MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

Deemed to be University
(Declared under Distinct Category by Ministry of Education, Govt. of India)
NAAC Accredited with A++ Grade

Project Report

on

Development of Cloud based SaaS App (Admin)

Submitted By

Yogesh Jatav

(0901CA221077)

Industry Mentor

Mr. Ashish Namdeo

(Eddy tools tech solutions)

Faculty Mentor

Dr. Parul Saxena (Assistant Professor)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

GWALIOR – 474005 (MP) Estd. 1957

January – June 2024

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A project report submitted in partial fulfilment of the requirement for the degree of

MASTER IN COMPUTER APPLICATION

in

COMPUTER SCIENCE AND ENGINEERING

Submitted By

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(0901CA221077)

Industry Mentor

Mr. Ashish Namdeo

(Project Guide, Eddy tool tech solutions)

Faculty Mentor

Dr. Parul Saxena

(Assistant Professor & Faculty Coordinator MCA, Department of Computer Science & Engineering)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

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Project Completion Certificate

EddyTools
Tech Solutions

GSTIN: 07ADXPN3624R2ZJ , UDYAM: DL-11-0004729

Date: 22-Apr-2024

LETTER OF PROJECT COMPLETION

To Whom It May Concern,

We are glad to inform you that Yogesh Jatav, student of MCA (Computer Application) , Madhav institute of technology and science, Gwalior has successfully completed a 3.5month project at EddyTools Tech Solutions (Remote)

During the project, Yogesh Jatav was assigned to work with our IT department aspart of the Team. Yogesh Jatav actively participated in various hands-on tasks, contributing to the team's projects and initiatives.

Throughout Yogesh Jatav's internship, we found them to be extremely inquisitive and hardworking. They demonstrated a keen interest in learning new technologies and displayed a strong commitment to thoroughly understanding subjects in order to deliveroptimal solutions.

Yogesh Jatav's association with our organization proved to be highly fruitful, and wehave no doubt that they will continue to achieve success in their future endeavors.

We wish Yogesh Jatav all the best and congratulate them on the successful completionof their internship(Project) with EddyTools Tech Solutions.

Sincerely,

Ashish Kashyap
(CEO, EddyTools)

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CERTIFICATE

This is certified that **Yogesh Jatav (0901CA221077)** has submitted the project report titled **Development of Cloud based SaaS App (Admin)** under the mentorship of **Mr. Ashish Namdeo**, in partial fulfilment of the requirement for the award of degree of Master in Computer Application in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

Saxena 25/4/24

Dr. Parul Saxena
Assistant Professor
Computer Science and Engineering

25/4/24

Dr. Manish Dixit
(Professor and Head)
Computer Science and Engineering

Dr. Manish Dixit
Professor & HOD
Department of CSE
M.I.T.S. Gwalior

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

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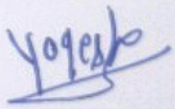
DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Master in Computer Application in Computer Science and Engineering at **Madhav Institute of Technology & Science, Gwalior** is an authenticated and original record of my work under the mentorship of **Mr. Ashish Namdeo, (Project Guide, Eddy tool tech solutions)**.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



Yogesh Jatav
0901CA221077
2nd Year
Master in Computer Application,
Computer Science and Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

Deemed to be University
(Declared under Distinct Category by Ministry of Education, Govt. of India)
NAAC Accredited with A++ Grade

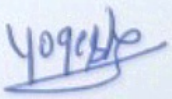
ACKNOWLEDGEMENT

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary project. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering**, for allowing me to explore this project. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I would like to extend my heartfelt appreciation to **Mr. Ashish Namdeo (Eddy tools tech solutios)** for his exceptional mentorship, guidance, and assistance throughout the project. His valuable input and feedback during the course of the project have helped me enhance my knowledge and skills. His constant encouragement and support have been instrumental in the successful completion of this project.

I am sincerely thankful to my faculty coordinator. I am grateful to the guidance of **Dr. Parul Saxena** (Assistant Professor), Computer Science and Engineering, for her continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.



Yogesh Jatav
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ABSTRACT

The goal of this cloud-based Software as a Service (SaaS) application project is to introduce a SaaS application that is carefully crafted to meet the complex needs of resource, task, and event management in corporate environments. Designed to satisfy the distinct requirements of Super Admins, Vendors, and Users in equal measure, this all-inclusive solution is ready to completely transform the operational environment by facilitating smooth processes, encouraging teamwork, and elevating operational excellence to previously unheard-of levels.

Using technologies like Graph QL, OpenAI, React.js, Node.js, and ZOHO Catalyst along with an unwavering dedication to user-centric design principles, the application is expected to be a model of efficiency in the field of organizational management. Through the centralized task management, effective resource allocation, and smooth event coordination it provides stakeholders with a level of control and visibility never before possible over their operational endeavours.

A few of the application's many noteworthy features include centralized dashboards that offer clear insights, robust task allocation and tracking features that guarantee efficiency and accountability, dynamic resource management tools that enable the best possible resource allocation, and extensive event planning and coordination modules that facilitate flawless event execution. Integrated communication channels facilitate smooth engagement and information sharing between stakeholders, which further improves collaboration.

To guarantee the highest levels of data privacy, regulatory compliance, and user happiness, the project also places a high priority on security and compliance. It does this by integrating strong security measures, compliance management functions, and thorough user training and support systems. By means of comprehensive feasibility studies that include technical, economic and behavioural aspects, the initiative aims to provide companies with concrete advantages and the necessary resources to prosper in the digital era .Future developments in AI integration, IoT integration, mobile application development, improved collaboration features, customization options, integration with third-party services, AR and VR integration, blockchain integration, continuous improvement initiatives, and expansion into new markets and industries are all anticipated to make the project's trajectory extremely promising. This all-encompassing strategy highlights the application's capacity to empower institutions, enhance workflows, and promote an innovative culture within the task, resource, and event management domains. All things considered, cloud-based software as a service (SaaS) is a revolutionary tool that will change organizational administration in the future.

सार

एक सेवा (सास) अनुप्रयोग परियोजना के रूप में इस क्लाउड-आधारित सॉफ्टवेयर का लक्ष्य एक अत्याधुनिक सास अनुप्रयोग पेश करना है जिसे कॉर्पोरेट वातावरण में संसाधन, कार्य और कार्यक्रम प्रबंधन की जटिल जरूरतों को पूरा करने के लिए सावधानीपूर्वक तैयार किया गया है। सुपर एडमिन, विक्रेताओं और उपयोगकर्ताओं की विशिष्ट आवश्यकताओं को समान रूप से पूरा करने के लिए डिज़ाइन किया गया, यह सर्व-समावेशी समाधान सुचारू प्रक्रियाओं को सुविधाजनक बनाकर, टीम वर्क को प्रोत्साहित करके और परिचालन उत्कृष्टता को पहले के अनसुने स्तरों तक बढ़ाकर परिचालन वातावरण को पूरी तरह से बदलने के लिए तैयार है। ग्राफ क्यूएल, ओपनएआई, React.js, Node.js, और ZOHO उत्प्रेरक जैसी अत्याधुनिक तकनीकों का उपयोग करके उपयोगकर्ता-केंद्रित डिजाइन सिद्धांतों के लिए एक अटूट समर्पण के साथ, एप्लिकेशन से संगठनात्मक प्रबंधन के क्षेत्र में दक्षता का एक मॉडल होने की उम्मीद है। केंद्रीकृत कार्य प्रबंधन, प्रभावी संसाधन आवंटन और सुचारू आयोजन समन्वय के माध्यम से यह हितधारकों को उनके परिचालन प्रयासों पर नियंत्रण और दृश्यता का एक स्तर प्रदान करता है जो पहले कभी संभव नहीं था। एप्लिकेशन की कई उल्लेखनीय विशेषताओं में से कुछ में केंद्रीकृत डैशबोर्ड शामिल हैं जो स्पष्ट अंतर्दृष्टि प्रदान करते हैं, मजबूत कार्य आवंटन और ट्रैकिंग सुविधाएँ जो दक्षता और जवाबदेही की गारंटी देते हैं, गतिशील संसाधन प्रबंधन उपकरण जो सर्वोत्तम संभव संसाधन आवंटन को सक्षम करते हैं, और व्यापक कार्यक्रम योजना और समन्वय मॉड्यूल जो त्रुटिहीन घटना निष्पादन की सुविधा प्रदान करते हैं। एकीकृत संचार चैनल हितधारकों के बीच सुचारू जुड़ाव और सूचना साझा करने की सुविधा प्रदान करते हैं, जिससे सहयोग में और सुधार होता है। डेटा गोपनीयता, नियामक अनुपालन और उपयोगकर्ता की खुशी के उच्चतम स्तर की गारंटी के लिए, परियोजना सुरक्षा और अनुपालन को भी उच्च प्राथमिकता देती है। यह मजबूत सुरक्षा उपायों, अनुपालन प्रबंधन कार्यों और पूरी तरह से उपयोगकर्ता प्रशिक्षण और समर्थन प्रणालियों को एकीकृत करके ऐसा करता है। व्यापक व्यवहार्यता अध्ययन के माध्यम से जिसमें तकनीकी, आर्थिक, परिचालन, कानूनी और व्यवहार संबंधी पहलू शामिल हैं, इस पहल का उद्देश्य कंपनियों को डिजिटल युग में समृद्ध होने के लिए ठोस लाभ और आवश्यक संसाधन प्रदान करना है।एआई एकीकरण, आईओटी एकीकरण, मोबाइल एप्लिकेशन

विकास, बेहतर सहयोग सुविधाएँ, अनुकूलन विकल्प, तृतीय-पक्ष सेवाओं के साथ एकीकरण, एआर और वीआर एकीकरण, ब्लॉकचेन एकीकरण, निरंतर सुधार पहल और नए बाजारों और उद्योगों में विस्तार सभी में भविष्य के विकास से परियोजना के प्रक्षेपवक्र को बेहद आशाजनक बनाने की उम्मीद है। यह सर्वव्यापी रणनीति संस्थानों को सशक्त बनाने, कार्यप्रवाह बढ़ाने और कार्य, संसाधन और कार्यक्रम प्रबंधन डोमेन के भीतर एक नवीन संस्कृति को बढ़ावा देने के लिए अनुप्रयोग की क्षमता पर प्रकाश डालती है। सभी बातों पर विचार करते हुए, क्लाउड-आधारित सॉफ्टवेयर एक सेवा के रूप में (सास) एक क्रांतिकारी उपकरण है जो भविष्य में संगठनात्मक प्रशासन को बदल देगा

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CHAPTER-1 INTRODUCTION

The cloud-based software as a service (SaaS) application will function as a centralized platform for managing tasks, resources, and events, giving Super Admins, Vendors, and Users the instruments and features required to maximize their productivity and accomplish their goals. The application will provide a smooth user experience and reliable performance by utilizing state-of-the-art technologies like React.js, Node.js, GRAPHQL, OpenAI, and ZOHO Catalyst. This will guarantee that stakeholders can promptly and effectively obtain the features and information they require.

The application would offer advanced capabilities including consolidated dashboard views, thorough analytics, and access control methods to Super Admins. Super Admins will be able to monitor progress, spot bottlenecks, and enforce adherence to corporate norms since they will have complete visibility and control over tasks, resources, and events. Additionally, Super Admins, Vendors, and Users will be able to collaborate and communicate more easily thanks to the program, which will improve their ability to work together to achieve shared objectives.

For Vendors, the application will offer tools for managing service delivery, tracking progress, and communicating with Super Admins and Users. Vendors will be able to access and update relevant information in real-time, ensuring that they can deliver services efficiently and meet the expectations of their clients. The application will also offer features for managing vendor profiles, contracts, and payments, streamlining the vendor management process and improving transparency and accountability.

The application will include self-service features, customized dashboards, and user-friendly interfaces. Users will be able to more effectively manage their workloads and interact with vendors and colleagues by creating, assigning, and tracking tasks, events, and resources. Along with capabilities for managing user profiles, preferences, and permissions, the program will make sure that users have the access they require to carry out their responsibilities efficiently and protect the security and privacy of their data.

CHAPTER-1 INTRODUCTION

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1.2 Parent Organization

Eddy Tool Tech Solution was founded in **Maharashtra**, India, in **2015**. The company was founded by **ASHISH NAMDEO**, a visionary leader with a love of technology and business, and it acquired popularity in the area very fast for its innovative digital solutions and software development.

Since its establishment, Eddy tool Tech Solution has concentrated on using cutting-edge technology to meet the changing demands of customers in a range of industries. Together with a committed group of knowledgeable experts, the business set out to push the limits of what was conceivable in the field of technology. With a focus on **IoT**, **blockchain**, **artificial intelligence**, and **machine learning**, Eddy tool Tech Solution established itself as a leader in the tech industry and is always looking for innovative ways to keep one step ahead of the competition.

Delivering extraordinary value to its clients by comprehending their particular difficulties and offering customized solutions that promote efficiency and growth has been one of the company's main objectives. Eddy Tool Tech Solution has established a reputation for excellence in the industry by developing innovative products and services via the promotion of a culture of continuous learning.

Over the years, Eddy tool Tech Solution has reached significant milestones and received accolades for its accomplishments. The organization has successfully completed a wide range of projects, from enterprise software applications to digital transformation programs, assisting clients in achieving their goals in a quickly changing digital landscape. Due to its dedication to excellence, dependability, and client pleasure, it has established enduring relationships with prestigious organizations in locally and in India. Since its founding, Eddy tool Tech Solution's workforce has expanded gradually. From its humble beginnings as a small group of enthusiastic individuals, the company has grown to employ a varied range of talented experts with expertise in UX/UI design, data science, software engineering, and project management. With an emphasis on developing talent and building a collaborative work environment, Eddy tool Tech Solution continues to attract top-tier talent and grow its capabilities to suit the evolving need.

The company's motto, **"Innovate, Collaborate, Transform,"** sums up its tenets and fundamental beliefs. It is a reflection of Eddy tool Tech Solution's dedication to creativity, teamwork, and utilizing technology to bring about revolutionary change. This motto is ingrained in all facets of the

business's operations, including how it develops new products, provides services, and builds connections with customers.

The company's founder, ASHISH NAMDEO, is a forward-thinking businessman with a solid foundation in technology and management. Ashish, who holds a degree in computer science and engineering, has always been captivated by how technology can be used to tackle challenging issues and bring about positive change. He worked in a variety of tech-related professions before launching Eddy tool Tech Solution, which allowed him to hone his skills in project management, business planning. Ashish started his own business because he was passionate about innovation and wanted to change the world. He thought he could build a business that would provide outstanding value to its customers while also encouraging innovation, teamwork, and constant improvement.
Eddy tool Tech Solution is proof of the ability of entrepreneurship and innovation to spur constructive change. The company has made a name for itself in the tech sector by emphasizing employee empowerment, customer pleasure, and technological excellence. It also keeps pushing the limits of what's feasible in the digital world. With a committed staff and a visionary entrepreneur leading the way, Eddy tool Tech Solution is well-positioned to expand and make a difference going forward.

1.3 Hardware and Software Specification

Popular technologies such as React.js, Node.js, Graph QL, and OpenAI with ZOHO catalyst application are used in the design and development of this cloud-based SaaS service. These technologies are used by the system to give the administrator, vendors, and users a scalable, effective, and user-friendly platform to carry out the work and manage resources and events. It guarantees that our development environment satisfies these requirements with cloud based App.

1.3.1 Hardware Specification

a. **Processor**: A modern multi-core processor like AMD RYZEN 5500U with random graphics or equivalent is recommended. This ensures smooth performance during development and can handle multiple tasks and servers efficiently.
b. **Memory**: 8 GB RAM is the minimum, but 16 GB or more is ideal. This allows you to run multiple applications and virtual machines without experiencing sluggish performance.
c. **Storage**: A 256 GB Solid State Drive (SSD) is the minimum, but a 512 GB SSD or larger is recommended. An SSD significantly reduces loading times for your development environment and tools.
d. **Display**: A monitor with a resolution of at least 1920x1080 is comfortable for coding. Consider a larger display or even a dual-monitor setup to maximize productivity.
e. **Network**: A stable internet connection is necessary for downloading dependencies, updates, and collaborating with team members if applicable.

1.3.2 Software Specification

a. **Operating System**: Choose from Windows 10 or 11 (64-bit), macOS (latest version), or Linux (popular distributions include Ubuntu and Fedora).
b. **Development Environment**: Install Node.js (latest LTS version), Graph ql, and a text editor or IDE like Visual Studio Code for writing code.
c. **Dependencies**: Use npm or yarn to manage dependencies for the project. This includes packages for Node.js, React, and any other libraries or frameworks used in your application.
d. **Graph Ql**: This Graph QL database serves as the data storage with the Schemas of your tables.
e. **Browser**: Make sure you have the latest versions of modern web browsers like Chrome, Firefox, or Edge for testing and debugging frontend components.
f. **Version Control**: Git is optional but recommended for version management. Platforms like Gitlab provide collaboration features and make it easier to manage code changes.

g. **Deployment**: Choose a deployment environment compatible with Node.js. This could be cloud platforms like AWS or Azure, and ZOHO catalyst with hosting services.

CHAPTER-2 SYSTEM ANALYSIS

2.1 Problem analysis

A comprehensive cloud-based SaaS application is the suggested solution to handle the identified problem analysis and get over the obstacles in task, resource, and event management. Task management, resource allocation, event coordination, communication, and data security components will all be integrated into one platform as a result.

SOLUTIONS

Centralized dashboard with access to all modules and features for Super Admins, Vendors, and Users.

Managing tasks that includes capabilities for creating, assigning, monitoring, and reporting progress.

Resource management that tracks resource availability and optimizes scheduling and utilization.

Platform for **event coordination** that includes tools for managing attendees, organizing logistics, and arranging the event.

Strong **data security** protocols, including access control, authentication, and encryption.

Organizations may provide outstanding experiences to their stakeholders while streamlining processes, improving cooperation, and guaranteeing compliance by putting this problem analysis into practice. The platform's centralised structure enhances operational efficiency, reduces risks related to task, resource, and event management, and allows for real-time decision-making.

2.2 Feasibility study

Any project's feasibility is essential to assessing its viability and likelihood of success. To guarantee the viability of our cloud-based software as a service application for managing tasks, resources, and events, a number of crucial aspects must be taken into account. These aspects include technological, financial, operational, legal, and schedule-related aspects.

2.2.1 Technical feasibility study

Hardware Requirements

S.no.	Specification	Description
1	Processor	AMD Ryzen 5500U with random graphics
2	RAM	8.00 GB
3	System Type	64-bit Operating System, X64-based processor
4	SSD Capacity	512 GB

Programming Languages

S.no.	Specification	Description
1	Front-End	React.js, Bootstrap, HTML, CSS
2	Backend	Node.js
3	Database	GraphQL

Software Requirements

S.no.	Specification	Description
1	Operating System	Windows 11
2	Browser	Chrome &Edge

3	Server	GraphQL (Apollo Server)
4	IDE	VS Code

2.2.2 Economical feasibility study

Personnel expenses

S.no.	Personnel Expenses	Cost
1	Front End Developer	3000/-
2	Backend Developer	3500/-
3	Hardware Cost	1800/-
4	Software Cost	2000/-
5	Database Administrator	2000/-
6	Miscellaneous Expenses	1500/-
	Total	13800/-

Other expenses

S.no.	Other Expenses	Cost
1	Electricity expenses	700/-
2	Stationary (for documentation)	600/-
3	Workspace facility (table, chairs)	2500/-
4	Wi-Fi	1000/-
	Total	4800/-

Net Amount

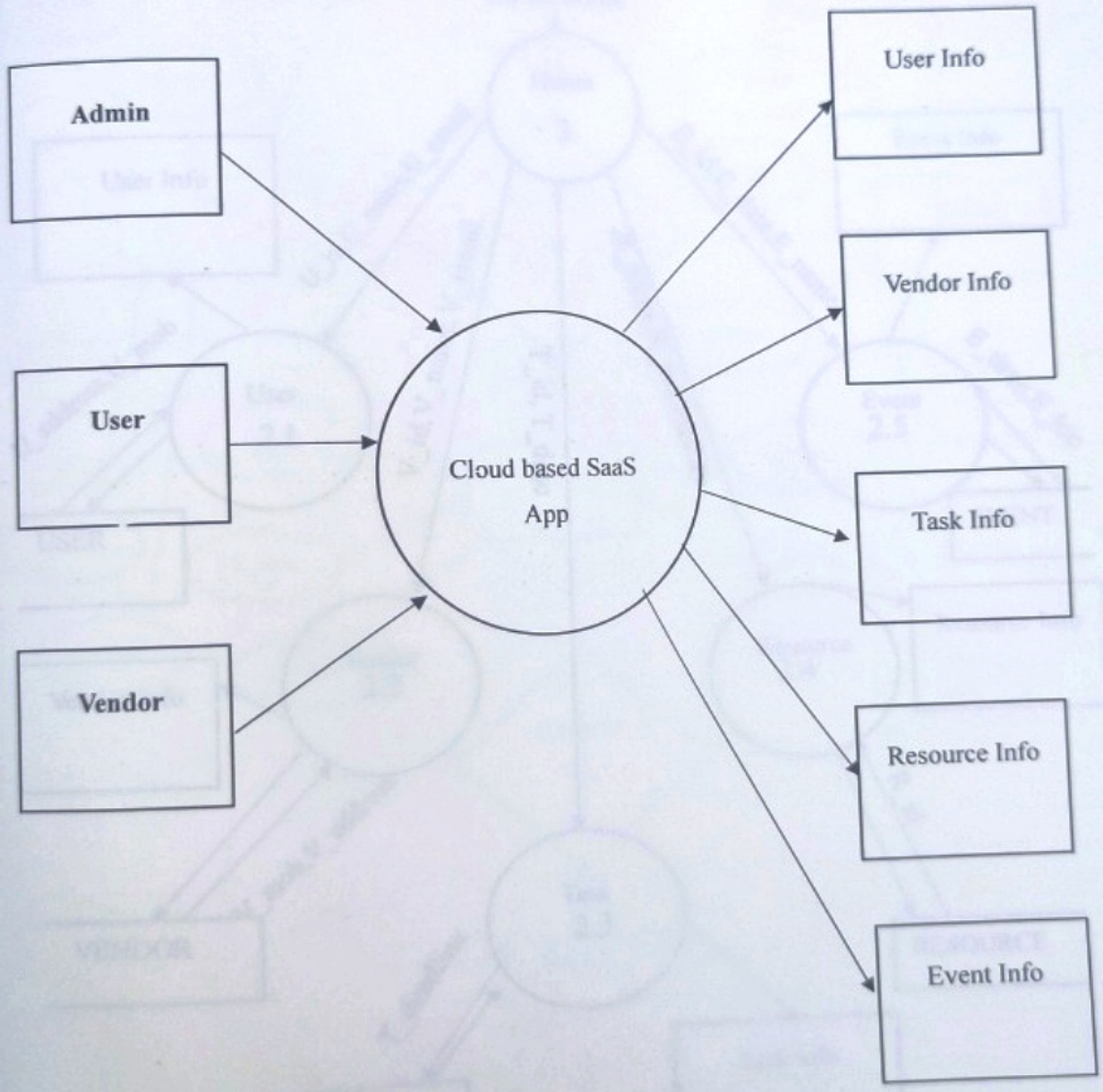
S.no.	Expenses	Cost
1	Personnel Expenses	13800/-
2	Other Expenses	4800/-
	Total	18,600/-

2.2.3 Behavioural Feasibility study

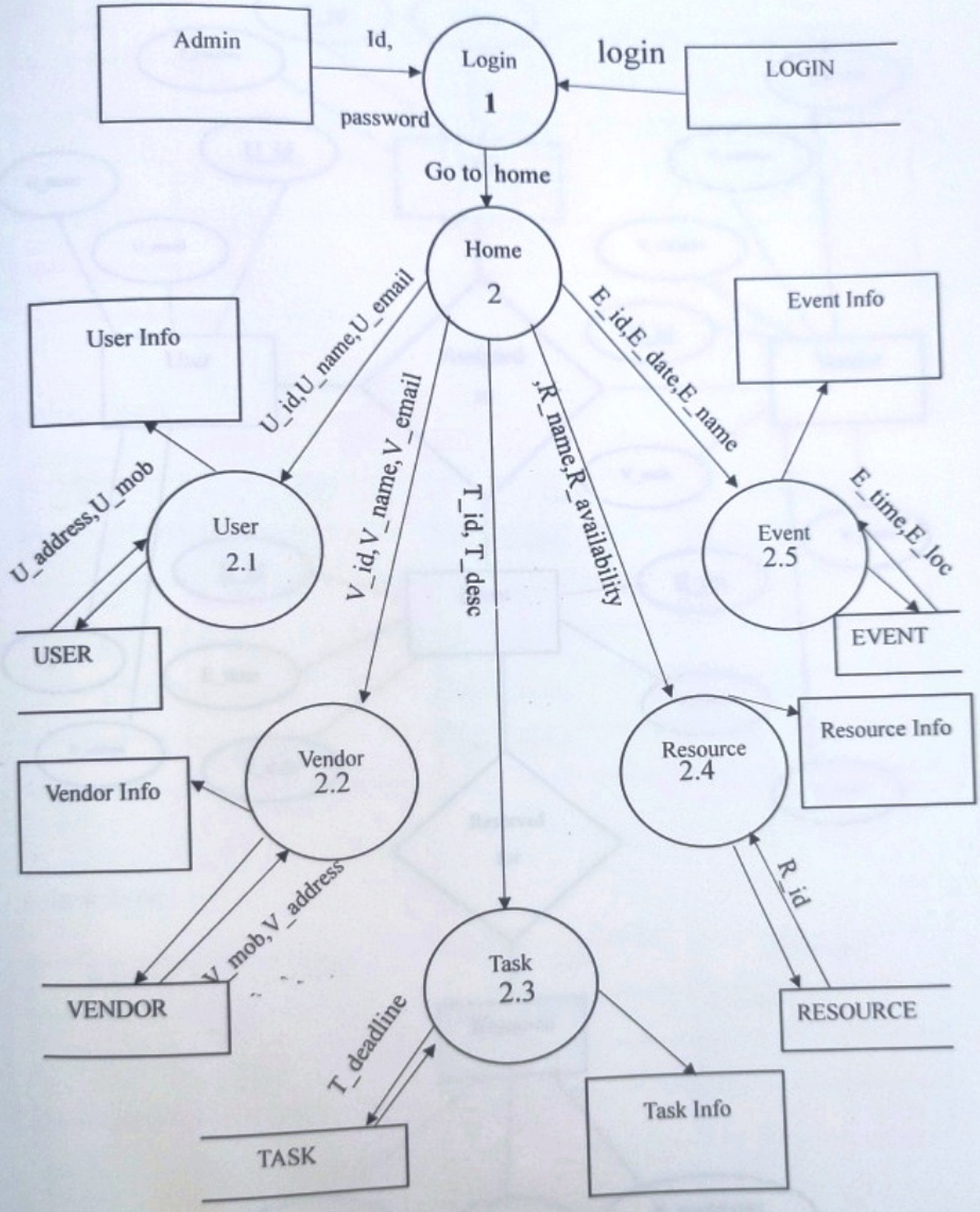
a. **User Needs Assessment**: Conduct surveys and interviews to understand user requirements, preferences, and pain points regarding task, resource, and event management.
b. **User Training and Support**: Identify training needs and develop user-friendly training materials and tutorials to facilitate smooth adoption of the new system.
c. **User Engagement**: Encourage active participation and feedback from users throughout the development and implementation process to ensure alignment with their needs and expectations.
d. **Stakeholder Involvement**: Engage key stakeholders, including Super Admins, Vendors, and Users, in the decision-making process to build a sense of ownership and commitment to the project.
e. **Monitoring and Evaluation**: Continuously monitor user adoption metrics and feedback to assess progress, identify areas for improvement, and make necessary adjustments to ensure successful implementation and user satisfaction.

2.3 Data Flow Diagram

2.3.1 0 LEVEL DFD

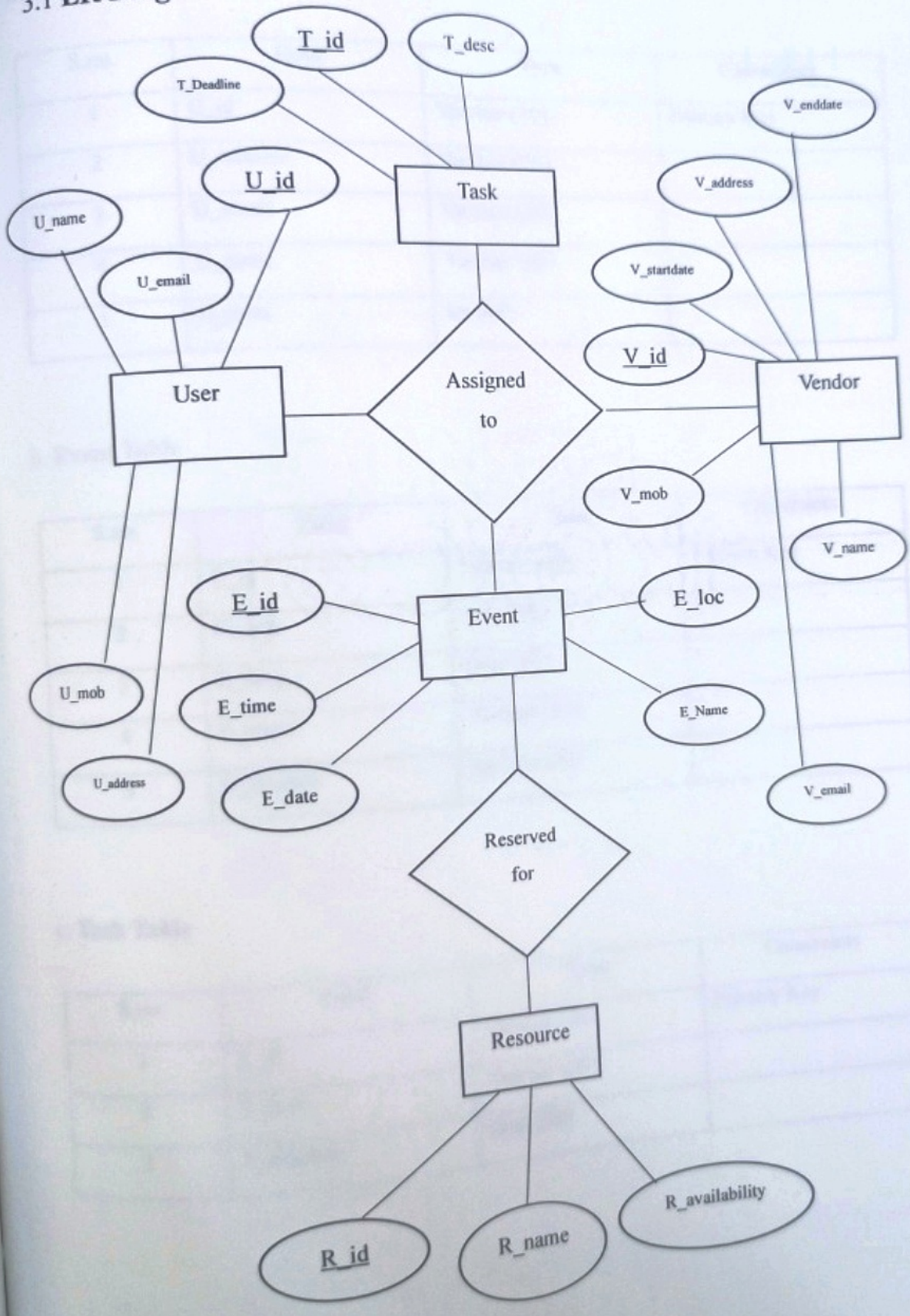


2.3.2 1 LEVEL DFD FOR ADMIN



CHAPTER-3 SYSTEM DESIGN

3.1 ER Diagram



3.2 Database Table

a. User table

S.no.	Field	Type	Constraints
1	U_id	Varchar (20)	Primary Key
2	U_address	Varchar (20)	-
3	U_email	Varchar (30)	-
4	U_name	Varchar (40)	-
5	U_mob.	Int (40)	-

b. Event Table

S.no.	Field	Type	Constraints
1	E_id	Varchar (20)	Primary Key
2	E_date	Date (20)	-
3	E_time	Date (30)	-
4	E_name	Varchar (40)	-
5	E_location	Varchar (40)	-

c. Task Table

S.no.	Field	Type	Constraints
1	T_id	Varchar (20)	Primary Key
2	T_desc	Varchar (20)	-
3	T_deadline	Date (30)	-

d. **Resource Table**

S.no.	Field	Type	Constraints
1	R_id	Varchar (20)	Primary Key
2	R_name	Varchar (20)	-
3	R_availability	Varchar (30)	-

e. **Vendor Table**

S.no.	Field	Type	Constraints
1	V_id	Varchar (20)	Primary Key
2	V_address	Varchar (20)	-
3	V_email	Varchar (30)	-
4	V_name	Varchar (40)	-
5	V_mob.	Int (40)	-
6	V_startdate	Date(20)	-
7	V_enddate	Date(30)	-

CHAPTER-4 TESTING

Testing is the process of assessing a system or program to find flaws, faults, malfunctions, and other problems that could compromise its functionality, quality, or dependability. It entails comparing the application's intended and actual results, as well as executing it in a controlled environment to ensure that it operates as expected. Testing's primary goal is to confirm that the program satisfies the needs and guidelines provided by its suppliers or customers and that it operates consistently, dependably, and effectively to carry out the functions for which it was created. Thus, in order to determine whether or not the produced system satisfies the criteria, we are employing a variety of testing techniques.

4.1 Unit Testing

We performed unit testing in each and every smallest unit of the project individually to check it's working. We used different test data to perform the testing. We try each and every type of possible input to check their corresponding outputs and its working.

Test Case id	Section	Element name	Test data	Expected result	Actual Result
101	AdminLogin	Username,Password	No Data	Please fill out this field.	Test case passed.
102	AdminLogin	Username,Password	Yogesh797@gmail.com /*****	Error Occurred.	Test case passed.
103	AdminLogin	Username,Password	Yogesh7974@gmail.com /********	Successfully logged in.	Test case passed.

4.2 Portability Testing

Objective: Ensure the website performs efficiently when transported from developer device to client device.

Compliance: To ensure that there is no change in performance of website when ported to client device.

Result: All the files and database can be transport from developer device to client device.

4.3 Compatibility Testing

Compatibility testing refers to the process of testing its compatibility across different platforms, devices, browsers, operating system, and network environments. The objective is to ensure that the website functions work properly and consistently for users.

Test Case ID	Element Name	Element Type	Test Condition	Expected Result	Actual Result	Test Result
TC-001	Device Compatibility	Responsiveness on different devices	Checking Responsiveness on devices for e.g., Laptops, tablets, Smartphones	Website will adapt different screen sizes on different devices without any disbalancing	As expected, the website is full responsive and working perfectly	Test case passed
TC-002	Operating System	Checking website behavior on different operating systems	Working on different Operating Systems e.g., Android systems, macOS, iOS, Windows, etc.	There shouldn't be any changes in website Designing, Working, Accessibility and Performance speed, while switching the Operating System	Compatibility As Expected, The Website is working all same even on different Operating System expect Linux operating system	Passed
TC-003	End-user Security	Data Security	Testing security measures of users	The logged in user will be able to see his/her own details related information only or correct user-profile is opened for user while logging in	As Expected, Details of login Email is shown, no details of other user are visible to all. Hence Secured	Test case passed

4.4 Alpha Testing

In alpha testing, we have tested all the functions of the project internally such as managing the task, manage an event, check the availability of resources etc. All the functions are working properly.

CHAPTER-5 IMPLEMENTATION

Firstly, we need to install some IDE and other software for implementing our project successfully which are as follows: -

5.1 Visual Studio Code

a. Go to the official Visual Studio website: Download Visual Studio Code - Mac, Linux, Windows
b. Click on the " Download " button for the version of Visual Studio according to your operating system (e.g. Windows, macOS, or Linux).
c. Choose the components you want to install, such as languages, frameworks, and tools.
d. To install this, click on the "Install" to start the installation process and follow the instruction of installation wizard.
e. Follow the instruction of installation wizard and select the options that suit your needs.
f. Click on exit

5.2 GraphQL

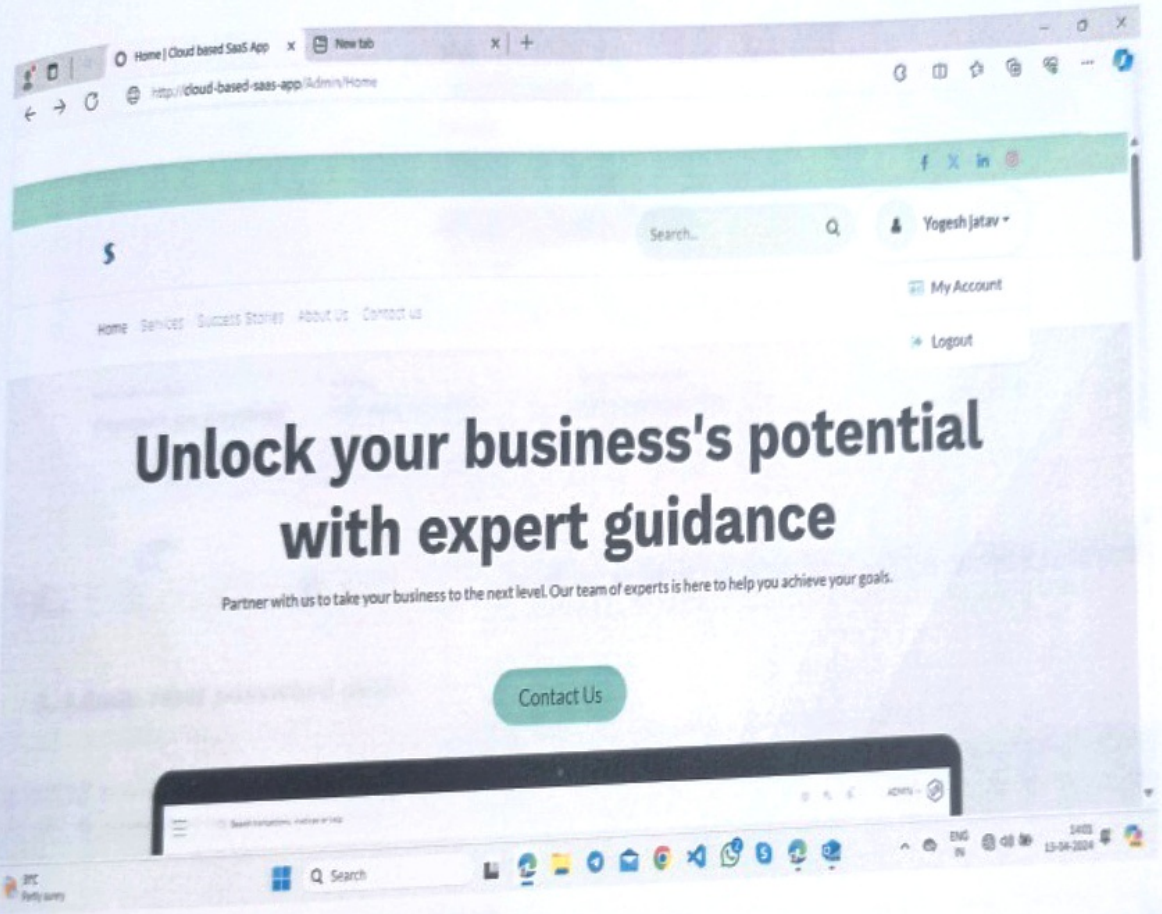
a. Go to the official GraphQL website: MongoDB Community Server Download
b. Select the suitable version of GraphQL from the website for according to your operating system (e.g. Windows, macOS, or Linux).
c. Click on the "Download" button to start the download.
d. Once the download is completed, run the downloaded installer and follow the instruction of installation wizard and select the options that suit your needs.

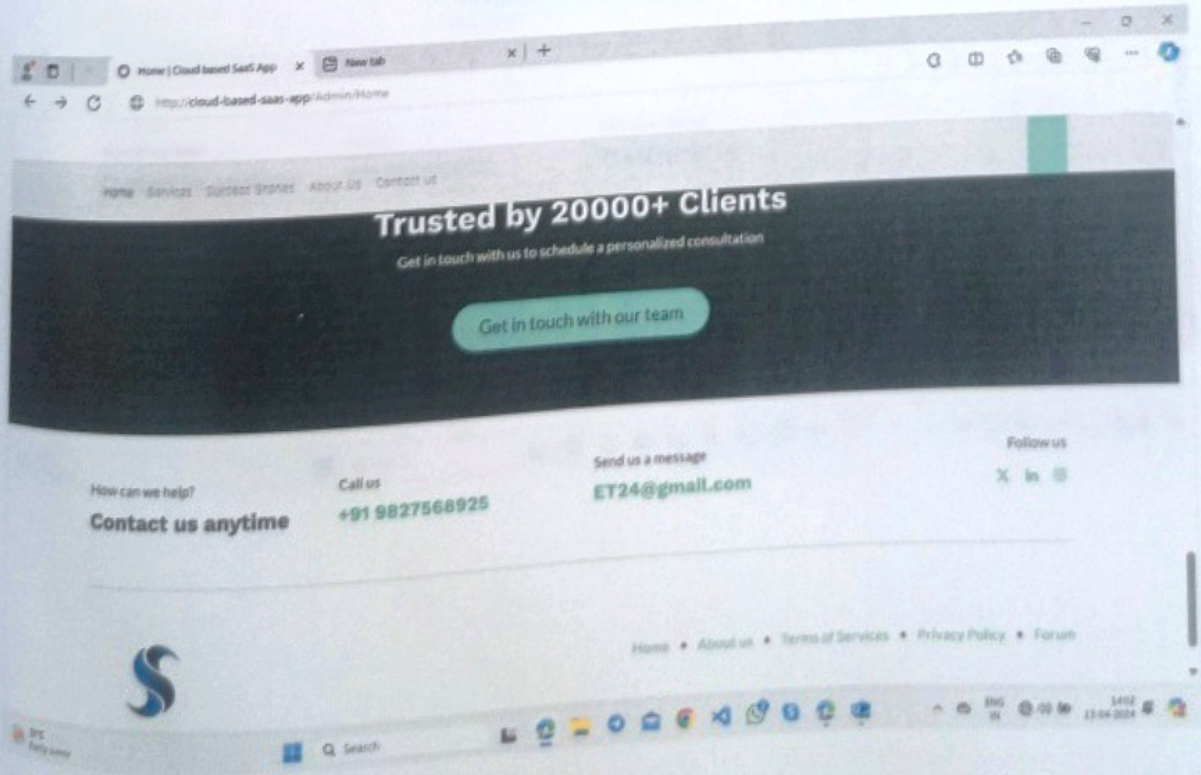
5.3 Node.JS

a. Go to the official Node.js website: Download Node.js
b. Select the appropriate version of Node.js for your operating system (e.g. Windows, macOS, or Linux).
c. Click on the "Download" button to start the download.
d. Once the download is complete, run the installer. Follow the installation wizard and select the options that suit your needs.
e. Once the installation is complete, you can open a terminal or command prompt and type node -v to check if Node.js is installed correctly. This should display the version of Node.js that you just installed which confirms the successful installation.

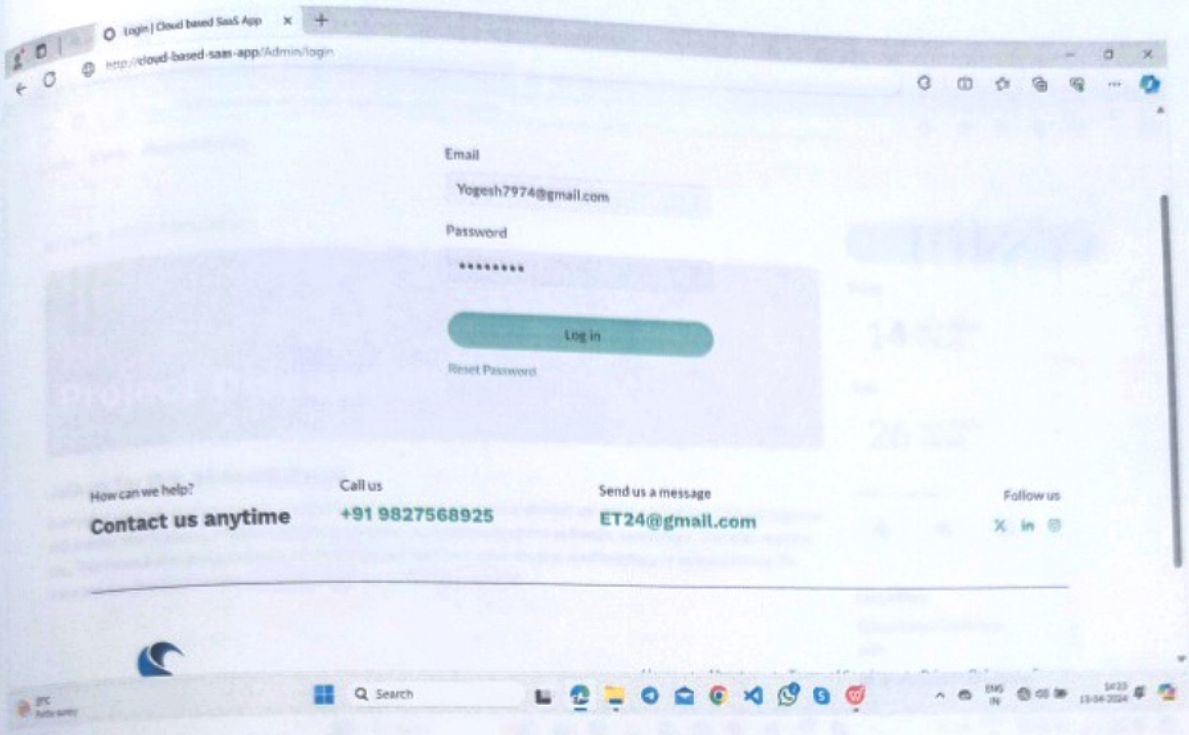
CHAPTER-6 SAMPLE FORMS & REPORTS

1. Landing Page

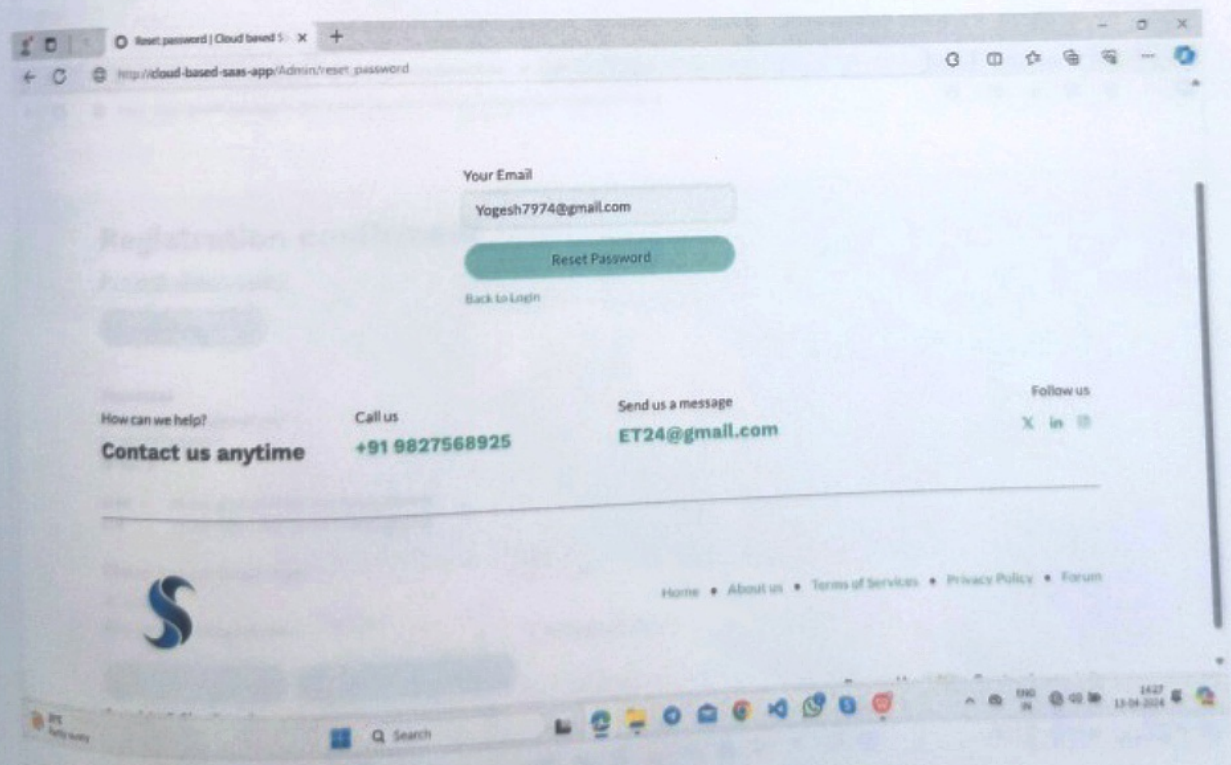




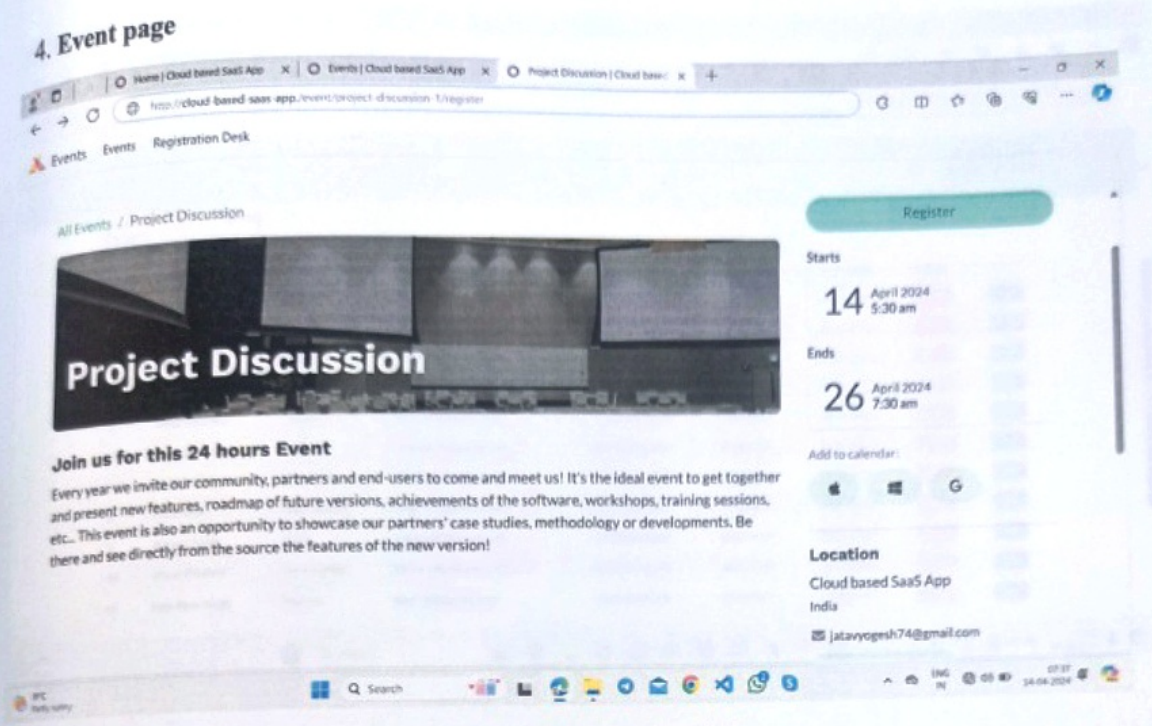
2. Admin login page



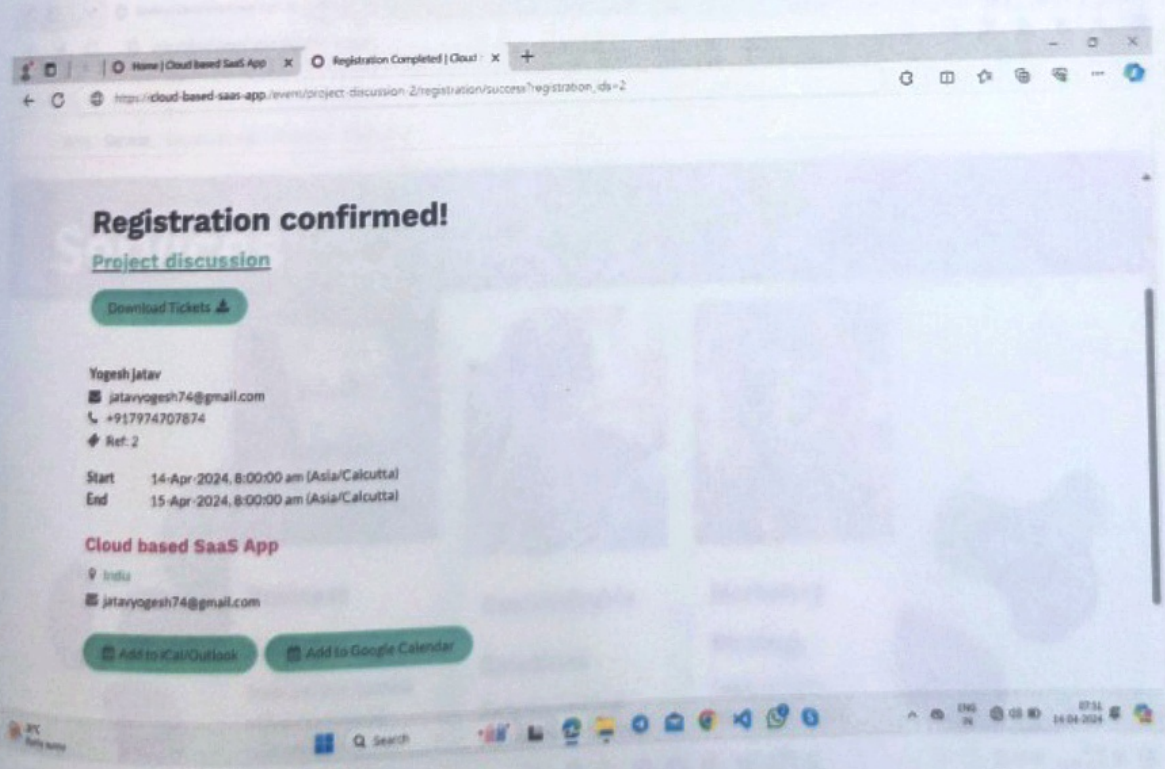
3. Admin reset password page



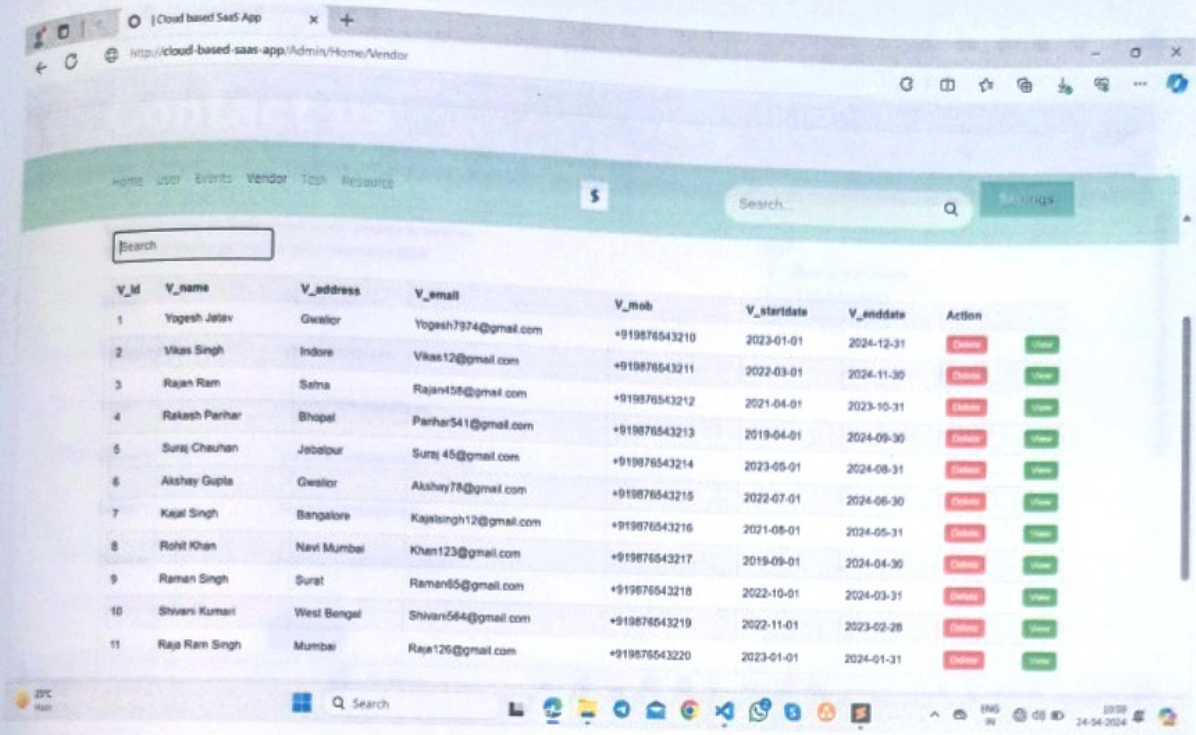
4. Event page



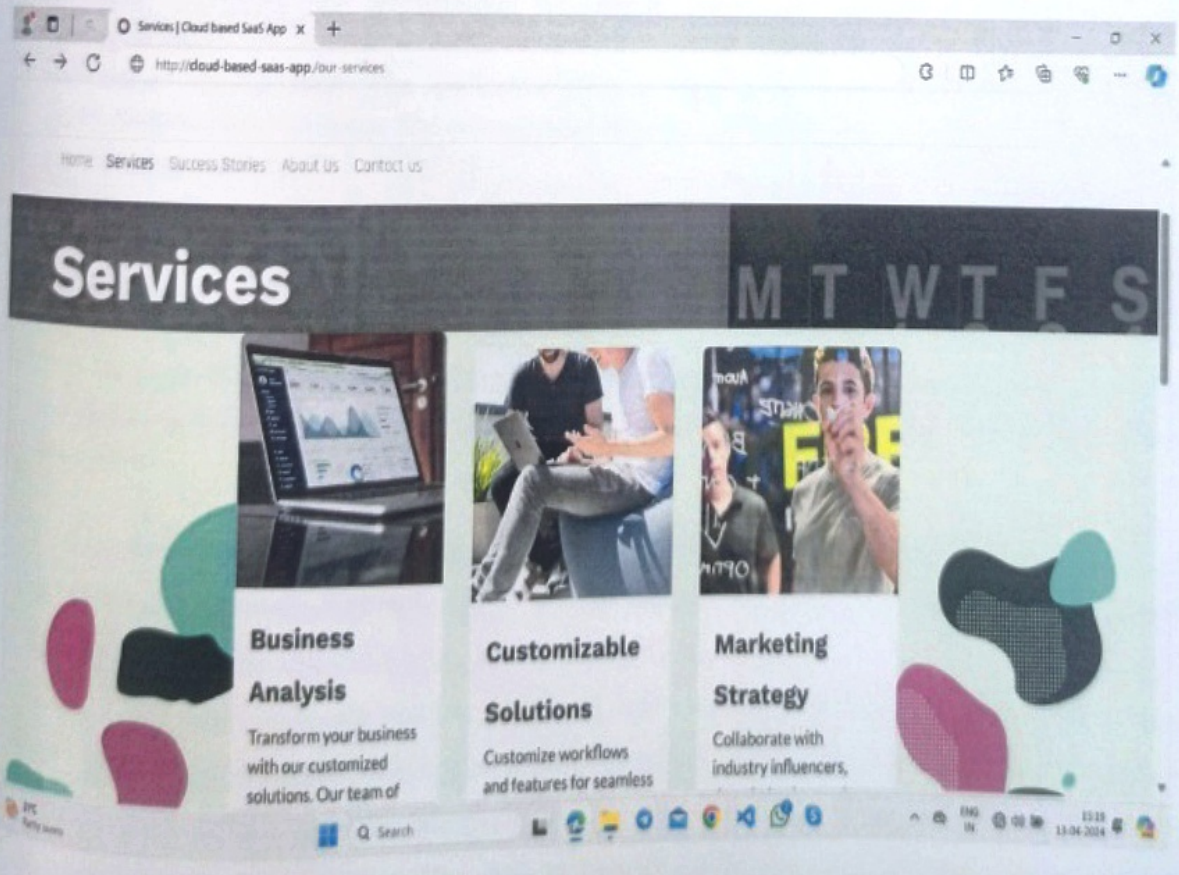
5. Event register confirmed page



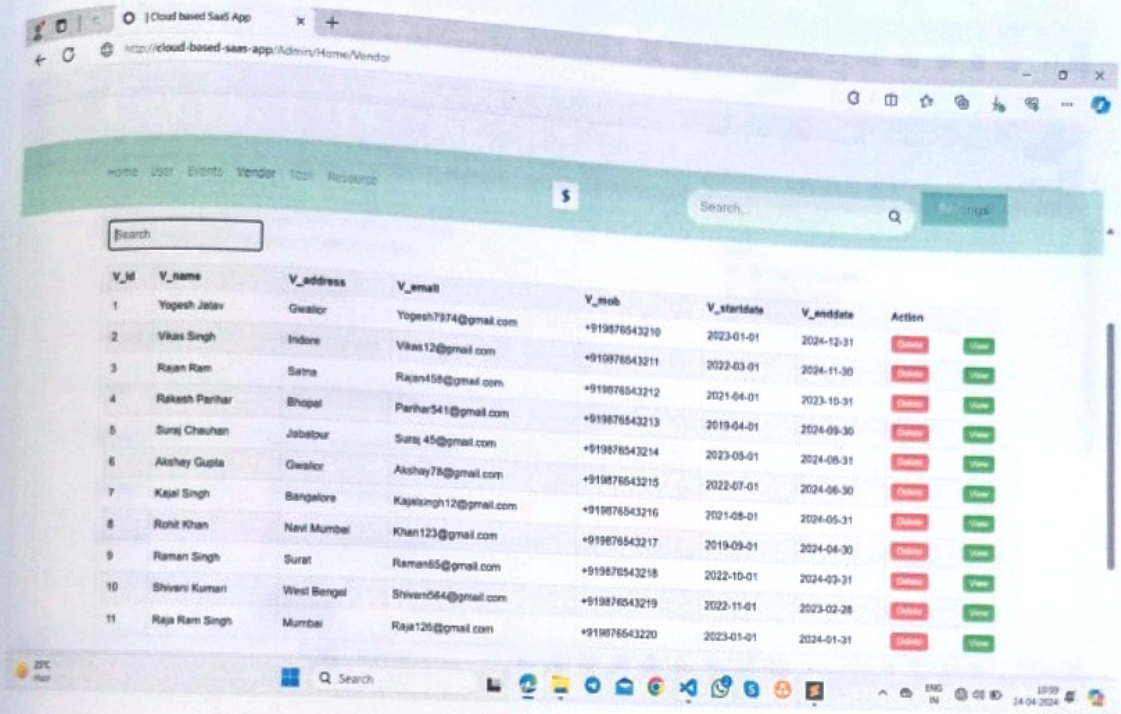
6. Vendor page



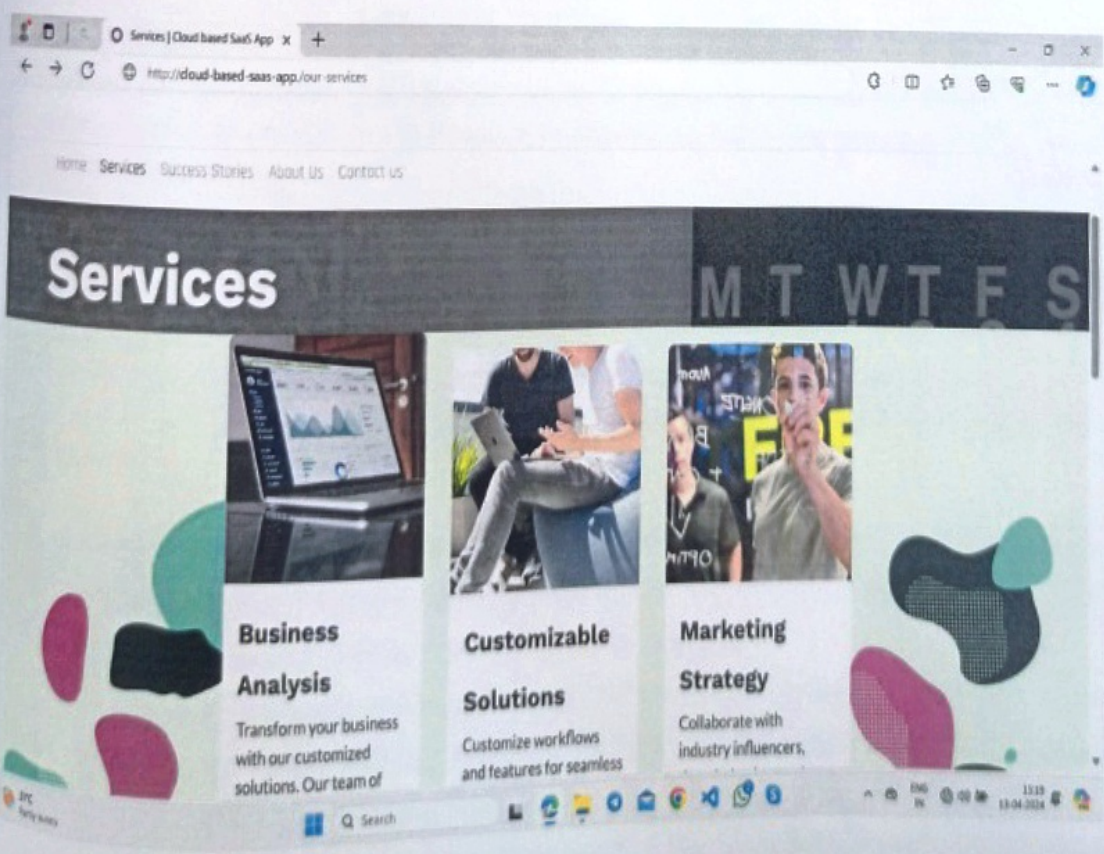
7. Service page



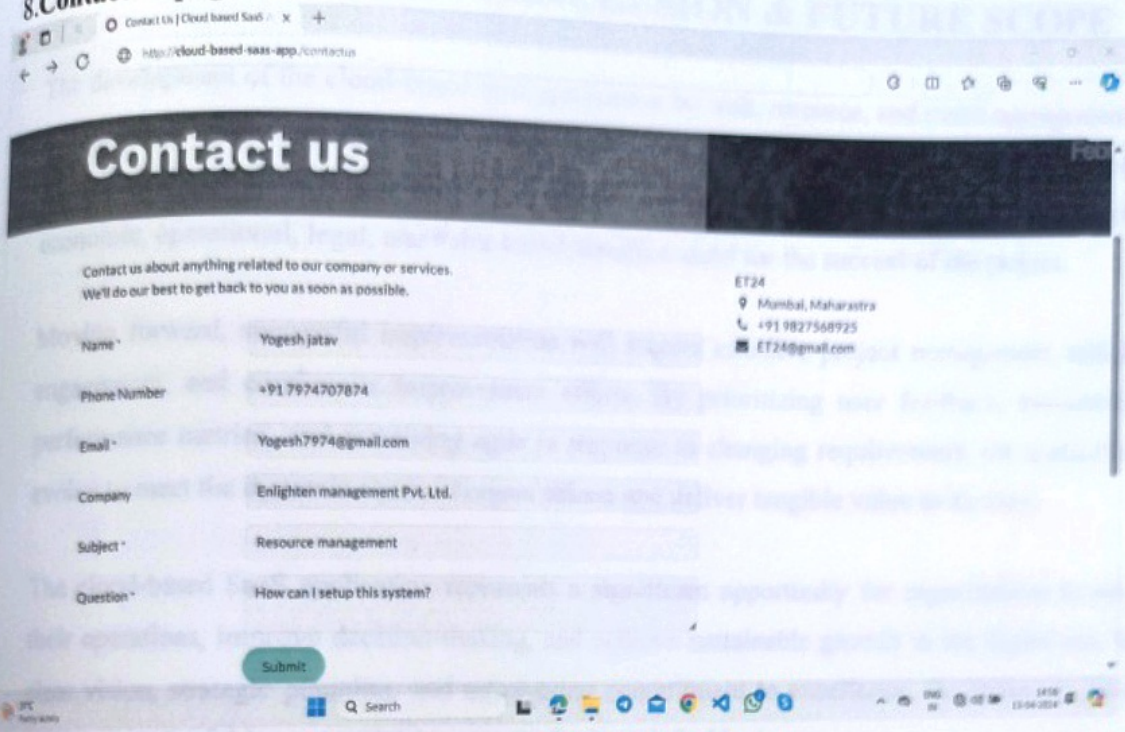
6. Vendor page



7. Service page



8.Contact us page



CHAPTER-7 CONCLUSION & FUTURE SCOPE

The development of the cloud-based SaaS application for task, resource, and event management offers a promising solution to address the evolving needs of organizations in today's digital landscape. Through a comprehensive feasibility study and meticulous planning, we have identified the technical, economic, operational, legal, and behavioural aspects crucial for the success of the project.

Moving forward, successful implementation will require effective project management, stakeholder engagement, and continuous improvement efforts. By prioritizing user feedback, monitoring key performance metrics, and remaining agile in response to changing requirements, the application can evolve to meet the dynamic needs of organizations and deliver tangible value to its users.

The cloud-based SaaS application represents a significant opportunity for organizations to optimize their operations, improve decision-making, and achieve sustainable growth in the digital era. With a clear vision, strategic planning, and unwavering commitment to excellence, the project is poised to make a meaningful impact and drive success for its stakeholders.

Increased Productivity and Efficiency: The program increases productivity and efficiency across corporate processes by streamlining workflows, automating tasks, and facilitating real-time communication.

Centralized Management: The application reduces fragmentation and enhances decision-making by giving stakeholders access to and management of pertinent information in a single location by offering a centralized platform.

Better Communication: The use of integrated communication technologies facilitates easy communication and cooperation between stakeholders, vendors, and team members, which improves decision-making.

Cost Savings: The program helps businesses cut expenses on hardware, maintenance, and operating overheads by doing away with the requirement for on-premises infrastructure and reliance on manual operations.

1. Advanced AI Integration: Incorporate artificial intelligence (AI) and machine learning (ML) algorithms to automate repetitive tasks, provide predictive analytics, and enhance decision-making capabilities based on historical data and user behaviour patterns.
2. IoT Integration: Integrate Internet of Things (IoT) devices to collect real-time data on resource utilization, event attendance, and environmental conditions, enabling organizations to make data-driven decisions and optimize resource allocation.
3. Mobile Application Development: Develop mobile applications for iOS and Android platforms to provide users with on-the-go access to the application's features and functionalities, enhancing convenience and flexibility.

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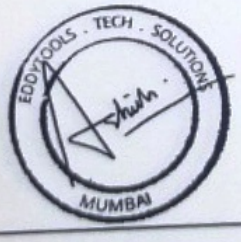
Summary

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	01/01/24 - 17/01/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work				✔	
Learning capacity / Knowledge up gradation			✔		
Performance / Quality of work			✔		
Behaviour Discipline / Team work				✔	
Sincerity / Hard work				✔	
Comment on nature of work done / Area / Topic	Initial selection and brainstorming assignment was done on time				
Overall Grade	Good				
Name of Industry Mentor	Mr. Ashish Namdeo				
Signature of Industry Mentor					

Receiving Date	17/01/24	Name of Faculty Mentor	Parul Saxena	Sign	19/1/24

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	18/01/24 - 01/02/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work				✔	
Learning capacity / Knowledge up gradation				✔	
Performance / Quality of work				✔	
Behaviour Discipline / Team work				✔	
Sincerity / Hard work				✔	
Comment on nature of work done / Area / Topic	Started with SCRUM calls				
Overall Grade	V.Good				
Name of Industry Mentor	Mr. Ashish Namdeo				
Signature of Industry Mentor					

Receiving Date	05/02/24	Name of Faculty Mentor	Parul Saxena	Sign	5/2/24

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	02/02/24 - 15/02/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work			✔		
Learning capacity / Knowledge up gradation				✔	
Performance / Quality of work				✔	
Behaviour Discipline / Team work				✔	
Sincerity / Hard work				✔	
Comment on nature of work done / Area / Topic	Project setup and Scoping				
Overall Grade	V.Good				
Name of Industry Mentor	Mr. Ashish Namdeo				
Signature of Industry Mentor					

Receiving Date	18/4/24	Name of Faculty Mentor	Parul Saxena	Sign	18/4/24

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	16/02/24 - 29/02/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work				✓	
Learning capacity / Knowledge up gradation				✓	
Performance / Quality of work				✓	
Behaviour Discipline / Team work				✓	
Sincerity / Hard work				✓	
Comment on nature of work done / Area / Topic	Started on admin dashboard on React				
Overall Grade	Very good				
Name of Industry Mentor	Mr. Ashish Namdeo				
Signature of Industry Mentor					

Receiving Date	24/4/24	Name of Faculty Mentor	Parul Saxena	Sign	

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	01/03/24 - 15/03/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work				✔	
Learning capacity / Knowledge up gradation				✔	
Performance / Quality of work				✔	
Behaviour Discipline / Team work				✔	
Sincerity / Hard work				✔	
Comment on nature of work done / Area / Topic	Setup with Dashboard				
Overall Grade	Very Good				
Name of Industry Mentor	Mr. Ashish Namdeo				
Signature of Industry Mentor					

Receiving Date	24-4-24	Name of Faculty Mentor	Parul Saxena	Sign	

FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of Student	Yogesh Jatav		Department	MCA	
Industry / Organization	EddyTools Tech Solutions		Date / Duration	16/03/24 - 31/03/24	
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Behaviour Discipline / Team work				✔	
Sincerity / Hard work				✔	
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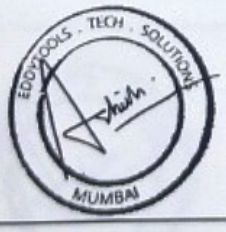
Signature of Industry Mentor					

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FORTNIGHT PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

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Industry / Organization	EddyTools Tech Solutions		Date / Duration	01/04/24 - 15/04/24	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality / Timely completion of assigned work				✔	
Learning capacity / Knowledge up gradation				✔	
Performance / Quality of work				✔	
Behaviour Discipline / Team work					✔
Sincerity / Hard work					✔
Comment on nature of work done / Area / Topic	Prototype application development				
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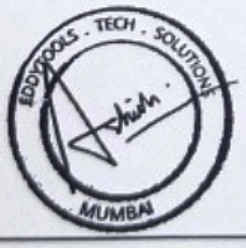
Signature of Industry Mentor					

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