**CHENNAI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)**
Sarathy Nagar, Kundrathur, Chennai-600069

*Approved by AICTE and Affiliated to Anna University, Chennai*
**COMPUTER SCIENCE AND ENGINEERING**

**WEB DEVELOPER**
**INTERNSHIP**

A REPORT ON INTERNSHIP

**Department of Computer Science and Engineering**

By

**KOWSICK K**

**22CS083**

**SEPTEMBER  2025**

**CHENNAI INSTITUTE OF TECHNOLOGY**
**CHENNAI-69**

CHENNAI INSTITUTE OF TECHNOLOGY

**CHENNAI INSTITUTE OF TECHNOLOGY**
(Autonomous)

Approved by   Accredited by

175th Rank
(NIRF Ranking 2022)

**Vision of the Institute:**

To be an eminent centre for Academia, Industry and Research by imparting knowledge, relevant practices and inculcating human values to address global challenges through novelty and sustainability.

**Mission of the Institute:**

**IM1**.To create next generation leader by effective teaching learning methodologies and in still scientific spark in them to meet the global challenges.

**IM2**.To transform lives through deployment of emerging technology, novelty and sustainability.

**IM3**.To inculcate human values and ethical principles to cater the societal needs.

**IM4**.To contributes towards the research ecosystem by providing a suitable, effective platform for interaction between industry, academia and R &D establishments.

CHENNAI
INSTITUTE OF TECHNOLOGY
Transforming Lives

CHENNAI
INSTITUTE OF TECHNOLOGY
(Autonomous)

Accredited by

A+
NAAC

NBA
CSE, ECE, EEE, MECH, MCT

nirf
175th Rank
(NIRF Ranking 2022)

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Vision of the Institute:

To be an eminent centre for Academia, Industry and Research by imparting knowledge, relevant practices and inculcating human values to address global challenges through novelty and sustainability.

### Mission of the Institute:

**DM1.** To provide strong fundamentals and technical skills for Computer Science applications through effective teaching learning methodologies.

**DM2.** To transform lives of the students by nurturing ethical values, creativity, and novelty to become Entrepreneurs and establish start-ups.

**DM3.** To habituate the students to focus on sustainable solutions to improve the quality of life and the welfare of the society.

**DM4.** To enhance the fabric of research in computing through collaborative linkages with industry and academia.

**DM5.** To inculcate learning of the emerging technologies to pursue higher studies leading to lifelong learning.

# CHENNAI INSTITUTE OF TECHNOLOGY

*An Autonomous Institute*

## CHENNAI-69



## CERTIFICATE

This is to certify that the "**Internship Report**" Submitted by **KOWSICK K (22CS083)** is the work done by him/her and submitted during the academic year **2025-2026** , in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF ENGINEERING** in **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**, at **Karthikesh Robotics Pvt.Ltd.**

**Dr.S.Pavithra**                                             **Department**
**Head of the Department**                        **Internship Coordinator**

**Internal Examiner**                                    **External Examiner**

## Internship Review Evaluation/Comments

| Sl No. | Criterion | Max. Marks | Marks Allotted |
|---|---|---|---|
| 1. | Regularity in maintenance of the diary. | 10 | |
| 2. | Adequacy & quality of information recorded | 10 | |
| 3. | Drawings, sketches and data recorded | 10 | |
| 4. | Thought process and recording techniques used | 05 | |
| 5. | Organization of the information | 05 | |
| 6. | Originality of the Internship Report | 10 | |
| 7. | Adequacy and purposeful write-up of the Internship Report | 10 | |
| 8. | Organization, format, drawings, sketches, style, language etc. of the Internship Report | 10 | |
| 9. | Practical applications, relationships with basic theory and concepts | 10 | |
| 10. | Presentation Skills | 20 | |
| **Total** | | 100 | |

External Internship Advisor's Name: KARTHIKESH

Company: KARTHIKESHROBOTICS

Date:                                                        Signature

# INTERNSHIP OFFER LETTER

**KARTHIKESH ROBOTICS PRIVATE LIMITED**

www.karthikeshrobotics.in

07/05/2024

**Kowsick K**

We are delighted to offer you the position of Developer Intern at KarthiKesh Robotics Pvt Ltd. This letter confirms your selection, effective from May 11, 2024. Welcome aboard!

**Program Details:**

**Start Date:** 11th May 2024

**Duration:** 1 Month

**Domain:** Web Development

**Location:** Hybrid

We hope this letter finds you well. KarthiKesh Robotics Pvt Ltd has designed this internship to offer you valuable learning experiences at no cost.

The program includes orientation and hands-on learning opportunities to enhance your understanding of various concepts.

We anticipate a mutually beneficial partnership that will equip you for future projects. Wishing you a rewarding and enriching internship experience.

**KARTHIKESH J G**
CEO &FOUNDER

6

# ACKNOWLEDGEMENT

First, I would like to thank **Mr.KARTHIKESH , Co-Founder of KARTHIKESHROBOTICS** for recommending me the opportunity to do an internship within the organization.

It is indeed with a great sense of pleasure and immense sense of gratitude that I acknowledge the help of these individuals.

I am highly indebted to our Chairman **Shri. P.SRIRAM** and Principal **Dr. A .RAMESH, M.E., Ph.D**, for the facilities provided to accomplish this internship.

I would like to thank my Head of the Department **Dr.S.Pavithra M.E., Ph.D., ,** for his constructive criticism throughout my internship.

I would like to thank **Ms.Bhavani Ramesh ,** internship coordinator Department name for their support and advices to get and complete internship in above said organization.

I am extremely great full to my department staff members and friends who helped me in successful completion of this internship.

<div align="right">

KOWSICK
22CS083

</div>

# PREFACE

I, student of Computer Science and Engineering require to do a Internship to enhance my knowledge. The purpose of Internship is to acquaint the students with practical application of theoretical concept taught to me during my course period.

It was a great opportunity to have close comparison of theoretical concept in practical field. This report may depict deficiencies on my part but still it is an account of my effort.

The output of my analysis is summarised in a shape of Virtual Internship the content of report shows the details of sequence of these. This is my Virtual Internship report which I have prepared for the sake of my **Final year** Virtual Internship. Being an engineer, I should help the society for inventing something new by utilising my knowledge which can help them to solve their problem so for this I am working in **KARTTHIKESH ROBOTICS**.

# ABSTRACT

## WEB DEVELOPMENT

We are excited to offer a dynamic and engaging Web Development Internship designed to provide a comprehensive learning experience for aspiring web developers.This internship is an excellent opportunity for individuals passionate about web development and eager to gain hands-on experience in a professional environment. Interns will have the chance to work on real-world projects, learn from experienced developers, and make meaningful contributions to our team.

- **Front-End Development**: Collaborate with the design team to implement user-friendly web interfaces. This involves translating design mockups into responsive web pages using HTML, CSS, and JavaScript. You will also work with front-end frameworks such as React, Angular, or Vue.js to build interactive user interfaces.

- **Back-End Development**: Assist in developing server-side logic, database management, and ensuring efficient data flow between the server and users. You will gain experience with back-end technologies such as Node.js, Python, or PHP, and work with databases like MySQL, PostgreSQL, or MongoDB.

- **Code Quality and Testing**: Write clean, efficient, and maintainable code while adhering to best practices and coding standards. Participate in code reviews to receive and provide feedback, ensuring the quality and reliability of the codebase. Additionally, you will assist in writing unit tests and performing debugging to identify and fix issues.

- **Version Control**: Utilize Git for version control and collaborate with the team using platforms like GitHub or GitLab. You will learn how to manage code repositories, handle branching and merging, and resolve conflicts effectively.

- **Continuous Learning**: Stay updated with the latest trends and advancements in web development technologies. You will be encouraged to explore new tools, libraries, and frameworks that can enhance your development skills and improve project outcomes.

- **Technical Skills**: Basic understanding of web development fundamentals, including HTML, CSS, and JavaScript. Familiarity with front-end frameworks (React, Angular, or Vue.js) and back-end technologies (Node.js, Python, or PHP) is advantageous.

- **Version Control**: Experience with version control systems, particularly Git, is preferred.

- **Problem-Solving**: Strong analytical and problem-solving skills, with the ability to troubleshoot and debug code effectively.

- **Communication and Collaboration**: Excellent communication skills and the ability to work well in a team environment. Willingness to share knowledge, seek help when needed, and contribute to team discussions.

- **Adaptability**: Eagerness to learn new technologies and adapt to changing project requirements.

## BENEFITS

This internship provides several benefits aimed at enhancing your professional growth and development:

- **Hands-On Experience**: Work on real-world projects and gain practical experience in web development. You will have the opportunity to see your work implemented and used by real users.
- **Mentorship**: Receive guidance and mentorship from experienced developers who will help you navigate challenges and enhance your skills.
- **Career Development**: Develop a strong portfolio showcasing your work, which will be valuable for future job opportunities. Successful interns may also be considered for full-time positions upon completion of the internship.
- **Flexible Work Environment**: Enjoy a flexible work schedule with the possibility of remote work, allowing you to balance your internship with other commitments.
- **Networking**: Build connections with industry professionals and fellow interns, expanding your professional network

**Programs and Opportunities**

This report highlights my web development internship at Karthikesh Robotics Pvt. Ltd., a leading company specializing in autonomous and industrial robotics as well as IoT solutions. The internship offered me the opportunity to apply my technical skills in a real-world setting and gain valuable industry exposure.

During my time at Karthikesh Robotics, I was actively involved in multiple aspects of web development, covering both front-end and back-end tasks.

My responsibilities included:

- Enhancing User Experience (UX): Collaborated with the design team to develop intuitive and responsive user interfaces that improved usability and accessibility.

- Developing New Features: Implemented innovative features that aligned with client requirements and contributed to the overall functionality of the company's web platforms.

- Ensuring Security and Performance: Optimized websites for speed and security by applying best practices in coding, testing, and deployment.

- Full-Stack Development: Worked across technologies to ensure smooth integration between the user-facing front end and the database-driven back end.
  This internship not only strengthened my technical skills in areas such as responsive design, performance optimization, and secure coding but also enhanced my ability to collaborate within a professional team. It gave me valuable insights into the intersection of web technologies, robotics, and IoT applications, highlighting the crucial role of web platforms in delivering innovative solutions.

Overall, the internship experience at Karthikesh Robotics has been a significant step in my career journey, boosting my confidence and preparing me for future opportunities in web development and related domains.

For more information about the company, visit: www.karthikeshrobotics.in.

| | CONTENTS | |
|---|---|---|
| CHAPTER NO. | CHAPTER NAME | PAGE NO. |
| 1. | **Introduction** | **15** |
| 2. | **Company Overview** | **15** |
| 3. | **Problem Statement** | **17** |
| 4. | **Methodology** | **19** |
| 5. | **Observations** | **19** |
| 6. | **Technology used** | **19`** |
| 7. | **Project Demo Code** | **22** |
| 8. | **Project Implementation** | **25** |
| 9. | **Project Analysis** | **29** |
| 10. | **Internship Completion   Certification** | **32** |
| 11. | **PO & PSO Attainment** | **33** |
| 12`. | **Conclusion** | **35** |

| | INTERNSHIP TASKS | |
|---|---|---|
| Chapter No | Title | Status |
| 1 | landing page | **Completed** |
| 2 | Objective Take any 2 pages from this website and clone with your creativity also change tha company name and logo with our assets | **Completed** |
| 3 | Develop the following website by reference video and image | **Completed** |
| 4 | Create a figma design of a ecommerce platform | **Completed** |

# WEEKLY OVERVIEW OF INTERNSHIP ACTIVITIES

| | Date | Day | Work done |
|---|---|---|---|
| **1st Week** | 11.06.24 | Saturday | Introduction to the project requirements and objectives. |
| | 13.06.24 | Monday | Research and analysis of the provided website for cloning. |
| | 14.06.24 | Tuesday | Research and analysis of the provided website for cloning. |
| | 15.06.24 | Wednesday | Implementing initial layout and structure using HTML and CSS. |
| | 16.06.24 | Thursday | Replacing the original company name and logo with provided assets. |

| | Date | Day | Work done |
|---|---|---|---|
| **2nd Week** | 17.06.24 | Friday | Review and testing of the cloned page for responsiveness and compatibility. |
| | 18.06.24 | Saturday | Starting the cloning process of the second selected page. |
| | 20.06.24 | Monday | Adding creative enhancements and customizations. |
| | 21.06.24 | Tuesday | Finalizing the second page clone. |
| | 22.06.24 | Wednesday | Making necessary adjustments based on feedback. |

| | Date | Day | Work done |
|---|---|---|---|
| **3rd Week** | 23.06.24 | Thursday | Implementing the initial layout and design using HTML, CSS, and JavaScript. |
| | 24.06.24 | Friday | Continued development of the website. |
| | 25.06.24 | Saturday | Conducting testing and debugging to ensure smooth performance. |

| | Date | Day | Work done |
|---|---|---|---|
| | **26.06.24** | Monday | Review and feedback session with the team. |
| | **27.06.24** | Tuesday | Documentation of the completed website development task. |

| | Date | Day | Work done |
|---|---|---|---|
| **4th Week** | **28.06.24** | Thursday | Starting the Figma design for the e-commerce platform. |
| | **29.06.24** | Friday | • Adding detailed design elements and ensuring visual consistency. <br> • Review and feedback session with the team for the Figma design. |

# INTRODUCTION

During my internship at Karthikesh Robotics Private Limited, I had the opportunity to work as a Web Developer Intern, where I gained hands-on experience in designing and developing a plagiarism visualizer application. This internship provided me with practical exposure to real-world software development challenges, enabling me to enhance my skills in front-end design, backend integration, and database management while building a functional and user-friendly application.

I collaborated with my peers and mentors to design a secure authentication system, manage file uploads, and implement plagiarism detection mechanisms using efficient algorithms and visualization techniques. I also contributed to creating an intuitive user interface with HTML, CSS, and Bootstrap, while integrating backend functionality using Django and database systems. Additionally, I worked on refining the application's performance, ensuring data accuracy, and maintaining seamless interaction between the client-side and server-side components.

This experience significantly improved my knowledge of full-stack development, debugging practices, and deployment strategies. It also helped me develop problem-solving skills, strengthen my understanding of web technologies, and practice building scalable solutions that enhance user experience.

Overall, my internship at KarthiKesh Robotics Private Limited equipped me with a strong foundation in web application development, preparing me to handle end-to-end project implementation effectively and contribute to building practical software solutions for real-world needs.

# PROBLEM STATEMENT

*Objective:*

Clone any two pages from a specified website with creative enhancements, and replace the company name and logo with provided assets. Additionally, develop a website based on a reference video and image, and create a Figma design for an e-commerce platform.

## METHODOLOGY
*Tasks:*

1. **Page Cloning:**
   o Select any two pages from the given website.
   o Clone these pages while incorporating your creative enhancements.
   o Replace the original company name and logo with the assets provided by our team.
2. **Website Development:**
   o Develop a website by referencing the provided video and image.
   o Ensure the website is responsive, user-friendly, and aligns with the design aesthetics shown in the reference materials.
3. **Figma Design:**
   o Create a comprehensive Figma design for an e-commerce platform.
   o The design should include essential pages such as the home page, product listing page, product detail page, shopping cart, and checkout process.
   o Incorporate modern UI/UX principles to enhance user experience and ensure visual consistency across all pages.

*Deliverables:*

1. **Cloned Pages:**
   o Two web pages cloned with creative enhancements and replaced assets.
   o HTML, CSS, and any other relevant files for the cloned pages.
2. **Developed Website:**
   o A fully functional website developed based on the provided reference video and image.
   o Source code and deployment instructions.
3. **Figma Design:**
   o A detailed Figma design file for the e-commerce platform.
   o Design elements and components organized in a systematic manner for easy handoff to developers.

*Evaluation Criteria:*

1. **Creativity and Innovation:**
o The extent of creative enhancements made to the cloned pages.
o Originality and innovativeness in the developed website and Figma design.
2. **Technical Proficiency:**
o Code quality and adherence to best practices in web development.
o Responsiveness and cross-browser compatibility of the developed website.
3. **Design Excellence:**
o Aesthetics and functionality of the Figma design.
o User experience considerations and adherence to modern UI/UX principles.
4. **Attention to Detail:**
o Accurate replacement of company name and logo with provided assets.
o Consistency and attention to detail in all deliverables

**Methodology:**

o During my tenure, I engaged in:
- Front-end development using HTML, CSS, and JavaScript.
- Back-end development involving server-side technologies.
- Implementing responsive design for cross-device compatibility.
- Testing and debugging to ensure high-quality web applications.
- Participating in team meetings and code reviews

**Observation Done:**
Enhancing my technical skills and understanding of the development lifecycle within a professional setting. It also emphasized the importance of teamwork, communication, and continuous learning.

This report will detail the tasks performed, skills developed, and the overall impact of my work at Karthikesh Robotics, along with the challenges encountered and solutions implemented throughout the internship.

**Technology Used**

➢ **Front-End Technologies**: HTML, CSS, JavaScript

➢ **Back-End Technologies**: Server-side programming languages (e.g., Node.js, Python)

➢ **Responsive Design**: Ensuring compatibility across various devices

➢ **Testing and Debugging**: Ensuring high-quality web applications

- ➤ **Security and Performance**: Maintaining robust and efficient web solutions

- ➤ **Integration**: Collaborating with cross-functional teams to integrate web solutions with robotic

## TASKS DETAILS

## TASK - 1

Make A Landing Page With

- About Us , Our Services ,Our Mission ,Our Vision ,Our Products (Use Online Images  Robots Any 3 ) , Contact Us ,Footer

## TASK – 2 Https://Techvico.Com/

Objective Take Any 2 Pages From This Website And Clone With Your Creativity Also Change Tha Company Name And Logo With Our Assets

- About Us , Our Services , Our Mission, Our Vision ,Our Products  ,Footer,Contact Us

## TASK – 3

Develop A Website By Reference Video And Image

## TASK - 4

Create A Figma Design Of A Ecommerce Platform

For Reference: Robu.In

Pages - Front Page, Signin, Login, Categories

**PROJECT DEMO CODE :**
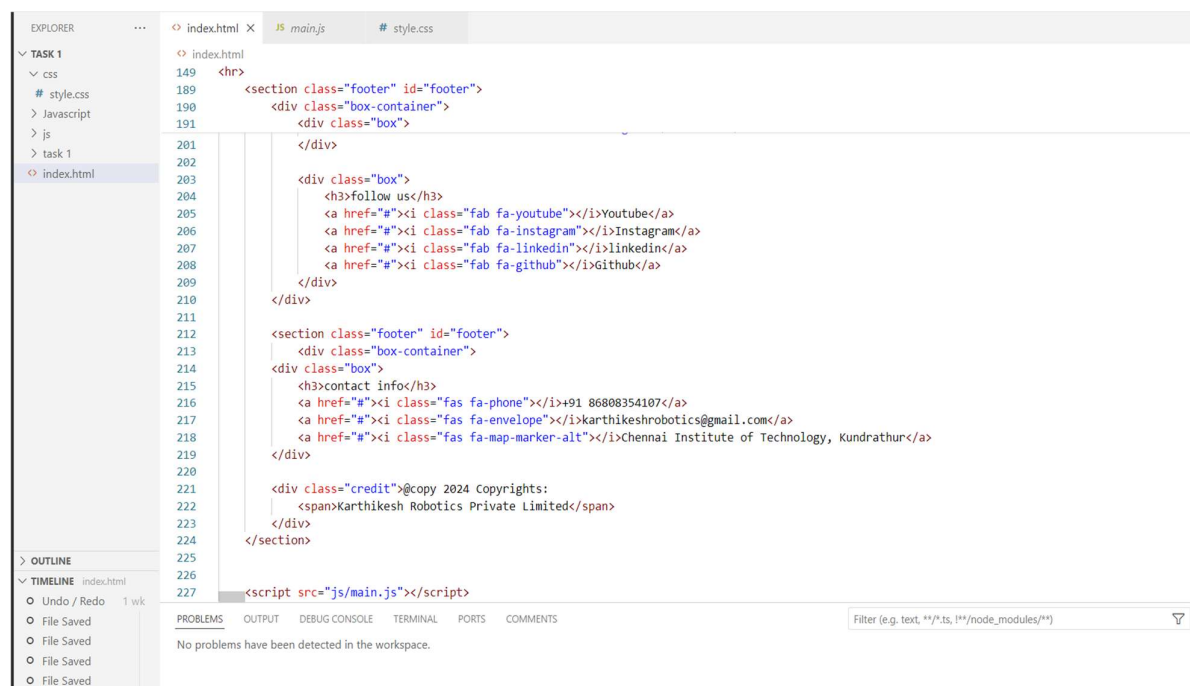
**USING HTML,CSS,JAVASCRIPT**
**TASK – 1**

**Index.html**
**Figure No : 1**
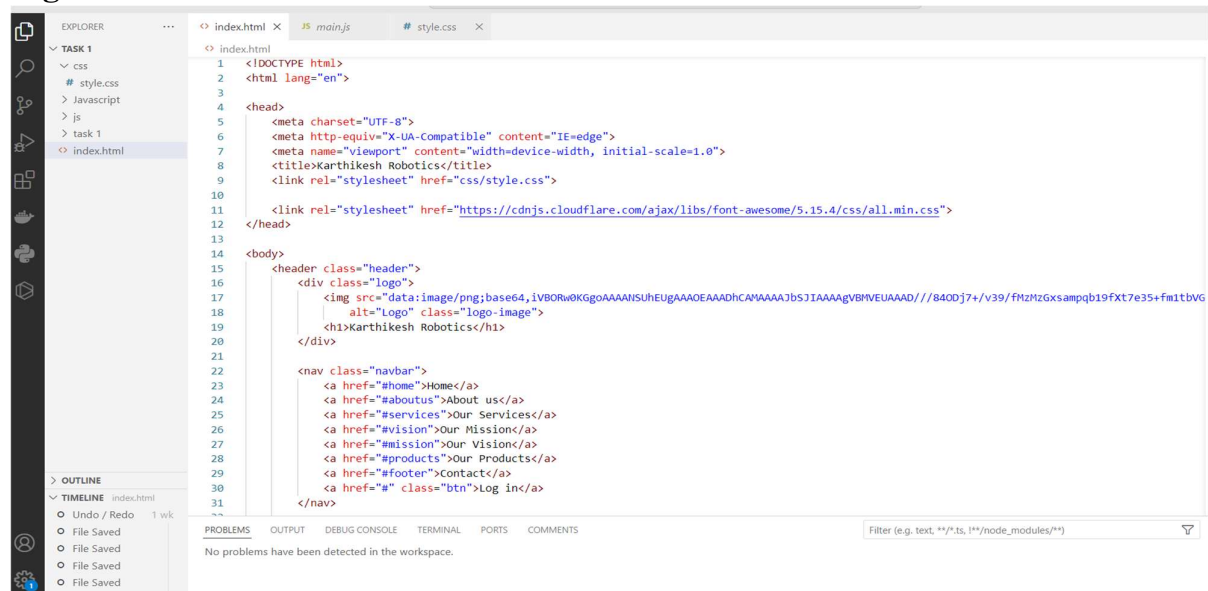


**Figure No : 2**

## Style.CSS

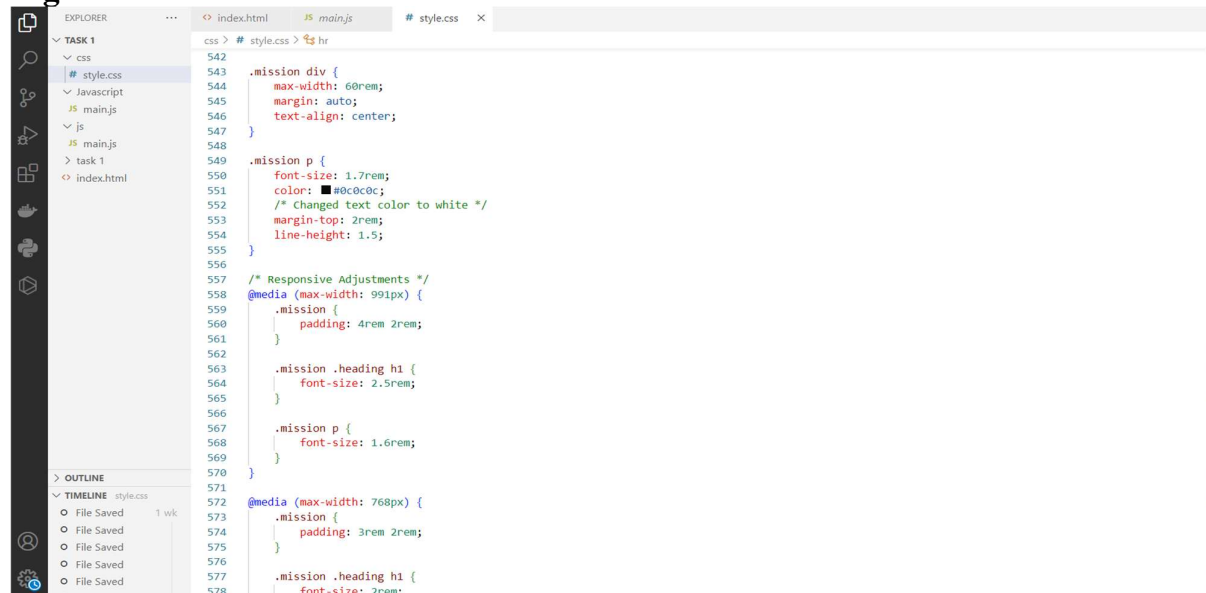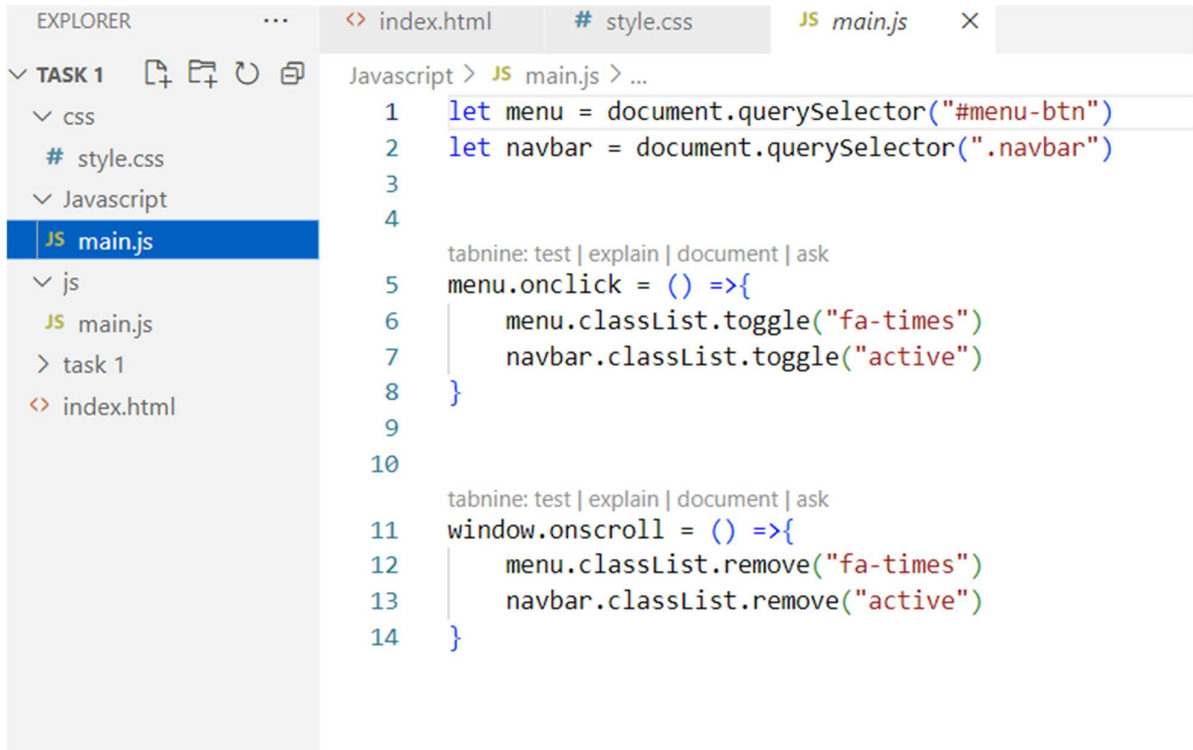## Figure No : 1



## Figure No : 2

**Script.js**:

**Figure No**: 1

```
EXPLORER                    ...      <> index.html        # style.css         JS main.js       ×

∨ TASK 1                             Javascript > JS main.js > ...
  ∨ css                                1     let menu = document.querySelector("#menu-btn")
    # style.css                        2     let navbar = document.querySelector(".navbar")
  ∨ Javascript                         3
    JS main.js                         4
  ∨ js                                        tabnine: test | explain | document | ask
    JS main.js                         5     menu.onclick = () =>{
  > task 1                             6         menu.classList.toggle("fa-times")
  <> index.html                        7         navbar.classList.toggle("active")
                                       8     }
                                       9
                                      10
                                             tabnine: test | explain | document | ask
                                      11     window.onscroll = () =>{
                                      12         menu.classList.remove("fa-times")
                                      13         navbar.classList.remove("active")
                                      14     }
```

# PROJECT IMPLEMENTATION
## TASK - I
### Landing Page



**Karthikesh Robotics**

HOME  ABOUT US  OUR SERVICES  OUR MISSION  OUR VISION  OUR PRODUCTS  CONTACT  LOG IN

# Karthikesh Robotics

OUR AUTONOMOUS WILL ROBOTS SIMPLIFY YOUR WORK

## About Us

**We Are Here To Change The Future**

**Imagine - Innovate - Implement**

We're Venturing Into The Exciting World Of Startups, Offering Advanced Products Like AGVs, Humanoids, And More. Our Company Not Only

**Karthikesh Robotics**

HOME  ABOUT US  OUR SERVICES  OUR MISSION  OUR VISION  OUR PRODUCTS  CONTACT  LOG IN

# Autonomous Robots

Autonomous Robots Represents The Cutting Edge Of Modern Technology, Designed To Operate Independently Without Human Intervention.

# IoT Solutions

By Connecting Everyday Objects To The Internet And Enabling Them To Communicate And Share Data, IoT Solutions Offer Unprecedented Levels Of Insight, Efficiency, And Convenience.

**TASK – 2**

Objective Take any 2 pages from this website and clone with your creativity also change the company name and logo with our assets
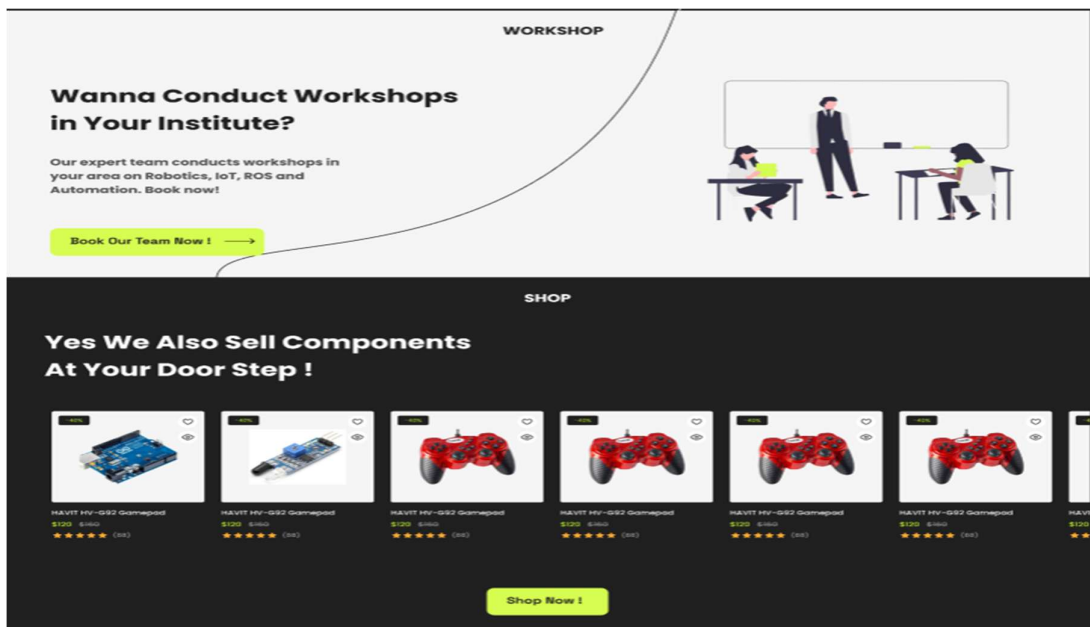
**Figure No : 1**



**Figure No:2**

# TASK - 3

Develop the following website by reference video and image

**Figure No: 1**



**Figure No:2**

# TASK – 4

Create a figma design of a ecommerce platform

For reference : Robu.in

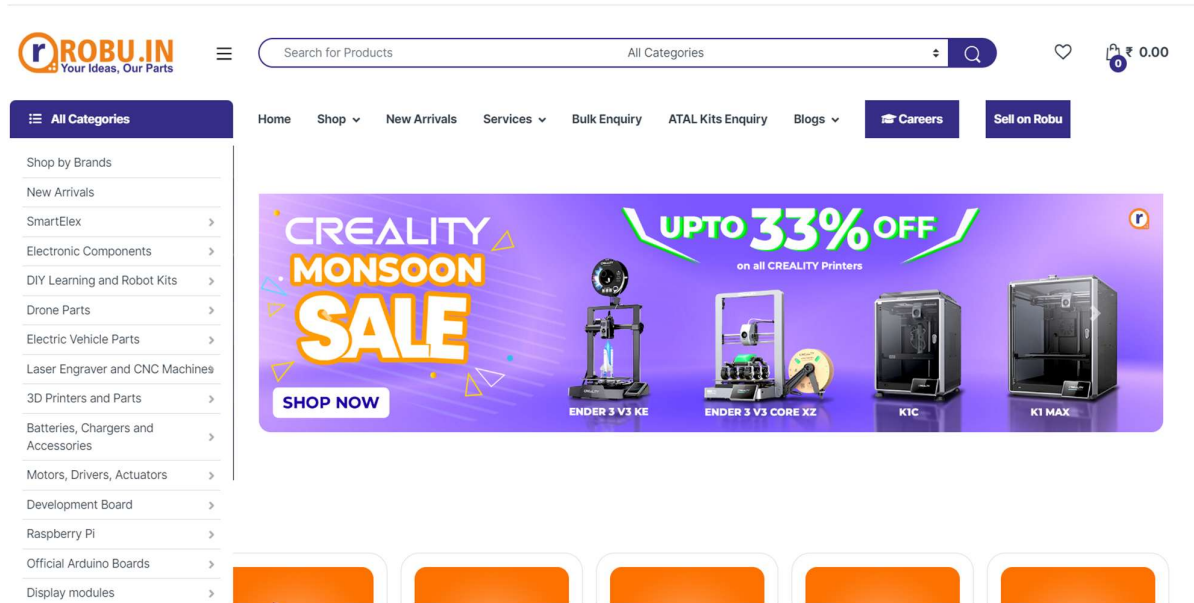Pages - Front page, signin, login, categories

## Figure NO: 1



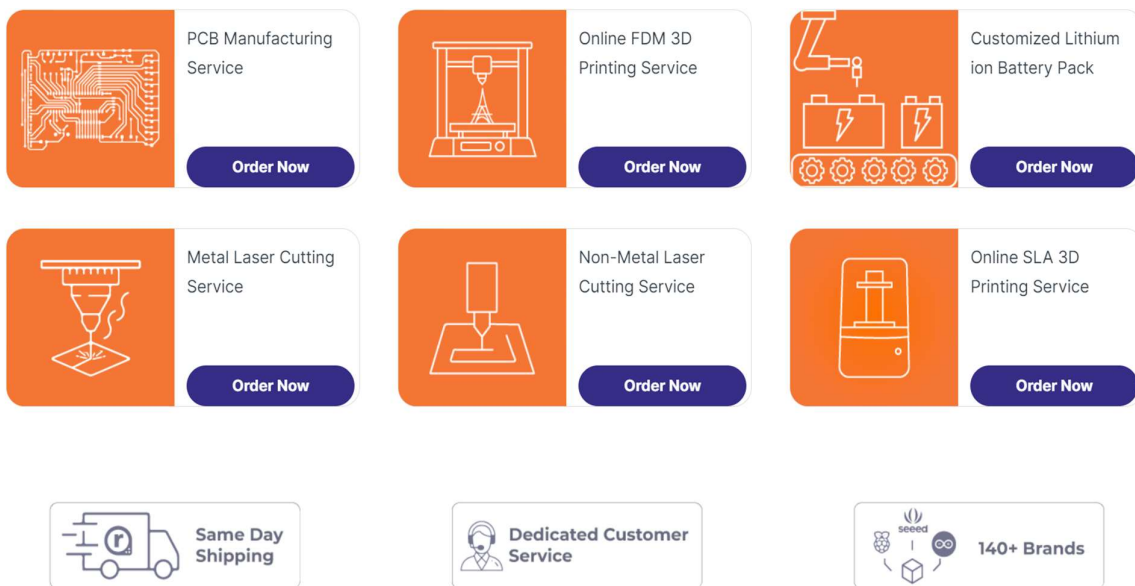## Figure No:2

# Web Development Project Analysis

*Project Overview:*

This web development project for Karthikesh Robotics aims to enhance user experiences on   the company's web platforms by cloning two existing pages with creative modifications, developing a new website based on reference materials, and designing an e-commerce platform in Figma.

*Objectives:*

1. **Cloning and Enhancing Existing Pages:**
   o Clone two pages from a given website.
   o Incorporate creative enhancements.
   o Replace the company name and logo with provided assets.
2. **Developing a New Website:**
   o Build a website using a reference video and image.
   o Ensure responsiveness and user-friendly design.
   o Optimize for performance and security.
3. **Figma Design for E-commerce Platform:**
   o Create a comprehensive Figma design for an e-commerce platform.
   o Include essential pages: home, product listing, product detail, cart, and checkout.
   o Apply modern UI/UX principles.

*Tasks Breakdown:*

1. **Page Cloning and Enhancement:**
   o **Analysis:**
   - **Existing Pages Review:** Examine the structure, design, and functionality of the selected pages.
   - **Creative Enhancements:** Identify areas for improvement, such as layout adjustments, design refinements, and additional features.
   o **Execution:**
   - **HTML/CSS/JS Development:** Recreate the structure and styling with custom enhancements.
   - **Asset Integration:** Replace company-specific assets.
   o **Testing and Review:**
   - **Cross-Browser Testing:** Ensure compatibility across different browsers and devices.
   - **Feedback Incorporation:** Adjust based on team feedback.
2. **Website Development from Reference:**
   o **Analysis:**
   - **Reference Materials Review:** Thoroughly analyze the provided video and image to understand the design and functional requirements.

- **Feature Identification:** List all features and elements visible in the reference materials.
  - **Execution:**
- **Initial Setup:** Set up the project environment and create the basic layout.
- **Feature Implementation:** Develop the identified features and ensure alignment with the reference design.
  - **Testing and Review:**
- **Responsiveness Testing:** Verify the website adapts well to various screen sizes.
- **Performance Optimization:** Implement optimizations for faster loading times and better performance.

3. **Figma Design for E-commerce Platform:**
  - **Analysis:**
- **Requirement Gathering:** Understand the needs and preferences for the e-commerce platform.
- **Wireframing:** Create initial wireframes to outline the structure of key pages.
  - **Execution:**
- **Detailed Design:** Develop detailed designs for each page, focusing on aesthetics and usability.
- **UI/UX Principles:** Apply best practices to ensure a seamless user experience.
  - **Review and Feedback:**
- **Design Review:** Present the design to the team for feedback.
- **Adjustments:** Make necessary adjustments based on feedback.

*Key Considerations:*

1. **User Experience (UX):**
  - Ensure the user interfaces are intuitive and easy to navigate.
  - Focus on accessibility to cater to a diverse audience.
2. **Performance and Security:**
  - Optimize the code and assets for faster loading times.
  - Implement security best practices to protect user data and prevent vulnerabilities.
3. **Responsiveness:**
  - Ensure all web pages are fully responsive, providing a consistent experience across all devices.
4. **Collaboration and Feedback:**
  - Regularly communicate with the team to gather feedback and make iterative improvements.

*Expected Outcomes:*

- **Enhanced Web Pages:** Two creatively enhanced web pages that reflect the new branding and improved design.
- **New Website:** A fully functional, responsive, and optimized website developed from reference materials.

- **E-commerce Design:** A detailed Figma design for an e-commerce platform, ready for development.

## INTERNSHIP COMPLETON CERTIFICATE

15/06/2024

## CERTIFICATE OF INTERNSHIP

This certifies that **Kowsick K** successfully completed an internship at KarthiKesh Robotics Private Limited from May 11 to June 14, 2024, showcasing dedication in various projects related to **WEB Development**. Kowsick K demonstrated exceptional enthusiasm and gained hands-on experience. KarthiKesh Robotics Private Limited appreciates the valuable contributions and positive impact on the organization. This certificate acknowledges the imparted skills and knowledge for future pursuits.

**KARTHIKESH J G**
CEO & FOUNDER

**Conclusion:**

The Web Development Internship offers a valuable opportunity to gain hands-on experience in the dynamic field of web development. By joining our team, you will enhance your technical skills, work on real-world projects, and receive mentorship from experienced professionals. This internship is designed to challenge you and support your growth, providing a solid foundation for a future career in tech. If you are passionate about web development and eager to learn, we encourage you to apply. Join us to start your journey towards a rewarding and successful career in web development. We look forward to your application!

**PO &PSO Attainment:**

| PO.No | Graduate Attribute | Attained | Justification |
|-------|-------------------|----------|---------------|
| PO 1 | Engineering knowledge | Yes | The course covers fundamental web development technologies such as HTML, CSS, JavaScript, and frameworks like React or Angular, equipping students with the necessary engineering knowledge. |
| PO 2 | Problem analysis | Yes | Students are trained to analyze client requirements and user needs, allowing them to break down complex problems into manageable parts to develop efficient web solutions. |
| PO 3 | Design/Development of solutions | Yes | The curriculum includes designing and developing responsive and user-friendly web applications, ensuring students can create practical and innovative solutions. |
| PO 4 | Conduct investigations of complex problems | Yes | The course encourages students to investigate and solve real-world web development issues, including debugging and optimizing web applications. |
| PO 5 | Modern Tool usage | Yes | Students use modern web development tools and technologies such as version control systems (Git), development environments (VS Code), and deployment platforms (Heroku, AWS). |

| | | | |
|---|---|---|---|
| PO 6 | The Engineer and society | Yes | The course addresses the societal impact of web technologies, teaching students to create accessible and inclusive web applications that serve diverse user groups |
| PO 7 | Environment and Sustainability | Yes | Web development includes optimizing websites for energy efficiency and minimal resource usage, aligning with environmental sustainability principles. |
| PO 8 | Ethics | No | Ethical considerations specific to web development, such as data privacy and security, are briefly mentioned but not deeply explored in the course. |
| PO 9 | Individual and team work | Yes | The course includes both individual projects and team-based assignments, fostering collaborative skills and independent problem-solving abilities. |
| PO 10 | Communication | No | While students learn to communicate technical concepts through code and documentation, there is limited emphasis on broader communication skills such as presentations and reports. |
| PO 11 | Project management and finance | Yes | The course covers basic project management principles, including planning, scheduling, and resource allocation, essential for managing web development projects. |

| | | | The rapidly evolving nature of web development technologies instills a habit of continuous learning and adaptation in students. |
|---|---|---|---|
| **PO 12** | **Life-long learning** | Yes | The rapidly evolving nature of web development technologies instills a habit of continuous learning and adaptation in students. |

| PSO.No | Graduate Attribute | Attained | Justification |
|---|---|---|---|
| **PSO 1** | To analyze, design and develop solutions by applying the concepts of Robotics for societal and industrial needs. | **NO** | The course includes projects that simulate real-world scenarios requiring the design and development of web-based interfaces and applications, catering to societal and industrial needs. |
| **PSO 2** | To create innovative ideas and solutions for real time problems i n Manufacturing sector by adapting the automation tools and technologies. | **NO** | The course encourages innovation by teaching students to use automation tools and web technologies to solve real-time problems, particularly in sectors such as manufacturing where digital transformation is key. |