

**MARYAM ABACHA AMERICAN UNIVERSITY NIGERIA**

**SCHOOL OF COMPUTING**

STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME [SIWES]

HELD AT

First Quartile Professionals CBT Center and Computing Institute

NO. 3 Naibawa yar’akwa B yankatako Street , along Zaria road, Kano State , Nigeria

# Title Page

BY

Thaamir Muhammad Vogam

MAAUN/21/CSC/0069

A SIWES REPORT SUBMITED TO THE DEPARTMENT OF COMPUTER SCIENCE SCHOOL OF COMPUTING, MARYAM ABACHA AMERICAN UNIVERSITY OF NIGERIA, KANO IN PARTIAL FUFILMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE IN COMPUTER SCIENCE

SUPERVISED BY

Ibrahim Muhammad

09122358066

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# **DECLARATION**

I, Thaamir Muhammad Vogam, hereby declare that this technical SIWES report is the result of my own efforts. I affirm that all sources have been appropriately and duly acknowledged. I also confirm that this report has not been submitted to this School or any other institution previously.

# **DEDICATION**

This report is dedicated to my family and friends, whose support and encouragement have been invaluable throughout my studies. I also dedicate this work to my mentors and supervisors, whose guidance and expertise have greatly contributed to my learning experience.

# **CERTIFICATION**

This is to certify that **Thaamir Muhammad Vogam** with matriculation number MAAUN/21/CSC/0069 undergoes his industrial training SIWES at First Quartile Professionals CBT Center and Computing Institute In partial fulfillment of the award of degree in Computer Science at Maryam Abacha American University of Nigeria, Kano, and is undersigned by the following;

................................... .................................

NAME DATE

Supervisor

..................................... ....................................

NAME DATE

Head of Department

.................................... ....................................

NAME DATE

Departmental SIWES Coordinator

# **ACKNOWLEDGEMENT**

I am deeply grateful to everyone who has supported me throughout my SIWES program. I would like to extend my heartfelt thanks to my supervisors and mentors, whose guidance and encouragement have been invaluable during this experience. My appreciation also goes to my family and friends for their unwavering support and patience.

I am particularly thankful to the management and staff of First Quartile Professional LTD for giving me the opportunity to acquire practical experience and for their consistent assistance and cooperation during my tenure.

Lastly, I express my sincere thanks to my lecturers and the SIWES coordinators at Maryam Abacha American University of Nigeria, Kano, for their invaluable advice and support, which contributed significantly to the success of this program.

# **ABSTRACT**

Students Experience Work Scheme (SIWES) is a compulsory skills and acquisition training program, designed to give university undergraduates in Nigeria appropriate practical knowledge, and exposure to industrial work place environment in their respective disciples during their course of study and to understand the industrial application of the theoretical knowledge they acquire within the six months of their industrial training. The students are also expected to develop occupational competencies that could facilitate their fitting into the world of work after graduation. I was fortunate to serve my four months SIWES program at**First Quartile Professional LTD***,* a well recognize organization that offers both business center, cyber café and computer school services. This report is a comprehensive summary of all that I learnt and was involved in throughout my SIWES program**First Quartile Professional LTD***.*

Chapter one discusses the students SIWES experiences including student’s strength and weakness. Chapter two gives a brief introduction and operations of**First Quartile Professional LTD**with an organogram of the company. Chapter three and Chapter four talks about my experiences, conclusion and recommendation.

**CHAPTER ONE**

# **INTRODUCTION**

# **1.1 INTRODUCTION**

The inception of the Student Industrial Work Experience Scheme (SIWES) dates back to 1974, marking its integration into the academic standards of Nigerian universities' degree programs. Spearheaded by the Federal Government of Nigeria, the SIWES policy for industrial training emerged as an indispensable component within the academic landscape. The orchestration of this program is overseen by the Industrial Training Fund (ITF), operating under the aegis of the Ministry of Education. The overarching purpose of SIWES is to empower students with indispensable practical education and experience within their chosen fields of study, thereby fostering a bridge to other related professions.

# **1.2 BRIEF HISTORY OF SIWES**

Funded by the Federal Government of Nigeria, this program is meticulously orchestrated by the Industrial Training Fund (ITF) and the National Universities Commission (NUC), involving a triad collaboration amongst students, universities, and industries. The foundation of SIWES is rooted in the aspiration to complement classroom theory with hands-on engagement. The crux of this endeavour is to familiarize students with diverse machinery and equipment, cultivate professional work methodologies, and instill an appreciation for the preservation of work environments within industries and organizations. SIWES stands as a conduit to imbue students with practical knowledge germane to their respective disciplines.

# **1.3 AIMS OF SIWES**

The fundamental aim of SIWES revolves around equipping students in Nigerian tertiary institutions with practical insights into their chosen fields of study. This is achieved through exposure to machinery, equipment, work methodologies, and the safeguarding of workspaces and personnel within industries and other organizational settings. The intrinsic objectives of this effort are multifaceted:

1. **Preparation for Industry**: SIWES aspires to prepare students for the professional realm they will encounter post-graduation.
2. **Exploration and Confirmation**: It offers students the chance to explore their interest in a particular career prior to committing permanently.
3. **Smooth Transition**: Facilitating the transition from academia to the professional world, it nurtures connections for future job placements and grants students an opportunity to assess potential workplaces.
4. **Enhanced Interpersonal Skills**: By interacting with peers and supervisors in diverse conditions, the program hones effective interpersonal skills within organizational dynamics.
5. **Maturity and Insight:** SIWES fosters increased maturity and comprehension of workplace intricacies.
6. **Skill Acquisition:** It offers higher education students a platform to acquire industrial skills and hands-on experience during their studies.

# **1.4 OBJECTIVES OF SIWES**

Document No. 1 of 1973, which established SIWES under the aegis of the Industrial Training Fund, delineated its core objectives. These objectives encompass:

1. **Work Methods and Techniques**: SIWES exposes students to specialized work methods and techniques involving equipment and machinery not typically available within their academic institutions.
2. **Career Exploration**: It provides a platform for students to evaluate their affinity for a specific career before making definitive commitments.
3. **Transition Facilitation:** As a bridge from academia to the professional realm, SIWES aids in making this transition smoother and aids in identifying potential workplaces.
4. **Interpersonal Dynamics:** The program imparts adeptness in interacting harmoniously with colleagues and supervisors under varying organizational conditions.
5. **Maturity and Workplace Understanding:** Students gain maturity and a more profound comprehension of workplace dynamics.
6. **Industrial Skills Acquisition:** SIWES enables students to accumulate industrial skills and practical experience while pursuing higher education.

# **1.5 OBJECTIVE OF SIWES REPORT**

The objectives of a SIWES (Student Industrial Work Experience Scheme) report are to:

1. **Document Practical Experience**: Provide a detailed account of the student's work experience, including the tasks performed and skills acquired during the industrial training.
2. **Bridge Theory and Practice**: Demonstrate how academic knowledge gained in the classroom is applied in real-world industry settings.
3. **Reflect on Learning**: Encourage students to reflect on their experiences, challenges faced, and how they overcame them, contributing to personal and professional growth.
4. **Evaluate Competence**: Assess the student's proficiency in relevant technical skills and their ability to work in a professional environment.
5. **Provide Feedback**: Offer insights to academic institutions and industry partners on the effectiveness of the SIWES program and identify areas for improvement.
6. **Professional Development**: Help students develop professional report-writing skills and the ability to communicate technical information effectively.

# **1.6 SCOPE OF THE LOG BOOK**

This logbook is limited to all recorded activities and skills I learned throughout the industrial training period. This encompasses the following:

1. **Fundamentals of JavaScript:** this includes JavaScript variables, functions, control structures, loops, class, and inheritance.
2. **Software development:** this includes a use case diagram, activity diagram.
3. **Model Building:** this covers collecting and understanding the data reading and writing, visualizing, preprocessing, training the model and evaluating the model.
4. **Book reading culture:** this involves reading book session and giving feedback about what you’ve learnt during the session.

# **1.7 THE LOGBOOK**

A student logbook is a record-keeping tool used by students to document their activities, progress, and experiences over a specific period, often in the context of practical training, internships, projects, or coursework. It typically includes:

1. **Daily or Weekly Entries**: Notes on tasks completed, skills learned, and any challenges faced.
2. **Reflections**: Personal reflections on what has been learned and how it applies to their studies or future career.
3. **Supervisor Feedback**: Comments and evaluations from a mentor or supervisor overseeing the student's work.
4. **Logs of Hours Worked**: Especially in internships or practical training, to keep track of time spent on various tasks.

Logbooks help students stay organized, reflect on their learning, and provide a basis for evaluation by educators or supervisors.

# **CHAPTER TWO**

# **THE ORGANIZATION**

# **2.1 INTRODUCTION**

First Quartile Professional LTD is a pioneering technology company based in Kano, Nigeria, dedicated to fostering digital transformation and innovation across Africa. With a comprehensive portfolio that spans digital consultancy, training, and specialized tech solutions, First Quartile Professional LTD aims to empower communities and organizations through cutting-edge technology and education.

# **2.2 BRIEF HISTORY OF THE ORGANISATION**

# Incorporated January 2012 to engage in professional services in business analysis, accounting, finance, and management; First Quartile Professionals as grown rapidly to become a force to reckon with in training aspiring finance experts. We have, over the years, trained and supported over one hundred candidates in the journey achieving their dream of earning the highly prestigious CFA charter. We have also supported our clients in achieving the best possible value in their businesses. We have valued companies for acquisitions, advised start-ups on financing, trained staff of public and private organizations, and trained hundreds of students in finance, accounting, financial modelling, and project management. First Quartile Professionals adopts a proactive approach utilizing our international exposure to assess, design, develop and implement solutions that focus on specific issues facing our clients. We are based in the Kano State Nigeria.

# **2.3 MISSION AND VISION OF THE ORGANISATION**

**MISSION:**

First Quartile Professional LTD is committed to empowering communities through transformative technology and education. The company aims to bridge the digital divide by providing access to essential digital skills and innovative solutions.

**VISION:**

First Quartile Professional LTD envisions a digitally connected Africa where technology empowers individuals, fosters innovation, and creates opportunities for a brighter future. This vision underscores the company's dedication to driving digital inclusion and leveraging technology for social good.

# **2.4 ORGANOGRAM AND UNITS OF THE ORGANISATION**

First Quartile Professional LTD organizational structure is designed to support its diverse range of services. Key units and personnel include:

Executive Team:

### Babangida Alhaji Sabo Director

Dr. Okey Umeano CFA,   
FCCA, ACA, FRM Instructor

Board of Directors:

Hafsatu Hamza

Dr. Omano Edigheji

Bukola Akerele, CFA, CIPM, FRM, FCA

EXECUTIVE TEAM

Chief Operating Officer

Board of Directors

Chief Executive Officer

Consultancy Unit

Head of Training Uint

Social Impact Division

**DEPARTMENTS**

Consultancy Unit: Focuses on delivering digital transformation services.

Training Academy: Manages educational programs and skill development.

Social Impact Division: Oversees community development initiatives.

This structure enables First Quartile Professional LTD to efficiently manage its operations and deliver high-quality services across different sectors.

# **2.5 ACTIVITIES/SERVICES OF THE ORGANIZATION**

First Quartile Professional LTD offers a comprehensive suite of services aimed at meeting the diverse needs of its clients:

Consultancy Services:

Digital transformation consulting

IT infrastructure development

Data analysis and infographics

GIS and geo-mapping services

Application Development:

Mobile and web application development

Website design and development

Digital Branding and Public Relations:

Digital marketing strategies

Brand development and management

Sector-Specific Solutions:

EdTech: Educational technology solutions

DevTech: Technology for Software development

Creative Services:

Videography and photography

These services are designed to help businesses and organizations harness the power of digital technology to improve performance, reduce costs, and mitigate risks.

# **2.6 TECHNOLOGIES/PROCESSES USED BY THE ORGANISATION**

First Quartile Professional LTD leverages a variety of advanced technologies and processes to deliver its services effectively:

Learning Management System (LMS): A robust platform for managing and delivering educational content.

Virtual Classrooms: Utilizing tools like Zoom and Microsoft Teams for interactive online sessions.

Data Analysis Tools: Sophisticated software for analyzing data and creating informative visuals.

GIS and Geo-Mapping: Advanced geographic information systems for spatial data analysis.

These technologies ensure that First Quartile Professional LTD remains at the forefront of digital innovation, providing clients with state-of-the-art solutions.

# **2.7 PROFESSIONAL ETHICS OF THE ORGANIZATION**

First Quartile Professional LTD operates under a stringent code of ethics that guides all its activities and interactions:

Integrity: Commitment to honesty and transparency in all dealings.

Excellence: Striving for the highest standards in service delivery and education.

Inclusivity: Promoting equal access to digital resources and opportunities.

Collaboration: Building strong partnerships with clients, communities, and stakeholders.

Innovation: Continually seeking new and creative solutions to meet the evolving needs of the digital landscape.

Diversity and Inclusion: Valuing diverse perspectives and fostering an inclusive environment.

These ethical principles ensure that First Quartile Professional LTD maintains trust and credibility with its clients and the broader community.

# **2.8 First Quartile Professional LTD**

First Quartile Professional LTD is an integral part of First Quartile Professional LTD, dedicated to providing comprehensive training in digital skills and software development. The academy offers a range of courses aimed at equipping individuals with the necessary skills to thrive in the digital age.

**COURSES OFFERED:**

Software Engineering: Introducing students to the fundamentals of programming and software development.

UI/UX Design: Training in user interface and user experience design, focusing on creating intuitive and engaging digital products.

Data Analysis:

Web Development

# **CHAPTER THREE**

# **TRAINING ACTIVITIES AND RESPONSIBILITIES**

# **3.1 DESCRIPTION OF DUTIES**

1. **Mentoring:** I was assigned to instruct and mentor some student that applied to learn html css and JavaScript, I was able to put them through the basics of web development which using of Visual Studio code and Notepad
2. **Social Activities:** there was no social activities present as at that moment but I make sure to participate in any activity or work given by my industrial supervisor in the organization.

# **3.2 LEARNING OBJECTIVES/ RELEVANCE TO THE FIELD**

During your industrial training at First Quartile Professional LTD, you could highlight the following web development learning objectives and their relevance to the field:

Learning Objectives:

1. **Front-End Development:**
   1. Gained proficiency in HTML, CSS, and JavaScript to build responsive and interactive web pages.
   2. Learned to use front-end frameworks like Bootstrap or Tailwind CSS for faster UI development.
2. **Back-End Development:**
   1. Developed skills in server-side scripting using languages like PHP, Python, or Node.js.
   2. Worked with databases (e.g., MySQL, MongoDB) to manage and retrieve data for web applications.
3. **Version Control:**
   1. Utilized Git for version control, allowing efficient collaboration and tracking of project changes.
4. **Web Hosting and Deployment:**
   1. Gained experience in deploying websites on platforms like Heroku, Netlify, or AWS, ensuring web applications are accessible online..

# **3.3 CHALLENGES ENCOUNTERED**

 **Industry Readiness:** The skills acquired are directly applicable to real-world projects, making you industry-ready.

 **Collaboration:** Understanding version control and deployment processes enables seamless teamwork in web development projects.

 **Scalability:** Knowledge of back-end development and database management ensures that web applications can handle growth and scale effectively.

 **User Experience:** Proficiency in front-end development contributes to creating user-friendly and visually appealing web applications.

#  **Security Awareness:** Learning web security practices is crucial in protecting sensitive data and maintaining the trust of users.

# **3.4 SKILLS ACQUIRED AND KNOWLEDGE GAINED**

**Technical Skills:**

 **Web Development:**

* **HTML/CSS:** Mastery in building and styling web pages with semantic HTML and advanced CSS techniques.
* **JavaScript:** Proficiency in adding interactivity to web pages, handling events, and manipulating the DOM.

 **Responsive Design:**

* **Mobile-First Design:** Ability to design websites that function seamlessly across different screen sizes using media queries and flexible layouts.
* **Frameworks:** Experience with responsive design frameworks like Bootstrap or Tailwind CSS.

 **Back-End Development:**

* **Server-Side Programming:** Hands-on experience with back-end languages like PHP, Python, or Node.js to handle server logic.
* **Database Management:** Knowledge of setting up and managing databases using SQL and NoSQL databases like MySQL and MongoDB.

 **Version Control:**

* **Git:** Proficient in using Git for version control, including branching, merging, and collaboration on projects.

 **Web Hosting and Deployment:**

* **Deployment:** Skilled in deploying web applications on platforms such as Heroku, Netlify, or AWS.
* **Domain Management:** Understanding of domain name registration, DNS settings, and SSL certificates.

**Business Acumen:**

1. Industry-specific knowledge and domain expertise
2. Business problem-solving and decision-making
3. Data-driven storytelling and presentation
4. Stakeholder management and communication
5. Business process improvement and optimization

**Knowledge Gained:**

1. Understanding of data structures and databases
2. Familiarity with data analysis tools and technologies
3. Knowledge of statistical concepts and machine learning algorithms
4. Insight into industry trends and market analysis
5. Understanding of data-driven decision-making processes

# **CHAPTER FOUR**

# **4.0** **OVER VIEW OF MY SIWES EXPERINCE**

My six month SIWES attachment with First Quartile Professional LTD in Kano State, Nigeria has been one of the instructive, interesting and productive experience in my life, in respect to this program, I have been able to gain new insight and more comprehensive understanding about the real industrial working condition and practice, it has also improve my learning skills, operating skills and designing skills, also practical and functional skills on computer, with these skills I could say that I am becoming a data analyst.

# **4.1 EXPERIENCE**

This six-month industrial training attachment has been a transformative experience for me, as it exposed me to numerous aspects of web development that I would not have learned both theoretically and practically on my own. The following is a summary and breakdown of what I learned during my four months of IT (Industrial Training):

* **Introduction to Front-End Development:**
  + Gained a strong foundation in HTML, CSS, and JavaScript, enabling me to create responsive and interactive web pages.
  + Learned how to use front-end frameworks like Bootstrap to accelerate development and ensure design consistency.
* **Introduction to Back-End Development:**
  + Developed a solid understanding of server-side programming, working with languages like PHP and Node.js to build dynamic web applications.
  + Acquired experience in managing databases, specifically using MySQL, to store and retrieve data efficiently.
* **Introduction to Web Hosting and Deployment:**
  + Gained hands-on experience in deploying web applications on platforms such as Heroku and Netlify, ensuring that my projects are live and accessible online.
  + Learned about domain management, including setting up DNS records and configuring SSL certificates to secure web traffic.
* **Introduction to Version Control:**
  + Mastered the use of Git for version control, learning how to manage code changes, collaborate with team members, and maintain a history of project development.
* **Introduction to API Integration:**
  + Learned how to integrate third-party APIs into web applications, enabling additional functionalities like payment processing and social media integration.
* **Computer Applications Related to Web Development:**
  + Gained proficiency in using tools like Visual Studio Code, GitHub, and Chrome Developer Tools to enhance my development workflow and debug web applications.

4.1 INTRODUCTION TO HTML

**HTML (Hypertext Markup Language)** HTML is the standard markup language for creating web pages and web applications. Here's an introduction to HTML:

**What is HTML?** HTML provides the basic structure of a webpage by using a series of elements or tags that define different parts of the content.

**BASIC HTML CONCEPTS:**

1. **Elements:** Building blocks of an HTML document, defined by tags.
2. **Tags:** Keywords surrounded by angle brackets, like <p> for a paragraph.
3. **Attributes:** Provide additional information about an element, such as class or id.
4. **Headings:** Define the titles or subtitles, represented by <h1> to <h6> tags.
5. **Paragraphs:** Used to define blocks of text, using the <p> tag.

**HTML Syntax:**

* <html>: Defines the root of an HTML document.
* <head>: Contains meta-information about the document (e.g., title, links to stylesheets).
* <body>: Contains the content of the document, such as text, images, and links.
* <a>: Creates hyperlinks.
* <img>: Embeds images.

**HTML Benefits:**

* **Standardization:** HTML is the standard for web content.
* **Accessibility:** Ensures content is accessible across different browsers and devices.
* **Structure:** Provides a clear structure for web content, enhancing readability and maintainability.

**Common HTML Applications:**

* **Web page creation:** Structure content for websites.
* **Form handling:** Collect user input through forms.
* **Content organization:** Use elements like lists and tables to organize content.

4.2 INTRODUCTION TO CSS

**CSS (Cascading Style Sheets)** CSS is a language used to describe the presentation of a document written in HTML or XML. Here's an introduction to CSS:

**What is CSS?** CSS is used to control the visual appearance of web pages, including layout, colors, fonts, and spacing.

**BASIC CSS CONCEPTS:**

1. **Selectors:** Patterns used to select the elements you want to style.
2. **Properties:** Define the aspects of style, such as color, font-size, and margin.
3. **Values:** Specific settings for properties, like blue for color.
4. **Classes and IDs:** Allow the application of styles to specific elements.
5. **Box Model:** Describes the rectangular boxes generated for elements, including padding, borders, and margins.

**CSS Syntax:**

* color: Sets the color of text.
* font-family: Defines the font used for text.
* margin: Controls the space around elements.
* padding: Controls the space inside elements, between the content and the border.
* display: Defines how elements are displayed (e.g., block, inline, none).

**CSS Benefits:**

* **Design Flexibility:** Provides extensive control over the look and feel of a website.
* **Consistency:** Ensures a uniform design across multiple web pages.
* **Responsiveness:** Enables designs that adapt to different screen sizes and devices.

**Common CSS Applications:**

* **Web page styling:** Apply styles to HTML elements to create visually appealing websites.
* **Responsive design:** Ensure websites work well on various devices.
* **Animation:** Create transitions and animations to enhance user experience.

4.4 INTRODUCTION TO JAVASCRIPT

**JavaScript (JS)** JavaScript is a high-level, interpreted programming language that enables dynamic interaction on websites. Here's an introduction to JavaScript:

**What is JavaScript?** JavaScript is used to create interactive and dynamic web content, allowing websites to respond to user actions in real-time.

**BASIC JAVASCRIPT CONCEPTS:**

1. **Variables:** Store data values that can be used and manipulated in scripts.
2. **Functions:** Blocks of code that perform specific tasks and can be reused.
3. **Events:** Actions that trigger responses, such as clicks or key presses.
4. **DOM (Document Object Model):** Represents the structure of a web page, allowing JavaScript to manipulate elements.
5. **Loops and Conditionals:** Control the flow of code execution based on conditions.

**JavaScript Syntax:**

* var or let: Declares variables.
* function: Defines a function.
* if: Creates a conditional statement.
* for: Creates a loop that repeats a block of code.
* document.getElementById: Selects an HTML element by its ID for manipulation.

**JavaScript Benefits:**

* **Interactivity:** Enables dynamic and interactive user experiences.
* **Client-Side Execution:** Runs directly in the user's browser, reducing server load.
* **Versatility:** Can be used for a wide range of web development tasks, from form validation to complex animations.

**Common JavaScript Applications:**

* **Form validation:** Check user input before submission.
* **Dynamic content:** Load content without reloading the entire page.
* **User interactions:** Create interactive elements like sliders and modals.

**CODE BASED FOR SMALL ‘Simple Quote Generator ‘**

**HTML:**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Random Quotes Generator</title>

    <link rel="stylesheet" href="styles.css">

</head>

<body>

    <div class="quote-container">

        <h1>Random Quotes Generator</h1>

        <div id="quote-box">

            <p id="quote">"Click the button to generate a quote!"</p>

            <p id="author">- Author</p>

        </div>

        <button onclick="generateQuote()">New Quote</button>

    </div>

    <script src="script.js"></script>

</body>

</html>

**CSS**

body {

    font-family: 'Arial', sans-serif;

    background-color: #f4f4f4;

    margin: 0;

    padding: 0;

    display: flex;

    justify-content: center;

    align-items: center;

    height: 100vh;

}

.quote-container {

    text-align: center;

    background-color: #fff;

    padding: 20px;

    border-radius: 8px;

    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);

    max-width: 500px;

    width: 90%;

}

h1 {

    color: #333;

    margin-bottom: 20px;

}

#quote {

    font-size: 24px;

    color: #555;

    margin: 0;

}

#author {

    font-size: 18px;

    color: #777;

    margin-top: 10px;

    font-style: italic;

}

button {

    margin-top: 20px;

    padding: 10px 20px;

    font-size: 16px;

    background-color: orange;

    color: white;

    border: none;

    border-radius: 5px;

    cursor: pointer;

}

button:hover {

    background-color: orange;

}

**JAVASCRIPT**

const quotes = [

    {

        quote: "The greatest glory in living lies not in never falling, but in rising every time we fall.",

        author: "Nelson Mandela"

    },

    {

        quote: "The way to get started is to quit talking and begin doing.",

        author: "Walt Disney"

    },

    {

        quote: "Your time is limited, so don't waste it living someone else's life.",

        author: "Steve Jobs"

    },

    {

        quote: "If life were predictable it would cease to be life, and be without flavor.",

        author: "Eleanor Roosevelt"

    },

    {

        quote: "If you look at what you have in life, you'll always have more.",

        author: "Oprah Winfrey"

    }

];

function generateQuote() {

    const randomIndex = Math.floor(Math.random() \* quotes.length);

    const selectedQuote = quotes[randomIndex];

    document.getElementById("quote").innerText = `"${selectedQuote.quote}"`;

    document.getElementById("author").innerText = `- ${selectedQuote.author}`;

}

**OUTPUT**

# C:\Users\muham\Pictures\Screenshots\screen.png

**Alphabet website** ,

where a children can a alphabet with an example when they press any symbol of the alphabet it will show an image name of the alphabet

**INPUT**

**HTML**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

  <h1>Alphabets</h1>

  <div class="alphabet\_container">

    <button onclick="showAlphabet('A')">A</button>

    <button onclick="showAlphabet('B')">B</button>

    <button onclick="showAlphabet('C')">C</button>

    <button onclick="showAlphabet('D')">D</button>

    <button onclick="showAlphabet('E')">E</button>

    <button onclick="showAlphabet('F')">F</button>

    <button onclick="showAlphabet('G')">G</button>

    <button onclick="showAlphabet('H')">H</button>

    <button onclick="showAlphabet('I')">I</button>

    <button onclick="showAlphabet('J')">J</button>

    <button onclick="showAlphabet('K')">K</button>

    <button onclick="showAlphabet('L')">L</button>

    <button onclick="showAlphabet('M')">M</button>

    <button onclick="showAlphabet('N')">N</button>

    <button onclick="showAlphabet('O')">O</button>

    <button onclick="showAlphabet('P')">P</button>

    <button onclick="showAlphabet('Q')">Q</button>

    <button onclick="showAlphabet('R')">R</button>

    <button onclick="showAlphabet('S')">S</button>

    <button onclick="showAlphabet('T')">T</button>

    <button onclick="showAlphabet('U')">U</button>

    <button onclick="showAlphabet('V')">V</button>

    <button onclick="showAlphabet('W')">W</button>

    <button onclick="showAlphabet('X')">X</button>

    <button onclick="showAlphabet('Y')">Y</button>

    <button onclick="showAlphabet('Z')">Z</button>

  </div>

  <div id="image\_container">

    <img id="alphabet\_image" src="" alt="">

    <p id="alphabet\_name"></p>

  </div>

   <script src="script.js"></script>

</body>

</html>

CSS

body{

    font-family:Arial , sans-serif;

    height: 100vh;

    width: 0;

    justify-content: center;

    background-color: #f0f0f0;

    text-align: center;

    display: inline;

}

.alphabet\_container{

    text-align: center;

}

button{

    font-size: 24px;

    margin: 2px;

    padding: 10px 20px;

    background-color: #3498db;

    color: #fff;

    border-radius: 10px;

    cursor: pointer;

    vertical-align: top;

}

button:hover{

    opacity: 0.7;

}

#image\_container{

    margin-top: 20px;

    margin-left: 30px;

}

#alphabet\_image{

    max-width: 100%;

    width: 300px;

    border: 2px solid #3498db;

    border-radius: 5px;

}

#alphabet\_name{

    margin-top: 10px;

    font: bold;

}

JAVASCRIPT

function showAlphabet(alphabet) {

    const alphabetData = {

        A: {image: 'image/apple.jpeg', name:'Apple'},

        B: {image: 'image/ball.jpeg', name:'Ball'},

        C: {image: 'image/cat.jpeg', name:'Cat'},

        D: {image: 'image/dog.jpeg', name:'Dog'},

        E: {image: 'image/elephant.jpeg', name:'Elephant'},

        F: {image: 'image/frog.jpeg', name:'Frog'},

        G: {image: 'image/goat.jpeg', name:'Goat'},

        H: {image: 'image/horse.jpeg', name:'Horse'},

        I: {image: 'image/iron.jpeg', name:'Iron'},

        J: {image: 'image/jug.jpeg', name:'Jug'},

        K: {image: 'image/kettle.jpeg', name:'Kettle'},

        L: {image: 'image/loin.jpeg', name:'Loin'},

        M: {image: 'image/mango.jpeg', name:'Mango'},

        N: {image: 'image/nose.jpeg', name:'Nose'},

        O: {image: 'image/orange.jpeg', name:'Orange'},

        P: {image: 'image/pineapple.jpeg', name:'Pineapple'},

        Q: {image: 'image/queen.jpeg', name:'Queen'},

        R: {image: 'image/rabbit.jpeg', name:'Rabbit'},

        S: {image: 'image/snail.jpeg', name:'Snail'},

        T: {image: 'image/table.jpeg', name:'Table'},

        U: {image: 'image/umbrella.jpeg', name:'Umbrella'},

        V: {image: 'image/van.jpeg', name:'Van'},

        W: {image: 'image/window.jpeg', name:'Window'},

        X: {image: 'image/xylophone.jpeg', name:'Xylophone'},

        Y: {image: 'image/yam.jpeg', name:'Yam'},

        Z: {image: 'image/zebra.jpeg', name:'Zebra'},

    } ;

    const imageContainer = document.getElementById('image\_container');

    const alphabetImage = document.getElementById('alphabet\_image');

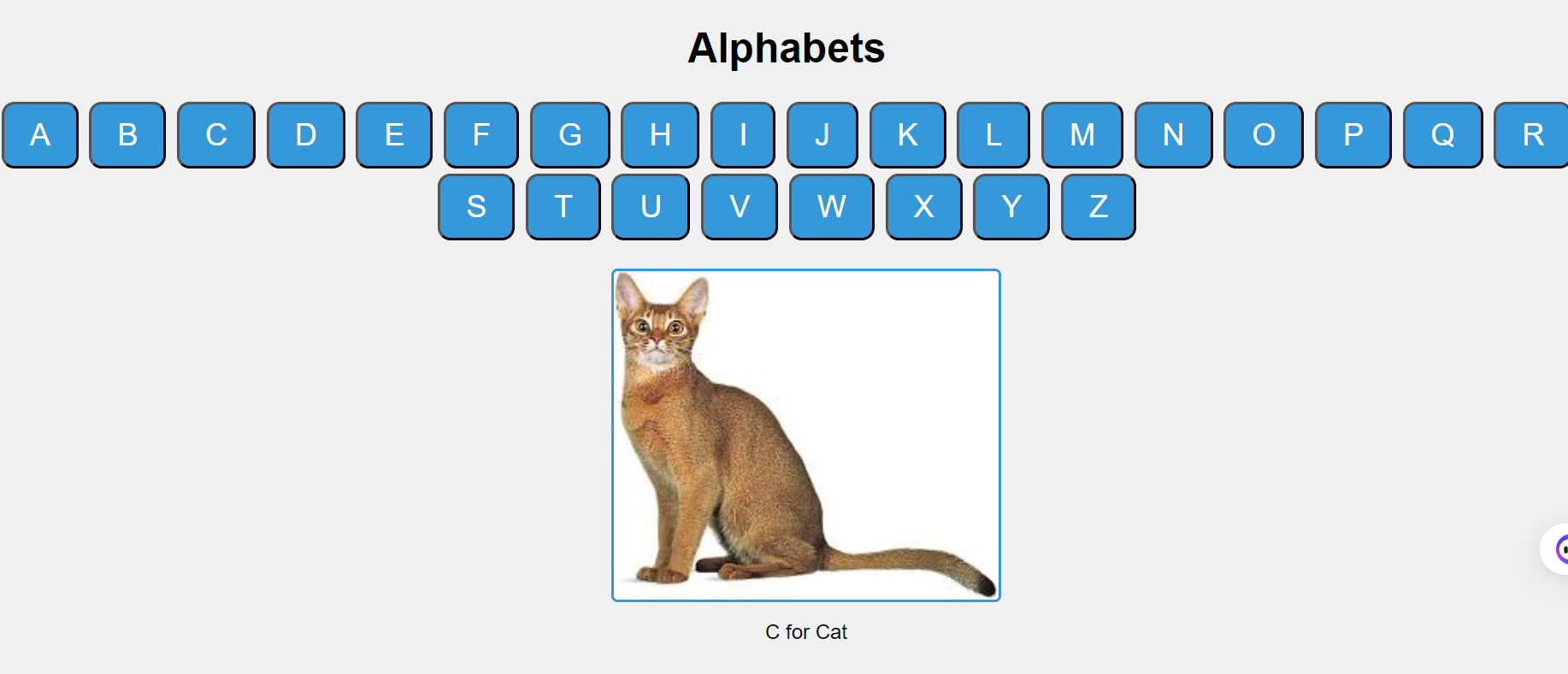
    const alphabetName = document.getElementById('alphabet\_name');

    alphabetImage.src = alphabetData[alphabet].image;

    alphabetName.textContent = `${alphabet} for ${alphabetData[alphabet].name}`;

}

**OUTPUT**



# **CHAPTER FIVE**

# **5.1** **SUMMARY AND CONCULSION**

**Summary and Conclusion**

During my six-month industrial training at First Quartile Professional LTD, I acquired a broad range of skills in web development. I gained hands-on experience in front-end technologies like HTML, CSS, and JavaScript, and back-end development with PHP and Node.js. I also learned how to manage and deploy web applications using tools such as Heroku and Netlify, and I became proficient in using Git for version control and collaboration. Additionally, I improved my understanding of integrating APIs and working with essential development tools.

**Conclusion:** This industrial training was an invaluable opportunity that significantly enhanced my technical skills and practical knowledge in web development. The experience has equipped me with the tools and confidence to pursue a career in the tech industry, laying a solid foundation for future growth and success in the field.

**Recommendation:**

Based on my experience during the SIWES program, I recommend that future students actively seek opportunities to engage with real-world projects, as these provide invaluable practical experience beyond classroom learning. I also suggest that the institution consider expanding partnerships with companies like First Quartile Professional LTD, as such collaborations greatly enhance the quality of the training by exposing students to industry standards and practices.