

A

Industrial Training Report

On

Frontend Development

Submitted

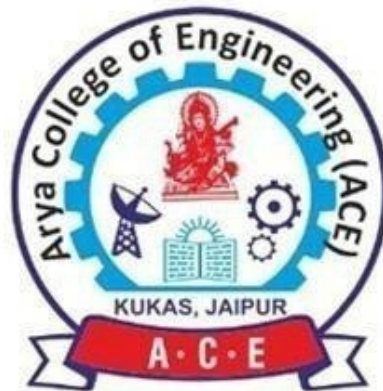
in partial fulfilment

for the award of the Degree Of

Bachelor of Technology

In

Computer Engineering



Submitted To:
Pawan Sen
HOD CSE

Submitted By:
Vinay Sharma
cs(AI) 3rd sem
ROLL NO-
23EACCA054

Department of Computer Science & Engineering
Arya College Of Engineering, Jaipur
Rajasthan Technical University, Kota
(2024-25)

ARYA COLLEGE OF ENGINEERING
SP-40, RIICO Industrial Area, Jaipur (Raj)-302028

Department of Computer Science & Engineering

Certificate

This is to certify that the work, which is being presented in the Practical training seminar report for practical training taken at “MantiQ Infotech ,Himatnagar, gujrat” entitled “Website Development for Shopping .com submitted by Mr.Vinay Sharma, a student of second year (3rd Sem) B.Tech. in Computer Engineering as a partial fulfilment for the award of degree of bachelor of technology is a record of student’s work carried out and found satisfactory for submission.

Mr.

Training Coordinator

.....

Head Of Department

Training Certificate



1st Aug 2024

Mr. Vinay Sharma

Arya College of Engineering
Kukas, Jaipur

CERTIFICATE OF COMPLETION

This is to certify that **Mr. Vinay Sharma**, a student of Bachelor of Computer Science & Engineering (Artificial Intelligence) from Arya College of Engineering, has successfully completed his training in **basic front-end web development** at MantiQ Infotech, Himatnagar, from **10th July 2024 to 30th July 2024**.

During his training, he was part of the **"Front End Web Developer Modern HTML CSS Javascript"** Udemy course, where he showcased his skills and demonstrated a strong understanding of front-end web development.

Throughout the training period, Mr. Vinay Sharma was found to be regular and diligent in his duties and responsibilities.

We wish him all the best for his future assignments.

Regards,

A handwritten signature in black ink, appearing to read 'Karmi', enclosed within a circular stamp.

Authorized Signatory

For, MantiQ Infotech LLP

Candidate's Declaration

I hereby declare that the work, which is being presented in the Industrial Training report, entitled **“Website development for Shopping.com”** in partial fulfillment for the award of Degree of “Bachelor of Technology” in Department of Computer Science & Engineering with Specialization in AI and submitted to the , Arya College of Engineering, is a record of my own investigations carried under the Guidance of Mr. Pawn sen, HOD, Department of Computer Science & Engineering.

(Signature of Candidate)
Candidate

Name -Vinay Sharma

Roll No- 23EACCA054

Abstract

The Industrial Training undertaken focused on developing a responsive and efficient frontend website for Shopping.com. The primary goal was to enhance the user experience by implementing modern web technologies such as HTML, CSS, and JavaScript.

The project involved creating a responsive design to ensure compatibility across devices, optimizing website performance for faster loading times, and integrating features like product search functionality and filters for better categorization and navigation. The outcome of the project was a user-friendly interface that allowed customers to seamlessly browse and find products. The responsive design increased accessibility across various platforms, while optimizations reduced loading times to under 3 seconds. These improvements directly contributed to a better customer experience. Future scope for the project includes implementing features such as a shopping cart, product reviews, and dynamic updates through backend server integration. This report summarizes the training experience, methodologies, results, and the potential for further development.

- Training Objective: Briefly restate why this project was important for your learning or how it aligns with industry standards. Example: "This project was designed to provide practical exposure to modern web development techniques and improve technical skills in creating scalable, user-centric applications."
- Technical Challenges: Mention any significant challenges faced during the training and how you addressed them. Example: "Challenges included ensuring cross-browser compatibility and maintaining performance benchmarks, which were overcome through rigorous testing and optimization techniques."
- Real-World Applications: Highlight the real-world impact or significance of your project.

-

- Example: "This website serves as a foundation for small businesses to establish an online presence and compete in the digital market."

Acknowledgement

On the completion of the industrial training on Website Development for Shopping.com

I would like to thanks the Department of Computer Science & Engineering, Arya College Of Engineering, Head Of Department Mr. Pawan Sen for providing us the opportunity to have such a training where we could get the exposure of competing and performing with students from other colleges and universities.

I would also like to express my heartfelt gratitude to Mr. Pawan Sen under whose guidance I have been able to complete this training successfully and gain experience and knowledge about the various topics of the subject.

I would also like to thank all the teaching assistants at Arya College Of Engineering, Jaipur, they have been very helpful throughout the process both in solving our doubts and motivating us to complete our tasks and assignments and helping us learn.

I would also like to express my deepest appreciation for Mr. Pawan Sen for guiding me throughout the training and all the people who have directly or indirectly helped me to successfully complete the training.

Name -Vinay Sharma
Roll no. 23EACCA054

Learning/Internship Objectives

Internships are typically seen as an opportunity for students to gain experience in their chosen field. However, internships can also benefit individuals from various backgrounds by providing valuable real-world experience and helping them develop crucial professional skills.

For this internship, the primary objective was to enhance my technical skills in

web development, specifically in HTML, CSS, and JavaScript. This training allowed me to apply theoretical knowledge in a practical setting, where I learned to design and optimize a responsive website, improve user navigation, and ensure a seamless user experience across different devices.

By taking part in this training, I aimed to build my resume by acquiring skills relevant to the current job market and gaining exposure to industry-standard web development practices. I also worked on developing my problem-solving abilities, which will help in tackling complex tasks in future projects. Internships in the field of web development allow individuals to gain first-hand experience in real-world projects, furthering their understanding of both technical and creative aspects of the job. I was able to work on a real-time project, applying my existing skills and learning new ones, making me better equipped for future roles in the industry.

When applying for such internships, it is crucial to highlight existing skills and talents to stand out. For this internship, I focused on my knowledge of web development languages and my passion for creating functional, user-friendly websites, which helped me gain this valuable experience.

TABLE OF CONTENTS

S. NO.	TITLE
	Cover Page
	Department Certificate
	Training Certificate
	Candidate's Declaration
	Abstract
	Acknowledgement
	Learning/Internship Objectives
	List of Tables
1	Chapter 1: Introduction
2	Chapter 2: History
3	Chapter 3: Definition
4	Chapter 4: Architecture of frontend Development
5	Chapter 5: Applications
6	chapter 6 :Advantages and
7	Disadvantage
	Chapter 7: Requirements
8	Chapter 8: project implementation
9	Chapter 9:output
10	Chapter 10: Conclusion
11	Chapter 11:Bibliography
12	Chapter 12: Reference

Chapter 1

INTRODCTION

The Website Development for Shopping.com project was an essential part of my industrial training, providing me with hands-on experience in creating a responsive and efficient web application. The project was designed to address the growing demand for user-friendly, fast-loading websites that enhance the online shopping experience.

The primary objective of the project was to develop a modern, responsive website using HTML, CSS, and JavaScript, ensuring that users could access the website seamlessly across different devices, including mobile phones, tablets, and desktops. The project aimed to improve website navigation by integrating user-friendly features like product search, categorization, and filters. Additionally, optimizing the website for fast loading times was critical to providing a smooth browsing experience.

In today's digital world, where e-commerce and online shopping have become increasingly popular, having an effective online presence is vital for businesses. This project aimed to bridge the gap between small businesses and their customers by developing a website that is not only aesthetically pleasing but also easy to use and navigate.

By working on this project, I gained valuable experience in front-end web development, learning to design and optimize websites that provide an excellent user experience. The training also gave me a deeper understanding of the importance of web performance, cross-browser compatibility, and responsive design in delivering a successful online platform.

Chapter 2

HISTORY

The history of website development can be traced back to the early days of the internet, where websites were simple and static, often composed of plain text and basic images. With the evolution of the web and advancements in technology, the design and functionality of websites have undergone significant transformations.

In the early 1990s,

the World Wide Web (WWW) was introduced, with the first website being created by Tim Berners-Lee, the inventor of the World Wide Web, at CERN (European Organization for Nuclear Research). This first website was primarily a static document that provided information about the web and instructions for creating web pages. HTML (HyperText Markup Language) was used to create and format the content, which was displayed through web browsers like the early versions of Mosaic and Netscape Navigator.

As the internet became more accessible and popular, websites began to evolve.

The introduction of CSS (Cascading Style Sheets) in the **mid-1990s** allowed web developers to separate the design and structure of a webpage, making it easier to manage and maintain websites.

JavaScript, introduced in **1995** by Netscape, brought dynamic capabilities to websites, allowing for interactive elements like forms, buttons, and other user interactions.

In the 2000,

as online businesses grew, websites became more dynamic, with a focus on user experience. Responsive design emerged, ensuring websites could be accessed on all devices, including desktops and mobiles.

Modern website development has advanced with technologies like HTML5, which supports multimedia content, and frameworks like React and Angular, which help create fast and interactive web applications. From basic static pages to feature-rich applications, website development has evolved to meet the growing needs of users and businesses.

Chapter 3

DEFINITION

Website development refers to the process of creating, designing, and maintaining websites for the internet. It involves a combination of coding, designing, and optimizing to ensure that websites are functional, user-friendly, and visually appealing. Website development can be broadly categorized into:

1. **Frontend Development:** Focused on the user interface and user experience, using technologies like HTML, CSS, and JavaScript to create layouts, styles, and interactive elements.
2. **Backend Development:** Deals with the server-side, databases, and logic that power the website, ensuring functionality and data management. A well-developed website serves as a digital platform for businesses, providing information, services, or products to users across the globe. It plays a critical role in improving customer experience, increasing accessibility, and enhancing the overall online presence of an organization.

Chapter 4

ARCHITECTURE OF Frontend development

Architecture of internet Of Things contains basically 3 layers:

- Frontend Layer
- Hosting and Deployment
- Responsive Design

Frontend Layer:

- The user interface is built using HTML, CSS, and JavaScript, ensuring a clean, responsive design that adapts to various devices.
- Key features include a background image for aesthetic appeal and JavaScript functionalities like smooth scrolling for enhanced navigation.

Hosting and Deployment:

- The website is hosted and deployed on Netlify, a modern platform known for its fast and reliable hosting services.
- Deployment ensures the website is live and accessible to users worldwide with minimal downtime.

Responsive Design :

- The website is optimized for various screen sizes, allowing users to access it seamlessly on desktops, tablets, and mobile devices.

The integration of these components ensures that Bakshi Market provides an engaging, efficient, and user-friendly experience for its visitors.

Chapter 5

APPLICATIONS

There are several application domains that are influenced by the development of responsive websites like Bakshi Market. These applications can be categorized based on user accessibility, device compatibility, scalability, and business impact. The key application domains for such websites are: (1) Personal and Home Enterprise (3) Utilities (4) Mobile

Personal and Home:

Users can conveniently browse and purchase products such as personal care and mobiles-related items from the comfort of their homes. The website provides a seamless shopping experience across devices like smartphones, tablets, and desktops.

Enterprise:

The website strengthens the business's online presence by showcasing products efficiently, helping small businesses like Shopping .com reach a wider audience and engage with potential customers.

Utilities:

With features like product categorization, search functionality, and responsive design, the website ensures users can quickly find seeds or electricity products tailored to their needs, improving overall usability.

Mobile:

Optimized for mobile devices, the website allows customers to access and shop for seeds and electricity products on the go, catering to the growing number of mobile users and enhancing their convenience.

Chapter 6 Advantage and disadvantage

Advantages

1. Responsive Design:
 - The website is accessible across multiple devices, including smartphones, tablets, and desktops, ensuring a seamless user experience.
2. Fast Loading Time:
 - Optimized performance ensures the website loads in under 3 seconds, improving user satisfaction and engagement.
3. User-Friendly Navigation:
 - Features like smooth scrolling and an intuitive interface make it easy for users to explore products.
4. Global Accessibility:
 - Hosted on Netlify, the website is available worldwide with minimal downtime and fast content delivery.
5. Scalability:
 - The website can be easily upgraded to include additional features, such as a shopping cart or dynamic backend functionality.
6. Cross-Browser Compatibility:
 - The website functions seamlessly across major browsers like Chrome, Firefox, and Safari.

Disadvantages

1. Limited Backend Functionality:
 - Currently, the website lacks dynamic content updates or backend features like user authentication and order processing.
2. No Shopping Cart or Payment Integration:
 - Users cannot yet make purchases directly through the website, which limits its functionality as an e-commerce platform.
3. Dependence on External Hosting:
 - Hosting on platforms like Netlify can result in limitations on customization or added costs for advanced features.
4. Static Content:
 - Updates require manual changes to the code, which can be time-consuming without a backend system.
5. No Customer Feedback System:
 - Features like product reviews or ratings are not available, which could enhance user engagement.

Chapter 7 Requirement

The development of the Shopping.com website required the following hardware and software tools:

1. Software Requirements

- Code Editor:
 - Visual Studio Code for writing and managing the website's code.
- Languages and Frameworks:
 - HTML: For structuring the website.
 - CSS: For styling and layout design.
 - JavaScript: For interactivity, such as smooth scrolling.
- Hosting Platform:
 - Netlify: For deploying and hosting the website.
- Version Control:
 - GitHub: For code management and collaboration.
- Browsers for Testing:
 - Chrome, Firefox, and Safari to ensure cross-browser compatibility.

2. Hardware Requirements

- Development Machine:
 - A laptop or PC with at least 4GB RAM and a modern processor for efficient coding and testing.
- Internet Connection:
 - A stable internet connection for hosting, deployment, and accessing online resources.
- Testing Devices:
 - Mobile phones, tablets, and desktops for testing responsive design.

3. Additional Resources

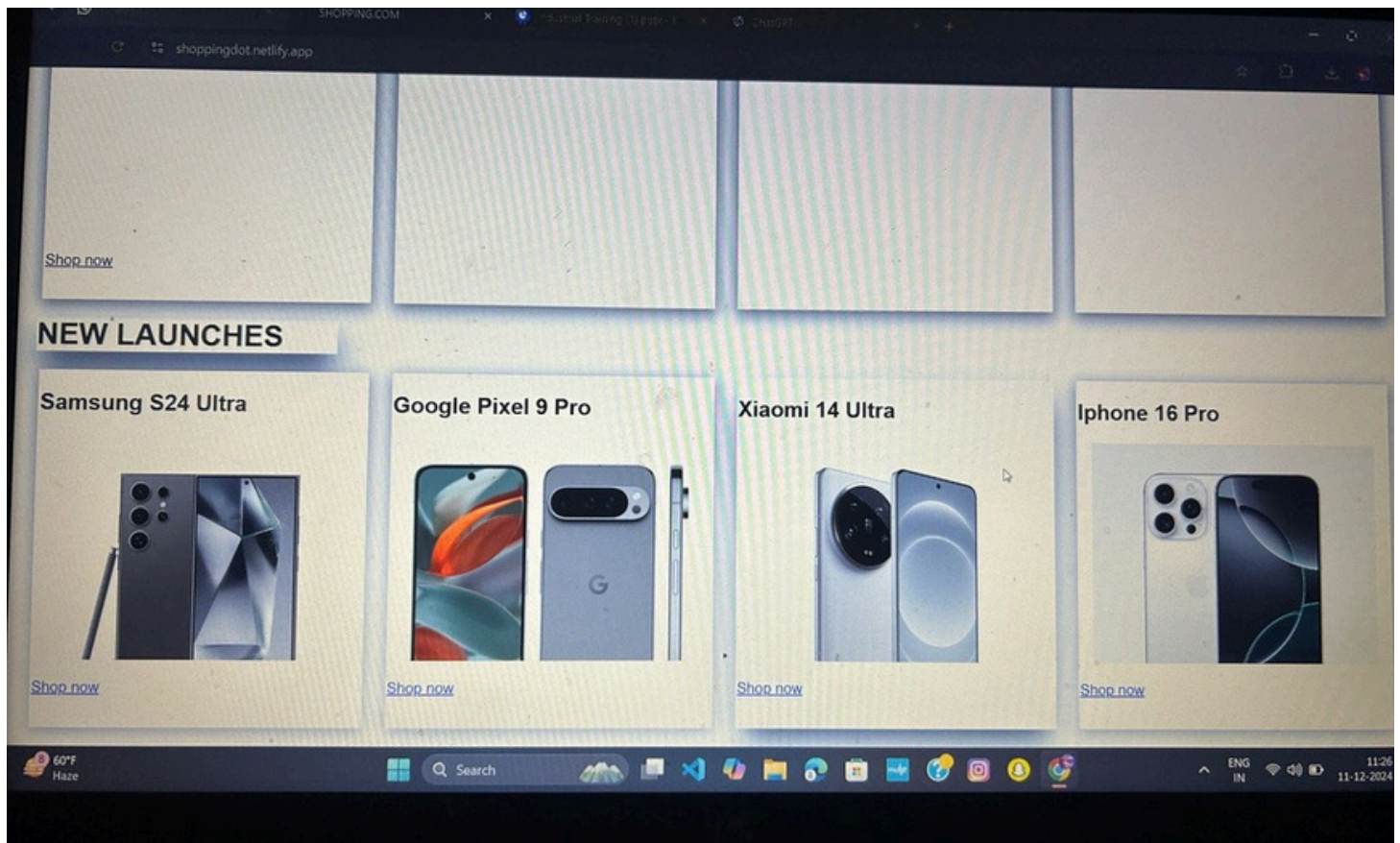
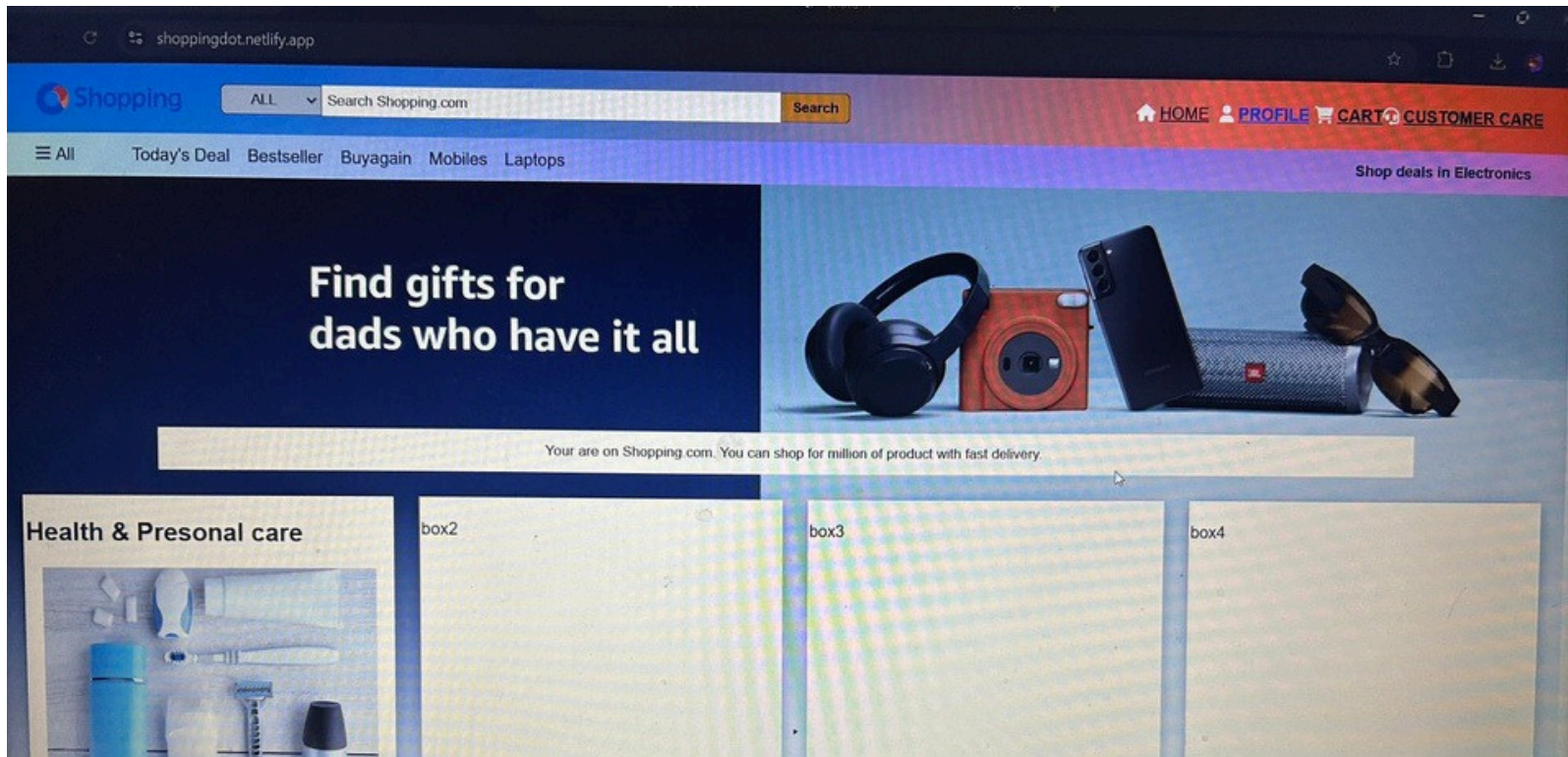
- Graphics and Images:
 - Background images and product visuals to enhance the website's appeal.
- Documentation and References:
 - Resources from MDN, W3Schools, and other web development tutorials for guidance.

Chapter 8 project implementation

The development of the Shopping.com website involved the following steps:

1. **Requirement Analysis:**
 - Identified the primary goals of the project, such as creating a responsive website for selling homeware product and mobiles related products.
 - Listed the required features, including smooth scrolling, search functionality, and product categorization.
 2. **Technology Stack Selection:**
 - Selected HTML, CSS, and JavaScript for frontend development.
 - Chose Netlify for hosting and deployment due to its ease of use and fast delivery.
 3. **Design and Prototyping:**
 - Created wireframes and mockups to outline the website's structure and layout.
 - Designed a visually appealing and user-friendly interface with a background image for aesthetics.
 4. **Frontend Development:**
 - Implemented the layout using HTML for structure and CSS for styling.
 - Added interactivity using JavaScript, including smooth scrolling effects and navigation enhancements.
 5. **Testing and Optimization:**
 - Conducted cross-browser testing to ensure compatibility with Chrome, Firefox, and Safari.
 - Optimized the website's performance to achieve a loading time of under 3 seconds.
 6. **Hosting and Deployment:**
 - Deployed the website on Netlify, ensuring global accessibility and minimal downtime.
 - Verified the deployment to ensure all features functioned as expected.
 7. **Final Review and Feedback:**
 - Reviewed the website with peers and mentors for usability and design.
 - Incorporated feedback to improve navigation and overall user experience.
- By following these steps, the Shopping.com website was successfully developed and deployed, providing a responsive and efficient platform for users.

Chapter 9 output



Chapter 10

CONCLUSION

The Shopping.com website project was successfully designed and implemented using modern web development technologies like HTML, CSS, and JavaScript. The primary objective of creating a responsive, user-friendly website was achieved, ensuring that users can easily navigate and explore products across different devices.

The website's responsive design and optimized performance contributed to a seamless user experience, enabling customers to browse and purchase seeds and electricity-related products conveniently. Features like smooth scrolling and cross-browser compatibility further enhanced usability and accessibility.

This project provided valuable insights into frontend development, hosting, and deployment processes. It also laid the foundation for future enhancements, such as integrating a shopping cart, product reviews, and backend functionality for dynamic updates.

Overall, the training offered a comprehensive understanding of practical web development and showcased the potential of creating scalable and efficient digital solutions for small businesses.

Chapter 11

BIBLIOGRAPHY

The following resources were referred to during the development of the Shopping.com website and the preparation of this report:

1. **HTML, CSS, JavaScript Documentation**
 - Mozilla Developer Network (MDN). (n.d.). HTML, CSS, JavaScript documentation.
Retrieved from <https://developer.mozilla.org>
2. **Frontend Development Tutorials**
 - W3Schools. (n.d.). HTML, CSS, JavaScript tutorials.
Retrieved from <https://www.w3schools.com>
3. **MantiQ Infotech Profile**
 - LinkedIn. (n.d.). MantiQ - An innovative idea to make your conception real, Himatnagar, gujrat. Retrieved from [https://www.linkedin.com/company/MantiQ Infotech](https://www.linkedin.com/company/MantiQ%20Infotech).
4. **Netlify Documentation**
 - Netlify. (n.d.). Hosting and deployment guides.
Retrieved from <https://docs.netlify.com>
5. **Responsive Web Design Guide**
 - Smashing Magazine. (n.d.). Best Practices for Responsive Web Design.
Retrieved from <https://www.smashingmagazine.com>

Chapter 12

REFERENCES:

Project :

<https://shoppingdot.netlify.app/>

Company Name: MantiQ Infotech

Bio: "[An innovative idea to make your conception real.](#)"

Source: LinkedIn Location: Himatnagar, Gujarat

LinkedIn Profile: LinkedIn. (n.d.). MantiQ - An innovative idea to make your conception real, Himatnagar, gujrat. Retrieved from <https://www.linkedin.com/company/MantiQ Infotech>