**SIWES 2023** 

2020/30206

OBADIMEJI OLUWAJIMI AYOMIDE

# REPORT OF STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME UNDERTAKEN AT HIIT PLC



# BY OBADIMEJI OLUWAJIMI AYOMIDE 2020/30206



# SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE

FACULTY OF COMMUNICATIONS INFORMATION AND TECHNOLOGY (FOCIT)

(MARCH 2023 - AUGUST 2023)

# **SUBMISSION LETTER**

Osun State University,
Faculty of Communication
Information and Technology,
Department of Computer Science,
Osogbo, Osun State,
December 2023.

The Director,

Industrial Training Co-ordinator unit,

Osun State University,

P.M.B 4494, Osogbo,

Osun State.

# **LETTER OF SUBMISSION**

I hereby submit the six months technical report of my Student Industrial Work Experience Scheme which was undertaken at **Hands-on Institute of Information Technology (HIIT PLC)** from the month of March to August, 2023.

Thank you.

Yours Faithfully,

**OBADIMEJI OLUWAJIMI** 

#### CERTIFICATION

This is to show that the technical report on student's industrial work experience scheme at **Hands-on Institute of Information Technology** (HIIT PLC), No 27 Obafemi Awolowo way Ikeja, Lagos State is prepared, compiled and submitted by Obadimeji Oluwajimi A to the department of Computer Science having been accepted on meeting part of the requirement for the award of Bachelor in Science.

Industrial Based Supervisor.
(Head of Department)

# **DEDICATION**

This report is dedicated to my parents MR & MRS OBADIMEJI for all their support throughout my education, and lecturers for impacting knowledge into me and lastly my friends.

# **ACKNOWLEDGEMENTS**

All praise, adoration and thanks goes to my creator, for the life in me, divine health, guidance and protection throughout my life and this program. I would like to acknowledge my parents and all staffs i met at my IT placement for making my experience an interesting and life changing one.

Finally, I will like to acknowledge everybody that contributed positively in one way or another during the course of my training.

# **ABSTRACT**

HiiT Plc is an Information Technology Institute that consists of different branches across the country. Hiit Plc is known for graduating over 50,000 students and the provision of good IT services/solutions to clients. HiiT Plc Was founded in 1994.

This Industrial Training was aimed at getting oneself acquitted with the work environment, getting to see the practical aspect of what we study in the classroom and also preparing us for the future ahead.

In the course of my training, I had various responsibilities like building multiple portfolio websites and landing pages, building of a food ordering web application, Online marketing campaign for Hiit Plc and many more.

My Industrial Training gave me a proper exposure especially in the area of providing solution as its solely based on IT. My Industrial Training has also changed my method of thinking whenever problem occurs, my training has given me ability to keep calm and think whenever am faced with a problem. Inside this report, contains full details of the organization where the student industrial training scheme took place, the working principles of equipment's and tools used in various departments of the organization and the knowledge gained.

# TABLE OF CONTENTS

# Table of Contents

CHAPTER 1	7
STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME	7
INTRODUCTION	7
1.1 OBJECTIVES	7
1.2 BODIES INVOLVED IN THE MANAGEMENT OF SIWES AND THEIR ROLES	7
CHAPTER 2	9
BRIEF INTRODUCTION ABOUT HiiT PLC	9
About HiiT Plc	9
Core Services	9
AWARDS	10
Works & Service	11
COMPANY'S ORGANIZATIONAL STRUCTURE	12
CHAPTER 3	13
EXPERIENCE OBTAINED DURING TRAINING	13
CHAPTER 4	14
Certification In Website Design and Development	14
4.1 INTRODUCTION	14
4.2 THE INTERNET	15
4.3 Html 5 (Creating a web page)	15
4.3.1 A Simple HTML Page Structure	15
4.3.2 Text Fonts	16
4.3.3 LISTS	16
4.3.4 Hyperlinks	17
4.3.5 IMAGES	17
4.3.6 What Is A Form?	18
HTML Code for a simple form	18
4.3.7 Fundamentals of web development	19
HTML	20
CSS(cascading style sheets)	22

4.3.8 Implementation Of BMI Calculator	24
4.3.9 Building a Portfolio Website for a Web Developer	26
4.3.10 Development of a Food Ordering Web Application for Restaurants	29
4.3.11 Digital Marketing Experience and Certification	33
CHAPTER 5	35
RECOMMENDATION/CONCLUSION:	35
CHALLENGES FACED BY STUDENT	35
CONTRIBUTIONS	35
CONCLUSION	35

#### CHAPTER 1 STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME

#### INTRODUCTION

In earlier years of science and technology education system in Nigeria, students were graduating from their respective institutions without acquiring any technical knowledge or work experience, which enables then to be exposed to the work force of the society. It was with this view that students undergo science and technology related courses in different institutions were required to partake in the SIWES program, designed to expose and prepare students of universities and other tertiary institution for the industrial work situation they are likely to face after graduation. The student industrial work experience scheme (SIWES) was established by the industrial trust fund (ITF) in 1973 with the aim of exposing students to machines and ways to safeguarding the work areas and workers in the industries, offices, laboratories, hospitals and other organization. The main reason behind the embackment of students in SIWES was to expose them to the industrial environment and enable them to develop occupational competencies so that they can readily contribute their quota to national economic and technological development after graduation. The major benefit to students who partake in the SIWES are the skills and competencies acquired. The relevant production skills remain a part of the recipients of industrial training as life-long assets which cannot be taken away from them. This is because the knowledge and skills acquired through training are internalized and become relevant when required to perform jobs.

#### 1.1 OBJECTIVES

The Industrial training funds policy of 1973 which established SIWES outlined the objectives of the scheme.

The objectives are to:

- I. Provide students with an opportunity to apply their theoretical knowledge in real work situation, thereby bridging the gap between university work and actual practice.
- II. Prepare students for work situations they are likely to face after graduation.
- III. Enables students to work methods and techniques in handling equipment and machinery that may not be available in the university.
- IV. Provides an avenue for students in higher institutions of learning to acquire industrial skills and experience during their course of study.
- V. Make transition from university to the world of work easier and thus enhance contest for later job placement.

#### 1.2 BODIES INVOLVED IN THE MANAGEMENT OF SIWES AND THEIR ROLES

The Federal Government, the industrial training fund (ITF), the supervising agency, National Universities Commission (NUC), Employers of labor and institution has specific roles to play in the management of SIWES.

- I. The federal government: \* To provide adequate funds to the ITF through the federal ministry of industrial for the scheme
- \* To make it mandatory for all ministries and companies to offer places to students in accordance with the provisions of decree No. 47 of 1971 as amended in 1990
- \* Formulate policies to guide the running of the scheme nationally
- II. The Industrial Trust Funds (ITF): \* Formulate policies and guidelines on SIWES for distribution to all the SIWES participating bodies and provide logistic materials needed to administer the scheme
- \* Organize orientation programs for students prior to attachment and provide information on companies for attachment and assist in industrial placement of students.
- \* Supervise students on industrial attachment and accept and process Master and Placement lists from institutions and supervising agencies
- \* Vet and process students logbooks and ITF Form 8
- III. The Supervisory Agency (NUC,NABTEB, etc.)
- \* To ensure the establishment and accreditation of SIWES unit/directorate in institutions under their jurisdiction
- \* To vet and approve Master & placement lists of students from participating institution and forward same to ITF
- \* Fund SIWES directorate in participating institutions and to direct for the appointment of full-time SIWES coordinator/Director.
- \* Review programs qualified from SIWES regularly and participate in the biennial SIWES Conferences and seminars in conjunction with ITF.

Therefore, the success of SIWES depends on the efficiency of the Ministry, ITF, Institution, Employers of labor and general public involved in articulation and management of the program. Thus the evaluation of SIWES in tertiary institution in meeting up with the needs for the establishment of program is necessary.

# CHAPTER 2

#### BRIEF INTRODUCTION ABOUT HiT PLC

#### **About HiiT Plc**

HiiT Plc is Nigeria's best Indigenous IT Training Establishment. We have excelled in IT Training/Education, Publishing, IT Consultancy and IT Solutions Development & Services. In our 18 years of successful existence, we have graduated over 60,000 students at our CPN-accredited IT Training Centres located in Lagos, Abuja, Ibadan, Kano and other cities nationwide.

#### **Core Services**

- IT Training/Education
- IT Solution Development & Services
- Publishing
- IT Outsourcing
- E-Learning Solution Development & Implementation

#### **Specialized Divisions**

- IT Training/Education Division
- IT Solutions Development & Services Division.
- Publishing Division.

#### HiiT Plc is a Professional Corporate Member of:

- Computer Professionals Registration Council of Nigeria-CPN
- Nigeria Computer Society (NCS)

#### **AWARDS**

HiiT Plc has won several awards in the past years because of her commitment in creation and development of products worthy of enhancing humanity.



**Award: Best Indigenous IT Training Brand of 2012** 

Award: Best Indigenous IT Training BRAND (Presented by Hon.Minister of Communication Technology to Kayode Shobajo, CEO, HiiT Plc @ Sheraton Hotel, Ikeja, 28th July 2012.

#### Award: Most Revolutionary Product of 2013 Award (ADPLUS 360)



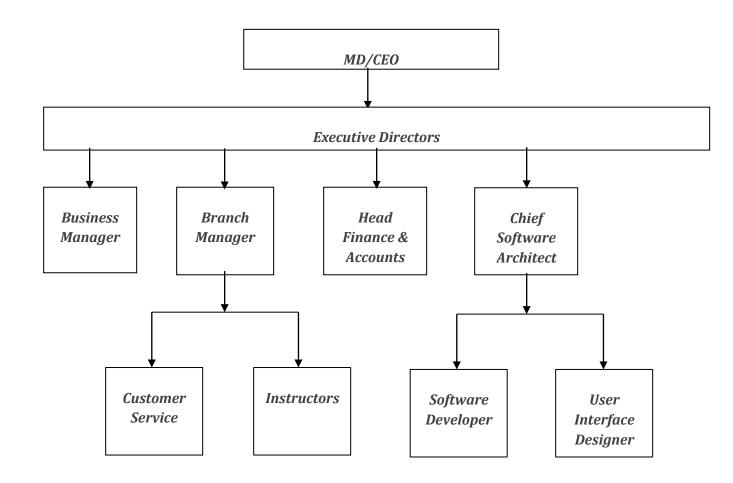
Presented by Engr. Ernest Ndukwe, Former EVC/CEO, NCC to Wale Shobajo, Chief Software Architect, HiiT Plc at Sheraton Hotel, Ikeja, 8th Dec 2013 @Africa Digital Awards

#### **Works & Service**

- Developed various Be-spoke Software Solutions, including Inventory Management, Personnel Management, ADPLUS- Print Media Advertising Management Solution, etc.
- Authors, Publishers and Copyright owners of Computer Studies for Primary Education (6 Titles, Pry 1-6); Computer Studies for Junior Secondary Education (3 Titles; JS1 – JS3) & Computer Studies for Senior Secondary Education; Approved by Federal Ministry of Education; and many states, including Lagos, Rivers, Kano, Ondo, etc.
- World Class IT Consulting Standards customized to suit local peculiarities.
- Graduated over 60,000 students in various IT courses in our four (4) IT Training Centres nationwide: Kano, Lagos, Abuja & Ibadan (Oyo State).
- A PLC since 2008, and we plan to list on the Nigerian Stock Exchange (NSE) as soon as optimal.



# **COMPANY'S ORGANIZATIONAL STRUCTURE**



# **CHAPTER 3**

# **EXPERIENCE OBTAINED DURING TRAINING**

- Certification in website design and development (Chapter 4).
- Software Engineering with python programming(Chapter 4).
- Digital Marketing Experience and Certification(Chapter 4).

# **CHAPTER 4**

## **Certification In Website Design and Development**

#### 4.1 INTRODUCTION

The Web is an Internet-based distributed information system. Anyone with a computer connected to the Internet can easily retrieve information by giving a Web address or by simply clicking a mouse button. The Web is a great way to disseminate information and making it available 24/7. Information can also be collected from Web users and customers through online forms. Maintainers and administrators can control and update Web content from anywhere on the Web. All these make the Web a powerful tool for mass communication, e-business and e-commerce. Compared with TV, radio, news papers, and magazines, putting the word out on the Web is relatively simple and inexpensive. But a website is much more than such one-way communication media. It can be a virtual office or store that is always open and supported by workers from anywhere. Web service companies offer free Web space and tools to generate simple personal or even business Web pages. But, well-designed and professionally implemented websites are much more involved. Even then, expertly produced websites are still much more cost-effective than other means of mass communication. For business and commerce, the cost of a website is negligible when compared to building and operating a brick-and-mortar office or store. Once in-place, a website is a store that never closes and that is very attractive. People take great pains in building an office or store to project the right image and to serve the needs of customers. Likewise, well-informed businesses will insist on professionally architected, designed and implemented websites. Nothing less will do. As a communication medium, the Web consists of these major components

- Networks—The local-area and wide-area networks connecting computers world-wide forming the Internet.
- Clients—Web browsers that enable end-users to access the Web.
- Servers—constantly running programs that serve up information to the Web.
- Documents—Web pages, mostly coded in HTML, that supply information on the Web.
- Protocols—The Hyper Text Transfer Protocol HTTP that Web clients and servers use to talk to one another and the TCP/IP (Transmission Control Protocol) on which HTTP depends. A basic understanding of these components and how they work together lays a good foundation for Web Design and Programming. Let's begin by taking a look at networking.

#### 4.2 THE INTERNET

Internet is a global network that connects IP networks. The linking of computer networks is called internetworking, hence the name Internet. Internet links all kinds of organizations around the world–universities, government offices, corporations, libraries, supercomputer centers, research labs, and even individual homes. The number of connections on the Internet is large and growing rapidly. The Internet evolved from the ARPANET2, a US Defense Advanced Research Projects 1 Including TCP, UDP, and others. 2The ARPANET was started in the late 1960s as an experimental facility for reliable military networking.

Brooks/Cole book/January 28, 2003 1.2. THE INTERNET 11

Agency (DARPA) sponsored network that developed the IP as well as the higher-level TCP (Transmission Control Protocol) and UDP (User Datagram Protocol) networking protocols. The architecture and protocol were designed to support a reliable and flexible network that can endure war-time attacks. The transition of ARPANET to Internet took place in the late 1980s as NSFNET, the US National Science Foundation's network of universities and supercomputing centers, helped create an explosive number of IP-based local and regional networks and connections. The NSFNET remains an important component of Internet. The Internet is so dominant now that it has virtually eliminated all historical rivals such as Bitnet and Decnet. The Internet Corporation for Assigned Names and Numbers (ICANN, www.icann.org) is a non-profit organization responsible for IP address space allocation, protocol parameter assignment, domain name system management, and root server system management functions.

#### 4.3 Html 5 (Creating a web page)

A Web page is a document, identified by an URL, that can be retrieved on the Web. Typically, a Web page is written in HTML, the Hypertext Markup Language. When a Web browser receives an HTML document, it can format and render the content for viewing, listening, or printing. The user can also follow embedded hyperlinks, or simply links, to visit other Web pages. HTML enables you to structure and organize text, graphics, pictures, sound, video, and other media content for processing and display by browsers. HTML supports headings, paragraphs, lists, tables, links, images, forms, frames, and so on. The major part of a website is usually a set of HTML documents. Learning and understanding HTML is fundamental to Web Design and Programming.

To create HTML files you may use any standard text editor such as Notepad or Sublime, Visual studio code(preferred).

HTML is a markup language that provides tags for you to organize information for the Web. By inserting HTML tags into a page of text and other content, you mark which part of the page is what to provide structure to the document.

#### **4.3.1** A Simple HTML Page Structure

```
<!Doctype Html> Used to inform the browser that this is a html document
<html>(Top level element)
<head> (Top level element)
<title> Welcome To Hiit Plc </title>
</head>
<body>(Top level element)
<h1> Hiit Plc </h1> (Block level element)
 Hiit Plc has graduated over 50,000 students  (Block level element)
</body>
</html>
```

#### 4.3.2 Text Fonts

One of the most important design aspect of a website is its readability. The textual content of the site must be easily readable and the designer's understanding of what factors enhance readability is absolutely essential to Web development. The font type, style, and leading (line separation) can affect the readability and the look and feel of the entire site.

You can specify style properties for font family, style, variant, weight, and size for

HTML elements. For example (Ex: FontFamily), font-family: Times

font-family: Arial, Helvetica, sans-serif

You may list more than one name, in order of preference, for the font-family property. In the above example, if the browser does not have Arial it will check for Helvetica, and so on.

#### **4.3.3 LISTS**

In addition to headings and paragraphs, lists can be used to organize and present information for easy reading. Web users like to find information quickly and will usually not have the patience to read long-winded passages. Itemized lists can help make the important points and to direct visitors in the right directions. Three blocklevel list elements are available:

- Bullet list: The ul element provides an unordered list where the ordering of the items is unimportant. A ul is usually presented as a set of bullet items.
- Ordered list: The ol element offers an numbered list where the ordering of the items is important. An ol is typically displayed as a sequence of enumerated items.
- Definition list: The dl element is handy for a definition list where each term (<dt>) is given a definition or description (<dd>).

List elements may only contain list items. List items in ol and ul are given as li elements which can contain other block elements such as headings, paragraphs, and lists. List items are usually displayed indented.

#### 4.3.4 Hyperlinks

Anchor elements (...) can specify hypertext references (or hyperlinks) to other documents on the Web/Internet. A hyperlink can be attached (anchored) to an inline element such as text or image.

A hyperlink is given in the form <a href="URL">anchor(text to be displayed) </a> Internal and External Links

In building a website, hyperlinks are used for two major purposes, to organize pages within the site (internal links) and to reach resources on the Web (external links).

Following an internal link, a visitor stays within a site and its navigation system. Clicking on an external link, the visitor goes to another site. Hence, a well-designed site should make a clear distinction between these two types of links. It is recommended that each external link

- is clearly indicated as going off-site
- is displayed in a new window so the visitor can come back by closing or iconifying that new window.

A simple way is to use the attribute **target="blank"** to cause the referenced page to display in a new window:

#### **4.3.5 IMAGES**

With a hyperlink such as <a href="cat.gif">My Cat<a>, you display a stand-alone image in a separate page. To include an image within a page together with other content, use the inline image element **img**. where URL points to an image file usually in GIF, JPEG, or PNG (portable network graphics) format. The raster image formats store a fine grid of pixels, or picture elements, to represent the image. They also employ data compression schemes to reduce the size of the file with little or no sacrifice on image quality. The inline element img can be placed in any block or inline element except pre. Attributes of img include:

- alt="text": Required alternative text to use for non-visual browsers and when the image file is not available.
- height="height", width="weight": height and width of display area for the image. This size information, given in any valid length, allows browsers to reserve the correct room for the image and continues to render the page without waiting for the image to load. For a page with multiple images, this can make the page appear on the

screen much faster. Hence, it is recommended that the exact image size in pixels be always specified. A size different from the original image can be given and the image will be scaled up or down to fit the specified area. Both height and width are optional.

longdesc="URL": A text file providing a verbal description of the image providing browsers for the blind, for example, a way to explain the image to the end user. It is recommend that you always include the alt, width and height attributes for img.

#### 4.3.6 What Is A Form?

The form element of HTML is designed to collect input from Web surfers for processing on the server side. You place different types of input control1 elements inside a form to receive user input for server-side processing. The form element may contain any kind of block elements so you can include instructions, explanations, and illustrations together with input controls.

#### **HTML Code for a simple form**

```
<form>
  <fieldset>
  <le>egend> Contact Us</legend>
  <div class="cent"
  <fieldset id="live">
  <div class="background">
  <div class="username"> Name: <div class="namebox"> <input type="text"/></div> </div>
  </br><div class="password">Password: <input type="password"/> </div>
  </br> <div class="state">State of origin:<input list="states"/> </div>
  <datalist id="states">
  <option value="Abuja">
  <option value="Lagos">
  <option value="Ekiti">
  </datalist>
  </br> <div class="message"> Message Us </div ><textarea rows="10"
cols="50"> </textarea>
 </br>><button type="button"</button> Submit
```

```
<div class="resetbutton"> <button type="reset" value="reset" name="resetbutton">
Reset</button> </div>
</div>
</div>
</fieldset>
</form>
```



A Simple Form

#### 4.3.7 Fundamentals of web development

Web development refers to the process of creating websites and web applications that are accessible via the internet.

Here are some of the fundamentals of web development:

**HTML**: HTML (Hypertext Markup Language) is the foundation of all web development. It is used to structure and format content on a web page, including headings, paragraphs, lists, and links.

**CSS**: CSS (Cascading Style Sheets) is used to add style and layout to web pages. It is used to control the visual presentation of content, including fonts, colors, and spacing.

**JavaScript**: JavaScript is a programming language that is used to add interactivity to web pages. It allows developers to create dynamic effects, such as pop-ups, animations, and form validation.

**Server-side programming languages**: Server-side programming languages, such as PHP, Ruby, and Python, are used to create dynamic web pages and applications. These languages allow developers to interact with databases, process form data, and create custom functionality.

**Content Management Systems (CMS):** A CMS is a software application that is used to create, manage, and publish digital content. Popular CMS platforms include WordPress, Drupal, and Joomla.

**Responsive design**: Responsive design is the practice of creating web pages that adapt to different screen sizes and devices. This ensures that the content is accessible and usable on desktops, tablets, and smartphones.

**Web hosting:** Web hosting is the process of storing and serving web content to users. Web developers need to understand how to choose a hosting provider and how to upload files to a web server.

Overall, web development is a vast and complex field that requires a broad range of technical skills and knowledge. These fundamentals are just the starting point for anyone looking to learn web development.

**HTML** 

HTML is a markup language that is used to structure content on the web. It is the foundation of all web development and is used to create the basic structure of a web page. HTML consists of a series of elements, which are used to define different parts of a web page, such as headings, paragraphs, images, and links.

Here is an example of some HTML code:

```
<!DOCTYPE html>
<a href="https://www.example.com/">Click here to visit Example.com</a>
<!DOCTYPE html>
<a href="https://www.example.com/">Click here to visit Example.com</a>
```

Let's break down what's happening in this code:

- <!DOCTYPE html> is a declaration that tells the browser that this document is an HTML document.
- <html> is the root element of the HTML document, and contains all other elements.
- <head> contains information about the document, such as the title of the page.
- <title> is used to set the title of the web page, which appears in the browser's title bar.

- <body> contains the visible content of the web page.
- <h1> is a heading element, used to create a main heading on the web page.
- is a paragraph element, used to create paragraphs of text.
- <img> is an image element, used to display images on the web page.
- <a> is an anchor element, used to create links to other web pages.

By using HTML to structure content on the web, web developers can create web pages that are both accessible and easy to understand for both humans and machines, such as search engines.

#### CSS(cascading style sheets)

CSS is a style sheet language that is used to describe the visual appearance of a web page. It allows developers to separate the presentation of content from its structure, making it easier to create consistent and visually appealing web pages.

CSS works by defining rules that apply to elements in an HTML document. Each rule consists of a selector (which specifies the elements to apply the rule to) and a set of properties and values (which define the style of the selected elements).

#### Here is an example of some CSS code:

```
h1 {
  color: red;
  font-size: 32px;
p {
  color: black;
  font-size: 16px;
```

```
line-height: 1.5;
}
```

In this example, we have two rules:

- The first rule applies to all <h1> elements on the web page. It sets the color of the text to red and the font size to 32 pixels.
- The second rule applies to all elements on the web page. It sets the color of the text to black, the font size to 16 pixels, and the line height to 1.5 times the font size.

By using CSS, web developers can create visually appealing web pages that are consistent and easy to navigate. CSS can be used to define a wide range of styles, including fonts, colors, backgrounds, borders, and layout. Additionally, CSS supports responsive design, which allows web pages to adapt to different screen sizes and devices.

Here is an example of some JavaScript code:

```
const button = document.querySelector('#my-button');
button.addEventListener('click', () => {
    alert('Button clicked!');
});
```

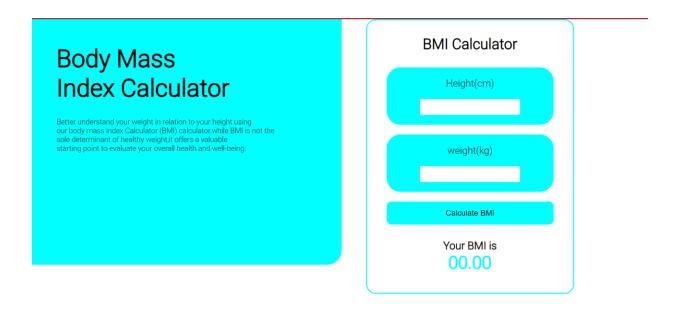
In this example, we are using JavaScript to add an event listener to a button element on the web page. When the button is clicked, an alert message will be displayed that says "Button clicked!".

JavaScript can be used for a wide variety of tasks, including form validation, creating animations, making API requests, and manipulating the Document Object Model (DOM) of a web page. The DOM is a programming interface for web documents that represents the structure of an HTML or XML document as a tree structure. JavaScript can interact with the DOM to add, modify, or delete elements on a web page, allowing developers to create dynamic and interactive user interfaces.

Overall, JavaScript is a powerful and flexible programming language that is essential for creating dynamic and interactive web pages.

Brief discussion about the projects I built with my experience gained.

#### **4.3.8 Implementation Of BMI Calculator**



BMI is a numerical value that expresses an individual's body weight in relation to their height.it is a widely used and simple method to access and categorize an individual's body weight status.

BMI provides a quick and easy way to identify potential health risks associated with being underweight, normal weight, overweight or obese.

Here's a brief explanation of how a BMI calculator works:
Input:
Users input their weight (in kilograms) and height (in meters) into the BMI calculator.
Formula:
The BMI is calculated using the following formula: BMI = weight $/$ (height * height).
Calculation:
The weight is divided by the square of the height to obtain the BMI value.
Categories:
The calculated BMI is then compared to standard ranges to determine the individual's weight status.
Common BMI categories include:
Underweight: BMI less than 18.5
Normal weight: BMI between 18.5 and 24.9

Overweight: BMI between 25 and 29.9

Obese: BMI of 30 or greater

Result:

The BMI result is typically presented to the user along with an interpretation of their weight

status.

Interpretation:

Users can interpret their BMI value to understand whether they are within a healthy weight range

or if they fall into categories associated with potential health risks. It's important to note that while

BMI is a useful screening tool, it does not directly measure body fat and may not account for

variations in muscle mass or distribution. Therefore, it's always advisable to consider other health

indicators and consult with a healthcare professional for a comprehensive assessment of one's

health.

Tools I built the calculator with:

Html, CSS and JAVASCRIPT

Domain: <a href="https://bmi-calculator.on.fleek.co/">https://bmi-calculator.on.fleek.co/</a>

4.3.9 Building a Portfolio Website for a Web Developer

26

I undertook the development of a comprehensive portfolio website tailored for a web developer during my SIWES internship. The primary objective was to create a visually appealing and functional platform that showcases the skills, projects, and expertise of the web developer.

Scope of Work:

User-Centric Design: Employed a user-centric design approach to ensure a seamless and engaging user experience.

Incorporated a clean and modern design that reflects the developer's personal brand and style.

Technical Implementation: Utilized HTML, CSS, and JavaScript to build the website, ensuring responsiveness across various devices.

Employed a mobile-first design strategy to cater to the growing mobile user base.

Portfolio Showcase: Implemented a dedicated section to showcase the developer's projects, including descriptions, technologies used, and links to live projects or repositories on platforms like GitHub.

Skill Display: Developed a section highlighting the developer's technical skills, programming languages, and tools proficiency.

Contact and Social Links: Included contact information and links to professional social profiles, facilitating easy communication and networking opportunities.

:

- Interactive Elements: Incorporated interactive elements, such as smooth transitions, hover effects, and a dynamic navigation menu, enhancing the overall user experience.
- Contact Form: Integrated a contact form to enable visitors to reach out to the web developer directly from the website.
- Performance Optimization: Applied performance optimization techniques to ensure fast loading times and optimal website responsiveness.

#### Testing and Feedback:

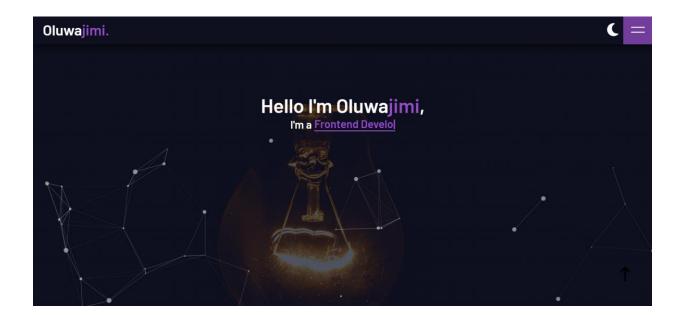
- Testing Procedures:
- Conducted thorough testing on various browsers and devices to identify and rectify any compatibility issues.

#### Feedback Loop:

Incorporated feedback from the web developer to tailor the website according to their preferences and needs.

#### Conclusion:

In conclusion, the development of the web developer's portfolio website aimed to create a visually appealing, functional, and user-friendly platform that effectively communicates their skills and projects to potential clients and collaborators.



Domain: https://oluwajimi.on.fleek.co/

### 4.3.10 Software Engineering with Python Programming

Software Engineering is the process of building a software that serves the user needs and follows user needs, features itemization, choice of programming languages, implementation, deployment and user testing. Software engineering works with building, maintaining & deploying a software. Software Engineering process follows the same steps which are:

- User needs
- Features Itemization
- Choice of Programming Languages
- Implementation
- Design
- Planning
- Analysis
- Deployment
- User Testing

During my SIWES internship, I developed a web application designed to facilitate food ordering for restaurants with my experienced gain. The application aims to streamline the ordering process, enhance user experience, and provide a seamless interaction between customers and restaurant services.

Key Features:

User Registration and Authentication:

Implemented user registration and authentication functionalities to ensure secure access for both customers and restaurant staff.

Restaurant Menu Display: Designed a user-friendly interface for displaying the restaurant's menu with clear categories, food items, descriptions, and prices.

Add to Cart Functionality: Enabled users to add desired food items to their virtual cart, providing a convenient way to customize their orders.

Cart Management: Implemented features for users to review and modify their cart contents before proceeding to checkout.

Proceed to Checkout: Developed a seamless checkout process, allowing users to confirm their orders, specify delivery details, and select payment options.

Order Confirmation: Provided users with a confirmation message and order summary upon successful completion of the checkout process.

Order History:

Implemented an order history section for registered users to track their previous orders, fostering a personalized and convenient experience.

Real-time Updates: Utilized real-time technologies to provide users with instant updates on order status, ensuring transparency and timely communication.

• Technical Implementation:

Backend Development: Utilized Python and Django framework for server-side scripting, implementing a robust backend to handle user requests, process orders, and interact with the database.

Frontend Design: Employed HTML, CSS, and JavaScript to create an intuitive and visually appealing user interface for seamless navigation.

Database Integration: Integrated a database system to store and retrieve information about menu items, user details, and order history.

Testing and User Feedback:

**Testing Procedures:** 

Conducted thorough testing of the application to identify and address any bugs, ensuring a smooth user experience.

User Feedback:

Gathered feedback from users and restaurant staff to make iterative improvements to the application's functionality and user interface.

Conclusion:

In conclusion, the food ordering web application addresses the specific needs of restaurants by providing a user-friendly interface, efficient order management, and real-time communication, ultimately enhancing the overall dining experience for customers.

In the current phase of development, the food ordering web application has been deployed and is accessible on my local server. While it is not publicly hosted on a live web server at this stage, the application's functionalities, features, and interactions have been thoroughly tested in a controlled environment. Future plans include exploring options for public hosting to make the application accessible to a wider audience.

#### 4.3.11 Digital Marketing Experience and Certification

As part of my SIWES internship, I actively engaged in digital marketing activities to enhance my skills and contribute to the online presence of the organization.

Key Activities:

Social Media Management: Assisted in managing and curating content for various social media platforms to increase brand visibility and engagement.

Content Creation: Developed compelling and shareable content, including graphics, posts, and articles, to effectively communicate the organization's messages.

Campaign Planning and Execution: Participated in the planning and execution of digital marketing campaigns, including targeted advertising and promotions to reach specific audiences.

Analytics and Reporting: Utilized analytics tools to track the performance of digital marketing efforts, providing insights for optimizing strategies and achieving measurable goals.

Digital Marketing Certificate:

During the internship, I completed a comprehensive Digital Marketing Certification program, which covered the following key areas:

Search Engine Optimization (SEO):Explored strategies to enhance website visibility on search engines, increase organic traffic, and improve search rankings.

Social Media Marketing: Gained insights into effective social media strategies, audience targeting, and leveraging platforms for brand growth.

Email Marketing: Explored the principles of email marketing, including list management, campaign design, and performance tracking.

Google Analytics: Developed proficiency in using Google Analytics to analyze website traffic, user behavior, and the effectiveness of online campaigns.

#### • Application of Skills:

Implemented Strategies: Applied digital marketing strategies learned from the certification program to enhance the organization's online presence.

Performance Metrics: Monitored and reported on the performance of digital marketing initiatives, highlighting key metrics and areas for improvement.

Conclusion: My experience in digital marketing during the SIWES internship, coupled with the completion of the Digital Marketing Certification program, has equipped me with valuable skills in online brand promotion, audience engagement, and data-driven decision-making

# **CHAPTER 5**

#### RECOMMENDATION/CONCLUSION:

This section discusses about the various challenge i faced as an intern, the various observations and contributions I made and also conclusion about my internship on a whole.

#### CHALLENGES FACED BY STUDENT

ADJUSTING TO A COMPLETELY NEW ENVIRONMENT - The

most challenging part of my job was adjusting to a completely new environment. When I first arrived, I was excited to jump in and start doing meaningful work. However, the reality was that I had never been in an industrial environment before and I knew very little or nothing about the process. I discovered that I had a lot to learn.

#### **CONTRIBUTIONS**

In review this internship has been an excellent and rewarding experience. I have been able to meet and network with so many people that I am sure will be able to help me with opportunities in the future.

My SIWES experience has indeed served its purpose as the initial idea of SIWES program was to not only expose the student to the real life work environment but to enable us students to educate ourselves about work ethics and ethos, mannerism and how to conduct ourselves in the work environment.

The industrial training illustrates what life is really like after school. It has really exposed me to what I obtainable in the industrial settings and I believe the experience gained would be put to good use in the nearest future. The training made me realize that there is much knowledge out there waiting to be gained. The knowledge gained during the six months of SIWES program was highly significant in the pursuit of my aspiration to be an Entrepreneur.

#### **CONCLUSION**

In review this internship has been an excellent and rewarding experience. I have been able to meet and network with so many people that i'm sure will be able to help me with opportunities in the future.

My SIWES experience has indeed served its purpose as the initial idea of SIWES program was to not only expose the student to the real life work environment but to enable us students to educate ourselves about work ethics and ethos, mannerism and how to conduct ourselves in the work environment.

The industrial training illustrates what life is really like after school. It has really exposed me to what is obtainable in the industrial settings and i believe the experience gained would be put to good use in the nearest future. The training made me realize that there is much knowledge out there waiting to be gained.