SIWES
Work Report

By

Kayode Peter Temitope, 208077 Computer Science, 300 Level.

University of Ibadan.

CSC 399

At

Information Technology Unit (ITU), College of Medicine, University of Ibadan.

3rd July – 25th August, 2023.

Computer Science Department,

Faculty of Science,

University of Ibadan,

Ibadan

6th October, 2023.

The Director,

International Training Coordinating Centre,

University of Ibadan,

Ibadan.

Dear Sir,

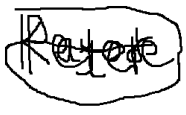
SUBMISSION LETTER FOR INDUSTRIAL TRAINING REPORT

I **KAYODE PETER TEMITOPE**, with Matriculation Number **208077**, of the **Department of Computer Science,** have successfully completed my eight weeks Industrial Training for 2021/2022 academic session and hereby write to submit my Industrial Training Report.

The Industrial Training took place at Information Technology Unit (ITU), College of Medicine, University of Ibadan, which started on the 3rd of July, 2023, and ended on the 25th August, 2023. I sincerely do appreciate the Director and ITCC for the opportunity given to me to apply my theoretical knowledge, and the exposure to the future world of work through the Industrial Training Program.

I will be grateful if this report is properly evaluated and given a satisfactory remark.

Yours Sincerely,



Kayode Peter Temitope

ACKNOWLEDGEMENT

Words alone are not enough to say how grateful I am to God, who saw me through this period of my Industrial Training. I appreciate all those who have in one way or the other contributed to make my Industrial Training a success.

I specially acknowledge my parent whose effort and unconditional love made it possible. I had to stay out of home for this period of the Industrial Training, in which they didn't fail to carry out their responsibility as to providing and supplying my basic needs.

I also sincerely appreciate the Head of the IT Unit at College of Medicine, Mr. Oluwasanmi Adetule, for making it possible for me to intern in his unit. I also sincerely express my gratitude to my direct supervisor, Mr. Kehinde Agboola, for your understanding and patience with me throughout my Industrial Training.

Finally, a big thank you to ITCC (Industrial Training Coordinating Center) for the opportunity given to us students to gain more knowledge through the Students' Industrial Work Experience Scheme.

TABLE OF CONTENT

ABSTRACT

This technical report contains the major activities carried out at the Information Technology Unit (ITU), College of Medicine, University of Ibadan, and brief description of the experience gained during the training period and the materials used in writing the report.

This report consists of five (5) chapters ranging from my experience and project I undertook in the software unit in Chapter one. Chapter two gives an overview of computer networking and also an overview of computer networking devices. Chapter three of this report gives my practical experience and projects that was done. It also carefully explains common practices and processes carried out in creating computer networks such as crimping of network cables, configuration of an access point and the use of the Dia software for simulation of the networking structure of a building. Chapter four gives a brief summary of my Industrial Training experience in relation to my previous class works. Finally, chapter five gives a brief conclusion and recommendation on the Industrial Training.

INTRODUCTION

The Students' Industrial Work Experience Scheme (SIWES) is an integral part of the preparation of students for Bachelor of Science (B.Sc.) in the Faculty of Science of University of Ibadan, Ibadan. This programme is undertaken by every student in this level in partial fulfillment of the award of Bachelor of Science (B.Sc.) degree.

Among the numerous objectives are:

- To provide avenue for students in Nigerian Universities to acquire industrial skills and experience in their course of study
- It enables student to understanding more on what had been taught in class.
- It enables student to associate and meet with industrial workers.
- Familiarizes the students with typical environments in which they are likely to function after graduation.
- To enlist and strengthen employer's involvement in the entire process of preparing university graduates for employment in the industry

Therefore, the eight weeks Industrial training I undertook at ITU, College of Medicine, University of Ibadan, has helped me in learning and knowing the skills and ability required to create a well-structured website and database for easy retrieval of data and information, troubleshoot, resolve, and communicate networking issues to other employees and management. Also to maintain the computer networks including mainframes, routers, servers and other physical hardware. I also learnt to use the Dia software for simulation to distribute and create a network for a building, learnt how to crimp a RJ45 network cable. Finally, I learnt to maintain the security and networking best practices to offer the best solutions and protection to the university system.

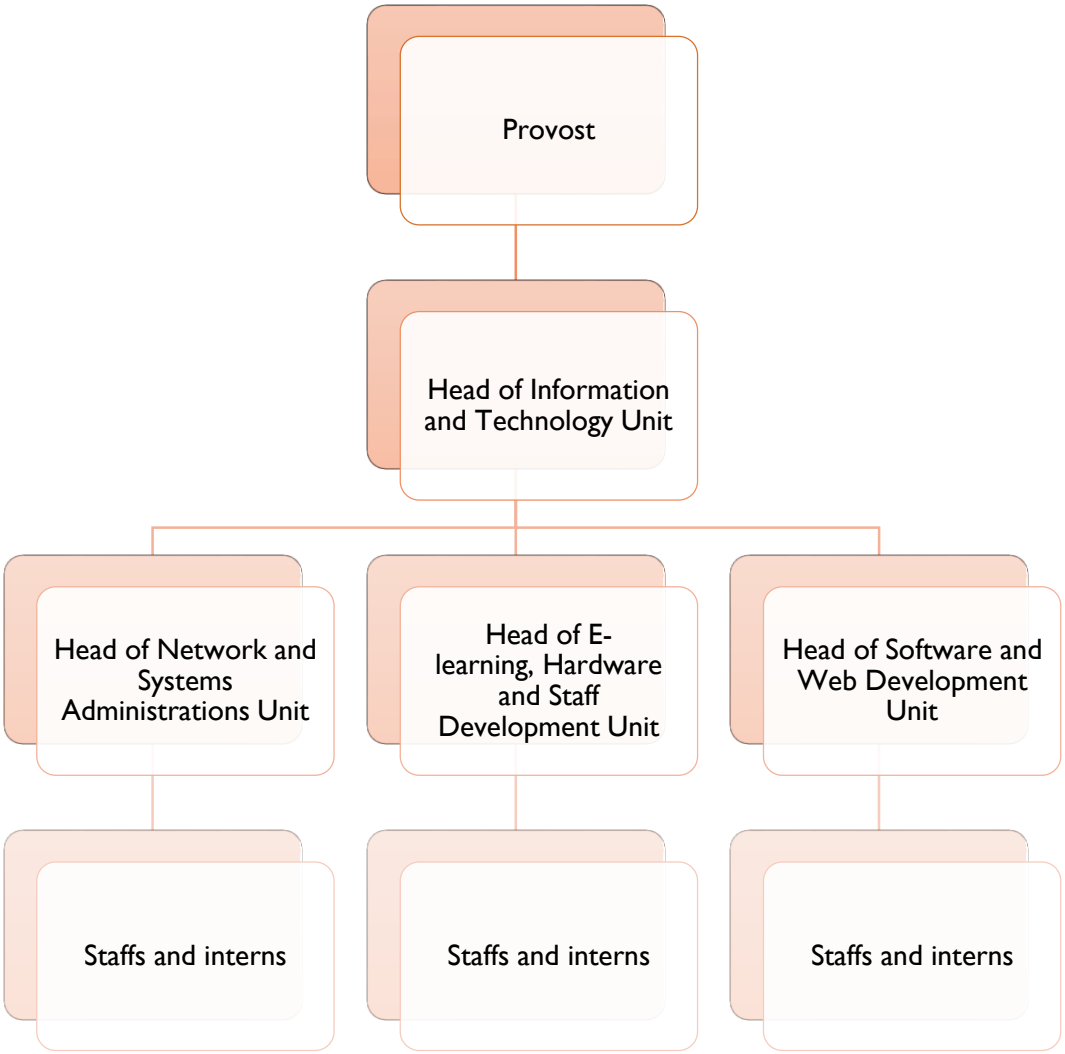
BRIEF OVERVIEW OF ITU, COLLEGE OF MEDICINE, U.I

ITU (Information Technology Unit) College of Medicine, is a unit under the office of the Provost of the College of Medicine, University of Ibadan, which in turn has three subunits namely: Network and System Administration Unit, E-Learning, Hardware and staff development Unit, and the Software and Web Development Unit.

More specifically, their services includes but not limited to:

1. Planning and implementation of College network expansion i.e. new network areas, extension of existing networks
2. Troubleshoot and maintain the existing College Network
3. Deploy and maintain College Network Services
4. Helpdesk functions (assist members of staff and units in resolving network related problems)
5. Creating and management of the Network Portals of the whole University
6. Troubleshooting and resolving of communication and networking issues in the University.
7. Design of College Website Maintenance and regular update of the College Website.
8. Co-ordinate the update of individual and departmental pages on the College website.
9. Design and implement software solutions for the activities of the College.
10. Determine ICT related training needs of the College.
11. Plan, organize and coordinate ICT related training in the College
12. Manage IT related facilities of the College.
13. Hardware support and maintenance.
14. Deploy and manage electronic learning (e-learning) platform for staff and students.
15. Supervise the ETF-sponsored and ABH cyber-café.

HIERARCHICAL STRUCTURE OF COLLEGE OF MEDICINE, U.I



CHAPTER ONE
WEB DEVELOPMENT

I had the distinct privilege of participating in a transformative web development project focused on revolutionizing the diagnostic process in healthcare. This report endeavors to provide a comprehensive account of this endeavor, shedding light on the technologies employed, the complexities tackled, and the substantial potential it holds for healthcare professionals.

Project 1: Patient's Medical Diagnosis Form

Overview

My project's central objective was to design and implement an intricate yet user-friendly medical form, meticulously crafted to facilitate the collection of critical patient data. This digital form aimed not only to streamline the data-gathering process but also to elevate the overall quality of diagnosis by furnishing healthcare practitioners with structured and organized patient information. The ultimate goal was to empower healthcare providers with a powerful diagnostic tool.

The web-based medical form we developed is a multifaceted system comprising various intricately designed sections, each tailored to elicit specific medical details from patients. These sections encompass personal information, medical history, symptoms, allergies, current medications, and more. I also invested considerable effort in creating an intuitive user interface to ensure ease of use for both patients and healthcare providers.

To ensure data integrity and seamless data access, the project integrated a robust database system. This database served as the repository for securely storing patient records, ensuring easy retrieval of information for healthcare practitioners. I recognized the paramount importance of safeguarding sensitive medical data and, therefore, implemented stringent security measures to protect patient confidentiality and compliance with healthcare data regulations.

Technologies used

The development of this medical form exemplified a harmonious fusion of diverse cutting-edge technologies. HTML played a pivotal role in crafting the structural framework of the form, ensuring it adhered to modern web standards. CSS, our styling wizard, was adept at transforming the form into an aesthetically pleasing and user-friendly interface. To enhance interactivity and user experience, we harnessed the capabilities of JavaScript, employing it for real-time form validation and dynamic content rendering.

On the server side, we adopted PHP, a robust and versatile scripting language, for processing and handling the data submitted by patients. PHP seamlessly interacted with our database, leveraging its capabilities to store, retrieve, and update patient records. The collaborative integration of these technologies ensured the development of a cohesive and responsive medical form.

Details

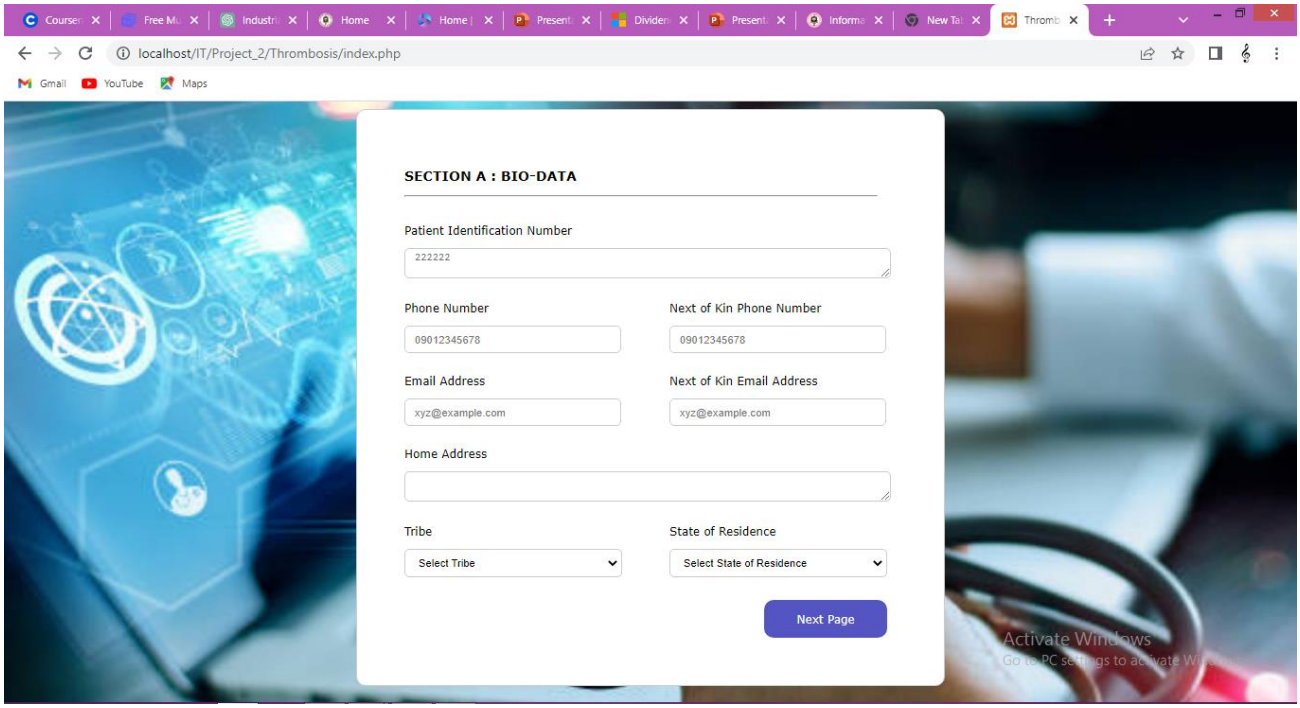
The medical form encompassed an array of meticulously designed sections, each with a unique purpose. The personal information section collected basic patient data such as name, age, and contact information. The medical history section enabled patients to provide details about their past illnesses, surgeries, and family medical history, aiding healthcare practitioners in identifying potential genetic predispositions.

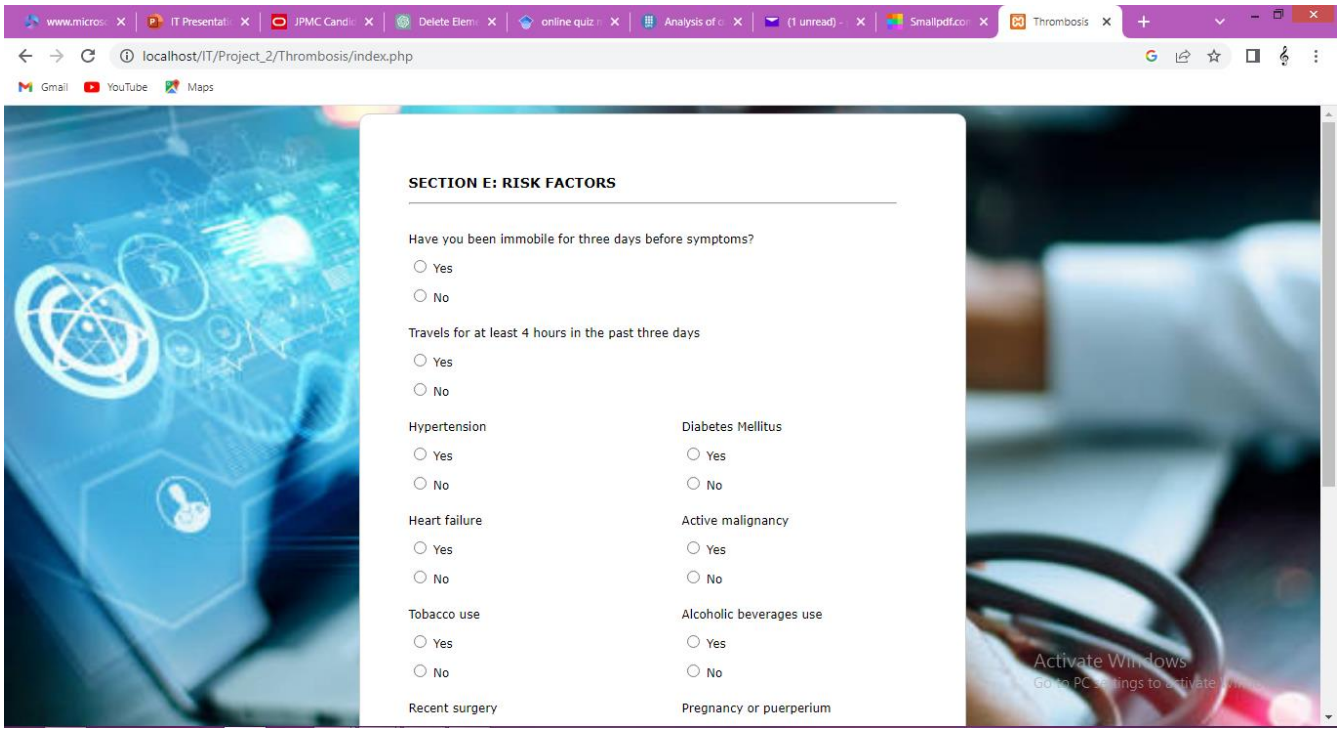
Symptoms and current medication sections allowed patients to articulate their current health status, while the allergies section served as a critical component to preempt any adverse reactions. A dedicated section for additional comments offered patients the opportunity to provide supplementary information, fostering open communication with healthcare providers. The database seamlessly stored this diverse array of information, ensuring it was easily accessible for healthcare practitioners.

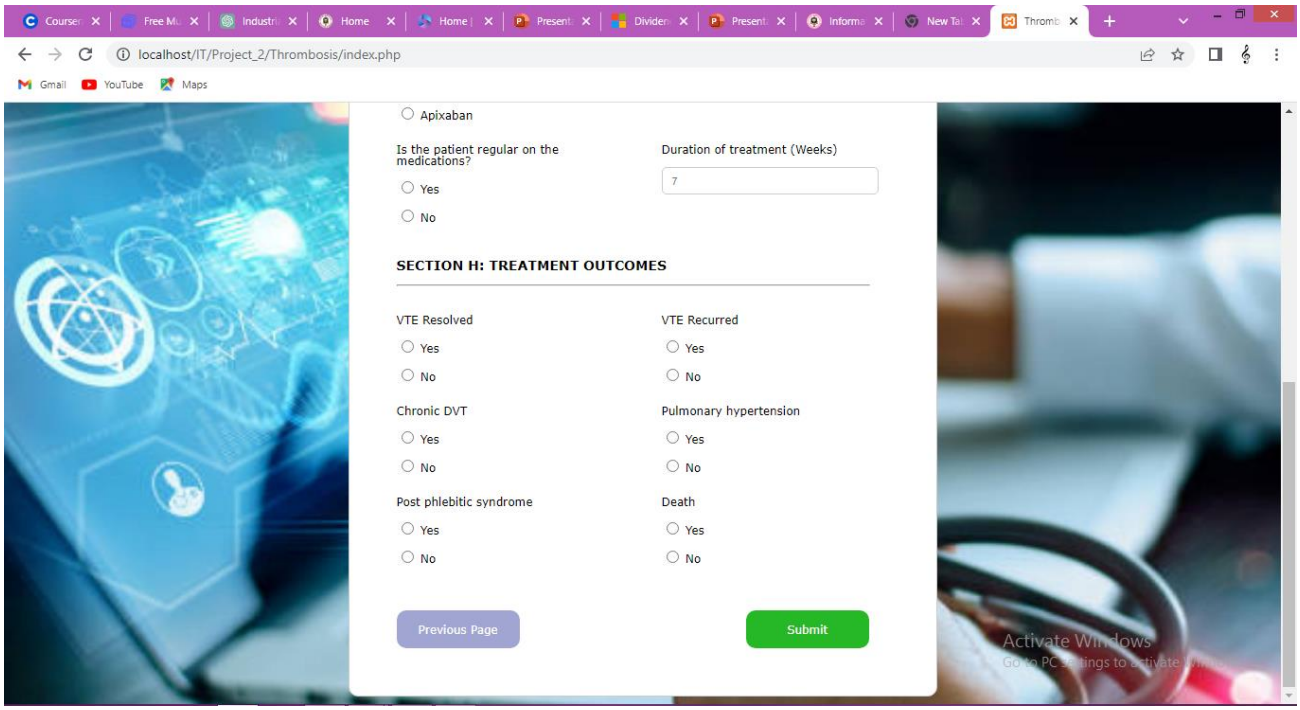
Details Screenshots and Database

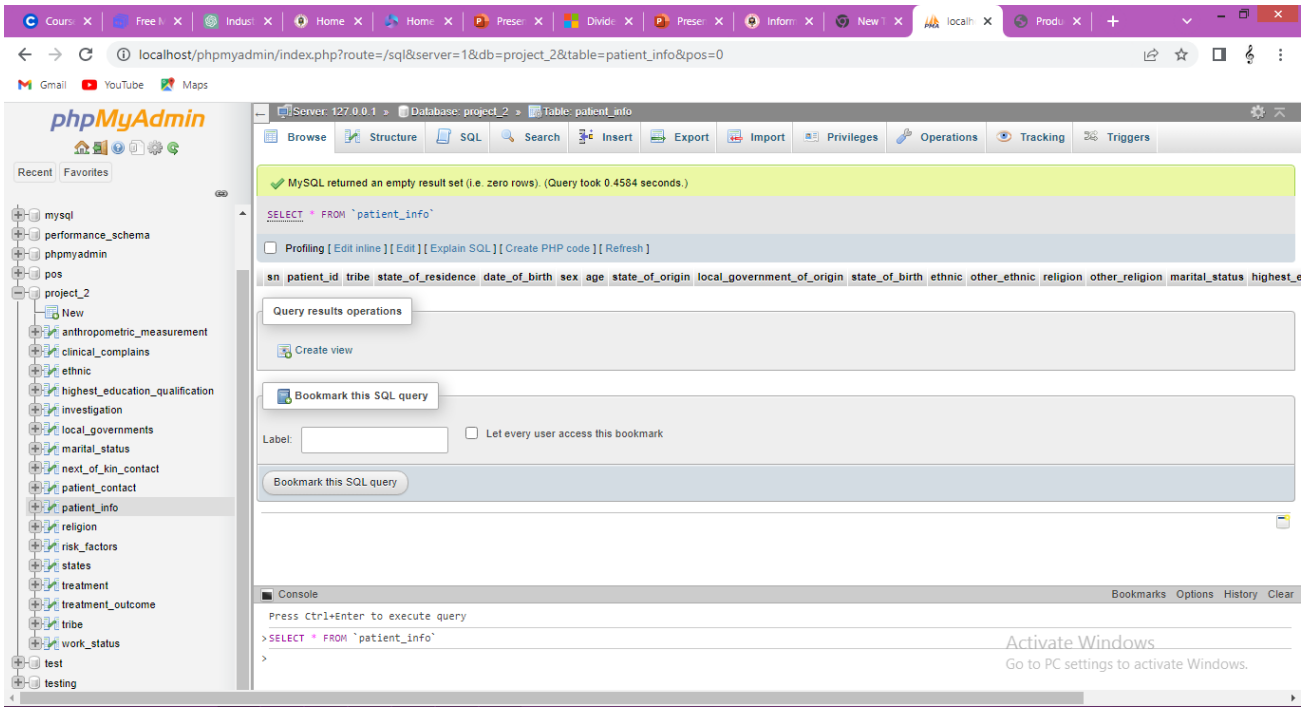
To provide a visual representation of my project, I have included a selection of screenshots capturing key sections of the medical form. These screenshots serve as a testament to the form's aesthetic appeal and user-friendly design. Additionally, the database, at the heart of the project, has been meticulously documented through a series of screenshots, providing insight into its structural complexity and data organization.

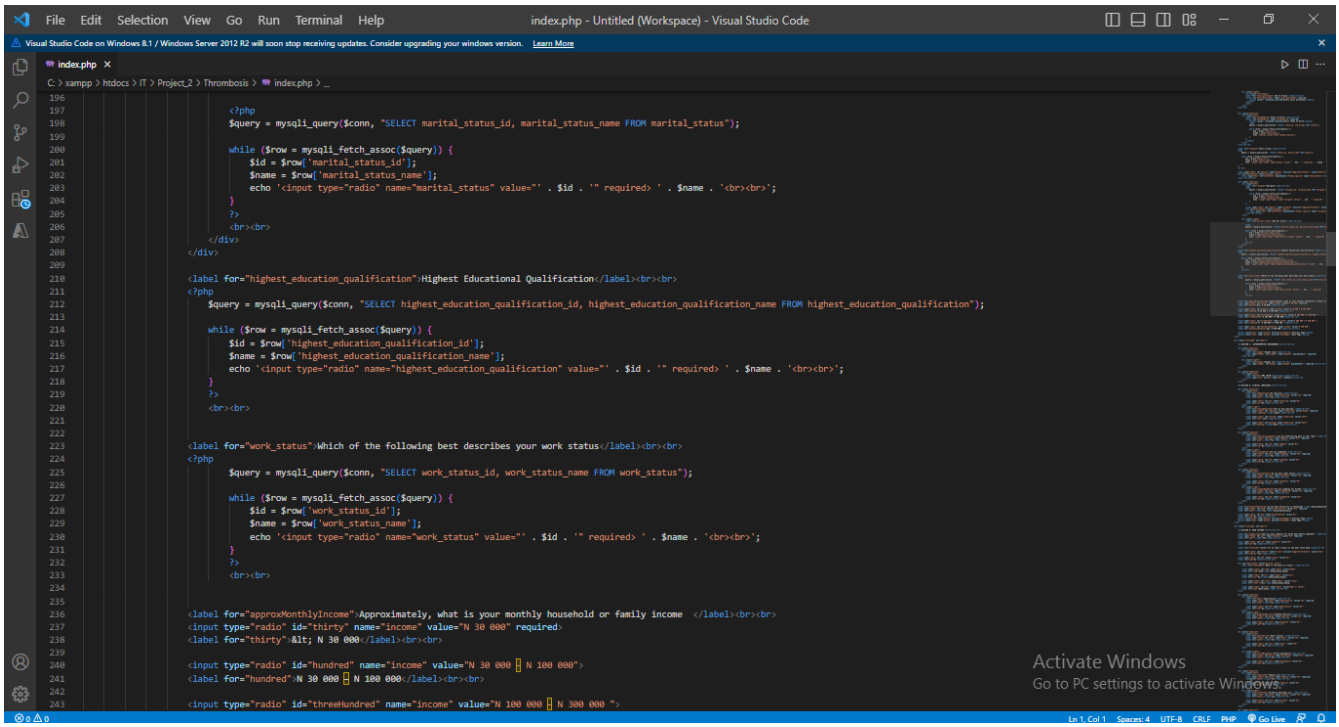
The database schema comprises interrelated tables, each meticulously designed to store specific categories of patient data. The schema not only ensures efficient data storage but also facilitates data retrieval through well-structured queries. This integration between the medical form and the database lays the foundation for a powerful diagnostic tool.




localhost/IT/Project_2/Thrombosis/index.php
SECTION E: RISK FACTORS
Have you been immobile for three days before symptoms?
Yes
No
Travels for at least 4 hours in the past three days
Yes
No
Hypertension
Yes
No
Diabetes Mellitus
Yes
No
Heart failure
Yes
No
Active malignancy
Yes
No
Tobacco use
Yes
No
Alcoholic beverages use
Yes
No
Recent surgery
Pregnancy or puerperium


localhost/IT/Project_2/Thrombosis/index.php
Apixaban
Is the patient regular on the medications?
Yes
No
Duration of treatment (Weeks)
7
SECTION H: TREATMENT OUTCOMES
VTE Resolved
Yes
No
VTE Recurred
Yes
No
Chronic DVT
Yes
No
Pulmonary hypertension
Yes
No
Post phlebitic syndrome
Yes
No
Death
Yes
No
Previous Page
Submit





Challenge faced

The development journey was not without its share of challenges. One of the primary hurdles I encountered was the intricate task of designing a comprehensive medical form that struck a balance between being exhaustive in its data collection and user-friendly in its implementation. Achieving this equilibrium required rigorous usability testing and iterative design refinements.

Additionally, I confronted the formidable task of implementing stringent data security measures to safeguard patient information. Overcoming these challenges was a valuable learning experience that solidified our commitment to data security and user-centered design principles

Project 2: E-Commerce Website

Overview

The project's central objective was to design, develop, and implement a robust e-commerce website, seamlessly integrating modern technologies to provide a user-friendly and secure online shopping experience. The platform was envisioned not only as a marketplace for consumers but also as a valuable tool for businesses seeking to expand their online presence.

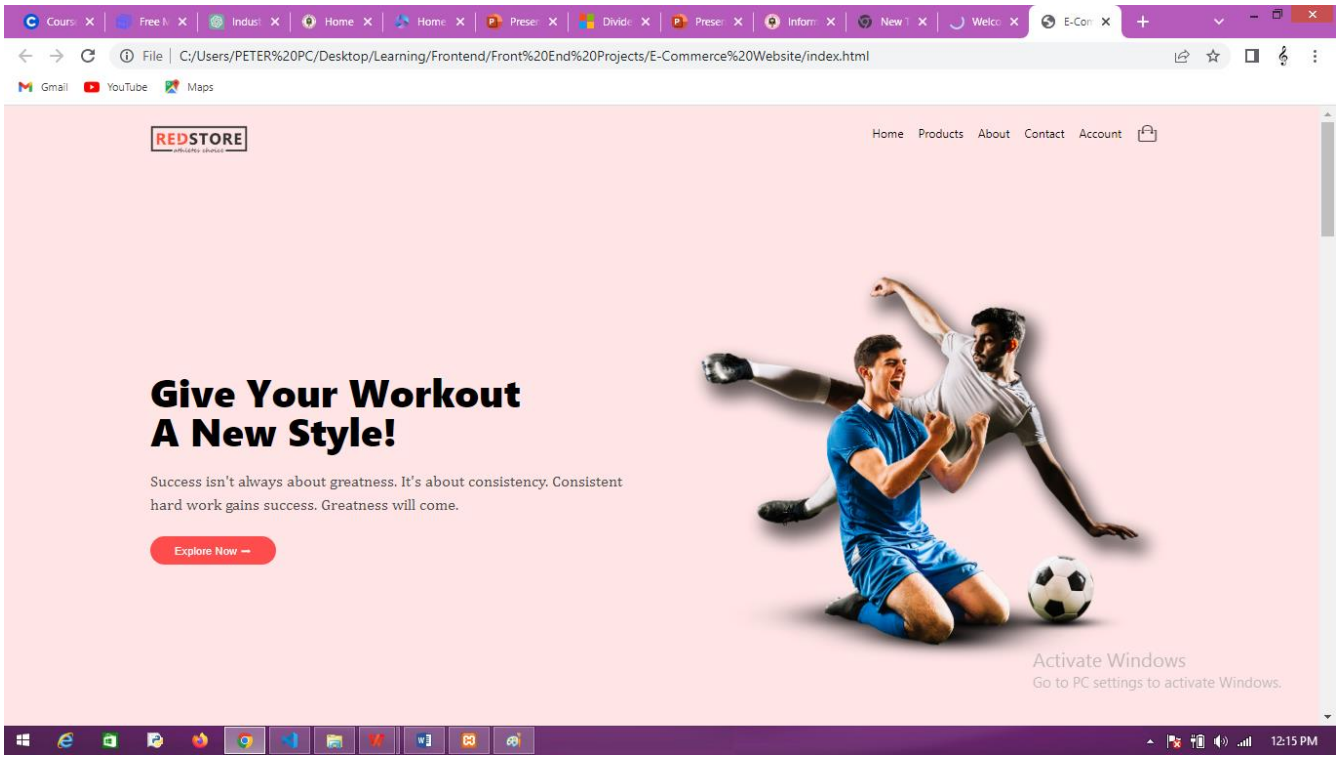
The e-commerce website we developed embodies the essence of contemporary online shopping, featuring an array of products, dynamic product listings, and secure transaction capabilities. The website was meticulously crafted to cater to diverse user needs, whether they were consumers searching for products or businesses seeking to showcase and sell their offerings.

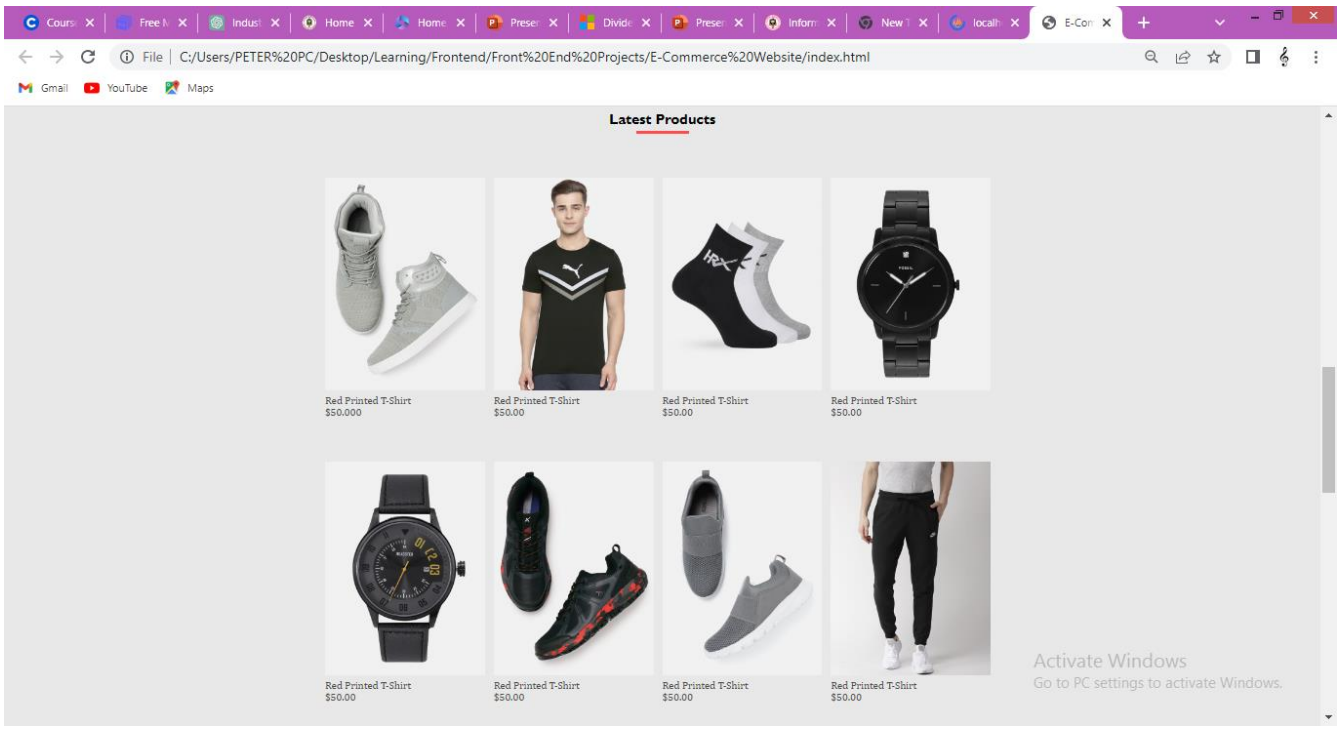
Technologies

The e-commerce website's foundation rested on HTML, the cornerstone of web development, which enabled us to structure web pages efficiently and ensure compatibility across various browsers and devices. CSS, the design maestro, breathed life into the website, applying styles, layouts, and responsiveness to enhance the visual appeal and usability.

JavaScript, my dynamic force, facilitated an engaging user experience by enabling interactive features such as image sliders, product filters, and live search. Additionally, JavaScript played a pivotal role in managing user interactions within the shopping cart, enabling users to add, remove, and update items seamlessly. 3.

Screenshots

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Maps
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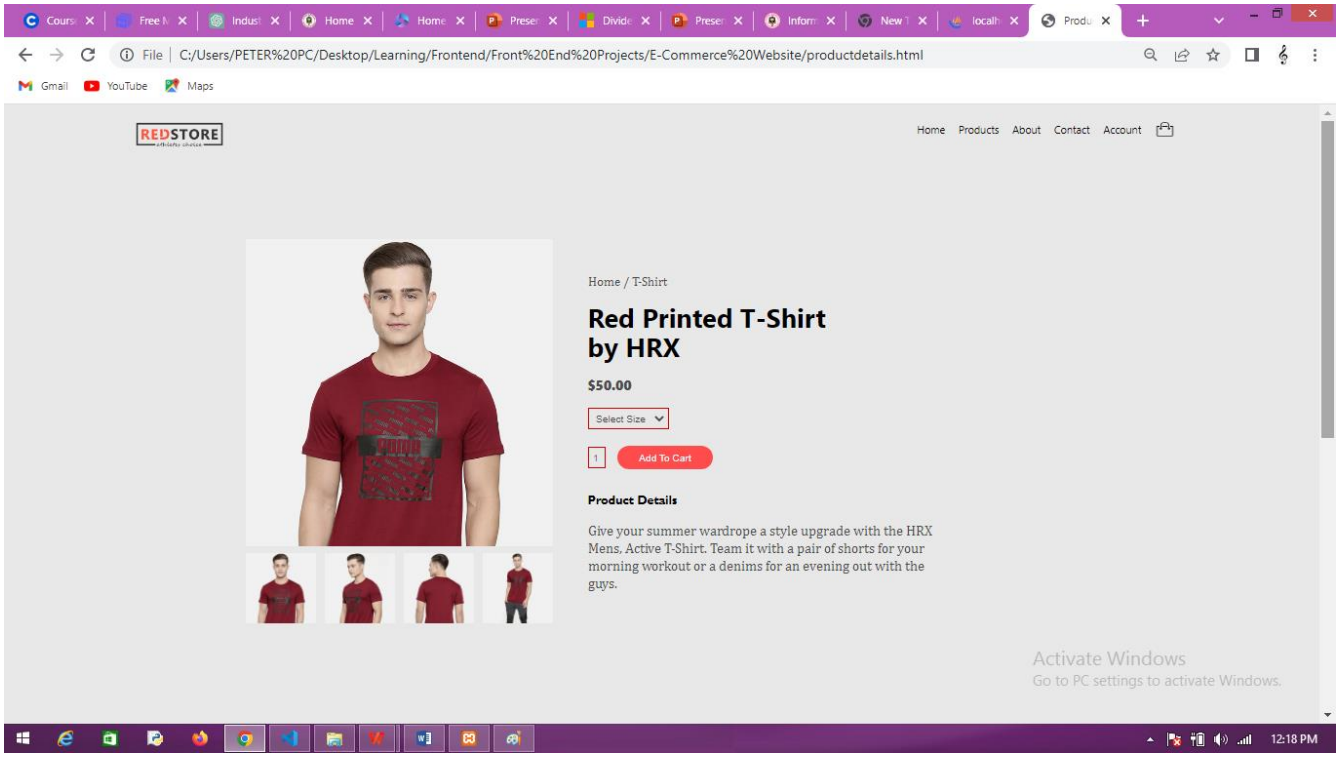
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Gmail
YouTube
Maps
REDSTORE
Home
Products
About
Contact
Account
Home / T-Shirt
Red Printed T-Shirt by HRX
$50.00
Select Size
1
Add To Cart
Product Details
Give your summer wardrope a style upgrade with the HRX Mens, Active T-Shirt. Team it with a pair of shorts for your morning workout or a denims for an evening out with the guys.
Activate Windows
Go to PC settings to activate Windows.
12:18 PM

CHAPTER TWO
COMPUTER NETWORKING

Computer networking refers to connected computing devices (such as laptops, desktops, servers, smartphones, and tablets) and an ever-expanding array of IoT devices (such as cameras, door locks, doorbells, refrigerators, audio/visual systems, thermostats, and various sensors) that communicate with one another.

How does a computer network work?

Specialized devices such as switches, routers, and access points form the foundation of computer networks. Switches connect and help to internally secure computers, printers, servers, and other devices to networks in homes or organizations. Access points are switches that connect devices to networks without the use of cables.

Routers connect networks to other networks and act as dispatchers. They analyze data to be sent across a network, choose the best routes for it, and send it on its way. Routers connect your home and business to the world and help protect information from outside security threats.

While switches and routers differ in several ways, one key difference is how they identify end devices. A Layer 2 switch uniquely identifies a device by its "burned-in" MAC address. A Layer 3 router uniquely identifies a device's network connection with a network-assigned IP address. Today, most switches include some level of routing functionality.

Computer Network

A computer network is a system in which multiple computers are connected to each other to share information and resources. A computer network or data network is a telecommunications network which allows computers to exchange data. In computer networks, networked computing devices pass data to each other along network links (data connections). The connections between nodes are established using either cable media or wireless media. The best- known computer network is the Internet.

Characteristics of a Computer Network

- Share resources from one computer to another.
- Create files and store them in one computer, access those files from the other computer(s) connected over the network.
- Connect a printer, scanner, or a fax machine to one computer within the network and let other computers of the network use the machines available over the network.

Following is the list of hardware's required to set up a computer network.

- Network Cables
- Distributors
- Routers
- Internal Network Cards
- External Network Cards

Overview of the Devices Used in Computer Networking

Network computer devices that originate, route and terminate the data are called network nodes. Nodes can include hosts such as personal computers, phones, servers as well as networking hardware. Two such devices can be said to be networked together when one device is able to exchange information with the other device, whether or not they have a direct connection to each other.

Network Cables

Network cables are used to connect computers. The most commonly used cable is Category 5 cable RJ-45.

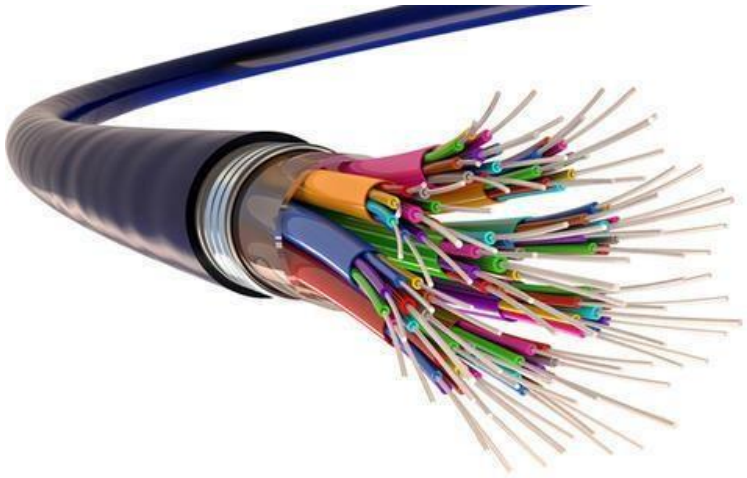
Types of Network Cables Coaxial Cable

Coaxial cables have a single copper conductor at the center, while a plastic layer provides insulation between the center conductor and braided metal shield. The metal shield blocks outside interference from fluorescent lights, motors, and other computers.

Coaxial cabling is highly resistant to signal obstruction, although it can be complex to install. It can handle greater cable lengths between network devices than twisted pair cables. The two types of coaxial cables are thick coaxial and thin coaxial.

Fiber Optic Cable

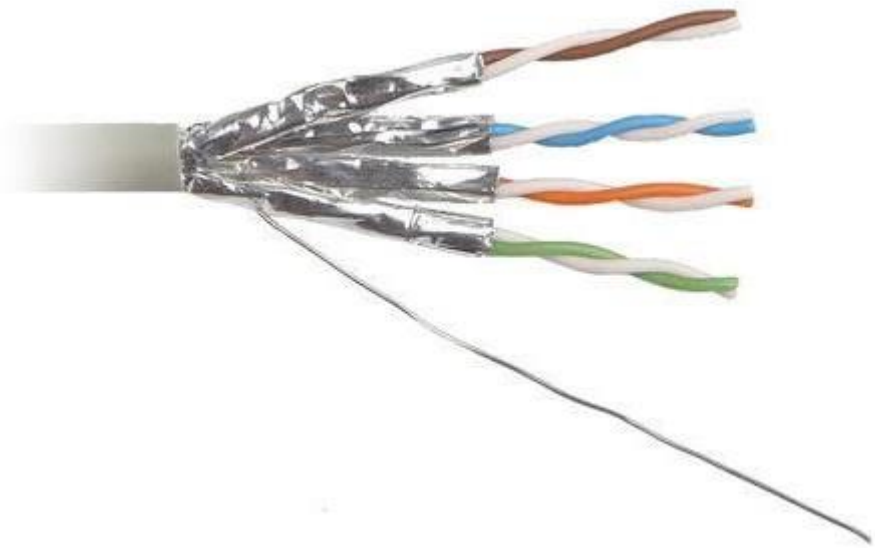
Fiber optic cables possess a center glass core surrounded by multiple layers of protective materials. They avoid electrical obstruction by transmitting light instead of electronic signals, making them perfect for environments with large amounts of electrical interference. Fiber optic cables have become the standard for connecting networks across buildings because of their resistance to moisture and lighting.



Shielded Twisted Pair (STP) Cable

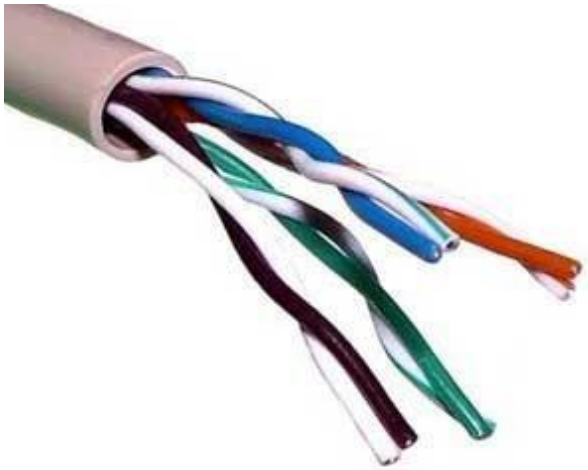
Often referred to colloquially as simply ethernet cables, STP cables employ a special type of copper telephone wiring used for business installations. An external shield functioning as a ground is added to the standard twisted pair of telephone wires.

Shielded twisted pair cables can be perfect if you want to set up cables in an area with potential interference and risks to an unshielded twisted pair cable's electrical current. Shielded twisted pair cables can also help to expand the distance between the cables.



Unshielded Twisted Pair (UTP) Cable

Unshielded twisted pair (UTP) cables are broadly used in the telecommunications and computer industries as ethernet cables and telephone wires. In a UTP cable, conductors forming a single circuit are twisted around one another to cancel out electromagnetic interference (EMI) from external sources.



Switch

A network switch connects devices within a network (often a local area network, or LAN) and forwards data packets to and from those devices. Unlike a router, a switch only sends data to the single device it is intended for (which may be another switch, a router, or a user's computer), not to networks of multiple devices.

Router

A router is a type of device which acts as the central point among computers and other devices that are a part of the network. It is equipped with holes called ports. Computers and other devices are connected to a router using network cables. Now-a-days router comes in wireless modes using which computers can be connected without any physical cable.

Network Card

Network card is a necessary component of a computer without which a computer cannot be connected over a network. It is also known as the network adapter or Network Interface Card (NIC). Most branded computers have network card pre-installed. Network cards are of two types: Internal and External Network Cards.

Internal Network Cards

Motherboard has a slot for internal network card where it is to be inserted. Internal network cards are of two types in which the first type uses Peripheral Component Interconnect (PCI) connection, while the second type uses Industry Standard Architecture (ISA). Network cables are required to provide network access.

External Network Cards

External network cards are of two types: Wireless and USB based. Wireless network card needs to be inserted into the motherboard, however no network cable is required to connect to the network.

Universal Serial Bus (USB)

USB card is easy to use and connects via USB port. Computers automatically detect USB card and can install the drivers required to support the USB network card automatically.

CHAPTER THREE

PROJECT UNDERTAKEN IN THE NETWORKING UNIT

1. CRIMPING OF NETWORK CABLES

Cables can transmit information along their length. To actually get that information where it needs to go, you need to make the right connections to an RJ45 connector. Your cable run needs to terminate into a connector, and that connector needs a jack to plug into.

Registered Jack 45 (RJ45) is a standard type of physical connector for network cables. RJ45 connectors are commonly seen with Ethernet cables and networks.

Modern Ethernet cables feature a small plastic plug on each end of the cable. That plug is inserted into RJ45 jacks of Ethernet devices. The term “plug” refers to the cable or “male” end of the connection while the term “jack” refers to the port or “female” end.

RJ-45 Connector with Protective Cover InstalledRJ45 plugs feature eight (8) pins to which the wire strands of a cable interface electrically. Each plug has eight locations (positions), spaced about 1mm apart. Individual wires are inserted using special cable crimping tools. The industry calls this type of connector 8P8C (Eight Position, Eight Contact).

Ethernet cables and 8P8C connectors are crimped into the wiring pattern to function. 8P8C can be used with other types of connections besides Ethernet; it is also used with RS-232 serial cables, for example. Because RJ45 is by far the predominant usage of 8P8C. Industry professionals use those two terms interchangeably.

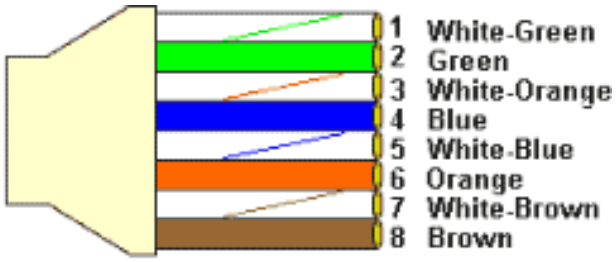
T568A or T568B Wiring Standard

RJ45 T568A Compared To T568B Wiring Standards

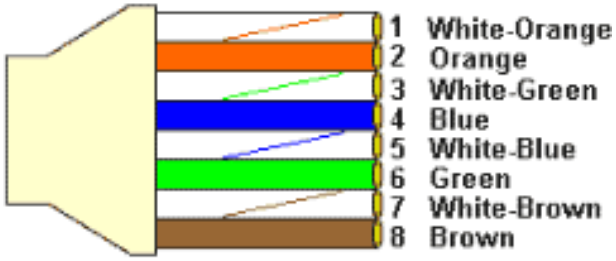
T568A and T568B are the two color codes used for wiring eight-position modular plugs. Both are allowed under the ANSI/TIA/EIA wiring standards. The only difference between the two color codes is that the orange and green pairs are interchanged.

There are no transmission differences between T568A and T568B cabling schemes. North America's preference is for T568B. Both ends must use the same standard. It makes no difference to the transmission characteristics of data.

T568B wiring pattern is recognized as the preferred wiring pattern.



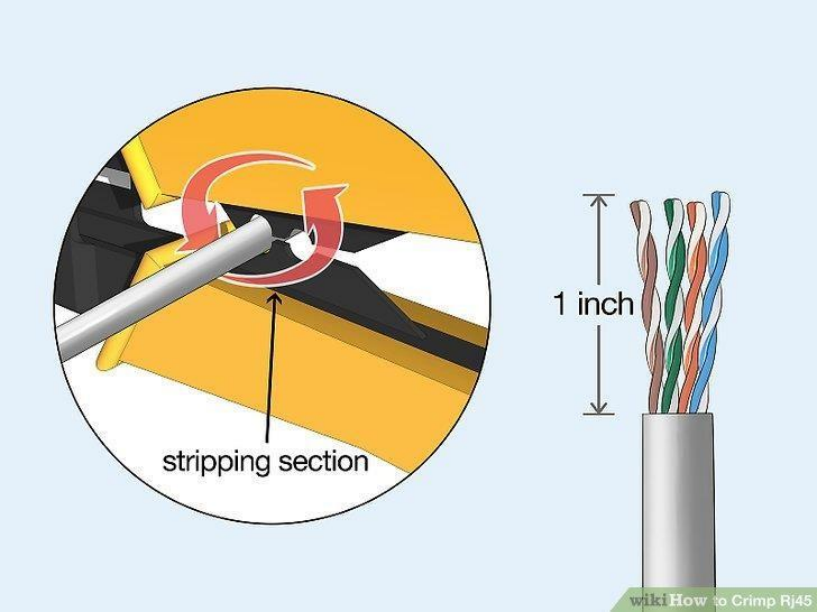
568A CABLE END



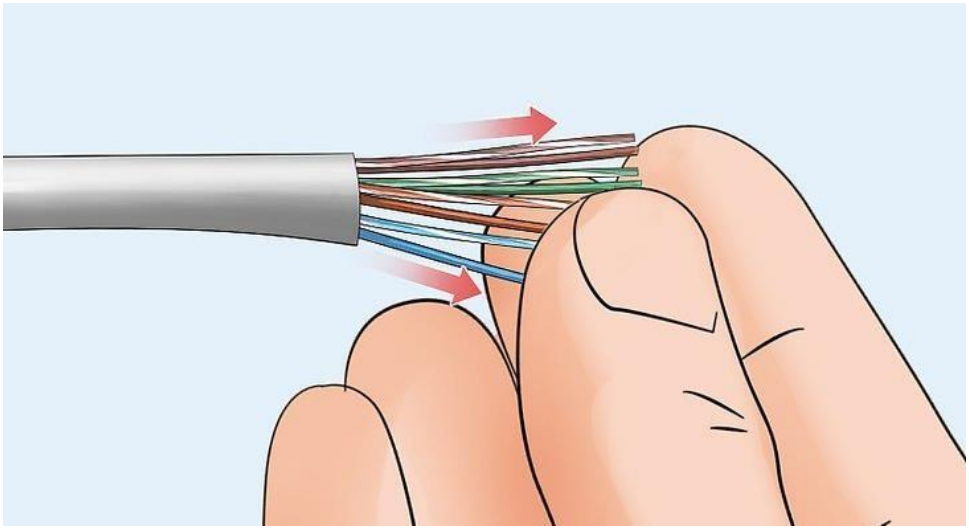
568B CABLE END

STEPS IN CRIMPING A NETWORK CABLE

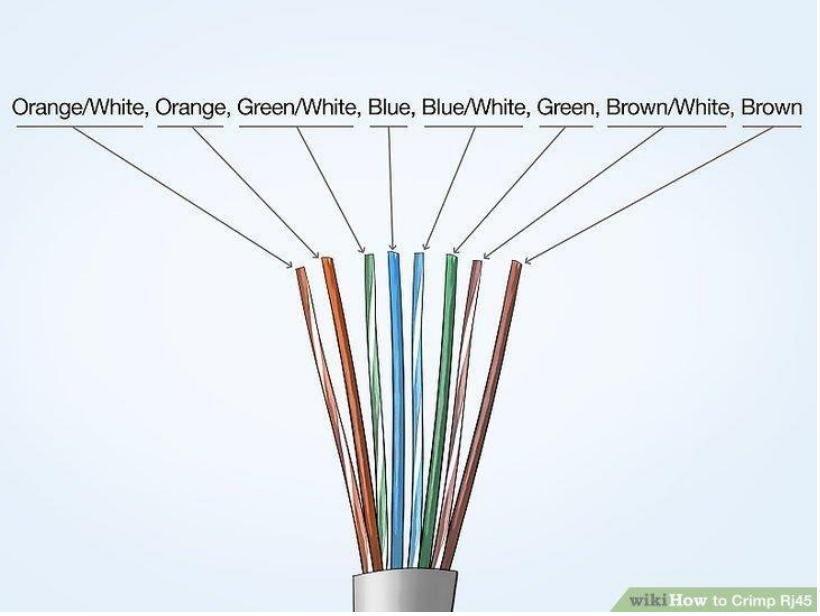
STEP 1: Strip the cable back 1 inch (25 mm) from the end. Insert the cable into the stripper section of the tool and squeeze it tight. Then, rotate the crimping tool around the cable in a smooth and even motion to create a clean cut. Keep the tool clamped and pull away towards the end of the wire to remove the sheathing. The stripping section is a round hole near the handle of the tool. The sheathing should come off cleanly, leaving the wires exposed.



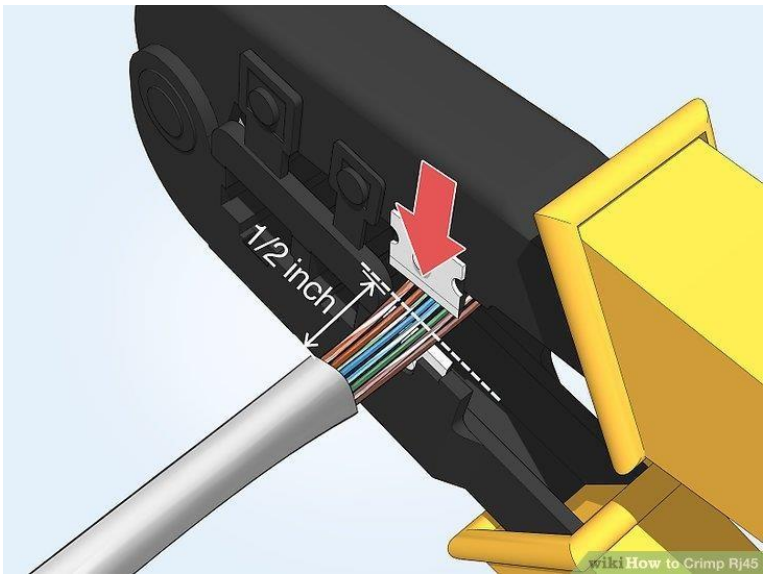
STEP 2: Untwist and straighten the wires inside of the cable. Inside of the cable you'll see a bunch of smaller wires twisted together. Separate the twisted wires and straighten them out so they're easier to sort into the right order. Cut off the small plastic wire separator or core so it's out of the way. Don't cut off or remove any of the wires or you won't be able to crimp them into the connector.



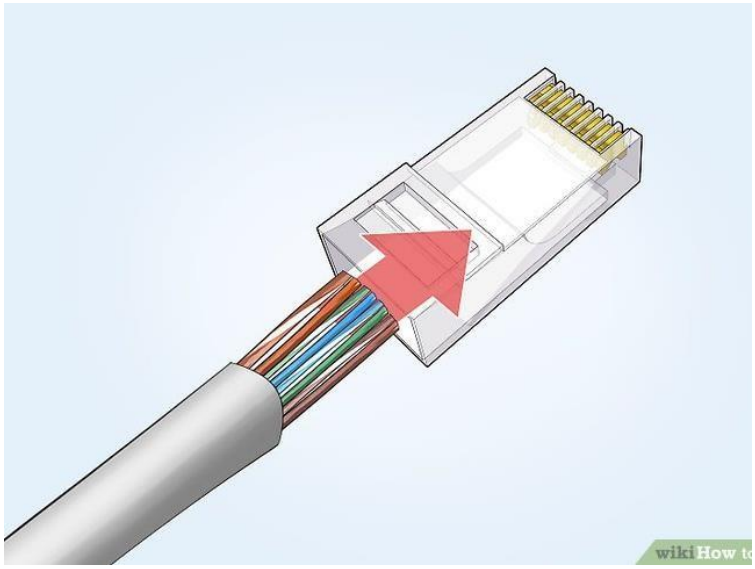
STEP 3: Arrange the wires into the right order. Use your fingers to put the wires in the correct order so they can be properly crimped. The proper sequence is as follows from left to right: Orange/White, Orange, Green/White, Blue, Blue/White, Green, Brown/White, and Brown. There are 8 wires in total that need to be arranged in the right sequence. Note that the wires labeled Orange/White or Brown/White indicate the small wires that have 2 colors.



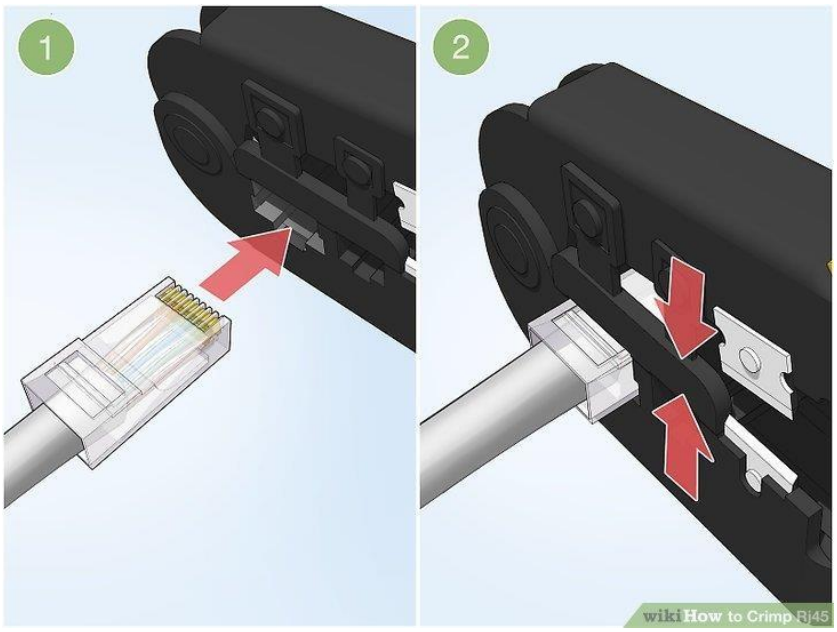
STEP 4: Cut the wires into an even line 1⁄2 inch (13 mm) from sheathing. Hold the wires with your thumb and index finger to keep them in order. Then, use the cutting section of the crimping tool to cut them into an even line. The cutting section of the tool will resemble wire cutters. The wires must be in an even line to be crimped into the RJ-45 connector properly. If you cut them in an uneven line, move further down the wires and cut them again.



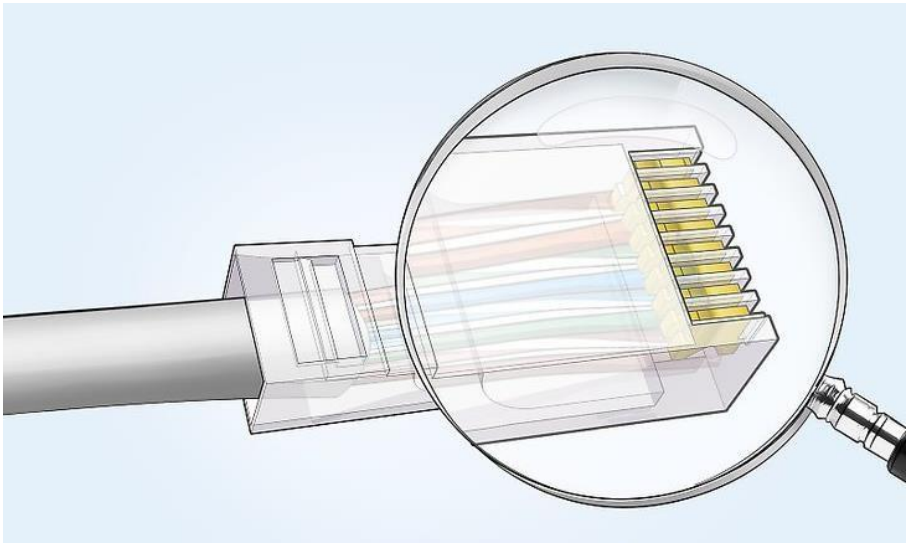
STEP 5: Insert the wires into the RJ-45 connector. Hold the RJ-45 connector so the clip is on the underside and the small metal pins are facing up. Insert the cable into the connector so that each of the small wires fits into the small grooves in the connector. The sheathing of the cable should fit just inside of the connector so it's past the base. If any of the small wires bend or don't fit into a groove correctly, take the cable out and straighten the wires with your fingers before trying again. The wires must be inserted in the correct order and each wire must fit into a groove before you crimp the connector.



STEP 6: Stick the connector into the crimping part of the tool and squeeze twice. Insert the connector in the crimping section of the tool until it can't fit any further. Squeeze the handles to crimp the connector and secure the wires. Release the handles, then squeeze the tool again to make sure all of the pins are pushed down. The crimping tool pushes small pins in the grooves down onto the wires to hold and connect them to the RJ-45 connector.



STEP 7: Remove the cable from the tool and check that all of the pins are down. Take the connector out of the tool and look at the pins to see that they're all pushed down in an even line. Lightly tug at the connector to make sure it's attached to the cable. If any of the pins aren't pushed down, put the wire back into the crimping tool and crimp it again.

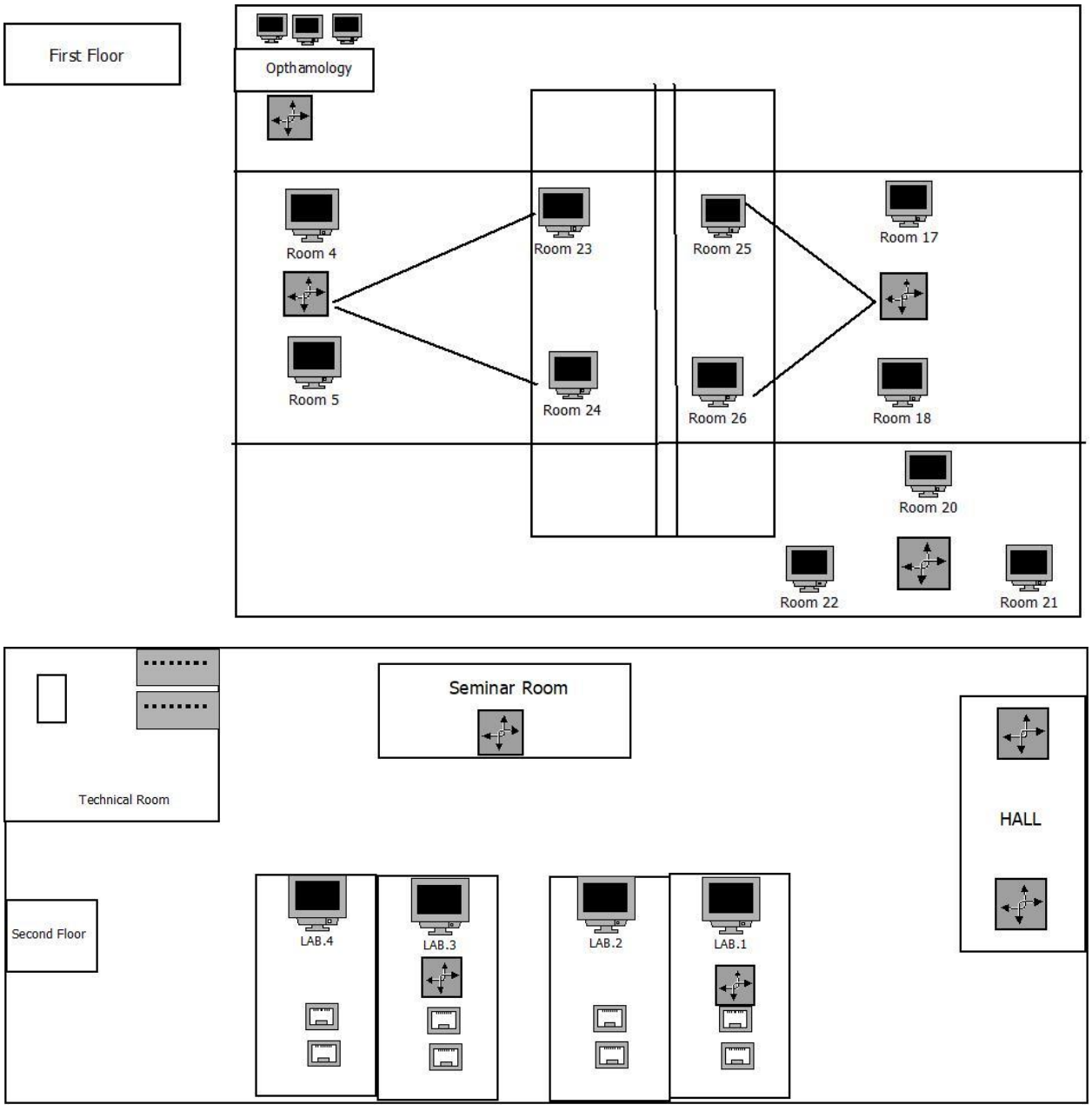


ACTION

2. USE OF DIA SOFTWARE TO SIMULATE THE NETWORK OF THE VERTICAL EXTENTION BUILDING

In the context of networking, Dia is used to create visual representations of network topologies, layouts, and configurations. Network administrators and engineers often use Dia to design and document network architectures, which can include routers, switches, servers, connections, and other network components.

In this case I used the software to model the networking structure of one of their new buildings (the vertical extension building), made the cost of networking the whole building, and presenting to the head of the unit just like a contractor about to be awarded a contract. Below is the modelling.



3. CONFIGURATION OF AN ACCESS POINT

Configuring an access point (AP) is an essential step in setting up a wireless network. Access points provide wireless connectivity to devices, allowing them to connect to a wired network or the internet.

STEPS IN CONFIGURING AN ACCESS PONT

STEP 1: Deploy the Router/Switch. (If there is no router or switch installed yet, do the following**)**

1. Find a good spot for the device.

If it is a wireless router, place it in a location that would be appropriate, keeping the potential location of the access point in mind. This guarantees effective distribution of coverage and minimized interference levels. If it is a switch or a wired router, then deploy it in a location where it would not interfere with any activities and the surrounding interior solutions.

2. Connect the router to a power outlet and switch it on. PoE-compatible devices will not require a power outlet—just an Ethernet cable. Also, some devices turn on automatically as soon as they are connected to a power source.

STEP 2: Deploy the Access Point.

1. Find a good spot for the device.

If the local area network has other wireless devices, such as a router, place the access point in a location where its wireless signal would have minimum or no interference with other wireless devices within the LAN and where it would provide effective coverage with respect to the premises. If the purpose of the access point is to introduce wireless connectivity to a wired LAN, then place it in a location where the wireless signal would cover the greatest possible area with the least number of obstacles and the least amount of interference.

2. If the device is powered by an AC/DC adapter, connect it to the access point and plug it into an electrical socket. If it is a PoE connection, proceed to the next step.

STEP 3: Connect the Cables. (There are several cables that the user will need to connect**)**

1. Use an Ethernet cable to connect the access point to the router. The cable should be inserted into a LAN port on the router and into the main Ethernet port on the access point. This introduces the access point to the router's created local area network.

2. Use an Ethernet cable to connect the router to the computer. The cable should be inserted into a LAN port on the router and into the Ethernet port on the computer (typically there is only one). This puts the computer onto the network and allows direct access point and LAN management.

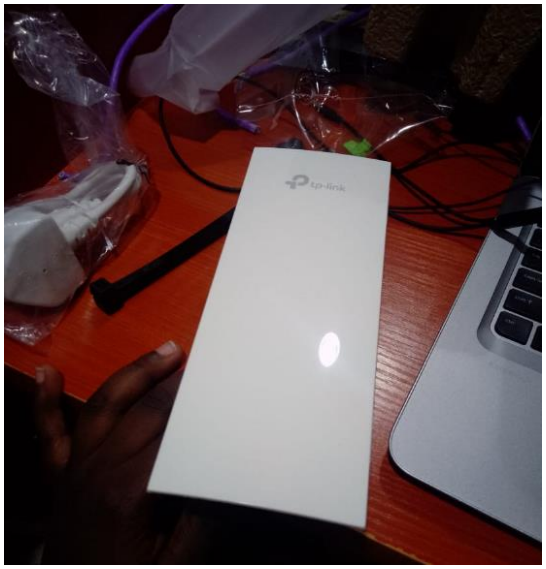
3. If it is necessary to provide access to the Internet over the local area network, use an Ethernet cable to connect the router to the modem. Insert the cable into the main Ethernet port on the router and into the Ethernet port on the modem (typically there is only one).

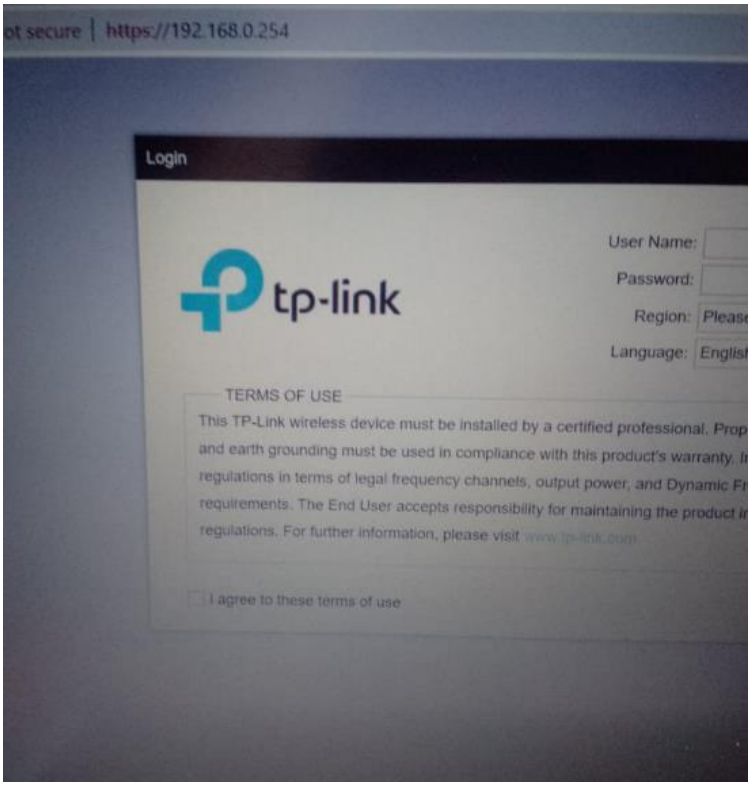
STEP 4: Configure

Modern technologies have practically done away with the inconvenience of manual LAN setup, let alone Internet access setup. Once everything is properly connected and the devices have acknowledged each other's presence on the network, the user is ready to go.

If any basic setup is necessary either for the access point or for the network in general, the computer or the user manual should provide instructions on what specific steps to take.

Users can also change optional and advanced router settings by connecting to the router via the computer using the IP address 192.168.0.1 or 192.168.1.1 (or the address noted in the manual).





CHAPTER FOUR

EXPERIENCES RELEVANT TO CLASSWORK

The knowledge my lecturers impacted in me turned out to be my most invaluable asset during my industrial training. Thanks to the hours of lectures, tons of homework, practical classes and some personal research while in school, I was able to handle a handful of challenges at my workplace with relative ease. To start with, Departmental courses such as CSC341 (Data Structures) in which I learnt how to effectively structure codes properly and efficiently for implementation, CSC293 (Web Programming) which was the bedrock for web development using various technologies like HTML, CSS, JavaScript and PHP, CSC322 (Digital Communication) in which I was taught and understood the basics of networking of which knowledge was so useful in the organization I interned. Furthermore, CSC321 (Introduction to Operating Systems) proved useful while configuring networks and management of the university network, and others like GES201 (Use of English) all proved to be useful at various points in time during my SIWES Training.

My basic understanding of CSC301 (Computing Centre Management) enabled me also to understand the structure of the medical library computer center and I was able to function effectively there while assisting the tutor during days of training on the use of ICT to ease the mode of teaching and learning in the College.

In the same vein, CSC335 (Software Engineering) which was taught by Dr. Angela Makolo helped me understand the various software development phases as it was very much in use (especially the Agile method) at where I interned. Thanks to our practical classes and lectures, I made mince meal of programming IDEs and Microsoft tools such as MS-Excel and MS-Access and Cisco Packet Tracer and the Dia Software for constructions of flowchart and structural diagrams meant for simulation whenever the need arose.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATION

Conclusion

Industrial training experience at Telemedicine Department gave me a glimpse and exposure to the reality of life after school. It sharpened my mind and spurred me into developing my digital communication skills, information management and interpersonal communication skills more. The training also afforded me the opportunity to see loopholes in the communication channels and pathways of the University system, thereby developing my analytical approach to solving various challenges with cutting-edge technology.

I was able to develop interpersonal relationship with colleagues at work as well and this boost my communication skills also.

Recommendations

The Industrial Training Coordinating Centre really did very well in this SIWES especially by ensuring that every student actually got IT placements that pertained to their fields of study and by organizing a seminar to intimate us students on what is required of us in the industry.

ITCC, after putting in a lot work, should not relent their efforts but go further to ensure that IT students' welfare are taken care of by employers.

The Department of Computer Science should place emphasis on more practical as regards database, digital communication and networking (Network Administration) as a course before students go for the SIWES training.

References

www.geeksforgeeks.org

www.tutorialspoint.com

www.stackoverflow.com

www.lingowave.com

www.w3schools.com

www.udacity.com

www.study.com