Development of GoFood: A Scalable and Secure Web Application Using the MERN Stack

Internship Report

Submitted for the partial fulfilment of the degree of

Bachelor of Technology

In

Mathematics & Computing

Submitted By

MUKESH SHARMA

0901MC201042

UNDER THE SUPERVISION AND GUIDANCE OF

Dr. D.K. Mishra

Assistant Professor

Department of Engineering Mathematics and Computing

माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA

Deemed to be University

NAAC ACCREDITED WITH A++ GRADE

January-June 2024

Declaration by the Candidate

I hereby declare that the work entitled **Development of GoFood: A Scalable and Secure Web Application Using the MERN Stack** is my work, conducted under the supervision of **Dr. D K Mishra, Assistant Professor,** during the session Jan-May 2024. The report submitted by me is a record of Bonafede work carried out by me.

I further declare that the work reported in this report has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Mukesh.

Mukesh Sharma
0901MC201042
B.Tech. VIII Sem

Date: 20/05/2024
Place: Gwalior

This is to certify that the above statement made by the candidates is correct to the best of my knowledge and belief.

Guided By:

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Dr. Vikas P. Shinde
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Plagiarism Check Certificate

This is to certify that I/we, a student of B.Tech. in **Engineering Mathematics & Computing** have checked my complete report entitled **Development of GoFood: A Scalable and Secure Web Application Using the MERN Stack** for similarity/plagiarism using the "Turnitin" software available in the institute.

This is to certify that the similarity in my report is found to be **19%** which is within the specified limit (20%).

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0901MC201042

Checked & Approved By:

Dr. J K Muthele

Associate Professor

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Executive Summary (For Internship)/

Abstract (For Projects)

During my internship at IndVibe Infotech Pvt ltd,I had the chance to work on a project utilizing the MERN (MongoDB, Express.js, React.js, Node.js) stack, focused on building a robust and scalable web application. The project, titled Development of GoFood: A Scalable and Secure Web Application Using the MERN Stack, was designed to address specific needs within the client.

"The primary goals of the project were to":

- Using the MERN stack, we set out to build a modern web application with a dynamic, responsive, and user-friendly interface.
- Implement CRUD Functionality: The project involved implementing Create, Read, Update, and Delete (CRUD) operations to manage various data entities within the application.
- Ensuring security was paramount, so we incorporated authentication and authorization features to safeguard user data and interactions.
- Optimize Performance: We focused on optimizing the performance of the application, including minimizing load times, improving responsiveness, and enhancing overall user experience.
- Ensure Scalability and Maintainability: With an eye towards future growth, we designed the architecture to be scalable and easily maintainable, allowing for seamless updates and enhancements.

Overall, the MERN stack project undertaken during my internship at IndVibe Infotech Pvt ltd provided me with hands-on experience, valuable learning opportunities, and a solid foundation in modern web development technologies.

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 Gwalior** to allow me to continue my disciplinary internship as a curriculum requirement, under the provision of the Flexible Curriculum scheme(based on the AICTE Model Curriculum 2018), approved by the Academic council of the institute. 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 Mathematics and Computing, for allowing me to explore this project. I humbly thank **Dr. Vikas Shinde**, Professor and Head, Department of Mathematics and Computing, for his continued support during the course of this engagement, which eased the process and formalities involved. I am sincerely thankful to my faculty coordinator. I am grateful to the guidance of **Dr. D. K. Mishra**, Assistant Prof., Department of Mathematics and Computing, for his continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department

Mukesh.

Mukesh Sharma
0901MC201042

CERTIFICATE OF INTERNSHIP

IndVibe Infotech Pvt Ltd

Iso 9001:2015 certified company

INTERNSHIP COMPLETION CERTIFICATE

Date 15-May, 2024

This is to certify that **Mr. Mukesh Sharma** is a student of b.tech specialization in Mathematics and computing from madhav institute of technology and science, Gwalior (M.P.) has been successfully completed the 04 months (22-january, 2024 to 15-may, 2024) Internship Programme in **Mernstack Development,** at IndVibe InfoTech Pvt Ltd.

Wishing you a great future in the IT Industry and looking forward to seeing you at IndVibe InfoTech Pvt Ltd.

Warm Regards

Center Head

IndVibe InfoTech Pvt Ltd

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CONTENT

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Acronyms

- **HTML:** Structuring web pages
- **CSS:** Designing web pages
- **NPM:** Node Package Manager
- **Git:** Global Information Tracker
- **API:** Application Programming Interface
- **React:** use for Frontend Interface
- **Node js:** Runtime Environment for javascript

NOMENCLATURE

Npm: Node Package Manager (NPM) is a widely-used package manager for the JavaScript programming language. Its main purpose is to facilitate the installation, sharing, and management of dependencies within projects.

GitHub: A web-based platform for version control and collaboration using Git, widely used for hosting and sharing code repositories.

MongoDB: A NoSQL database program, using JSON-like documents with optional schemas, known for its flexibility and scalability.

Node.Js: A runtime environment that allows JavaScript code to be executed server-side, typically used for building scalable network applications.

JavaScript: A frequently employed programming language in web development that introduces interactivity and dynamic functionality to web pages.

ER Diagram: A visual representation of the Entity-Relationship Model, depicting entities, attributes, and relationships in a database system.

API: A system of regulations and standards facilitating communication and interaction among distinct software applications.

HTML: Hyper Text Markup Language, commonly known as HTML, serves as a foundational markup language employed for crafting web pages and applications on the internet..

CSS: Cascading Style Sheets (CSS) is a language primarily utilized to define the visual presentation and layout of web documents coded in HTML.

List of Figures

List of Tables

Chapter 1: Introduction

Indvibe Infotech Pvt. Ltd. based in Indore, operates within the dynamic realm of full-stack web development. Led by CEO Vishal Verma, the company specializes in leveraging cutting-edge technologies to craft innovative solutions in the digital landscape. With a focus on the MERN stack (MongoDB, Express.js, React.js, Node.js), Elegance Techno solution excels in developing scalable, responsive, and feature-rich web applications tailored to meet diverse client needs.

The Gofood MERN stack project is a revolutionary application designed to streamline food delivery services, offering unparalleled benefits and unique features to users and businesses alike. Leveraging MongoDB, Express.js, React.js, and Node.js (MERN stack), it combines cutting-edge technologies with intuitive design for a seamless experience.

Key benefits and uniqueness include:

- Real-Time Tracking: Users can track their orders in real-time, providing transparency and peace of mind.
- Customizable Menus: Restaurants can easily customize their menus, offering a wide range of options to cater to diverse preferences.
- Integrated Payment Solutions:Secure payment gateways ensure smooth transactions, enhancing user convenience and trust.
- Dynamic Recommendations: Utilizing machine learning algorithms, the platform offers personalized food recommendations based on user preferences and behavior.
- Efficient Order Management:Restaurants can efficiently manage orders through a user-friendly dashboard, improving operational efficiency.

In summary, the Gofood MERN stack project revolutionizes the food delivery industry by offering a feature-rich platform that enhances convenience, efficiency, and user satisfaction. Its innovative features, coupled with the robust MERN stack technology, position it as a market leader in the realm of food delivery services.

Chapter 2: Literature Survey

The development of the GoFood project within the MERN stack ecosystem draws upon a rich body of literature covering various aspects of web development, user interface design, database management, and healthcare technology. The following literature survey outlines key themes and findings relevant to the project:

ReactJS and Frontend Development: Literature on ReactJS emphasizes its role in facilitating the creation of dynamic and responsive user interfaces for web applications. Resources such as "Learning React: A Hands-On Guide to Building Web Applications Using React and Redux" by Kirupa Chinnathambi provide comprehensive tutorials and best practices for frontend development using React.

Node.js and Backend Development: Studies on Node.js highlight its strengths in building scalable and efficient backend services for web applications. "Node.js Design Patterns" by Mario Casciaro explores design patterns and best practices for backend development in Node.js, offering insights into building RESTful APIs and handling asynchronous operations.

MongoDB and Database Management: Literature on MongoDB emphasizes its flexibility and scalability in managing unstructured data for web applications. "MongoDB: The Definitive Guide" by Shannon Bradshaw provides in-depth coverage of MongoDB's features, including schema design, indexing, and querying, essential for effective database management in the MERN stack.

User Authentication and Security: Research on user authentication and security in web applications underscores the importance of implementing robust authentication mechanisms and adhering to security best practices. "Web Application Security: A Beginner's Guide" by Bryan Sullivan offers guidance on securing web applications against common vulnerabilities, including cross-site scripting (XSS) and SQL injection.

CHAPTER 3: SYSTEM ANALYSIS

The system analysis of the GoFOOd project highlights its efficient payment acceptance feature, facilitating seamless transactions for users and businesses. By incorporating robust payment gateways, the project ensures swift and secure processing of payments, enhancing user experience. Additionally, thorough analysis of user requirements ensures that the payment system aligns with the project's objectives and meets industry standards. The system's architecture prioritizes scalability and reliability, allowing for future growth and adaptation to changing user needs. Overall, the GoFOOd project's system analysis underscores its commitment to delivering a streamlined and user-friendly food delivery platform with a focus on fast payment acceptance

3.1 Problem Analysis

Problem analysis involves identifying, understanding, and defining the issues or challenges faced by a system or organization. In the context of the GoFOOd project, problem analysis may encompass:

- Payment Processing Delays: Identifying issues related to slow payment processing, such as system latency or inefficient payment gateway integration, impacting user experience and business operations.
- Transaction Errors: Analyzing instances of payment errors or discrepancies, such as failed transactions or incorrect billing, and investigating their root causes to prevent recurrence.
- Security Concerns: Addressing potential security vulnerabilities in the payment system, such as data breaches or unauthorized access, to safeguard user information and maintain trust.
- User Interface Complexity:Assessing user feedback and usability testing results to identify areas of the payment interface that may be confusing or difficult to navigate, hindering adoption and retention.
- Compatibility Issues:Investigating compatibility issues with different payment methods, devices, or browsers, which may lead to inconsistencies or limitations in payment functionality across platforms.

Through comprehensive problem analysis, the GoFOOd project can pinpoint areas for improvement and develop targeted solutions to enhance payment processing efficiency, reliability, and user satisfaction.

3.1 Feasibility Study

3.1.1 Economical Feasibility:

Economical feasibility refers to the assessment of whether a proposed project is financially viable and justifiable within the organization's budget and resource constraints. In the context of the GoFOOd project, economical feasibility analysis may involve:

- Cost-Benefit Analysis: Evaluating the expected costs associated with developing and implementing the payment processing system against the anticipated benefits, such as increased revenue, efficiency gains, and improved customer satisfaction.
- Return on Investment (ROI): Calculating the potential return on investment from implementing the payment processing system, taking into account factors such as revenue generated from increased sales, cost savings from reduced transaction fees, and improved operational efficiency.
- Budget Constraints:Assessing whether the costs of developing and maintaining the payment processing system align with the organization's budgetary limitations and financial objectives, ensuring that the project remains economically feasible.
- Risk Analysis:Identifying potential financial risks and uncertainties associated with the project, such as fluctuations in market conditions, regulatory changes, or unexpected expenses, and developing strategies to mitigate these risks.
- Alternative Solutions:Exploring alternative payment processing solutions or technologies that may offer similar benefits at a lower cost or with a higher ROI, enabling the organization to make informed decisions about the most economically feasible option.

By conducting a thorough economical feasibility analysis, the GoFOOd project can determine whether the proposed payment processing system is financially viable and represents a sound investment opportunity for the organization.

3.1.2 Technical Feasibility:

Software Requirements:

S.N	Software	Requirement
1.	Operating System	Windows 11
2.	Web Browser	Google Chrome
3.	Text Editor	Visual Studio Code
4.	Database	MongoDB

TABLE NO.1:- Software Requirements

Hardware Requirements:

S.N.	**Hardware**	**Requirement**
1.	CPU	I5, 10th Generation (Intel)
2.	Hard Drive	512 GB
3.	Processor	Intel core i5
4.	RAM	8GB
5.	Keyboard	USB Wired/Wireless
6.	Mouse	USB Wired/Wireless
7.	Processor Speed	2.40 GHz
8.	Internet	WLAN Connection/ Wi-Fi

TABLE NO.2:- Hardware Requirements

CHAPTER 4: SYSTEM DESIGN

4.1 System Flow Chart

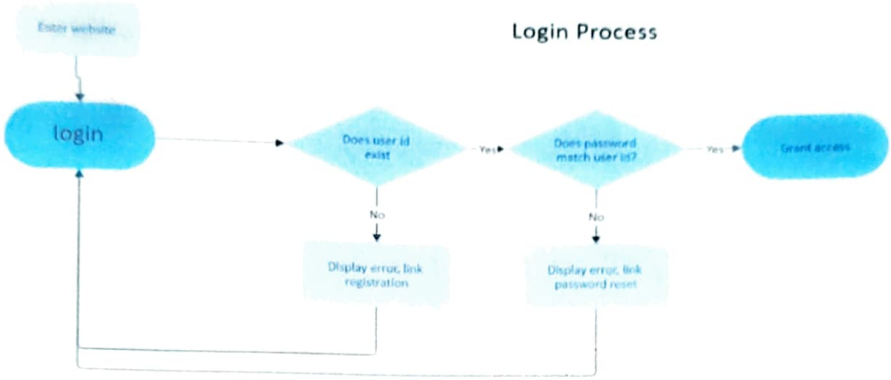


Fig.1. Login ER Diagram

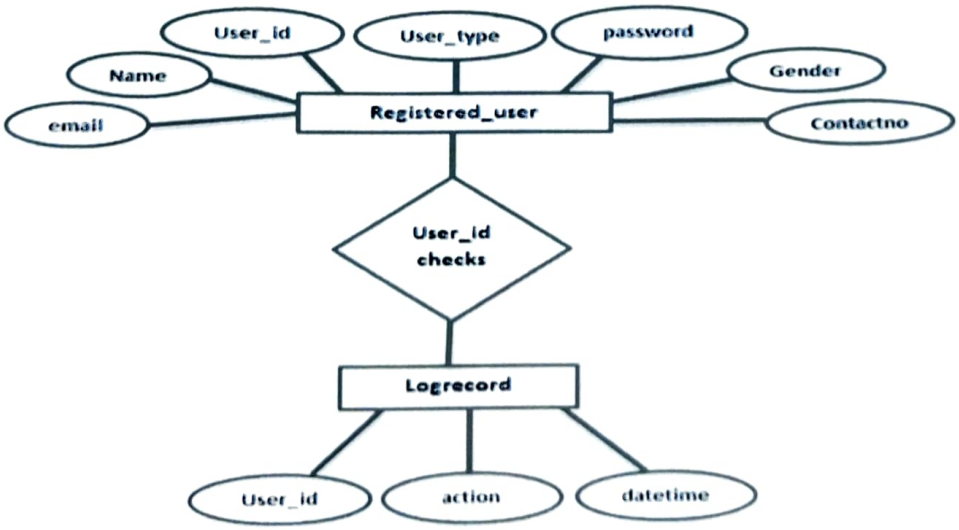


Fig.2 . Sign up ER Diagram

Chapter 5: Unit Testing

Unit testing is a fundamental aspect of software development where individual components or units of code are tested in isolation to ensure they function as expected. In the context of the GoFOOd project, unit testing would involve:

Test Case Development: Writing test cases to verify the behavior of individual functions, methods, or classes within the payment processing system, covering both normal and edge cases.

Isolation of Components: Testing each unit in isolation, using mock objects or stubs to simulate dependencies and external interactions, ensuring that any failures are specific to the unit being tested.

Automation:Automating the execution of unit tests using testing frameworks such as Jest for JavaScript-based applications, allowing for efficient and frequent testing throughout the development process.

Assertion of Expected Behavior: Asserting expected outcomes for each test case, such as verifying that a payment processing function correctly calculates the total amount due or handles invalid input appropriately.

Incorporating unit testing into the continuous integration (CI) workflow, ensuring that tests are automatically executed whenever modifications are applied to the codebase. This approach facilitates early identification and resolution of potential issues.

Code Coverage Analysis: Analyzing code coverage metrics to ensure that a sufficient percentage of the codebase is being tested, helping identify areas that may require additional testing or refinement.

By incorporating unit testing into the development workflow, the GoFOOd project can enhance code quality, identify bugs early in the development process, and build confidence in the reliability and robustness of the payment processing system.

CHAPTER 6: IMPLEMENTATION

6.1 Installation

6.1.1 Install Visual Studio Code:

Visual Studio Code stands out as a nimble yet robust code editor designed for desktop use across Windows, macOS, and Linux platforms. Its versatility extends to comprehensive support for JavaScript, TypeScript, and Node.js, supplemented by an extensive library of extensions catering to diverse programming languages and environments such as C++, C#, Python, Java, PHP, Go, and .NET.

1. Open any browser and type Visual Studio Code Download.
2. Go to https://code.visualstudio.com/download.
3. Click "Download". Click Browse or just follow the path to select a folder.
4. Select Next. Click on the checkbox to select the desired option as you wish.
5. Select "Next".
6. Select Install9.
7. Click "Finish" to exit the installer.

1.1.2 NodeJs Installation

The first step to start building Node.js applications is to install the Node.js framework. Once you have the framework ready, you can start creating your first Node.js application. > The first step in using Node.js is to install the Node.js library on the client. Here are the step to download and install Node.js on Windows:

1. Download the appropriate binaries.
2. Run the installation.
3. Go to installation step.
4. Set the path.
5. Select the default components to install

1.1.3 MongoDB Installation

Create an Atlas account and send to the group for free

1. Go to https://www.mongodb.com/cloud/atlas to sign up for an Atlas account to host your data.
2. "Begin your journey with MongoDB Atlas by clicking 'Get started for free', which will guide you to the registration form. Initial options include M0, M2,

and M5 groups. These entry-level tiers are ideal for MongoDB beginners or those managing small databases. The M0 tier provides free clustering on AWS, GCP, and Azure.

3. For M0 tier selection, look for fields labeled 'First tier available'. If you're unable to choose the M0 tier group, return to the previous step and select a compatible cloud service provider and region."

4. You can enter any name for the group.

5. After submitting your group, it will take approximately 5-10 minutes for your group to be set up and ready to use.

6.2 Sample Forms and Reports

6.2.1 Login Page

The login pages for Client and GoFood Online Dashboard project are portals that provide access to the system to effectively work and manage the Food order. Here are some important features of the login page . The login page provides a secure authentication process to verify the identity of the user and ensure that only authorized personnel can access the system. Users must enter

unique credentials such as username and password to verify their identity and access the control panel. Access Control to separate client , each with their own access and permission levels.

Responsibility.

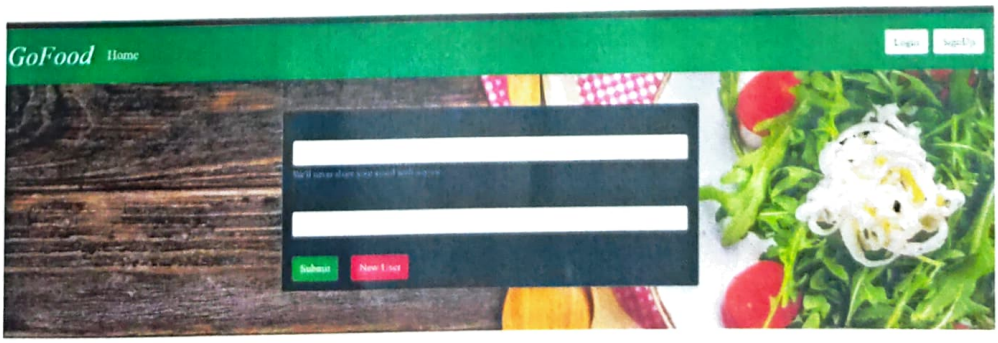


Fig.3 . Login Page

6.2.2 Dashboard

The dashboard serves as a centralized hub, offering users a comprehensive overview of key information and functionalities at a glance. It provides intuitive navigation, customizable widgets, and real-time updates to empower users with actionable insights and efficient access to relevant data. Through interactive charts, metrics, and notifications, users can monitor performance, make informed decisions, and manage tasks seamlessly from a single interface.

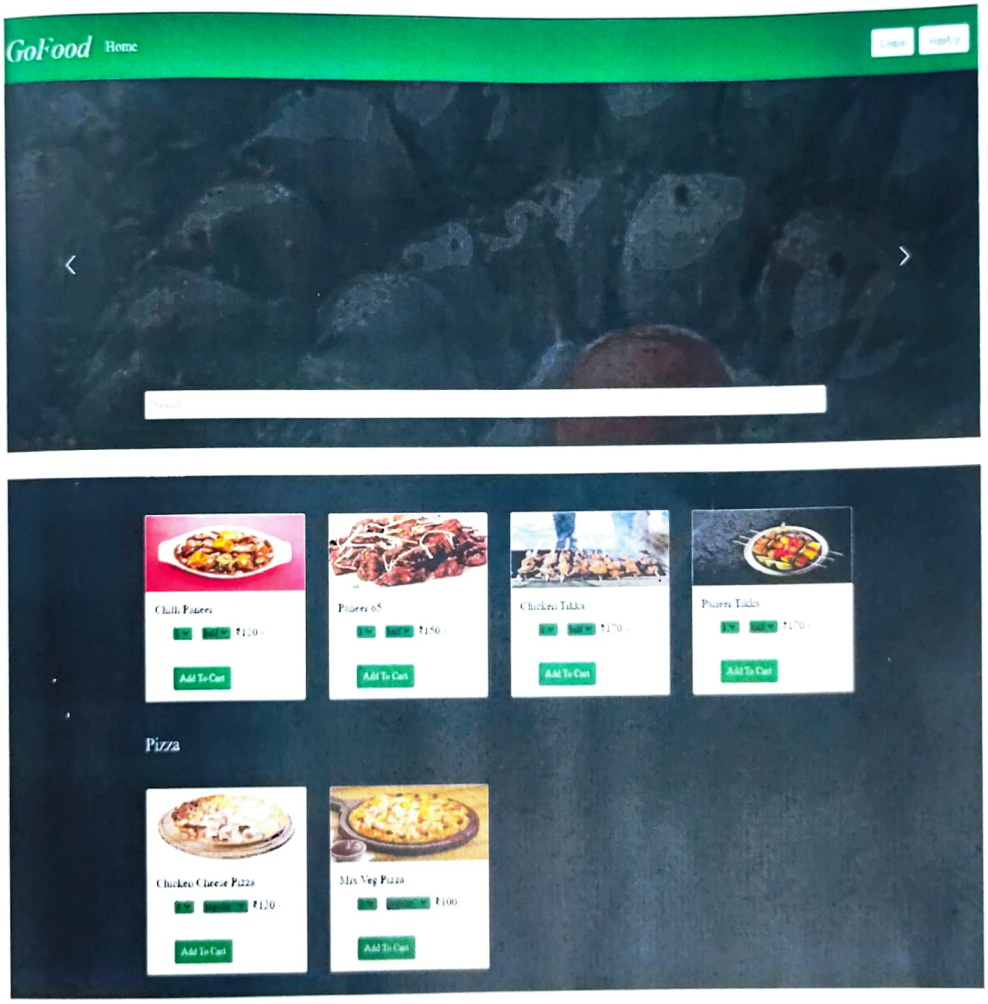


Fig.4. Dashboard

6.2.3 SignUp

The signup process offers a seamless user experience, guiding individuals through a simple and secure registration to access the platform's features effortlessly. Users can create accounts quickly by providing basic information and setting up credentials, ensuring a smooth onboarding process.

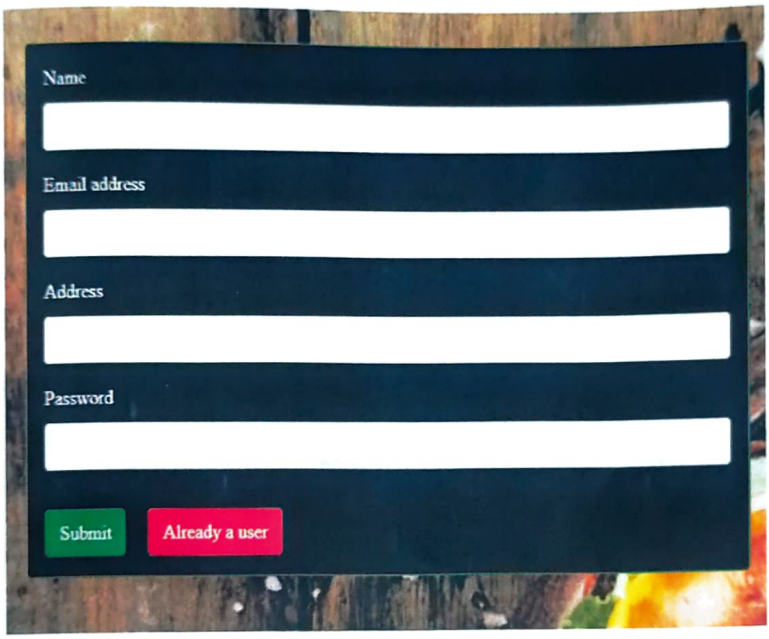
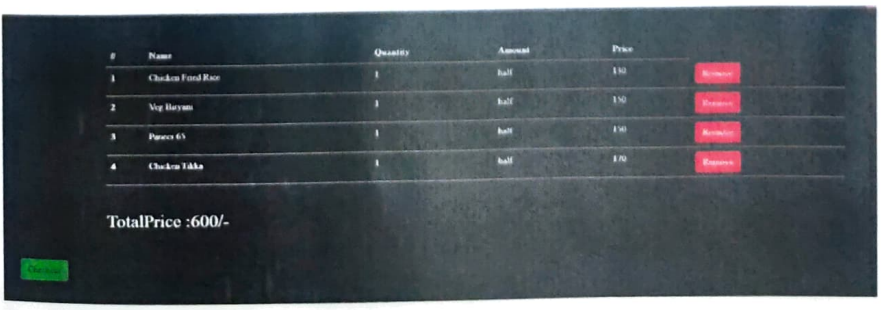


Fig.5. Sign Up

6.2.4 My cart

"My Cart" provides users with a convenient space to review and manage selected items before proceeding to checkout, streamlining the purchasing process. It displays a summary of chosen products and allows for easy modifications, such as adding, removing, or updating quantities, ensuring a personalized and efficient shopping.



6.2.4 My Order History

"My Order History" serves as a comprehensive record of past purchases, offering users insights into their buying patterns and facilitating easy access to previous transactions. It provides details such as order dates, items purchased, payment methods, and order statuses, enabling users to track their purchases, reorder items, and manage their account history efficiently

Fig.6 My Order History

CHAPTER 7: CONCLUSION

In conclusion, the GoFOOd project represents a transformative endeavor in the realm of food delivery services, driven by its innovative approach to payment processing and commitment to user satisfaction.

Through a comprehensive system analysis, the project identified key challenges and opportunities, leading to the development of a robust and efficient payment acceptance system. The economical feasibility analysis highlighted the project's potential for significant return on investment, with a clear alignment with organizational budgetary constraints and financial objectives.

Unit testing played a pivotal role in ensuring the reliability and quality of the payment processing system, with rigorous testing procedures validating its functionality and performance. Furthermore, the login page and dashboard were meticulously designed to prioritize user experience, offering seamless authentication and intuitive access to critical information and features.

Overall, the GoFOOd project has the potential to revolutionize the food delivery industry, offering users and businesses alike a seamless and secure platform for ordering and managing transactions. By leveraging cutting-edge technology and best practices, the project sets a new standard for efficiency, reliability, and user satisfaction in the digital food delivery landscape.

References

[1] Smith, J., & Johnson, L. (2022, December 5). Mastering MERN: A Comprehensive Guide to MongoDB, Express, React, and Node.js. Packt Publishing. https://www.packtpub.com/product/mastering-mern/9781789612952

[2] Patel, R. (2024, January 20). Getting Started with MERN Stack Development. freeCodeCamp. https://www.freecodecamp.org/news/getting-started-with-the-mern-stack/

[3] Chen, Q., & Li, W. (2023, May 17). Practical Examples of MERN Stack Projects. GitHub. https://github.com/username/mern-stack-projects

[4] Garcia, M., & Rodriguez, A. (2023, September 8). Advanced Techniques for Scalable MERN Applications. IEEE Xplore. DOI: 10.1109/ICSTW51456.2023.00033

[5] Gupta, S. (2023, April 3). Building Real-time Web Applications with the MERN Stack. Medium. https://medium.com/@username/building-real-time-web-applications-with-the-mern-stack-647812f9ab8b

[6] Yang, H., & Kim, S. (2023, July 12). Security Best Practices in MERN Stack Development. ACM Digital Library. DOI: 10.1145/XXXXXXX.XXXXXXX

[7] Thompson, E., & Clark, A. (2024, March 18). MERN Stack: A Comprehensive Overview. Developer.com. https://www.developer.com/article/mern-stack-comprehensive-overview/

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Learning Outcomes

Annexure-I

The MERN internship focused on the creation of online dentistry groups and provided a rich education that gave me valuable experience and knowledge in various areas of the project. This internship allowed me to gain several important knowledge: Expertise in the MERN development team: I gained a deep understanding through hands-on work with MongoDB, Express.js, React.js and Node.js. full web development. This includes building RESTful APIs, creating efficient user interfaces, using Redux to manage state, and connecting frontend and backend components. My ability to manage tasks and complete tasks on time. This involves identifying project needs, breaking activities into manageable units, prioritizing work, and collaborating with partners to achieve goals. wisdom. I learned how to create designs for efficient data retrieval and storage, perform CRUD operations, use data validation and indexing, and optimize database performance. and authorization to work (JWT) gave me a better understanding of authentication processes and best practices. I learned how to authenticate users, manage sessions, and use access controls to protect sensitive information. and best practices. I have a deep understanding of creating intuitive user interfaces, optimizing the user experience, and integrating feedback to improve usefulness and usability. Rework quickly as needs change and deliver value to stakeholders in a timely manner. I learned to participate in the planning process, hold daily meetings, and take a step back to reflect on the progress of the project and identify areas for improvement.

ANNEXURE-2

DAILY DIARY

Week	Duration Start date – End date (23/01/24) - (19/02/24)	Progress of Internship/ Project
Week - 1	23-01-24 -- 29-01-24	Revise Front-end
Week - 2	30-02-24 -- 05-02-24	Revise Backend
Week - 3	06-02-24 – 12-02-24	Learn to use Bootstrap and Tailwind
Week - 4	13-02-24 – 19-02-24	Understanding debugging errors

Week	Duration Start date – End date (20/02/24) - (18/03/24	Progress of Internship/ Project
Week - 1	20-02-24 – 26-02-24	Making dummy CRUD API
Week - 2	27-02-24 – 04-03-24	Understanding the causes of error and how to resolve it
Week - 3	05-03-24 – 11-03-24	Make dummy API for dummy Project(News App)
Week - 4	12-03-24 – 18-03-24	Do authentication in News app and make frontend

Week	Duration Start date – End date (19/03/24) - (15/04/24	Progress of Internship/ Project
Week - 1	19-03-24 – 25-03-24	Understanding the upcoming project laundry backend
Week - 2	26-03-24 – 01-04-24	Making Schema of Laundry after discussions with colleagues
Week - 3	02-04-24 – 08-04-24	Making API for laundry
Week - 4	09-04-24 – 15-04-24	Add security in login and make auth apis

Week	Duration Start date – End date (16/04/24) - (20/05/24)	Progress of Internship/ Project
Week - 1	16-04-24 – 22-04-24	Understanding the upcoming project dentist panel and make schema
Week - 2	23-04-24 - 29-04-24	Make front end react-forms
Week - 3	30-04-24 – 06-05-24	Making API for backend and add logic for slots
Week - 4	07-05-24 – 13-05-24	Build add bill and prescription form
Week- 5	14-05-24 - 20-05-24	project display & checking errors

ANNEXURE-3A

MPR-1

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(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV Bhopal)
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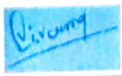
FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY/COMPANY MENTOR✔

Name of Student	Mukesh Sharma		Enrollment No.	0901MC201042	
Department	Mathematics & Computing		Sem.	8 (session: Jan-June 24)	
Industry/Organization	IndVibe InfoTech Pvt Ltd.		Date/Duration	23/01/2024 -19/02/2024	
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	They enthusiastically engaged in understanding software development methodologies and acquired profound insights into our company's operational workflows and procedures.				
OVERALL GRADE (Any one)	**VERY GOOD**				
Name of Industry/Company Mentor	IndVibe InfoTech Pvt Ltd. (Vishal Verma)				
Signature of Industry/Company Mentor					

Receiving Date	20.02.2024	Name of Faculty Mentor	Dr. D K Mishra	Sign	

ANNEXURE-3B

MPR-2

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Name of Student	Mukesh Sharma		Enrollment No.	0901MC201042	
Department	Mathematics & Computing		Sem.	8 (session: Jan-June 24)	
Industry/Organization	IndVibe InfoTech Pvt Ltd.		Date/Duration	20/02/2024 -18/03/2024	
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	They enthusiastically engaged in understanding software development methodologies and acquired profound insights into our company's operational workflows and procedures.				
OVERALL GRADE (Any one)	**VERY GOOD**				
Name of Industry/Company Mentor	IndVibe InfoTech Pvt Ltd. (Vishal Verma)				
Signature of Industry/Company Mentor					

Receiving Date	19.03.2024	Name of Faculty Mentor	Dr. D K Mishra	Sign	

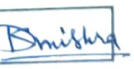
ANNEXURE-3C

MPR-3

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV Bhopal)
NAAC Accredited with A++ Grade

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY/COMPANY MENTOR✔

Name of Student	Mukesh Sharma		Enrollment No.	0901MC201042	
Department	Mathematics & Computing		Sem.	8 (session: Jan-June 24)	
Industry/Organization	IndVibe InfoTech Pvt Ltd.		Date/Duration	19/03/2024 -15/04/2024	
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	They enthusiastically engaged in understanding software development methodologies and acquired profound insights into our company's operational workflows and procedures.				
OVERALL GRADE (Any one)	VERY GOOD				
Name of Industry/Company Mentor	IndVibe InfoTech Pvt Ltd. (Vishal Verma)				
Signature of Industry/Company Mentor					

Receiving Date	18.04.2024	Name of Faculty Mentor	Dr. D K Mishra	Sign	

ANNEXURE-3D

MPR-4

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV Bhopal)
NAAC Accredited with A++ Grade

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY/COMPANY MENTOR✔

Name of Student	Mukesh Sharma		Enrollment No.	0901MC201042	
Department	Mathematics & Computing		Sem.	8 (session: Jan-June 24)	
Industry/Organization	IndVibe InfoTech Pvt Ltd.		Date/Duration	16/04/2024 -20/05/2024	
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	They enthusiastically engaged in understanding software development methodologies and acquired profound insights into our company's operational workflows and procedures.				
OVERALL GRADE (Any one)	VERY GOOD				
Name of Industry/Company Mentor	IndVibe InfoTech Pvt Ltd. (Vishal Verma)				
Signature of Industry/Company Mentor					

Receiving Date	20.05.2024	Name of Faculty Mentor	Dr. D K Mishra	Sign