SAHYADRI
COLLEGE OF ENGINEERING & MANAGEMENT
An Autonomous Institution

SUMMER INTERNSHIP-II

(Innovation/Societal/Entrepreneurship-based Internship)

(Academic Batch 2021-25)

Submitted by

ANANTH B S

4SF22AD400

Artificial Intelligence and Data Science

Under the Mentorship of

Mr. Duddela Sai Prashanth

Professor of CSE

DEPT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

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CERTIFICATE

This is to certify that the **SUMMER INTERNSHIP-II (Innovation/Societal/Entrepreneurship)** has been carried out by **Mr. Ananth B S** bearing the USN **4SF22AD400**, b onafide student of Department of AIDS (Artificial Intelligence And Data Science Sahyadri College of Engineering & Management,Adyar, Mangalore, during the Academic Year 2022-23.

The internship report is verified as per the requirements of the Academic Statute and is recommended for the award of the Academic Credit for the said course.

Mentor	**Head of the Department**
Mr. Duddela Sai Prashanth	Dr. Pushpalatha k

Name of the Examiner	**Signature with Date**
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ACKNOWLEDGEMENT

First, I would like to thank **Sahyadri college of Engineering and Management** for conducting this Internship Program within the organization.

I am highly grateful to **Dr. Pushpalatha K ,** Head of the Department for providing the necessary support to carry out this Internship and guidance for the successful completion of this program.

I wish to extend our gratitude to all **faculty and staff members** who rendered necessary help in carrying out this Internship.

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ANANTH B S

4SF22AD400

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Week 1

1.1 Day 1: Introduction to Web Development:

The first day of the web development internship provided an overview of web development, covering the basics of front-end and back-end technologies. Participants were introduced to HTML, CSS, and JavaScript, and discussions focused on the importance of a well-rounded skill set in web development.

1.2 Day 2: Front-End Basics (HTML, CSS, JavaScript):

On the second day, attention turned to front-end development. Participants delved deeper into HTML for content structure, CSS for styling, and JavaScript for dynamic interactivity. Practical exercises included building simple web pages to reinforce the concepts covered.

1.3 Day 3: Introduction to Responsive Design and CSS Frameworks:

Day three introduced the concept of responsive design and popular CSS frameworks like Bootstrap. Interns learned to create mobile-friendly layouts and explored the benefits of using frameworks to streamline development. Practical sessions involved adapting existing web pages for various screen sizes.

1.4 Conclusion:

In the span of just one week, the web development internship successfully covered the fundamentals of both front-end and back-end development. Participants gained practical experience in building responsive web pages, creating RESTful APIs, and integrating databases. The hands-on approach and the culmination in a full-stack project provided condensed yet immersive learning skills.

CHAPTER-02

Week 2

2.1 Day 1: Introduction to MERN Stack:

The first day of the MERN internship was dedicated to introducing participants to the MongoDB, Express.js, React, and Node.js stack. The focus was on understanding the role of each technology in full-stack web development. Practical discussions included the advantages of using MERN and its prevalence in the industry.

2.2 Day 2: MongoDB Basics and Setup:

Day two focused on MongoDB, the NoSQL database in the MERN stack. Interns were guided through the installation process and introduced to the fundamentals of document-oriented data storage. Practical exercises involved setting up a MongoDB database and performing basic CRUD operations.

2.3 Day 3: Introduction to React.js:

The fifth day marked the beginning of front-end development with React.js. Participants were introduced to React components, JSX syntax, and the concept of a virtual DOM. Practical exercises included setting up a React application and creating basic components.

- Introduction to the MERN stack.
- Setting up the development environment.
- Learning the basics of MongoDB and creating a sample database.
- Building a simple REST API using Node.js and Express.js.

- Understanding the fundamentals of React and creating a basic UI.

2.4 Challenges:

- Adapting to the fast-paced learning environment.
- Balancing coursework and the internship.
- Initial difficulties in connecting the frontend and backend.

2.5 Conclusion:

This week was primarily focused on getting familiar with the MERN stack components. I successfully set up my development environment and made significant progress in creating a basic application. Although the learning curve was steep, I managed to overcome the initial challenges. This week laid the foundation for the subsequent tasks.

In just one week, the MERN internship provided participants with a condensed yet comprehensive overview of the MongoDB, Express.js, React, and Node.js stack. The day-wise structure allowed for a focused exploration of each technology, combining theoretical understanding with practical application.

CHAPTER-03

Week 3

3.1 Day 1: Back-End Basics (Node.js and Express.js):

The focus shifted to back-end development on the fourth day, with an introduction to Node.js and Express.js. Participants learned the fundamentals of server-side scripting, routing, and handling HTTP requests. Practical exercises included setting up a basic server and creating RESTful APIs.

3.2 Day 2: Database Integration (MongoDB):

Day five centered on database integration using MongoDB, a NoSQL database. Interns learned about data modeling, CRUD operations, and the basics of setting up a MongoDB database. Practical sessions involved integrating the back-end with the database to create dynamic and data-driven web applications.

3.3 Day 3: Full-Stack Development Project:

The penultimate day was dedicated to a full-stack development project. Interns applied their knowledge of front-end and back-end technologies to build a complete web application. The goal was to provide a hands-on experience in developing a real-world project and to showcase the integration of different components**.**

- Deepening my understanding of MongoDB and working with more complex data structures.
- Enhancing the REST API with advanced features and routes.
- Building interactive components and state management in React.
- Collaborating with team members on a group project.

- Learning to use Git for version control and contributing to the project repository.

3.4 Challenges:

- Managing group dynamics and collaboration.
- Grappling with more complex React concepts.
- Ensuring code consistency and avoiding conflicts in the Git repository.

3.5 Conclusion:

In week two, I dived deeper into the MERN stack, focusing on creating more complex applications. The collaborative project allowed me to apply my knowledge in a real-world scenario, teaching me valuable lessons in teamwork and communication. I continued to learn about version control and gained confidence in my coding skills.

Interns emerged with a foundational understanding of web development, ready to explore further and apply their skills in real-world scenarios. This week structure allowed for a focused and efficient learning journey, providing a solid introduction to the diverse aspects of web development.

CHAPTER-04

Final Submission

4.1 Day 1: Integration with Node.js and Full-Stack Development:

of the one-week MERN internship centered on integrating the knowledge gained from both server-side and client-side development. Interns were ta

The final day sked with creating a full-stack MERN application, connecting the Express.js server with the React front-end. This hands-on project served as the culmination of the week's learning.

4.2 Day 2: Deployment and Final Presentations:

The final day focused on deployment and presentations. Interns learned about deploying web applications to hosting platforms, and each participant presented their final project. This served as an opportunity for reflection, feedback, and peer-to-peer learning.

- Finalizing and polishing the group project.
- Conducting thorough testing and bug fixing.
- Preparing documentation for the project.
- Submitting the project to the supervisor for evaluation.
- Participating in a review session with mentors and colleagues to discuss the project's strengths and areas for improvement.

4.3 Challenges:

- Ensuring project quality and addressing last-minute issues.
- Preparing comprehensive documentation.
- Managing time effectively to meet the submission deadline.

4.4 Conclusion:

The fourth and final week of the MERN internship was dedicated to the completion and submission of the group project. We worked tirelessly to polish the project, ensuring it met the required quality standards. Thorough testing and bug fixing were crucial in delivering a functional and user-friendly application. Additionally, I put significant effort into creating comprehensive project documentation to facilitate future maintenance and understanding of the codebase.

The submission marked the culmination of the internship, and it was satisfying to see the result of our hard work. The review session provided valuable feedback and insights, helping me identify areas of improvement in my development skills and project management abilities.

CONCLUSION

Blogging for business is a content marketing tactic in which a company creates content related to its product or service to improve its online visibility. But visibility isn't the only thing you stand to gain; in fact, business blogging is so valuable that it is a top priority for.

Blogging doesn't immediately pay off for businesses in the way that advertising and specifically online advertising does; most corporate blogs don't see a positive ROI until they've been blogging consistently for. That said, blogs gain potency as they grow which means that they have a longer lifespan than ads. In fact, 56% of marketers say that blogging is effective and 10% say that a blog has the of all marketing strategies.

To take full advantage of that potential, shares one of its at the top of the homepage. The article links to nine of the company's planners and—as we can see in the "top navigation flows" report below—successfully leads site visitors to product pages.

If you only use your social media accounts as free ad space, you're missing a huge opportunity. Social media marketing can improve customer retention, as it keep businesses top-of-mind for interested consumers, and build brand awareness. To reap those benefits, you need to share valuable content that makes consumers want to follow you. Your blog posts will (ideally) contain information that will interest your target audience, so just reshape your content to fit the feed. For example, you could turn the most valuable morsels in your blog posts into for Instagram or LinkedIn. On average, small businesses that blog have than those that don't.

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