A TECHNICAL REPORT ON

STUDENT INDUSTRIAL WORK EXPERIENCE

SCHEME [S.I.W.E.S]

HELD AT

SOLUTECHCITY SOFTWARE COMPANY

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

INTRODUCTION

1.1 BACKGROUND

SIWES was established by ITF in 1973 to solve the problem of lack of adequate practical skills preparatory for employment in industries by Nigerian graduates of tertiary institutions.

The Scheme exposes students to industry-based skills necessary for a smooth transition from the classroom to the world of work. It affords students of tertiary institutions the opportunity of being familiarized and exposed to the needed experience in handling machinery and equipment which are usually not available in the educational institutions.

Participation in Industrial Training is a well-known educational strategy. Classroom studies are integrated with learning through hands-on work experiences in a field related to the student's academic major and career goals. Successful internships foster an experiential learning process that not only promotes career preparation but also provides opportunities for learners to develop the skills necessary to become leaders in their chosen professions.

One of the primary goals of the SIWES is to help students integrate leadership development into the experiential learning process. Students are expected to learn and develop basic non-profit leadership skills through a mentoring relationship with innovative non-profit leaders.

By integrating leadership development activities into the Industrial Training experience, we hope to encourage students to actively engage in non-profit management as a professional career objective. However, the effectiveness of the SIWES experience will have varying outcomes based on the individual student, the work assignment, and the supervisor/mentor requirements. Each internship position description must include specific, written learning objectives to ensure leadership skill development is incorporated.

Participation in SIWES has become a necessary pre-condition for the award of Diploma and Degree certificates in specific disciplines in most institutions of higher learning in the country, following the education policy of the government.

1.2 OBJECTIVES OF SIWES

The following are some of the objectives of SIWES:

i. SIWES will provide students the opportunity to test their interest in a particular career before permanent commitments are made.

ii. SIWES students will develop skills in the application of theory to practical work situations.

iii. SIWES will provide students the opportunity to test their aptitude for a particular career before permanent commitments are made.

iv. SIWES students will develop skills and techniques directly applicable to their careers.

v. SIWES will aid students in adjusting from college to full-time employment.

vi. SIWES will provide students the opportunity to develop attitudes conducive to effective interpersonal relationships.

vii. SIWES will increase a student's sense of responsibility.

viii. SIWES students will be prepared to enter into full-time employment in their area of specialization upon graduation.

ix. SIWES students will acquire good work habits.

x. SIWES students will develop employment records/references that will enhance employment opportunities.

CHAPTER TWO

DESCRIPTION OF THE ESTABLISHMENT OF ATTACHMENT

2.1 LOCATION AND BRIEF HISTORY OF ESTABLISHMENT

The name of the organization is Solutechcity Software Company, Century plaza, Plot 2, Kayode Sadiku Street, Near Former Panat Feed Mill, Sango Area, Ilorin, Kwara State.

It was founded by a group of computer scientists whose aim is to develop, train, and recreate the world of technology with the motto, together, we recreate the world.

The company started its operation in November 2019.

Presently the organization has grown wide to the extent that it has several departments.

This institution has grown to the extent of having a staff of 15 or more and people that are been paid by this institution.

2.2 OBJECTIVES OF THE ESTABLISHMENT

i. To provide world-class training services for computer students and IT enthusiast

ii. To provide a co-working space for experts to work and network

iii. To provide a community of like-minded technological experts

v. To create a platform where students of tertiary institutions can put classroom knowledge into real-life practice.
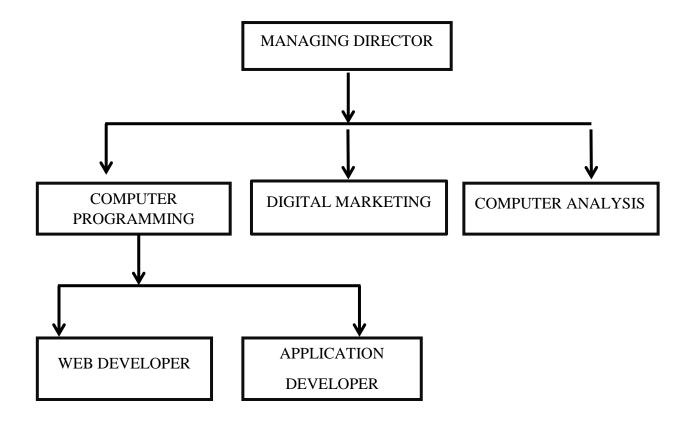
2.3 ORGANIZATIONAL STRUCTURE

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                    ┌──────────────────────┐
                    │  MANAGING DIRECTOR   │
                    └──────────┬───────────┘
          ┌────────────────────┼────────────────────┐
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 │    COMPUTER     │  │ DIGITAL MARKETING│  │ COMPUTER ANALYSIS│
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│   WEB    │ │ APPLICATION  │
│DEVELOPER │ │  DEVELOPER   │
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Figure 1.0 Organizational structure of the company

2.4   MAJOR ACTIVITIES OF THE ORGANISATION

SOLUTECHCITY Software Company, Century plaza, Plot 2, Kayode Sadiku Street, Near Former Panat Feed Mill, Sango Area, 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
6.   Digital Marketing

CHAPTER THREE

3.0   STUDENT SPECIFIC INVOLVEMENT IN VARIOUS SECTION/UNIT.

SOLUTECHCITY Software Company has a room that is used for tutoring, and other offices that were partitioned into segments for some other activities.

All the departments are independent since they are of different courses but they all have a common department in which a student learns basic computing for his /her first two (2) weeks of training.

I carried out some activities in the web development department and some of these activities included designing web pages, putting media on web pages, creating web forms, and so on.

I also took some lessons with the software development department.

Lastly, I also learned some elementary designing. After all the lessons I learned from these departments, I then proceeded to the department where I wanted to study which is the web development department and that was where I gained all the experience I have in addition to the ones I have gained from other departments.

3.1   CHALLENGES AND PROBLEM ENCOUNTERED

It is not uncommon to hear students on their Student Industrial Work Experience Scheme (SIWES) or internship lament their unpleasant experiences, especially the challenges encountered in the process of finding a firm to accommodate and support them.

While it is expected of students to go out and acquire practical knowledge of their chosen fields, it seems also right for firms to make provisions to support their efforts.

Though internships are peculiar to polytechnics, most universities have followed suit depending on the course of study of the students. The major objective of an internship is to help students apply theoretical knowledge and school-based skills to practice before they enter the world of work.

The program came into existence following decree No. 47 of October 08, 1971, as amended in 1990. This decree gave birth to the founding of the Industrial Training Fund (ITF) in 1973/1974, which in turn established the Students Industrial Work Experience Scheme (SIWES) to bridge

the gap between school-based knowledge and workplace skills. Though industrial training provides students with work experience that prepares them for the workplace, the major advantage is that it helps students discover their areas of career interests which they are most likely to acquire.

But despite this advantage, internship isn't without its hiccups, as students face the challenges of getting firms that would not just absorb them in their core areas of competence, but pay them monthly allowances. Vanguard Learning investigation reveals that organizations such as banks request IT students because of cheap labor, others do not wish to accommodate students who beg for placements, while some organizations will ask the students to pay for the knowledge that will be acquired.

At Solutech City Software Company, the workers work harder and they are very good at their work. Some of the challenges faced are listed below:

- Too much money is been spent during the program due to transport fees (to and fro).
- Too much stress is carried out during the SIWES program.
- The problems of getting attachment in an establishment to get the required knowledge.
- Non-availability of well-trained computer scientists.

CHAPTER FOUR

INDUSTRIAL EXPERIENCE

4.0   WEB DESIGN

I was trained and exposed to web development, especially the creation of websites using tools like HTML, CSS, etc. This is achieved step by step with practical all through the process.

4.1   HTML

HTML is a **markup** language for **describing** web documents (web pages).

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- A markup language is a set of **markup tags**
- HTML documents are described by **HTML tags**
- Each HTML tag **describes** the different document content

HTML TAGS:

HTML tags are **keywords** (tag names) surrounded by **angle brackets**:

<tagname>Content</tagname>

- HTML tags normally come **in pairs** like <h1> and </h1>
- The first tag in a pair is the **start tag,** and the second tag is the **end tag.**
- The end tag is written like the start tag but with a **slash** before the tag name

The following are the names of tags and their description.

Tag Description <html> This tag encloses the complete HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by <body>...</body> tags. <head> This tag represents the document's header which can keep other HTML tags like <title>, <link>, <script language>, etc.

<title> The <title> tag is used inside the <head> tag to mention the document title. <body> This tag represents the document's body which keeps other HTML tags like <h1>, <div>, <p>, <table>, etc.

4.1.2   CSS AND ITS PROPERTIES

- CSS stands for Cascading Style Sheets
- CSS defines how HTML elements are to be displayed
- Styles were added to HTML 4.0 to solve a problem
- CSS saves a lot of work
- External Style Sheets are stored in CSS files

The following are reasons why CSS is better

1. It saves time

2. It eradicates the idea of using repeating codes

3. It provides efficiency in design and updates: with CSS, we can create rules, and apply those rules to many elements within the website.

4. It creates an external file (server side) for managing HTML content

METHOD USED BY CSS IN FORMATTING HTML DOCUMENT

1. Inline Style: An inline style loses many of the advantages of a style sheet (by mixing content with presentation). Use this method sparingly! To use inline styles, add the style attribute to the relevant tag. The style attribute can contain any CSS property.

2. Embedded / Internal Style: An internal style sheet should be used when a single document has a unique style. You define internal styles in the head section of an HTML page, inside the <style> tag,

3. External Style: An external style sheet is ideal when the style is applied to many pages.

With an external style sheet, you can change the look of an entire Web site by changing just one file.

Each page must include a link to the style sheet with the <link> tag. The <link> tag goes inside the head section.

CSS SELECTORS AND HOW THEY CAN BE USED

CSS selectors are used to find or select HTML elements based on their element name, id, or class

1.   Element Selector: The element selector selects elements based on the element name.

2.   You can select all <p> elements on a page like this: (all <p> elements will be center-aligned, with a red text color)

```
P{
   text-align: center;
   color: red;
}
```

3.   Id Selector: The id selector uses the id attribute of an HTML element to select a specific element. An id should be unique within a page, so the id selector is used if you want to select a single, unique element. To select an element with a specific id, write a hash character, followed by the id of the element. e.g id="hello" CSS #hello {color: red ;}

4.   Class Selector: The class selector selects elements with a specific class attribute. To select elements with a specific class, write a period character, followed by the name of the class e.g .center {text-align: center ;}

BACKGROUND AND FONT OF VARIOUS HTML ELEMENTS

You can set the following background properties of an element.

1. The background color: This is a property used to set the color background of an element.

2. The background-image property: is used to set the background image of an element.

3. The background-repeat: This is used to control the repetition of an image in the background.

4. The background-position: This is used to control the position of an image in the background.

5. The background attachment: Is used to control the scrolling of an image in the background.

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6. The background property: Is used as a shorthand to specify a number of other background properties.

FONT WHICH ARE;

1. The Font-family property: This is used to change the face of a font

2. The Font-style property: This is used to make a font italic or oblique.

3. The Font-weight property: This is used to increase or decrease how bold or light a font appears.

4. The Font-size property: This is used to increase or decrease the size of a font.

TEXT DECORATION

This demonstrates how to decorate a text in CSS, the values are none, underline, overline, line through, and blink.

4.1.3   PROPERTIES OF HYPERLINK USING CSS

1. The link signifies unvisited hyperlinks

2. The link visited signifies visited hyperlinks

3. The link hovered signifies an element that currently has the user's mouse pointer hovering over it.

4. The link active signifies an element on which the user is currently clicking.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0   CONCLUSION

In conclusion, this report has dealt with all I was taught both practical and theory during the SIWES program. The SIWES program is of great advantage which every student that participated will forever remember.

5.1   PERSONAL IMPRESSION ABOUT THE ORGANISATION

The Web Development Department of SOLUTECHCITY Software Company is a place to be and thank God that I went there for the industrial training. They have God-fearing staff and students have unlimited and unrestricted access to all their resources which makes it easier for students to learn fast.

5.2   SUGGESTIONS AND RECOMMENDATIONS

I will suggest that the ITF should keep the SIWES program going so that students in the higher institution can gain more practical experience which will prepare them ahead of the labor market demands.

I recommend the Web Development Department of Century plaza, Plot 2, Kayode Sadiku Street, Near Former Panat Feed Mill, Sango Area, Ilorin, Kwara State for any computer science student interested in web development, it is a place where one can never be the same after being trained, and also for any IT department the student might fall into.