

L J University

School of Computer Applications Dept. of Master of Computer Applications

Near Sarkhej Cross Roads,
Ahmedabad – 382210, Gujarat, India.

Website: www.ljku.edu.in



Group Number	51
Name of the college	LJ college of computer application
Project Title	Healthmate
Course name and Semester	MCA Semester 4
Internal guide	Dr. Bhavin shah
Enrolment Number	2021002401110055 2021002401110029
Roll Number	35, 41
Division	A

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CERTIFICATE

DIV: A ROLL NO: 35 ENROLLMENT NO.: 2021002401110055

This is to certify that Mr. / Mrs. Bhavesh Anilbhai Soni studying in Master
of Computer Applications (MCA), Semester IV, has satisfactorily completed

his/her Software Project Titled

_____ **Healthmate** _____

Date of Submission:

Dr. Bhavin Shah
Internal Guide

Dr. Bhavin Shah
HOD

Prof. Alok Manke
Director

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CERTIFICATE

DIV: A ROLL NO: 41 ENROLLMENT NO.: 2021002401110029

This is to certify that Mr. / Mrs. Vatsal Narendrabhai Nayi studying in
Master of Computer Applications (MCA), Semester IV, has satisfactorily
completed his/her Software Project Titled

_____ **Healthmate** _____

Date of Submission:

Dr. Bhavin Shah
Internal Guide

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Director



LOK JAGRUTI KENDRA UNIVERSITY
Syllabus for Master of Computer Applications (MCA)
Semester: IV
Subject Name: Software Project 2

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Need for the new system

- **Streamlining the hiring process:** The healthcare industry is often fast-paced and understaffed, which means that hiring managers need to be able to quickly identify and hire qualified candidates. A new job application system can help to automate many of the steps in the hiring process, such as resume screening and scheduling interviews, which can help to speed up the process and ensure that qualified candidates are not overlooked.
- **Ensuring compliance with regulations:** The healthcare industry is highly regulated, and there are many laws and regulations that govern the hiring process. A new job application system can help to ensure that hiring managers are following all of the necessary regulations and that they are collecting and storing applicant information in a way that is compliant with all relevant laws.
- **Improving candidate experience:** Applying for a job in the healthcare industry can be a complex and time-consuming process, which can discourage some qualified candidates from applying. A new job application system can help to simplify the process and make it more user-friendly, which can improve the candidate experience and attract more qualified candidates.
- **Enhancing data analysis:** A new job application system can provide healthcare organizations with valuable data on their hiring process, including the number of applicants, the time to hire, and the quality of the candidates. This data can be used to identify areas for improvement and to make data-driven decisions about the hiring process.

Objective of the New System

The objective of Our system could be to provide a platform for healthcare professionals, such as nurses, doctors, and other support staff, to connect with patients or healthcare facilities for short-term or temporary job assignments. Our online system is to make it easier and more efficient for healthcare professionals and facilities to connect and collaborate, improving access to quality healthcare services for patients and providing more flexible job opportunities for healthcare professionals.

Problem Definition

Our system is a digital platform that connects healthcare professionals and providers with freelance job opportunities in the healthcare industry. The platform provides a flexible, accessible and convenient way for freelancers to find and apply for healthcare job opportunities that match their skills and expertise.

Core Components

1. **User Management:** This component manages the registration and authentication of clients and candidates on the platform. It also stores and manages the personal and professional information of the users.
2. **Search and Matching:** This component allows clients to search for available candidates based on specific criteria, such as location, skills, and qualifications. It also enables candidates to search for job opportunities that match their preferences.
3. **Application and Hiring:** This component allows candidates to apply for job opportunities, and clients to review and select suitable candidates. It also facilitates the hiring process and payment for services.
4. **Communication:** This component provides a secure and convenient way for clients and candidates to communicate with each other, including scheduling interviews and receiving updates on the status of their applications.
5. **Analytics and Reporting:** This component provides insights into the platform usage and performance, including the number of job postings, candidate applications, and successful hires.
6. **Payment Processing:** This component facilitates the payment of services by clients to candidates, ensuring that payments are secure, reliable, and processed in a timely manner.

Project Profile

Project Name	HealthMate
Developed By:	Bhavesht Soni, Vatsal Nayi
Platform	Healthcare Freelancer App
Front-End	Flutter
Back-End	Laravel
Completion Time	4 Month
Internal Guide	Dr. Bhavin Shah
Institute Name	LJ University

Assumptions and Constraints

Assumptions:

1. Adequate internet connectivity and technology infrastructure is available to support the platform.
2. There is a demand for freelance healthcare services and job opportunities in the industry.
3. Healthcare professionals and providers are comfortable using digital platforms for job search and freelance work.
4. Patients are open to receiving care from freelance healthcare providers and are comfortable using telehealth services.
5. The platform meets regulatory requirements and complies with healthcare laws and regulations, such as HIPAA (Health Insurance Portability and Accountability Act) and data privacy laws.

Constraints:

1. Limited access to healthcare services in certain geographic areas or for certain populations.
2. Resistance from traditional healthcare providers to use the platform or accept care from freelance healthcare providers.
3. Lack of standardization in freelance healthcare services and quality control measures.
4. Competition from other online healthcare platforms and job marketplaces.
5. Limited funding and resources for development and maintenance of the platform.

Advantages and Limitations of the Proposed System

Advantages:

1. **Increased Access to Healthcare Services** : Our system can help increase access to quality healthcare services for patients, particularly in areas where there is a shortage of traditional healthcare providers.
2. **Flexibility for Healthcare Providers** : Freelance healthcare providers can offer their services on a flexible schedule, allowing them to balance their work with other responsibilities and commitments.
3. **Career Opportunities for Healthcare Professionals** : The platform provides a convenient and accessible way for healthcare professionals to find freelance job opportunities, helping them to grow their careers and expand their expertise.
4. **Improved Workforce Planning for Employers** : Employers can use the platform to access a pool of skilled and experienced freelance healthcare providers to meet their staffing needs, helping them to better manage their workforce and meet demand for services.

Limitations:

1. **Quality Control** : There may be a lack of standardization in the quality of freelance healthcare services offered through the platform, potentially leading to concerns about the quality and reliability of care.
2. **Regulatory Compliance** : The platform must comply with healthcare regulations and laws, such as HIPAA (Health Insurance Portability and Accountability Act) and data privacy laws, which can be challenging and require ongoing compliance efforts.
3. **Resistance from Traditional Healthcare Providers** : Traditional healthcare providers may resist the use of the platform and the use of freelance healthcare providers, which can limit its success and impact on the industry.
4. **Limited Availability in Certain Areas** : The platform may not be accessible in certain geographic areas due to limited internet connectivity or technology infrastructure.

Requirement Determination

1. **User-friendly interface** : The platform should be easy to navigate and use, with clear and intuitive interfaces for both healthcare clients and candidates.
2. **Secure authentication and authorization** : The platform should implement secure authentication and authorization processes to ensure the privacy and security of user information and healthcare data.
3. **Customizable profiles** : Healthcare professionals and providers should be able to create and customize their profiles to showcase their skills and experience.
4. **Payment processing** : The platform should have a payment processing system in place to facilitate transactions between clients and candidates, and handle payments for freelance job opportunities.

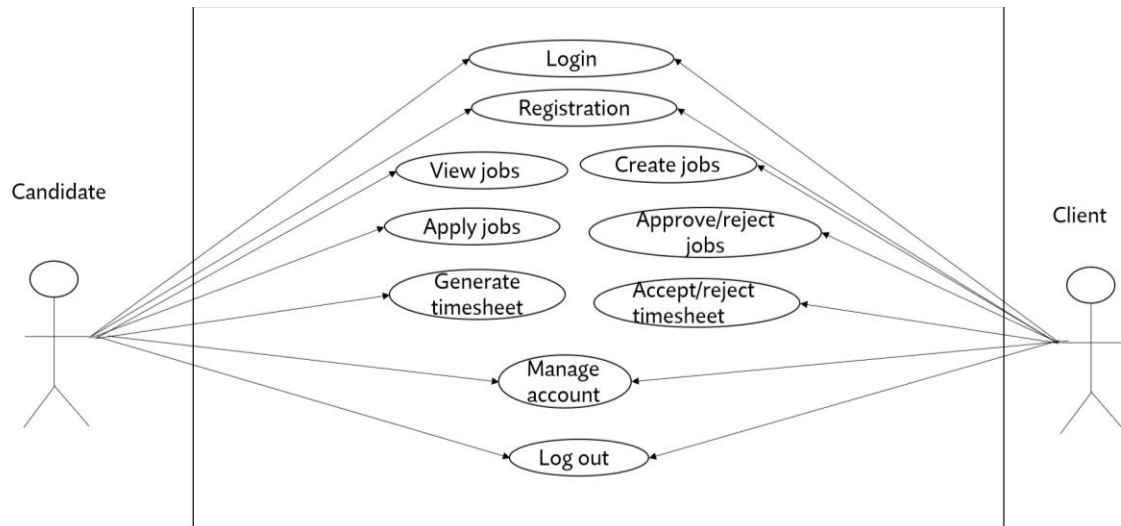
Requirement Specification

1. **User Accounts** : The platform should support the creation and management of user accounts for healthcare professionals and employers, with secure authentication and authorization processes.
2. **Provider Profiles** : Healthcare professionals should be able to create and customize their profiles, including information about their skills, experience, education, and certifications.
3. **Employer Profiles** : Employers should be able to create and manage their profiles, including information about their healthcare organization and job requirements.
4. **Matchmaking and Job Posting** : The platform should provide matchmaking capabilities to help healthcare professionals find and apply for freelance job opportunities, and employers to post and manage freelance job listings.
5. **Reporting and Analytics** : The platform should provide reporting and analytics capabilities to help improve the quality of services and inform future development efforts.
6. **Technical Requirements** : The requirement specification should also outline the technical requirements for the platform, including hardware and software specifications, data storage and retrieval, and system security and performance.

Targeted User

1. **Candidate** : Doctors, Nurses, Physiotherapists, and other healthcare professionals with specialized skills and knowledge can offer their services as freelancers.
2. **Client** : Freelance healthcare consultants can offer their expertise to healthcare organizations looking to improve their operations, processes, and patient outcomes.

Use case Diagram



Data Dictionary

Table: candidate

Primary Key: Candidate ID

Table: candidate

Primary Key: Candidate ID

Field Name	Data Type	Description
Candidate ID	Integer	Unique identifier for each candidate
Avatar	Varchar	Profile picture Path of candidate
First Name	Varchar	First name of the candidate
Last Name	Varchar	Last name of the candidate
Email	Varchar	Email address of the candidate
Phone Number	Varchar	Phone number of the candidate
Gender	Varchar	Gender of the candidate
Role	Integer	Role id of the candidate
Password	Password	Password of the candidate for application

Table: client
Primary Key : Client ID

Field Name	Data Type	Description
Client ID	Integer	Unique identifier for each client
Avatar	Varchar	Profile picture path of client
Company Name	Varchar	Name of the client company
Email	Email	Email address of the contact person
Phone Number	Varchar	Phone number of the contact person
Address	Varchar	Address of the company
Password	Varchar	Application Password of client
Login_Otp	Varchar	Authentication otp for client (Login time)
Login_Otp_expire	Timestamp	Otp expire Time
Forgot_Password_otp	Varchar	Reset Password otp for client (change Password)
Forgot_Password_otp_expire	Timestamp	Forgot password otp expire time

Table: Application
Primary Key: Application ID
Foreign Key: Candidate ID, Job ID

Field Name	Data Type	Description
Application ID	Integer	Unique identifier for each application
Candidate ID	Integer	ID of the candidate who submitted the application
Job ID	Integer	ID of the job listing the application was submitted for
Status	Varchar	Status of the application (e.g. "Submitted", "Under Review", "Accepted", "Rejected")
Reject_reason	Varchar	If client reject candidate reason is required
Date Submitted	Date	Date the application was submitted

Coding Standard

Use consistent formatting: Your code should be easy to read and understand, so use consistent formatting throughout your code. This includes indentation, spacing, and the use of braces.

Write clean code: Write code that is easy to read and understand. This means avoiding overly complex code and using descriptive names for variables, functions, and classes.

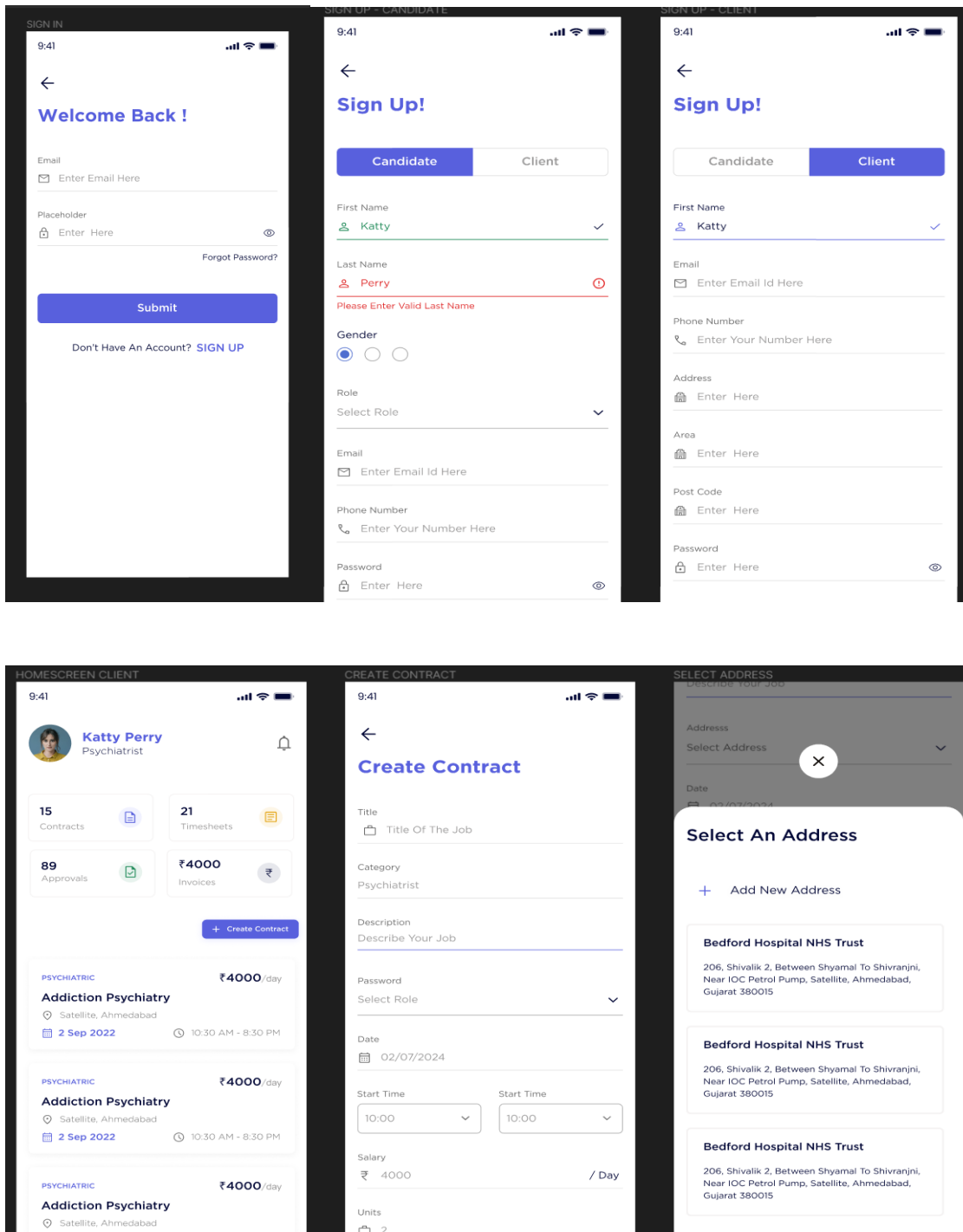
Comment your code: Commenting your code is important for other developers who may need to work with your code in the future. Use comments to explain why you're doing something, not just what you're doing.

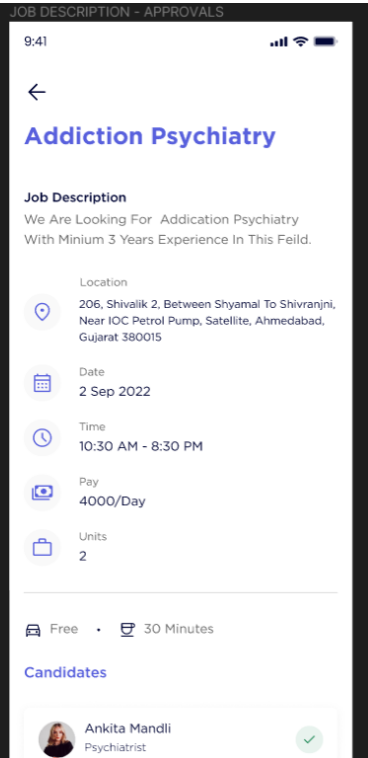
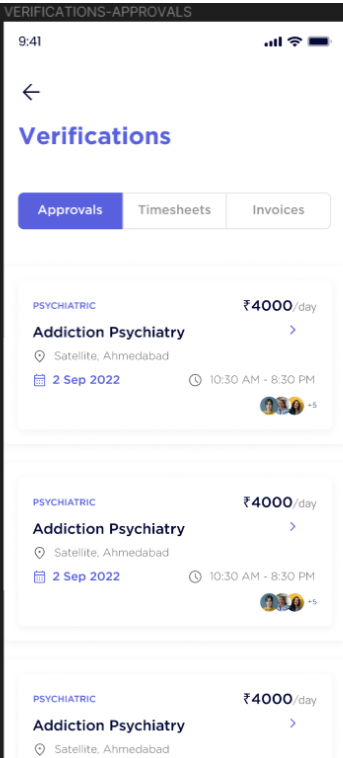
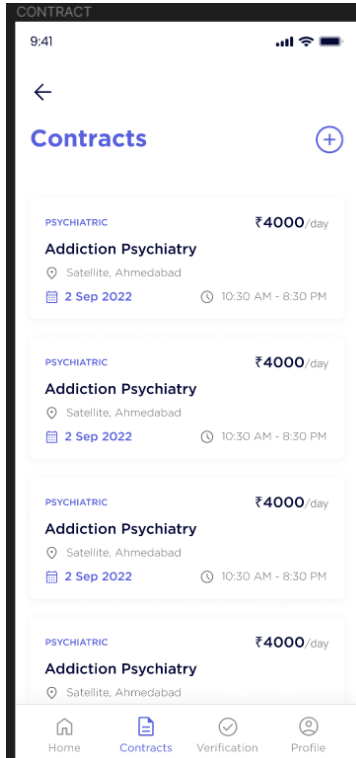
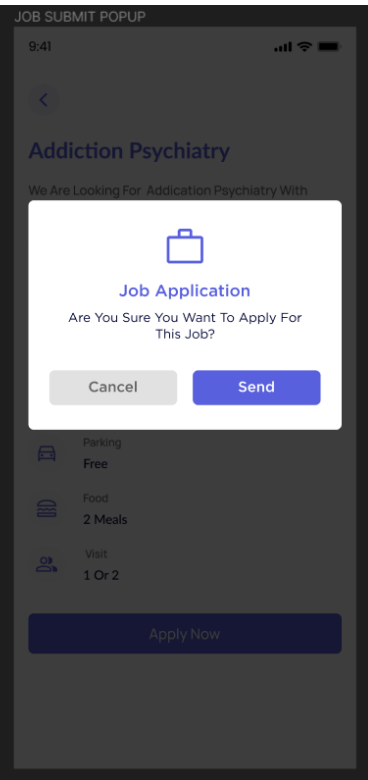
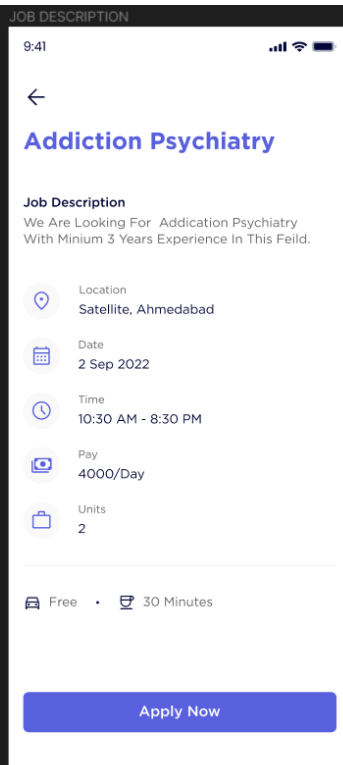
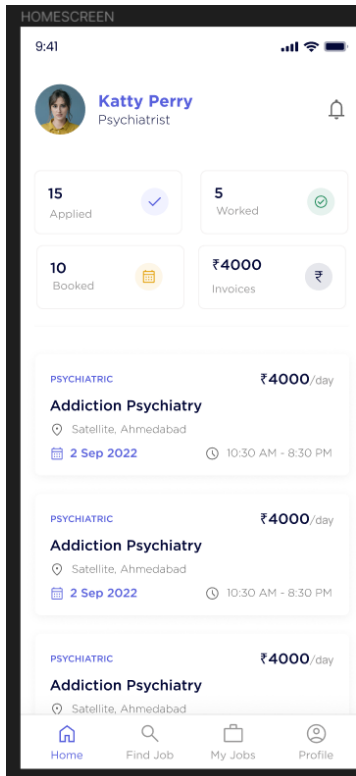
Use version control: Use version control tools like Git to manage your code changes and collaborate with other developers.

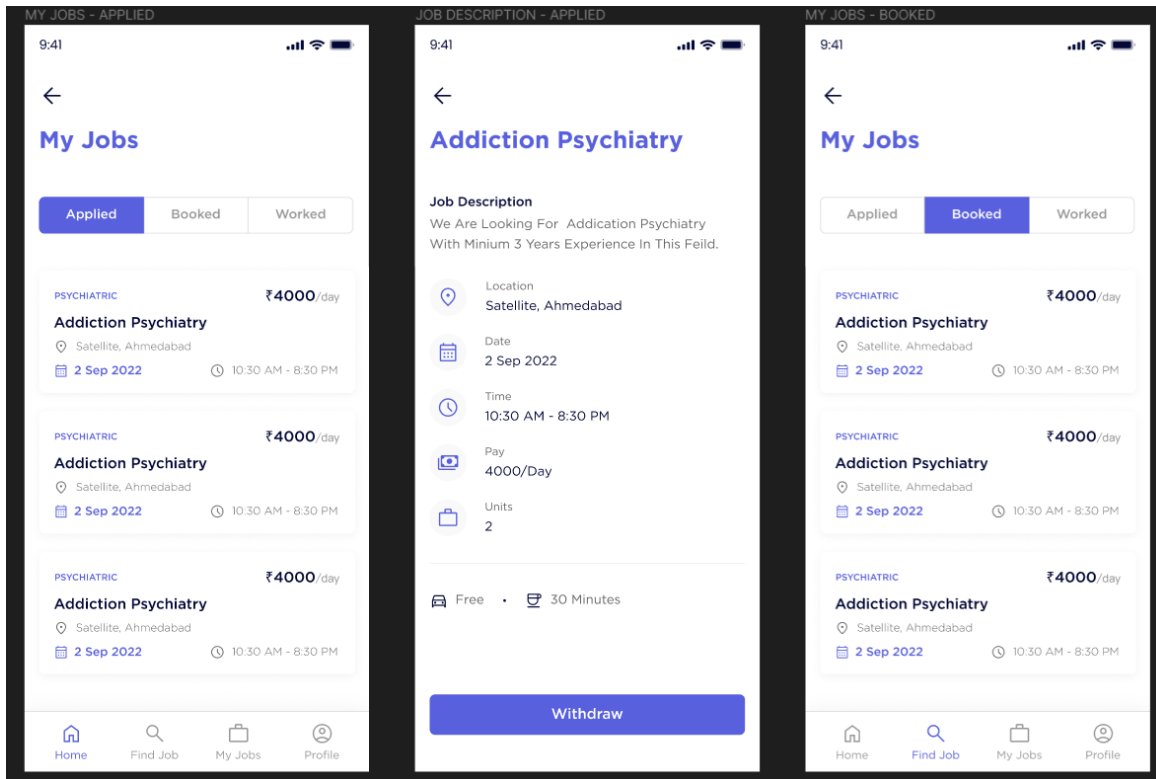
Test your code: Test your code thoroughly to ensure that it works as expected. Use unit tests, integration tests, and other testing techniques to verify the functionality of your code.

Follow best practices: Follow best practices for the language and framework you're using. This includes using proper error handling, avoiding global variables, and following security best practices.

Screen Shots



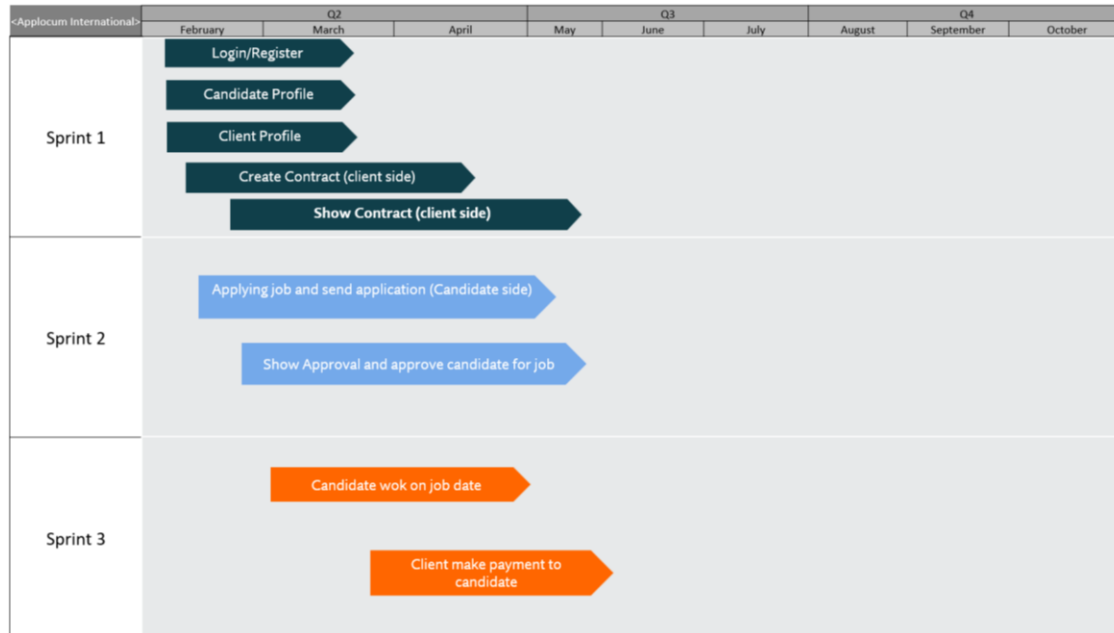




Agile Project Charter

General Project Information	
Project Name	HEALTHMATE
Project Champion	BHAVESH SONI , VATSAL NAYI
Project Sponsor	APPLOCUM INTERNATIONAL
Project Manager	SIRAJ SUMRA
Stakeholders	APPLOCUM INTERNATIONAL
Expected Start Date	22/02/2023
Expected Completion Date	24/04/2023
Project Details	
Mission	The mission of a Healthmate application is to showcase the doctor's education, training, clinical experience, and other qualifications that make them a suitable candidate for a medical position. A doctor's job application should demonstrate their ability to provide medical care and treatment, communicate effectively with patients and other healthcare professionals, and manage complex medical cases.
Vision	To create a job application platform that simplifies the job application process for candidates and streamlines the recruitment process for clients.
Scope	The scope of a Healthmate application for a doctor typically includes information about their education, training, clinical experience, and other qualifications relevant to the specific position they are applying for. This can include hospital-based positions, private practice positions, academic positions, or public health positions. The application should focus on the doctor's skills, experience, and qualifications related to the specific position, and demonstrate why they are the best candidate for the job.
Success Metrics	The success metrics of a job application for a doctor typically include being invited to an interview, receiving a job offer, and ultimately being successful in the job. The success of a job application depends on the strength of the doctor's qualifications and experience, the quality of the application materials, and the competitiveness of the job market. Other success metrics may include the doctor's fit with the organization and their ability to provide high-quality patient care.
Date: 25/03/2023	Date: 25/03/2023

Agile Roadmap/ Schedule



Agile User Story

User Story ID	As a <type of user>	I want to <perform some task>	so that I can <achieve some goal>
1	User	Have to Credentials to login into application	To login successfully to different dashboard
2	Client	Create a Job for Hiring a candidate as per demand	Created a Job successfully
3	Candidate	Show Jobs as per interested Stream	Show all job Information as per hiring.
4	Candidate	Apply Job as per the Interest	Apply job and send resume and cv as attachment
5	Client	Show All Approvals for Interested Candidates	Book a candidate as per candidate skill and interest.
6	Candidate	As per the Booking Working on job date	Working properly
7	Client	Cross check to the candidate work	Check fillable timesheet of candidate
8	Client	After checking timesheet if data match perfectly	Approve the timesheet of candidate
9	Candidate	Manage All status of payment	Like payment due , in processing ,payment done
10	Client	Make payment	Using payment application

Agile Release Plan

Sprint	Task	Start	End	Duration	Status	Release Date	Goal
1	Task 1	22-02-2023	26-02-2023	4	Released	27-02-2023	Complete Register module
1	Task 2	27-02-2023	01-03-2023	2	Released	01-03-2023	Complete Login module
1	Task 3	01-03-2023	04-03-2023	3	Released	01-03-2023	Complete Work on authentication of client and candidate login different ways
1	Task 4	04-03-2023	09-03-2023	5	Released	08-03-2023	Create Client Dashboard
2	Task 5	09-03-2023	14-03-2023	5	Released	14-03-2023	Create Candidate Dashboard
2	Task 6	14-03-2023	19-03-2023	5	Released	19-03-2023	Work on Create job Module (Client Side)
2	Task 7	19-03-2023	25-03-2023	6	Released	25-03-2023	Work on Show Created job Module (Candidate Side)
2	Task 8	25-03-2023	28-03-2023	3	Released	28-03-2023	Work on Show own created job (Client Side)
3	Task 9	28-03-2023	31-03-2023	3	Released	31-03-2023	Show profile (Client side)
3	Task 10	31-03-2023	04-04-2023	4	Released	04-04-2023	Show profile (Candidate side)
3	Task 11	04-04-2023	10-04-2023	6	Ongoing		Edit Profile details and Set Avatar
4	Task 12	10-04-2023	18-04-2023	8	Ongoing		Apply Job For specific Role (Candidate side)
4	Task 13	18-04-2023	20-04-2023	2	Ongoing		Check Approvals And Book a Candidate (Client side)
4	Task 14	20-04-2023	21-04-2023	1	Ongoing		Candidate Manage Timesheet as the timing of working
5	Task 15	21-04-2023	24-04-2023	3	Ongoing		Client check a candidate timesheet and approve timesheet
5	Task 16	24-04-2023	25-04-2023	1	Ongoing		Manage status of job and application
5	Task 17	25-04-2023	29-04-2023	4	Planned		Make payment to candidate
5	Task 18	29-04-2023	01-05-2023	2	Ongoing		Show Count on dashboard of activity
5	Task 19	01-05-2023	05-05-2023	4	Planned		Show screen of payment successful (candidate side)
4	Task 13	18-04-2023	20-04-2023	2	Ongoing		Check Approvals And Book a Candidate (Client side)
4	Task 14	20-04-2023	21-04-2023	1	Ongoing		Candidate Manage Timesheet as the timing of working
5	Task 15	21-04-2023	24-04-2023	3	Ongoing		Client check a candidate timesheet and approve timesheet
5	Task 16	24-04-2023	25-04-2023	1	Ongoing		Manage status of job and application
5	Task 17	25-04-2023	29-04-2023	4	Planned		Make payment to candidate

Agile Sprint Backlog

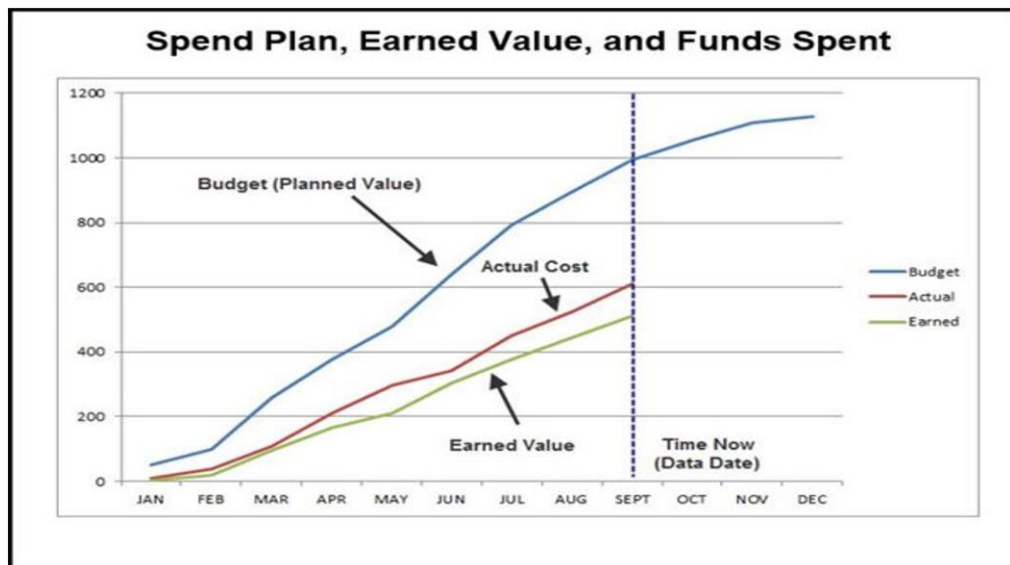
Task Name	Story	Sprint Ready	Priority	Status	Story Points	Assigned to Sprint
Sprint 1	Yes	Yes	Medium	Complete	24	Bhaves
Task 1	Yes	Yes	Medium	Complete	8	Bhaves
Task 2	Yes	Yes	Medium	Complete	16	Bhaves
Task 3	Yes	Yes	Medium	Complete	0	Vatsal
Sprint 2	Yes	Yes	Medium	In Progress	96	Bhaves
Task 4	Yes	Yes	Low	Complete	32	Vatsal
Task 5	Yes	Yes	Low	Complete	48	Vatsal
Task 6	Yes	No	Medium	Not Started	16	Bhaves
Sprint 3	Yes	No	Medium	In Progress	32	Vatsal
Task 7	Yes	No	Low	In Progress	8	Bhaves
Task 8	Yes	Yes	Medium	In Progress	8	Bhaves
Task 9	Yes	No	Medium	In Progress	16	Vatsal
Sprint 4	Yes	Yes	Medium	In Progress	64	Bhaves
Task 10	Yes	No	Low	In Progress	32	Bhaves
Task 11	Yes	Yes	Low	Complete	32	Vatsal
Task 12	Yes	Yes	Medium	Complete	0	Vatsal
Sprint 5	Yes	No	Low	Not Started	64	Bhaves
Task 13	Yes	No	Low	Not Started	48	Bhaves
Task 14	Yes	No	Low	Not Started	8	Vatsal
Task 15	Yes	No	Medium	Not Started	8	Vatsal

Agile Test Plan

Sprint	Objective	Testing Requirements	Test Cases	Responsible Team Member	Deadline
1	Test the basic functionality of the patient portal and login functionality	Functional testing, Usability testing	- Create account and login- View patient profile- Schedule an appointment- Cancel an appointment- Send a message to a doctor- Verify that the login page is accessible- Verify that a new user can create an account- Verify that an existing user can login successfully- Verify that a user cannot login with incorrect credentials- Verify that the "forgot password" functionality works	Test Engineer	End of sprint 1
2	Test the integration between the patient portal and the doctor's dashboard	Integration testing	- Doctor receives appointment requests- Doctor can view patient profile- Doctor can update patient information- Verify that the doctor's dashboard displays the correct patient information after login- Verify that the doctor can access the patient portal from the dashboard	Test Engineer, Developer, Product Owner	End of sprint 2

3	Test the performance and scalability of the patient portal and the doctor's dashboard	Performance testing, Load testing	- Simulate concurrent users accessing the patient portal and the doctor's dashboard- Measure response time and resource utilization	Test Engineer, Developer, Product Owner	End of sprint 3
4	Test the security of the patient portal and the doctor's dashboard	Security testing, Penetration testing	- Verify that patient data is encrypted- Attempt to access the system without authorization- Attempt to inject malicious code- Verify that login credentials are encrypted during transmission- Attempt to login without authorization- Attempt to inject malicious code	Test Engineer, Security Expert	End of sprint 4

Earned-value and Burn charts



Proposed Enhancement

Currently, the company relies on occasional surveys and anecdotal feedback to gauge customer satisfaction. While this information is valuable, it can be limited in scope and may not capture the full range of customer experiences. By implementing a more robust feedback system, we can gather more comprehensive and actionable data that will enable us to better understand customer needs and preferences.

To implement this enhancement, I recommend working with our IT department to develop and integrate the new feedback system into our existing infrastructure. We would also need to develop clear guidelines for soliciting and responding to customer feedback to ensure that we are using the data effectively.

Overall, I believe that this proposed enhancement will have a positive impact on customer satisfaction, loyalty, and retention. By showing a commitment to listening to and addressing customer feedback, the company can build stronger relationships with its customers and stay ahead of the competition.

Conclusion

"In conclusion, this project report has demonstrated my ability to analyze complex data and make informed recommendations to drive business success. By leveraging my experience in project management, data analysis, and communication, I am confident that I can bring value to the Applocum International team and help drive growth and innovation. I am excited about the opportunity to contribute my skills and experience to the company and look forward to the chance to further discuss my qualifications with the hiring team. Thank you for your consideration."

Bibliography

1. [Applocum International](#)
2. [Stack overflow](#)
3. [ChatGPT](#)
4. [Flutter Documentation](#)
5. [Laravel Documentation](#)

THANK YOU