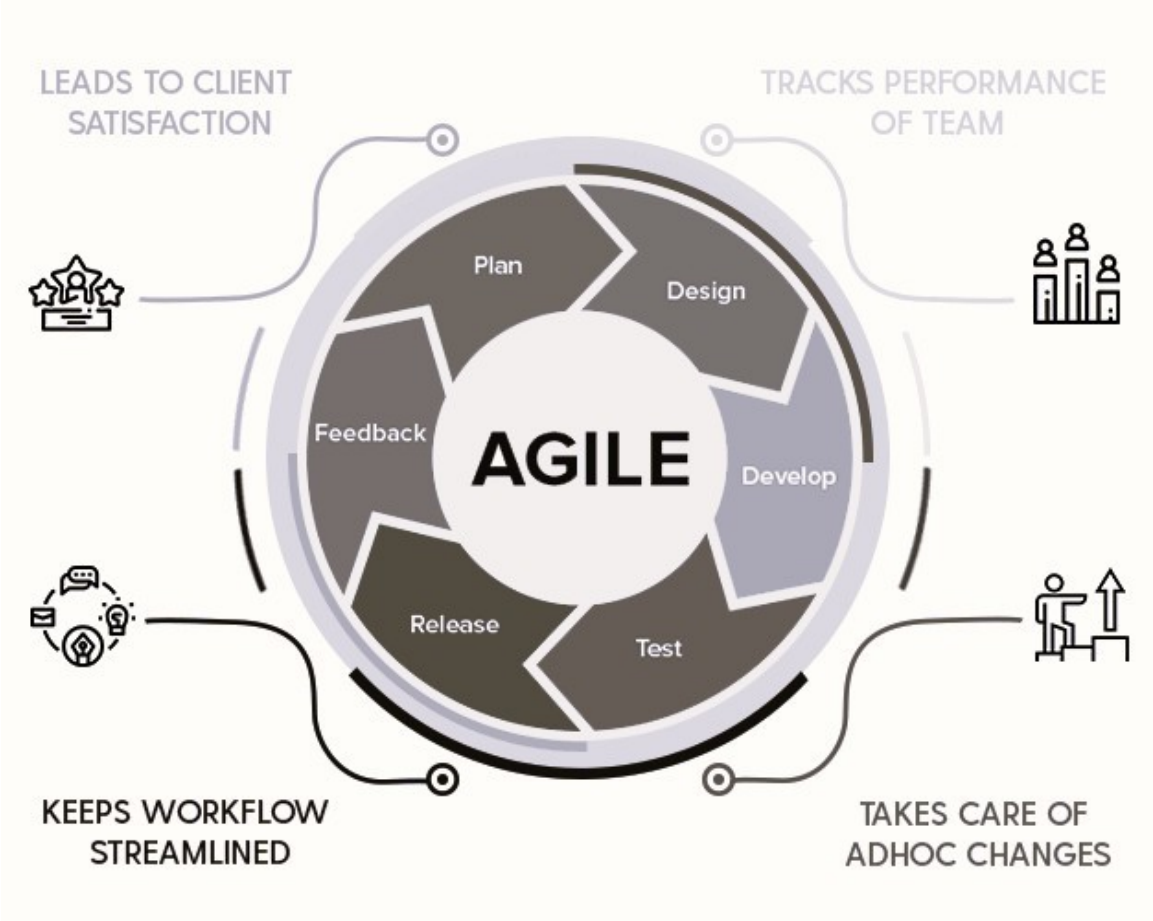


Figure 4. 1 Agile Methodology

Agile methodology is a popular approach for software development, and it can be a good fit for developing MindMend. One of the main benefits of Agile methodology is that it allows for changes and updates to be made easily throughout the development process. This is important for an app like MindMend, which may need to adapt to user feedback or changing market conditions. Other advantages of using Agile methodology for the development of our project are:

- Flexibility: Agile methodology allows for changes to be made to the project as it progresses, providing greater flexibility in responding to changes in user needs and market demands.
- Team collaboration: Agile methodology emphasizes close collaboration between the development team, stakeholders, and customers.
- Transparency: Agile methodology encourages regular communication and reporting of project progress, making the development process more transparent to all stakeholders.
- Continuous improvement: Agile methodology is based on continuous improvement, with regular review and retrospection of the project process and outcomes.

5. Requirement Analysis

Requirement specification:

- Operating System: Android, Window
- Database: PostgreSQL
- Frontend: React native, Next JS
- Backend: Java Spring Boot

5.2 Functional Requirements:

Functional requirements describe the specific actions and behaviors that a system must be able to perform, as well as the desired outputs.

- User Registration and Authentication: The system should allow users to create accounts, log in securely, and manage their profiles.
- Assessment and Evaluation: The platform should provide various assessment tools and tests to evaluate the user's mental health, cognitive abilities, or specific conditions.
- Goal Setting and Tracking: Users should be able to set goals related to their mental well-being and track their progress over time.
- Therapy and Intervention Tools: The system should offer a range of therapeutic tools, techniques, or interventions to assist users in managing their mental health or cognitive challenges.
- Communication and Support: Users should be able to communicate with professionals, therapists, or support groups through messaging, video calls, or forums.
- Progress Reporting and Analytics: The system should generate reports and provide analytics to track the user's progress and identify areas for improvement.
- Notifications and Reminders: Users should receive timely reminders, notifications, or alerts for assessments, therapy sessions, or goal deadlines.
- Data Security and Privacy: The platform should ensure the

confidentiality, integrity, and privacy of user data, complying with relevant data protection regulations.

5.2 Non- Functional Requirement

Non-functional requirements describe the system's characteristics or qualities that are not

related to a specific function or behaviors. Some of the Non-Functional Requirements are:

- Usability and User Experience: The system should have an intuitive and user-friendly interface, allowing easy navigation and seamless interactions.
- Performance and Scalability: The platform should be capable of handling multiple concurrent users and maintain acceptable response times, even during peak usage periods.
- Reliability and Availability: The system should be highly reliable, minimizing downtime and ensuring continuous availability to users.
- Accessibility: The platform should comply with accessibility guidelines, making it usable for individuals with disabilities or impairments.
- Compatibility: The system should be compatible with a range of devices (desktop, mobile, tablets) and various operating systems and browsers.
- Security: The platform should implement robust security measures, including encryption, secure data storage, and protection against unauthorized access or data breaches.
- Integration: The system should allow integration with external services or platforms, such as electronic health records (EHR) systems or third-party applications.
- Performance Monitoring: The platform should include monitoring and logging capabilities to track system performance, identify bottlenecks, and proactively address any issues.

6. System Analysis and Design

6.1 Class Diagram

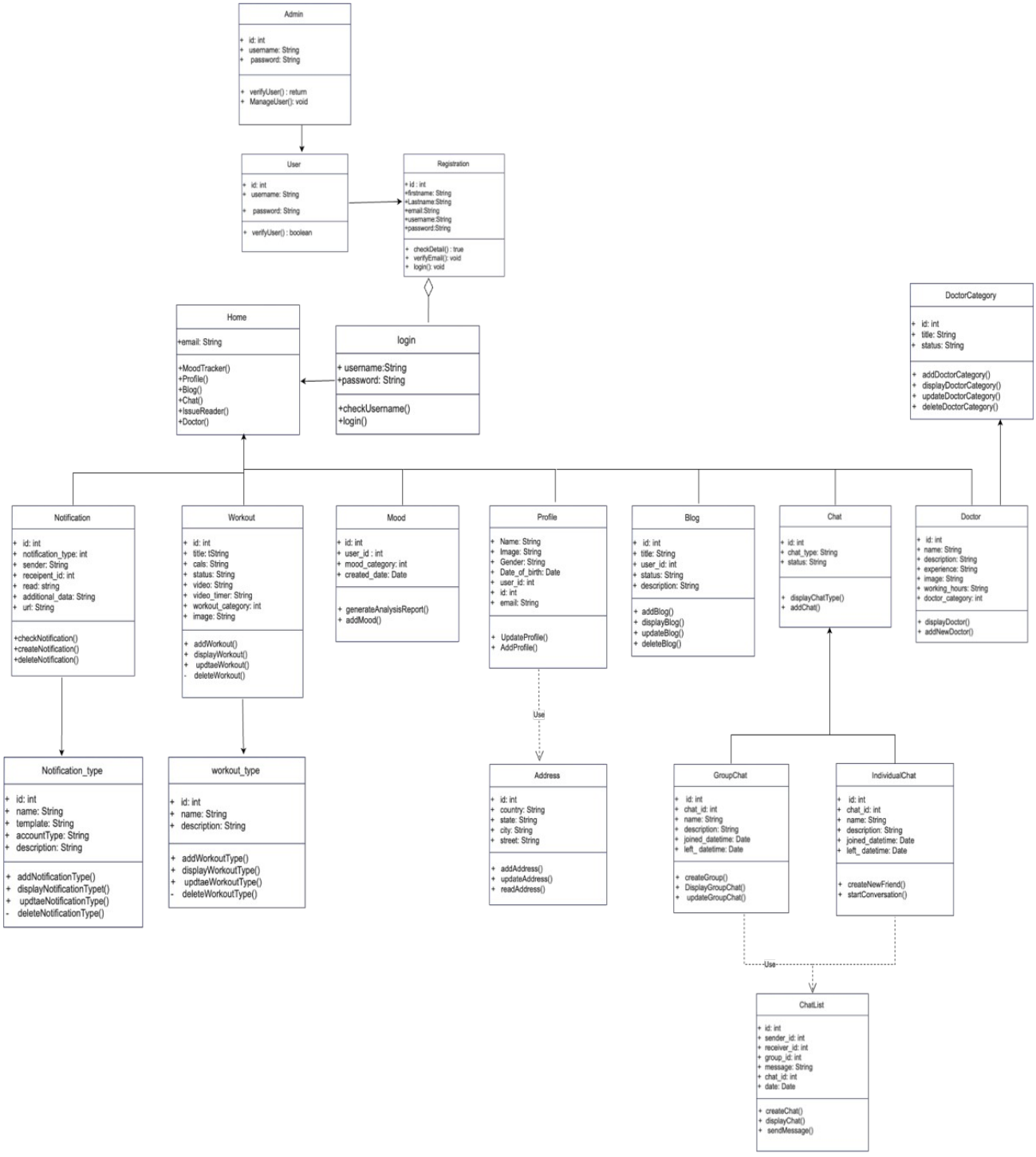


Figure 5.1. 1 Class Diagram

6.2 ER Diagram

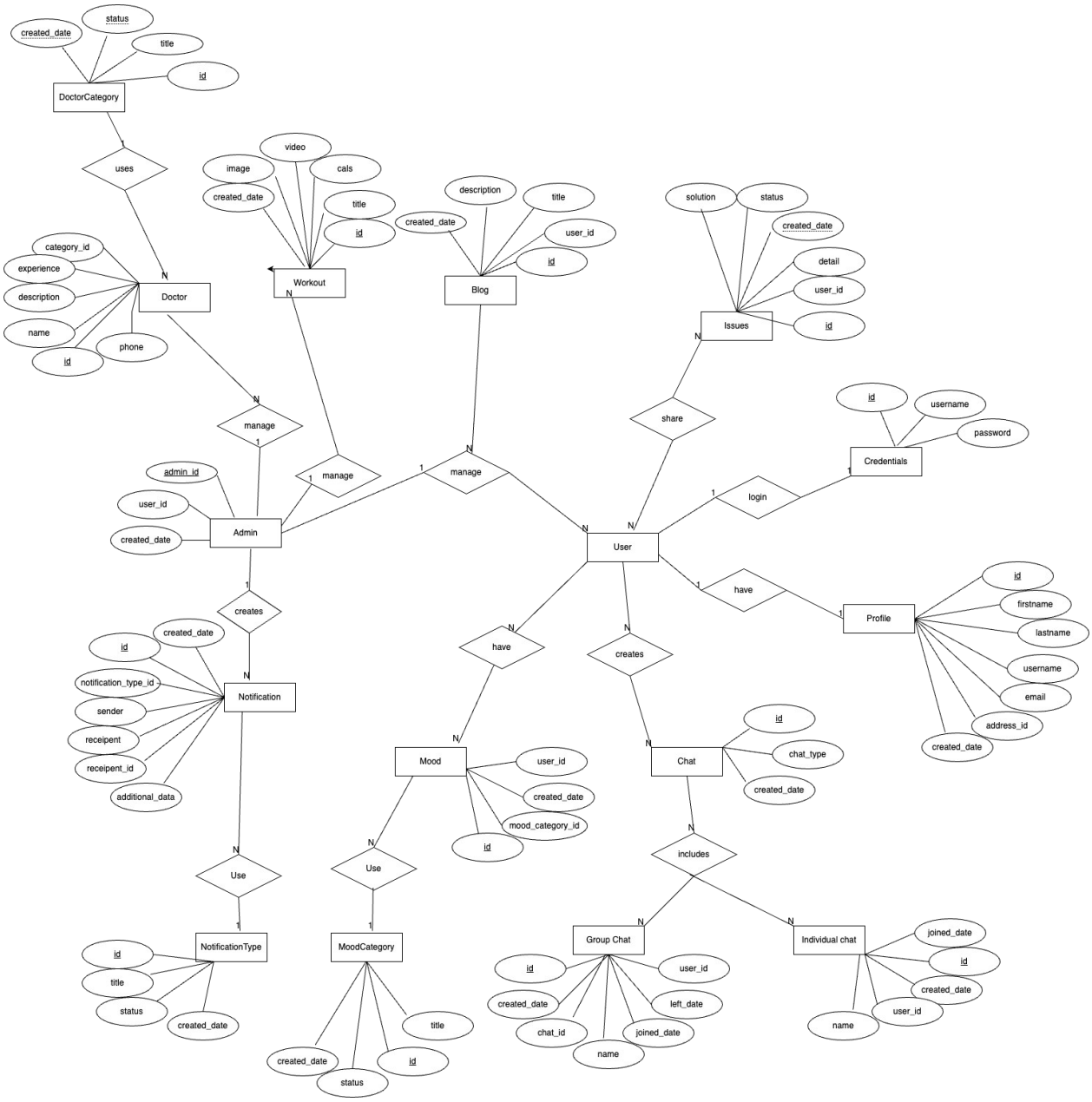


Figure 5.2. 1 ER Diagram

6.3 Data Flow Diagram

6.3.1 DED level-0

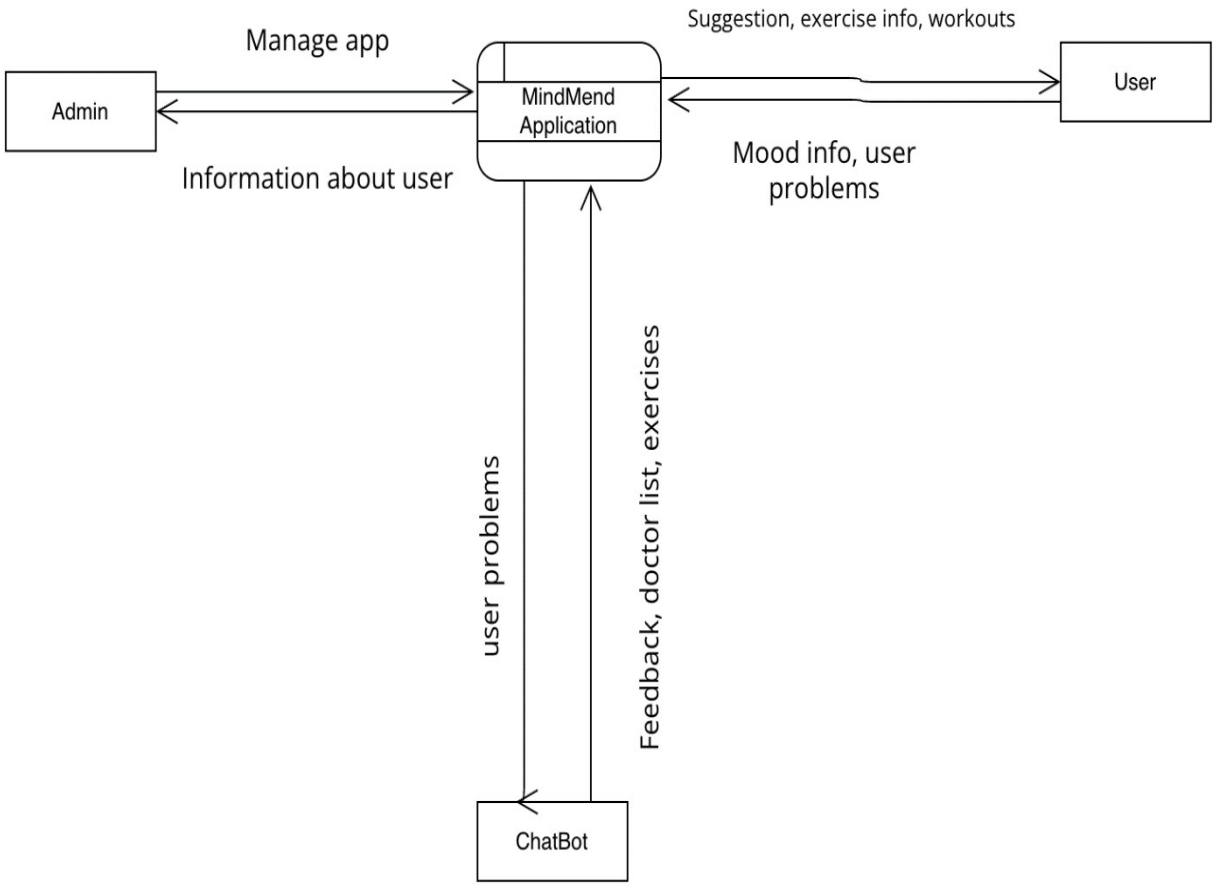


Fig: 6.3.1 DFD level 0

6.3.2 DFD level-1

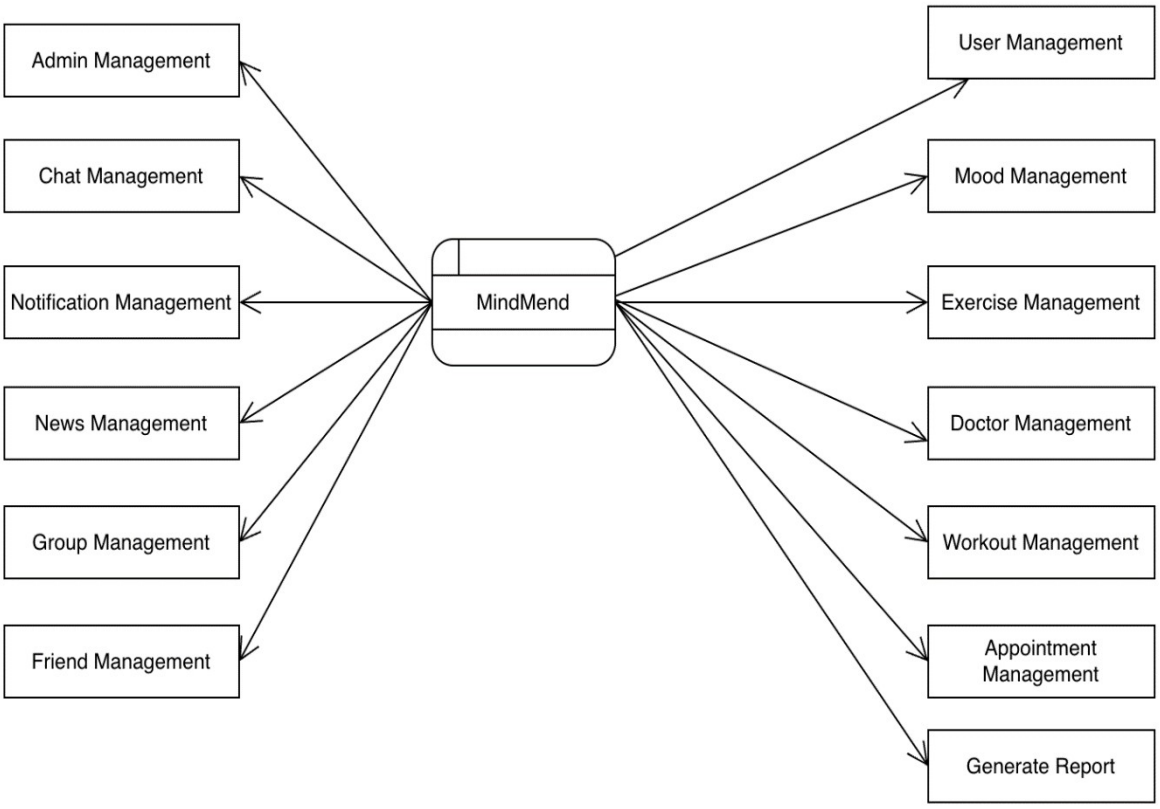
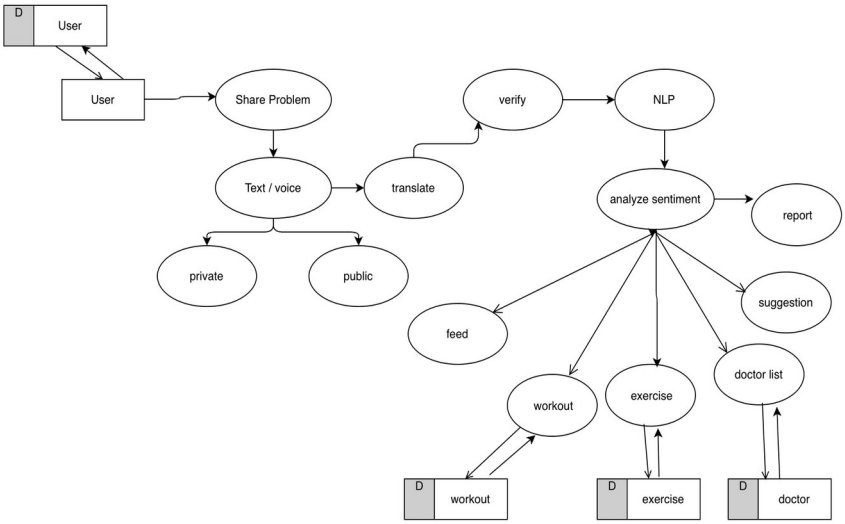


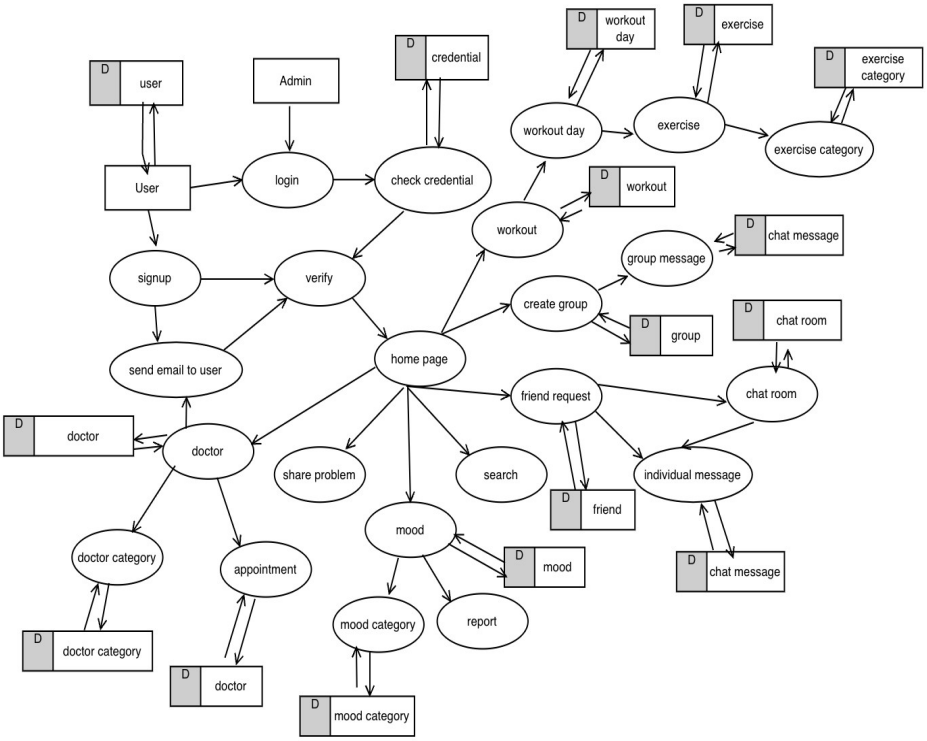
Fig 6.3.2:DFD level 1

6.3.3 DFD level-2

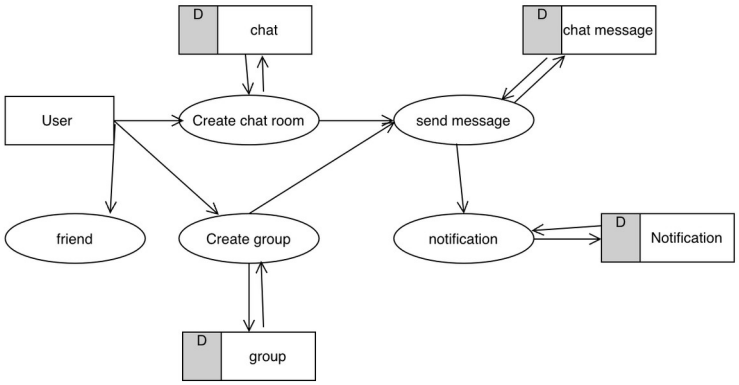
ChatBot



USER



Chat Message



7. Gantt Chart

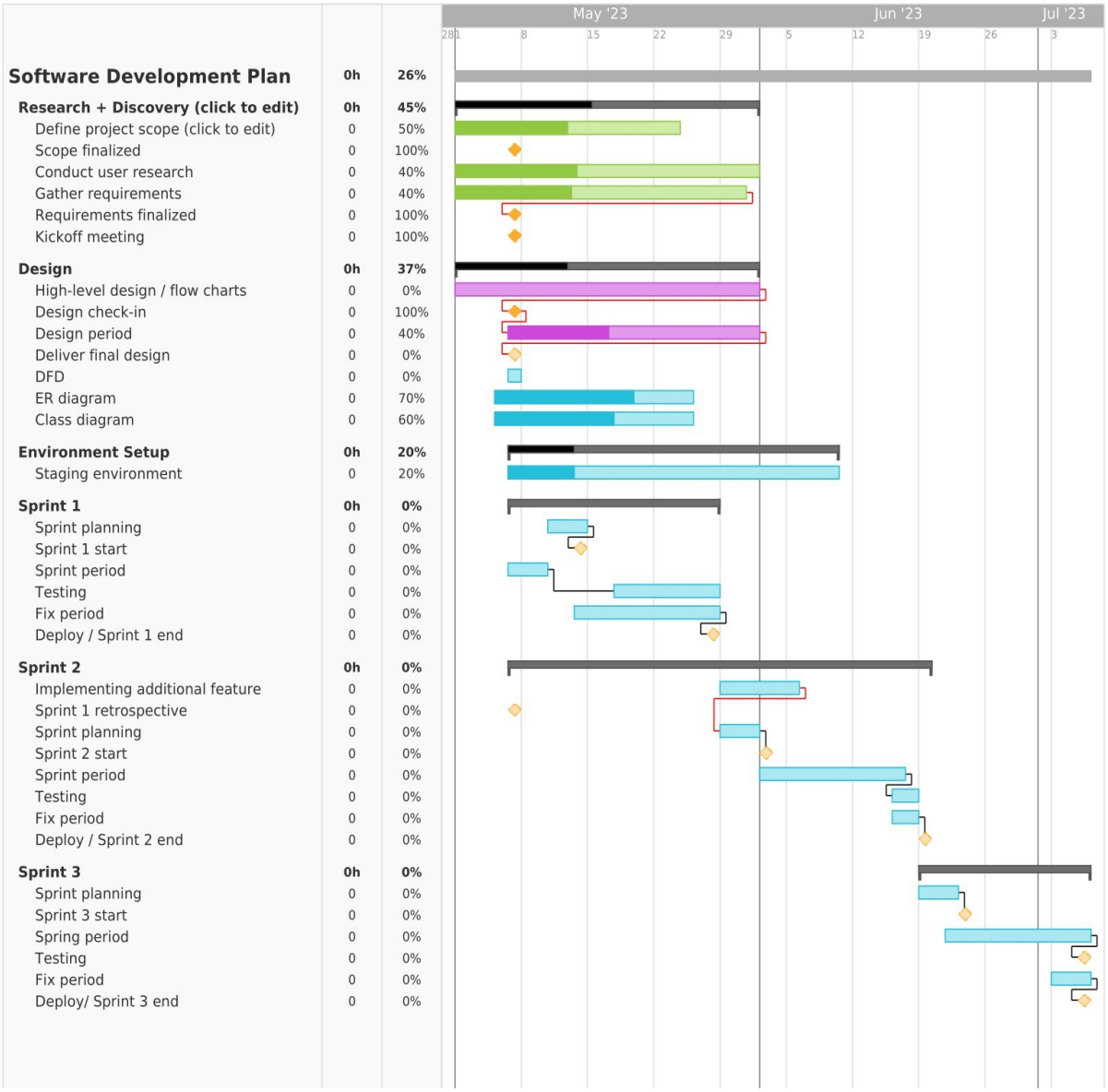


Figure 7. 1 Gantt Chart

8. Completed Task

Web :

- Created landing page in web.
- Created UI for profile, login page, admin dashboard, and also created UI design for managing mood, mood category from the admin table.
- Created UI design for managing user, account, doctor, site configuration from the admin side.
- Created UI design for discover and managing all the features of the admin panel in web.
- Integrated landing page with API created using spring boot backend.
- Integrated Admin dashboard with API.

Mobile App:

- Created Database design for the project.
- Created UI design for login and home page for the android system.
- Created Apis for user, doctor information, mood which include all the CRUD operation.
- Implemented validation and exception handling.
- Implemented unit Testing of user, doctor, mood.
- Created UI design for Discover page, Group chat. Individual chat, Profile page, User analysis page.
- Created Api for workout, workout category, exercise, exercise category, and discover which include all CRUD operations.
- Added Table for Chat. Difficulty level, friends.
- Created Api for difficulty level of exercise, report generation.
- Added Management features and design new UI for management.

9. Incomplete Task

- Integrating MindMend app with the Api
- Creating UI design for user feed and problem sharing page, exercise page.
- Integrating backend with AI and creating API for problem sharing and feedback
- Implementing JWT authentication and testing
- Creating UI for chat in web, charts and exercise and notification
- Integrating notification in mobile app and web.

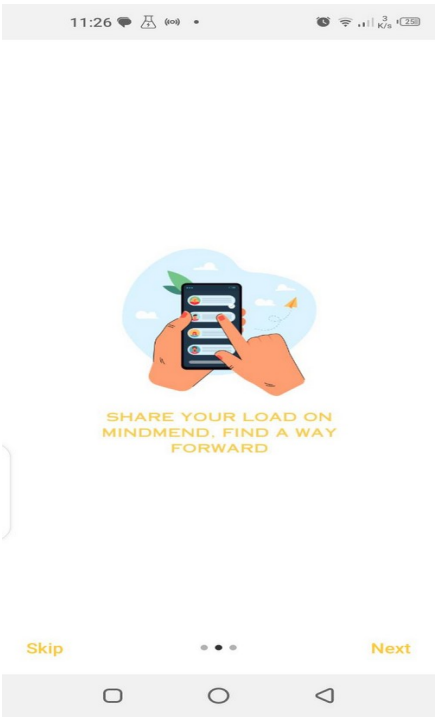
10. Deliverables

Once the app is created, there are certain criteria it will fulfill in order to be successful. Although the system is never fully perfect and there is always room for improvement. There are some things that are basically expected after a system is created. Some of our targeted and expected output are:

- It will provide a platform for individuals who have mental stress and looking for someone to share their problems and stress
- It will be able to track the mood of the users and analyze their mood over a specific time and recommend workouts and exercises.
- It will also provide user guide for those who are new to the app.
- It will provide a community driven platform top share the experience of the user with other users of the app.
- It will provide doctors information based on the analysis of users issue.

We have completed 70% of goal of our project. Some of the screen shots of our project are shown below:

App: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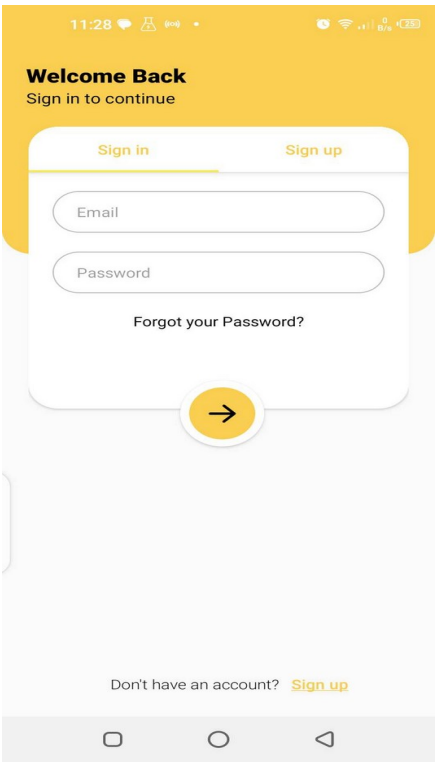
SHARE YOUR LOAD ON MINDMEND, FIND A WAY FORWARD
Skip
Next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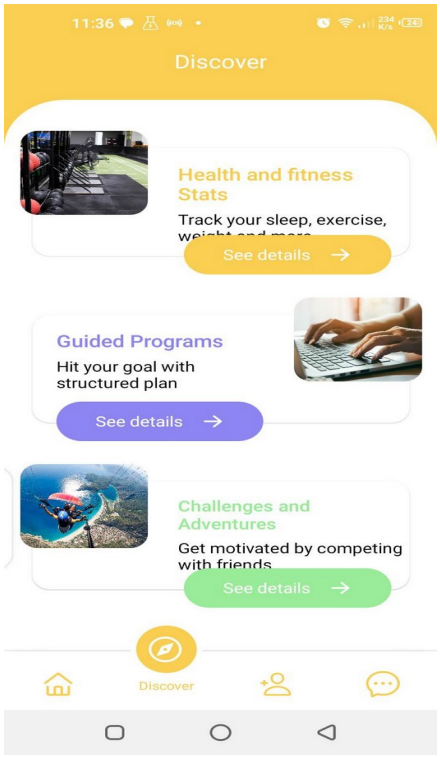
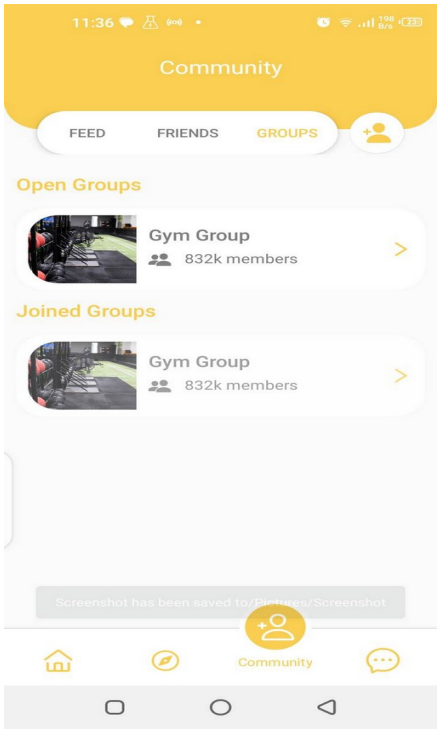
Welcome Back
Sign in to continue
Sign in
Sign up
Email
Password
Forgot your Password?
Don't have an account? Sign up


11:36
Discover
Health and fitness Stats
Track your sleep, exercise,
See details
Guided Programs
Hit your goal with structured plan
See details
Challenges and Adventures
Get motivated by competing with friends
See details
Discover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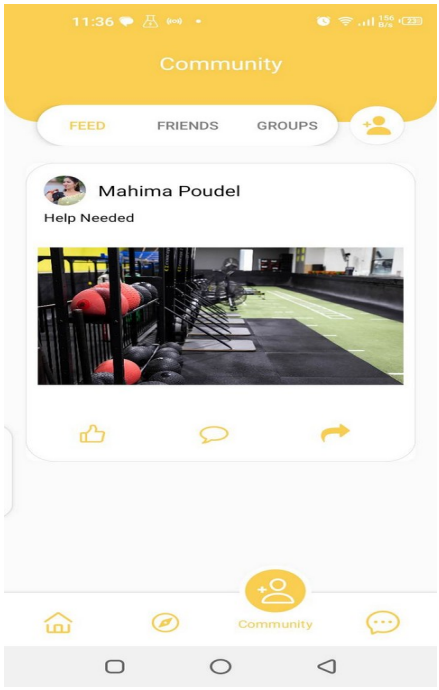
Community
FEED
FRIENDS
GROUPS
Open Groups
Gym Group
832k members
Joined Groups
Gym Group
832k members
Community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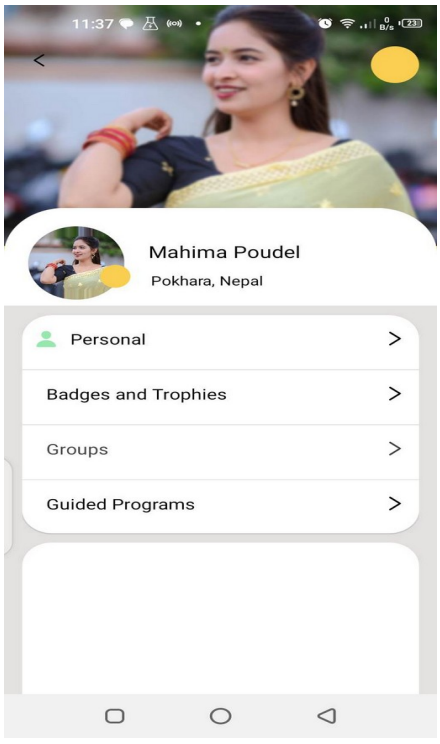
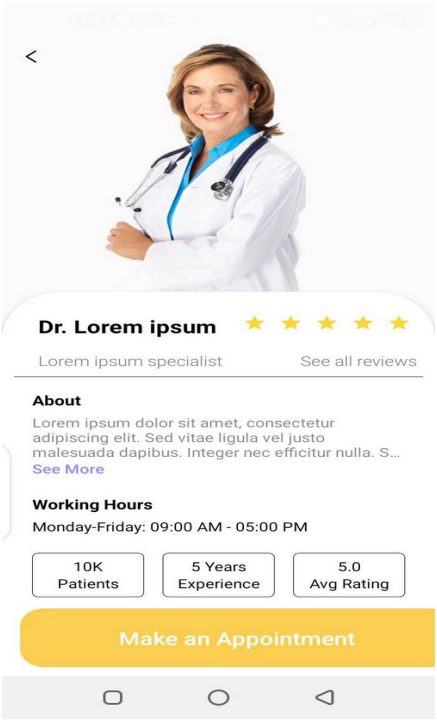
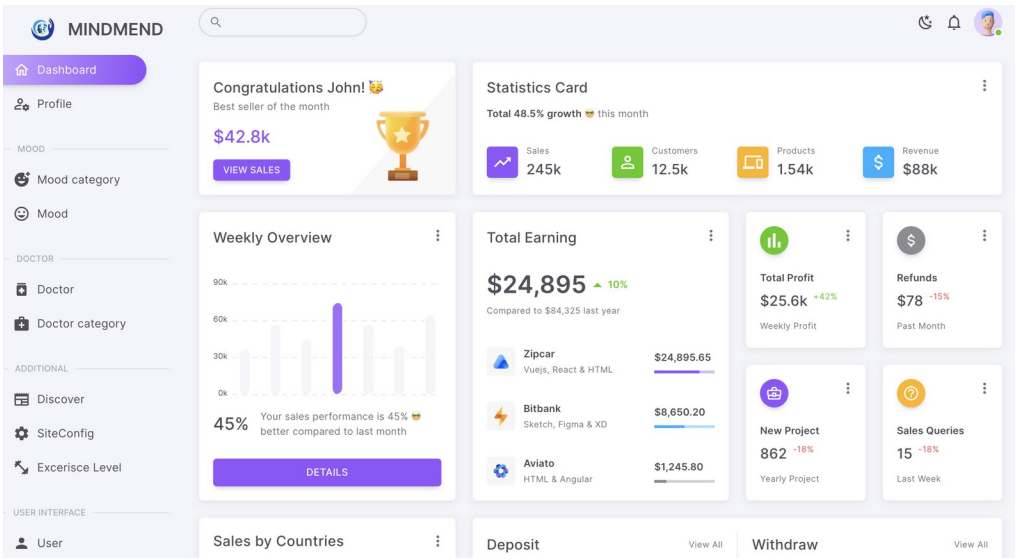
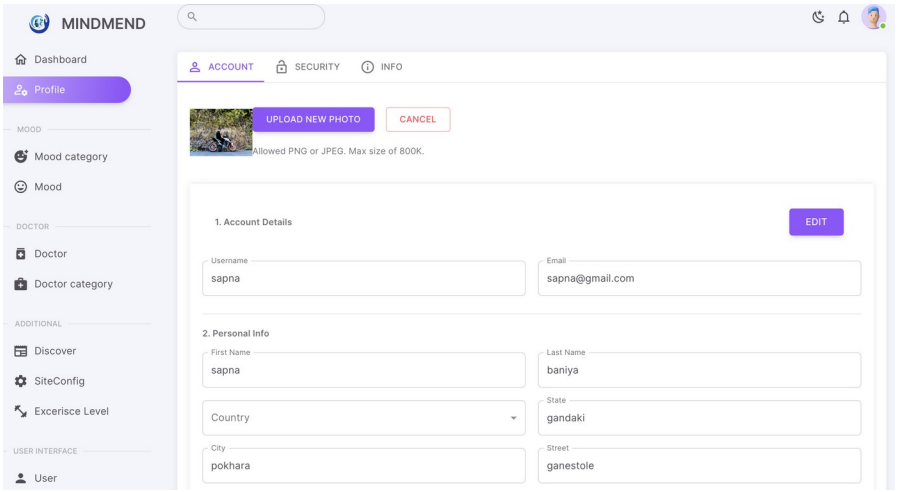
Community
FEED
FRIENDS
GROUPS
Mahima Poudel
Help Needed
Community


11:37
Mahima Poudel
Pokhara, Nepal
Personal
Badges and Trophies
Groups
Guided Programs


Dr. Lorem ipsum
Lorem ipsum specialist
See all reviews
About
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed vitae ligula vel justo malesuada dapibus. Integer nec efficitur nulla. S...
See More
Working Hours
Monday-Friday: 09:00 AM - 05:00 PM
10K Patients
5 Years Experience
5.0 Avg Rating
Make an Appointment

Web:


MINDMEND
Dashboard
Profile
MOOD
Mood category
Mood
DOCTOR
Doctor
Doctor category
ADDITIONAL
Discover
SiteConfig
Excerisce Level
USER INTERFACE
User
Congratulations John!
Best seller of the month
$42.8k
VIEW SALES
Statistics Card
Total 48.5% growth this month
Sales 245k
Customers 12.5k
Products 1.54k
Revenue $88k
Weekly Overview
45%
Your sales performance is 45% better compared to last month
DETAILS
Total Earning
$24,895
10%
Compared to $84,325 last year
Zipcar
Vuejs, React & HTML
$24,895.65
Bitbank
Sketch, Figma & XD
$8,650.20
Aviato
HTML & Angular
$1,245.80
Total Profit
$25.6k +42%
Weekly Profit
Refunds
$78 -15%
Past Month
New Project
862 -18%
Yearly Project
Sales Queries
15 -18%
Last Week
Sales by Countries
Deposit
View All
Withdraw
View All


MINDMEND
Dashboard
Profile
MOOD
Mood category
Mood
DOCTOR
Doctor
Doctor category
ADDITIONAL
Discover
SiteConfig
Excerisce Level
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User
ACCOUNT
SECURITY
INFO
UPLOAD NEW PHOTO
CANCEL
Allowed PNG or JPEG. Max size of 800K.
1. Account Details
EDIT
Username
sapna
Email
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Last Name
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Country
State
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City
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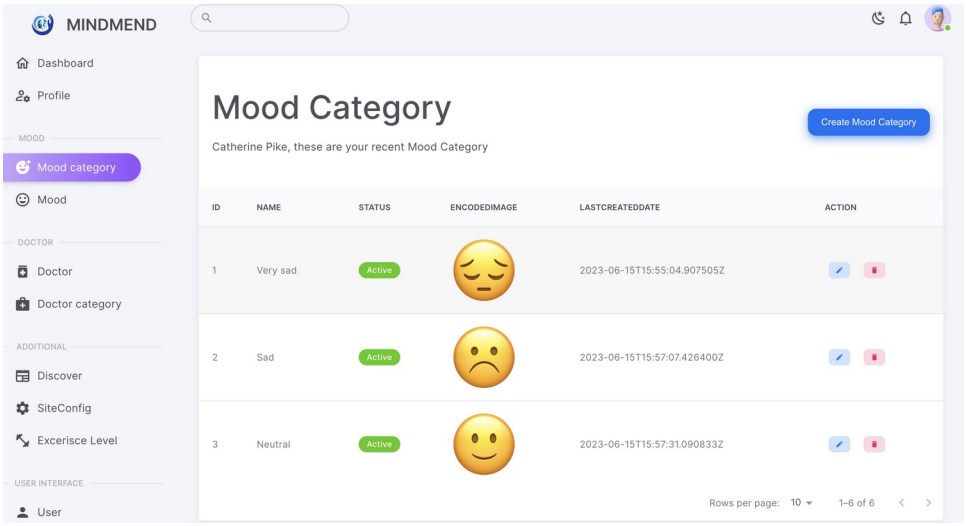
MINDMEND
Dashboard
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MOOD
Mood category
Mood
DOCTOR
Doctor
Doctor category
ADDITIONAL
Discover
SiteConfig
Excerisce Level
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User
Mood Category
Catherine Pike, these are your recent Mood Category
Create Mood Category
ID
NAME
STATUS
ENCODEDIMAGE
LASTCREATEDDATE
ACTION
1
Very sad
Active
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2
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Active
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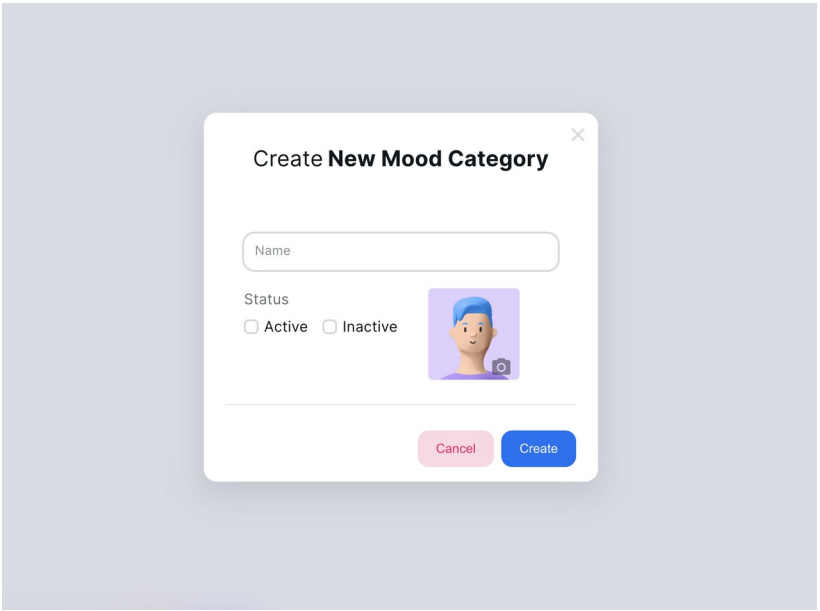
Create New Mood Category
Name
Status
Active
Inactive
Cancel
Create

11. References

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