

**A TECHNICAL REPORT ON
STUDENT INDUSTRIAL WORK EXPERIENCE
SCHEME [S.I.W.E.S]**

**HELD AT
SOLUTECHCITY SOFTWARE COMPANY
No. 15, Century Plaza, Panat Area, Agric, Ilorin, Kwara State.**

BY

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REPORT OVERVIEW

This report details the industrial training experience gained during the Student Industrial Work Experience Scheme (SIWES) conducted at Solutech-City Software Company. The report is divided into five chapters:

- Chapter One provides an introduction to SIWES, detailing its background and objectives.
- Chapter Two describes the establishment of attachment, including its location, history, objectives, and organizational structure.
- Chapter Three focuses on the student's specific involvement in various sections and units within the organization.
- Chapter Four discusses the industrial experience, highlighting key lessons learned in HTML, CSS, and JavaScript.
- Chapter Five presents a summary of attachment activities, problems encountered, and recommendations for improving the SIWES scheme.

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CHAPTER ONE

1.0 INTRODUCTION

The Student Industrial Work Experience Scheme (SIWES) stands as a pivotal program initiated by the Industrial Trust Fund (ITF) to facilitate experiential learning for students in higher institutions. This industrially-focused training spans 3-4 months within an organization or firm chosen by the student, serving as a crucial avenue for acquiring practical expertise aligned with their respective courses of study.

The essence of the SIWES program lies in providing students with an invaluable opportunity to immerse themselves in a real-world working environment. By engaging with an organization of their choice, students gain unfettered access to the abundant resources of the workplace, enabling them to bridge the gap between theoretical knowledge and practical application. This hands-on experience proves instrumental in reinforcing and complementing the theoretical aspects of their academic pursuits.

In essence, the SIWES program becomes a conduit through which students not only comprehend their coursework more profoundly but also have the chance to apply and substantiate their learning in a professional setting. This introduction sets the stage for an exploration of the transformative experiences and insights gained during industrial training, shedding light on the symbiotic relationship between academic learning and real-world application.

1.1 DEFINITION OF SIWES

The acronym SIWES represents the Students Industrial Work Experience Scheme, a structured program established by the Industrial Training Fund (ITF). This initiative is designed to offer students in higher institutions of learning comprehensive and practical exposure to the industrial work

environment. SIWES typically spans 3-4 months and is carried out in an organization or firm of the student's choice.

1.2 AIMS AND OBJECTIVES

The aim and objectives of SIWES are to provide students with practical experience of what they have been taught theoretically in school.

With some of the experience gained during SIWES, students will be able to overcome future challenges while working.

Provide students with a seamless transition from theoretical learning in the classroom to practical application in real-world work environments.

Facilitate experiential learning opportunities that go beyond textbook knowledge, allowing students to gain insights into the practical aspects of their chosen fields.

Encourage critical thinking and analytical skills by immersing students in situations that require problem-solving and decision-making.

CHAPTER TWO

DESCRIPTION OF THE ESTABLISHMENT OF ATTACHMENT

2.1 Location and Brief History of Establishment

Solutech City Software Company is located at Century Plaza, Plot 2, Kayode Sadiku Street, near Former Panat Feed Mill, Sango Area, Ilorin, Kwara State. This central location offers the company easy access to local and international clients, fostering business relationships and collaborations across the region.

Brief History of Establishment

Solutech City Software Company began its operations in November 2019, with a vision to provide innovative and effective software solutions to meet the growing technological needs of businesses and individuals. Founded by a team of technology enthusiasts, the company aimed to fill the gap in the local tech ecosystem by offering cutting-edge services that bridge the divide between theoretical knowledge and practical application.

Since its establishment, Solutech City has gained recognition for its exceptional services, including software development, web development, digital marketing, and IT consultancy. The company has also contributed to skills development through its computer training programs, which offer both certificate and advanced diploma courses, empowering individuals with the technical expertise needed in today's digital world.

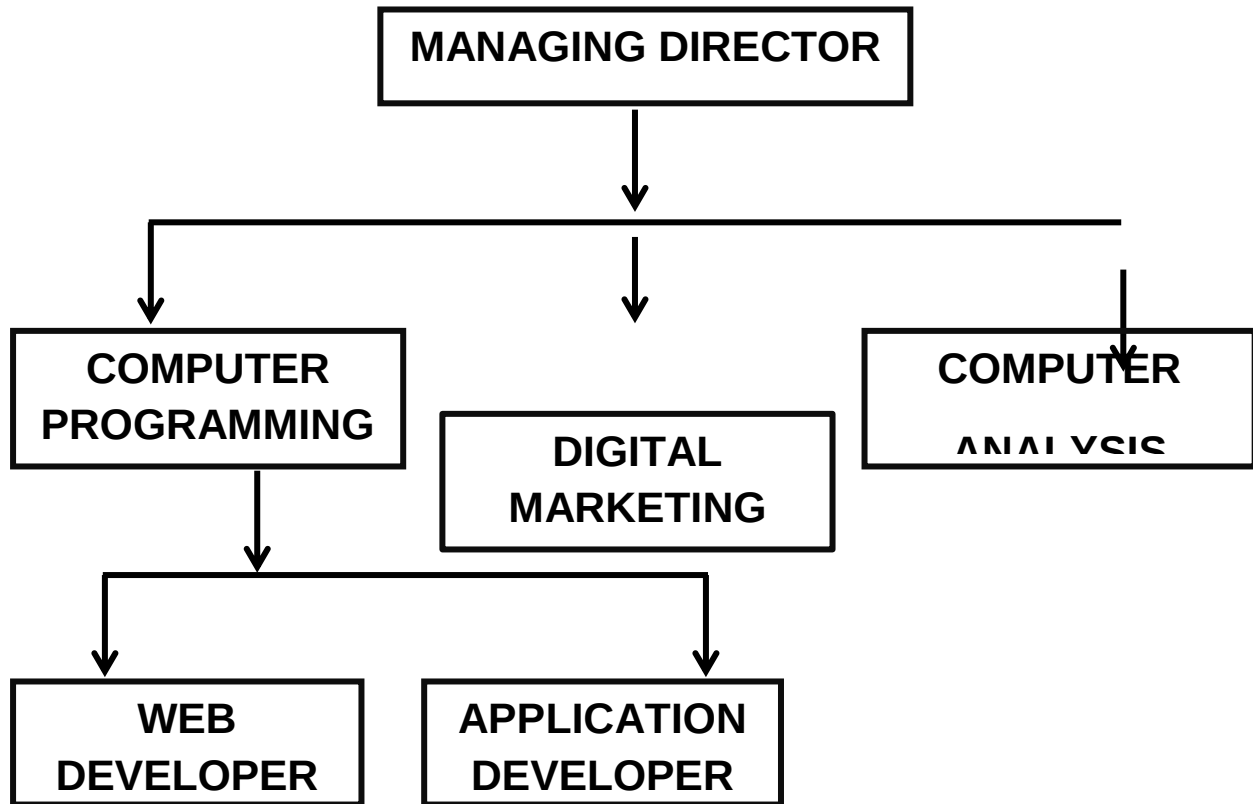
Solutech City has become an integral part of the local tech landscape, offering a broad range of services tailored to the needs of various industries, and positioning itself as a trusted name in the tech sector of Kwara State and Nigeria at large.

2.2 Objectives of the Establishment

The primary objectives behind the establishment of Solutech City Software Company are centered around providing innovative and effective technology solutions while fostering the growth of the local tech ecosystem. These objectives include:

1. **Providing High-Quality Software Solutions:** The company aims to develop custom software applications that meet the unique needs of businesses, improving their operational efficiency and performance through innovative technology.
2. **Enhancing Technological Development:** By offering specialized services in software development, web design, and IT consulting, Solutech City seeks to drive technological advancement in the region, contributing to the broader development of the Nigerian tech industry.
3. **Fostering Local Talent Development:** One of the key objectives is to empower individuals with the skills and knowledge needed to excel in the IT industry. Through their computer training programs (both certificate and diploma courses), the company provides essential skills to aspiring professionals, helping them to gain industry-relevant expertise.
4. **Bridging the Gap between Theory and Practice:** Solutech City recognizes the need for practical experience in the tech field. The company provides hands-on experience through its services and training programs, preparing individuals and businesses to thrive in real-world environments.
5. **Providing Comprehensive IT Solutions:** The company is dedicated to offering a wide range of IT services, including digital marketing, data processing, and IT consultancy, to meet the evolving technological needs of businesses, helping them to grow and stay competitive in an increasingly digital world.

2.3 THE ORGANISATION CHART



2.4 The Various Departments/Units in the Establishment and Their Functions

Solutechcity Software Company, No. 15, Century Plaza, Panat Area, Agric, Ilorin, Kwara State was established to meet some technical needs in the Centre and its environment. Listed below are the major activities:

1. Software Development
2. Web Development
3. Data Processing
4. Information Technology Consultancy (IT)
5. Computer Training in both certificate and diploma (advanced) courses

CHAPTER THREE

3.0 STUDENT SPECIFIC INVOLVEMENT IN VARIOUS SECTION/UNIT

Solutechcity Software Company employs a strategic approach to student involvement across its diverse departments, fostering a well-rounded learning experience. The company's facilities include a dedicated room for tutoring and segmented office spaces tailored for specific activities. The students, each pursuing different courses, engage in various units independently, with a common department providing foundational computing skills during the initial two weeks of training.

3.1 COMMON COMPUTING DEPARTMENT

Activities:

Basic Computing Skills: All students partake in a comprehensive program covering fundamental computing skills during the initial two weeks of training.

Purpose:

To establish a common foundation in computing for students from different courses.

3.2 WEB DEVELOPMENT DEPARTMENT

Activities:

Web Page Design: Engaged in designing and creating web pages with a focus on aesthetics and functionality.

Media Integration: Involved in incorporating various media elements into web pages for enhanced user experience.

Web Form Creation: Participated in the creation of web forms to facilitate user interactions.

Purpose:

To provide hands-on experience in web development, covering diverse aspects of web design and functionality.

3.3 SOFTWARE DEVELOPMENT DEPARTMENT:

Activities:

Lessons in Software Development: Participated in lessons covering the principles and practices of software development.

Purpose:

To expose students to the intricacies of software development, complementing their understanding of programming languages.

3.4 Personal Emphasis on Web Development:

Activities:

In-Depth Learning: Focused on gaining specialized knowledge and practical experience within the Web Development Department.

Purpose:

To consolidate and apply the foundational skills acquired in other departments to specialize in web development, aligning with personal career interests.

Solutechcity Software Company structures its training program to ensure that students receive a comprehensive and diversified education, allowing them to explore various aspects of computing before specializing in their preferred departments. The approach enhances the students' adaptability and proficiency in multiple facets of the software industry.

CHAPTER FOUR

4.0 DISCUSSION

4.1 RELEVANCE OF EXPERIENCE GAINED DURING SIWES PROGRAM

EXPERIENCE GAINED ON WEB DEVELOPMENT

Hyper Text Markup Language (HTML):

HyperText Markup Language (HTML) stands as the cornerstone of web development, playing a pivotal role in structuring both textual and graphical content on web pages. It provides the essential framework for creating and organizing content that users interact with on the internet.

Html As A Foundational Language:

1. Structuring Textual Content:

HTML utilizes a markup structure based on tags to define and organize text within a web page. Tags are HTML elements that enclose content and provide instructions on how that content should be displayed. For instance:

```
<p>This is a paragraph of text.</p>
```

2. Organizing Graphical Content:

While HTML itself is primarily focused on text, it also facilitates the integration of graphical content through elements such as images and multimedia. For example: ``

3. TAGS as Commands:

HTML operates through a set of commands known as tags. Tags are the building blocks of HTML and come in pairs: an opening tag and a closing tag. They define the structure and appearance of the content enclosed within them. Example: `<h1>This is a Heading</h1>`

4. Shaping Document Appearance:

The arrangement and nesting of HTML tags play a crucial role in determining the visual hierarchy and presentation of content. Properly structured HTML contributes to a more organized and readable codebase.

5. Document Object Model (DOM):

HTML, combined with the Document Object Model (DOM), forms a dynamic representation of a web page's structure in the browser. This enables JavaScript to interact with and manipulate the content in real-time, providing a dynamic user experience.

6. Semantic HTML:

HTML5 introduces semantic elements that go beyond traditional div and span tags, providing more meaningful structure to content. Elements like `<header>`, `<nav>`, `<section>`, and `<footer>` enhance the clarity and accessibility of web documents.

7. Accessibility and SEO:

Proper use of HTML tags contributes to better accessibility for users with disabilities. Additionally, search engines rely on HTML structure to understand and rank the content, emphasizing the importance of semantic HTML for search engine optimization (SEO).

In essence, HTML serves as the bedrock of web development by providing a standardized and structured way to create and present content on the internet. Its simplicity and versatility make it accessible for beginners while offering depth for more advanced applications when combined with other technologies like Cascading Style Sheets (CSS) and JavaScript.

HTML TAGS: There are several HTML tags some of which are:

`<p>...</p>`: Used to define and structure paragraphs of text on a web page.

`<br/>`: Inserts a line break, starting a new line on the web page.

`<font>...</font>`: Historically used to format text on a web page, including specifying font size, color, and face. (Note: Consider using CSS for text formatting in modern practices.)

`<img />`: Embeds an image on the web page. Attributes include src to specify the image file path.

`<marquee>...</marquee>`: (Obsolete in HTML5) Used to create a scrolling or moving effect for content on a web page.

`<body>...</body>`: Contains all content of a web page, including text, images, links, etc.

`<strong>...</strong>`: Used to emphasize text, typically by making it bold.

`<i>...</i>`: Italicizes text, indicating emphasis or a different tone.

`<u>...</u>`: Underlines the enclosed text.

`<strike>...</strike>`: Used to strike out or draw a line through the enclosed text.

`<h1>...</h1>` to `<h6>...</h6>`: Used for defining headings of various levels, /where `<h1>` is the largest and `<h6>` is the smallest.

`<a href="...">...</a>`: Creates hyperlinks, allowing users to navigate to other web pages or resources. The href attribute specifies the link's destination.

`<ul>...</ul>` and `<ol>...</ol>`: Used for creating unordered (bulleted) and ordered (numbered) lists, respectively.

`<li>...</li>`: Defines list items within `<ul>` or `<ol>` tags.

`<div>...</div>`: Acts as a container for grouping and styling other HTML elements. Often used in conjunction with CSS for layout purposes.

`<span>...</span>`: Similar to `<div>`, but used for inline styling and grouping of elements.

`<table>...</table>`: Defines a table on a web page. Includes tags such as `<tr>` (table row), `<th>` (table header), and `<td>` (table data) for structure.

`<form>...</form>`: Encloses form elements on a web page, allowing users to input data. Contains tags like `<input>`, `<select>`, `<textarea>`, and others.

`<input type="...">`: Creates various types of input fields within a form, such as text boxes, checkboxes, radio buttons, and more.

`<textarea>...</textarea>`: Defines a multiline text input field within a form.

`<select>...</select>`: Creates a dropdown list within a form. Contains `<option>` tags for individual list items.

`<iframe src="...">...</iframe>`: Embeds an inline frame, allowing the display of another web page within the current page.

STEPS TO CREATE A WEBPAGE

STEP 1: Open Notepad

Go to Start at the bottom left corner of the desktop.

STEP 2: Access Programs

Click on "All Programs."

STEP 2: Select Accessories

Within the "All Programs" menu, find and select "Accessories."

STEP 3: Open Notepad

In the "Accessories" menu, click on "Notepad."

STEP 4: Type HTML Code

In Notepad, type in the necessary HTML elements or code to create a webpage. For example:

```
<!DOCTYPE html>
<html>
  <head>
    <title>My First Webpage</title>
  </head>
  <body>
    <h1>Hello, World!</h1>
    <p>This is my first webpage created using Notepad.</p>
  </body>
</html>
```

STEP 5: Save the Document

- Go to File > Save As.
- Choose the location where you want to save the file.
- Enter the desired filename with the extension ".htm" or ".html" (e.g., "index.html").
- Select "All Files" in the "Save as type" dropdown.
- Click "Save."

STEPS TO LAUNCH AN EXISTING WEBPAGE

Step 1: Go to the folder where your webpage is saved

Step 2: You will see an icon of your default web browser then double-click it

Step 3: The page will be opened with what you designed

SAMPLE WEBPAGE Code: SAMPLE1.HTML

```
<html>
<head> <title>SAMPLE WEBPAGE </title>
</head>
<body style="background-color: red">
<centre> <h1> WELCOME TO MY WORLD </h1> </centre>
<strong> THIS IS MY FIRST WEB PAGE </strong>
</body>
</html>
```

SAMPLE WEBPAGE Code: SAMPLE2.HTML

```
<html>
<head><title> TOYOSI SAMPLE WEBPAGE 2 </title>
</head>
<body style="background-color: green">
<table border ="1" width ="60" height ="50">
    <tr>
        <td colspan="4" align="center">COMPUTER SCIENCE TIME  TABLE
    </td>
    </tr>
    <tr>
        <td> COM 111 </td>
```

```
<td> COM 112 </td>
<td> COM 113 </td>
<td> COM 114 </td>
</tr>
<tr>
<td colspan = "2"> GNS 111 </td>
</tr>
</table>
```

CHAPTER FIVE

5.0 CONCLUSION:

In summary, this report comprehensively captures the practical and theoretical aspects covered during the SIWES program. The program has proven to be of immense value, providing participating students with an unforgettable and enriching learning experience.

5.1 PERSONAL IMPRESSION ABOUT THE ORGANIZATION:

The Web Development Department at Solutechcity Software Company left an indelible mark on my professional journey. It stands out as an exceptional learning environment, characterized by a team of dedicated and God-fearing staff.

5.2 SUGGESTIONS AND RECOMMENDATIONS:

- Sustaining the SIWES Program:

I strongly recommend the continuity of the SIWES program by the Industrial Training Fund (ITF). This ongoing initiative ensures that students in higher institutions continually benefit from practical experiences, equipping them to the evolving demands of the labor market.

- Endorsement of Solutechcity Software Company:

I wholeheartedly endorse the Web Development Department of Solutechcity Software Company, located at No. 15, Century Plaza, Panat Area, Agric, Ilorin, Kwara State. For computer science students aspiring to delve into web development, this department is transformative. The commitment of the staff and the unrestricted access to resources make it an ideal training ground. I also recommend it for students in other IT-related departments, as the skills acquired are versatile and invaluable.