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MINISTERE DE L'ENSEIGNEMENT SUPERIEURE

**COLLEGE OF TECHNOLOGY**

**UNIVERSITY OF BUEA**

TECHRITOMA

Spirit of Creativity

# A SEVEN WEEKS INTENSHIP REPORT BY AKIJIKA RANDOLPH YUFENYUY CT23A012 AT TECHCRITOMA Inc UNDER THE SUPERVISION OF *MR KOLE.*

# 2023/2024 ACADEMIC

## Certification

This is to certify that, **AKIJIKA RANDOLPH YUFENYUY** with matricule **(CT23A012)** in the department of computer engineering College of Technology University of Buea has successfully completed his internship training at **TECHRITOMA inc.** for a period of 7 weeks and has submitted this report. This report is the reflection of work done during the internship under my field supervisor. Guidance and mentorship.

**Academic Supervisor**

Mr. Kolle Emmanuel

Signature_____.

Date_____.

**Field Supervisor**

Eng. ANDROPOV AJUATA AJEBUA

Signature_____.

Date_____.

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# LIST OF ABBRIVIATIONS

- XAMPP: CROSS PLATFORM APPACHE MYSQL PHP PERL
- PHP: HYPERTEXT PREPROCESOR
- CSS: CASCADING STYLE SHEET
- HTML: HYPERTEXT MARKUP LANGUAGE
- SDLC: SOFTWARE DEVELOPMENT LIFE CYCLE
- UX:USER INTERFACE DESIGNE

# ACKNOLEDGMENT

I would like to express my sincere gratitude to God almighty for providing me with the strength, knowledge and all the necessary requirements needed for me to go through the internship.

I am deeply grateful to my academic supervisor MR. KOLLE for the endless time he created for me and all the necessary corrections he gave for me to put this document to perfection. I am supper grateful to my internship supper visor Dr. Tchapga Tchito Christian, for providing me with accurate knowledge on how to go about my internship and the necessary information on how to write this report.

A word of thanks to the entire staff of College of Technology for including internship as a first-year program which has helped me interact with workers of my field and increase my aspiration towards my field.

Also, my sincere gratitude to my wonderful lecturers who thought me the skills I needed to be able to carry on with my internship smoothly.

I take this opportunity to thank my field supervisor Eng. Andropov Ajuatah Ajebua for his guidance, encouragement and excellent supervision during the course of my internship program Not forgetting my first blessing Mr. & Mrs. AKIJIKA for being my support system and providing me with all the finances I needed for my internship.

# GENERAL INTRODUCTION

## Background

As a first-year student of software engineering at the University of Buea college of technology, I was eager to gain practical experience and insights into the industry. The internship at TECHRITOMA provided an invaluable opportunity to apply theoretical knowledge, develop skills and explore potential career paths.

## Objectives

My primary objectives of this internship were:

- Gain practical experience. One of my primary objectives for the tech internship was to gain hands-on, practical experience in the field. This includes applying theoretical knowledge to real-world projects, learning industry-specific tools and technologies, and understanding the practical challenges and solutions in the tech industry.
- To develop fundamental skills in programming and in web development.
- Secondly to gain advanced knowledge in full stack web development, especially in the backend languages like hypertext pre-processor (PHP), perfect my development in the front-end languages like html, cascading style sheet (CSS), JavaScript, and frame work like bootstrap then apply theoretical knowledge from college, and develop both technical and soft skills in a professional environment.
- Explore my career interests: This was to help me explore my career of interests and gain exposure to different roles and responsibilities within the tech industry. It was also to help provide insight into the skills and qualifications needed for my career path.

## Scope of the Report

This internship report covers my experiences and accomplishments during my 6 weeks of internship at TECHCRITOMA Inc., from the July to October. The report outlines lessons learned, task I carried and the challenges i faced. It will also contain my point of view about the internship.

# CHAPTER 1: OVERVIEW ON THE COMPANY:

## Company Profile:

### Company name: TECHRITOMA INC.

TECHRITOMA INC stands for (Technology for Recovery Investments, Taking Operative Actions for Massive Avail Incorporated). TECHRITOMA Inc is a multipurpose technology-based company with head office in Buea Cameroon. The CEO is Engineer Andropov Ajuatah Ajebua. This company was brought to light in the year 2019 but went fully operational in 2021 and since then has had tons of clients nationwide and beyond. The company is renowned for its innovations in the world of technology, including products like: job door way, Ajua market, excellence preparatory classes. And are based in the following domains: Application development, web development, cloud deploy, and data science. With a mission to empower stakeholders, clients, business leaders, and entrepreneurs with cutting-edge product services, it strives to drive unparallel productivity through state-of-the-arts data-to-decision technologies and seamless process automation.

## COMPANY MISSION AND VISSION:

## Mission:

The mission of TECHCRITOMA Inc. is to empower stakeholders, clients, business leaders, and entrepreneurs with cutting-edge product services, empower stakeholders, clients, business leaders, and entrepreneurs with cutting-edge product services they strive to drive unparalleled productivity through state-of-the-arts data-to-decision technologies and seamless process automation and are committed to delivering measurable value and setting new benchmarks in the industries the serve.

## Vision:

To become the number one excellence, technology-based solution provider in the word.

## COMPANY ORGANIGRAM:

TECHRITOMA Inc is organized is the bellow diagram with its head being the Ceo of the company

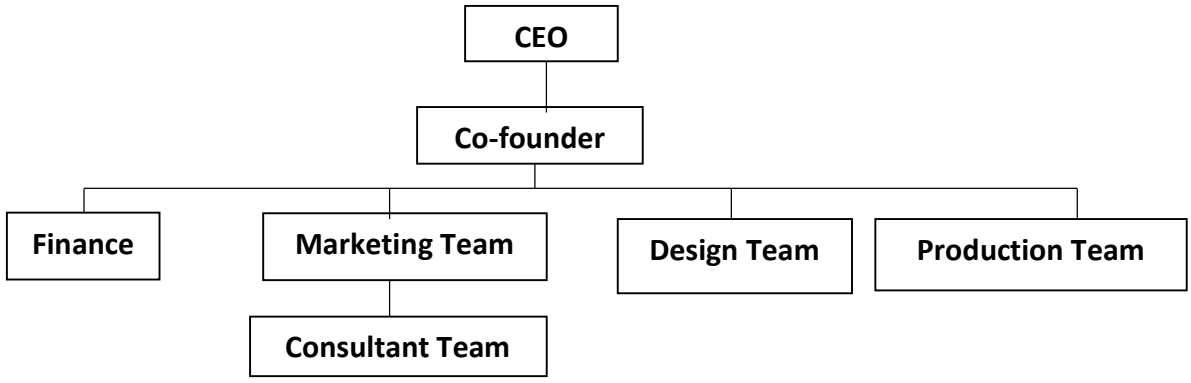


*Fig 0: Company organigram*

## COMPANY LOCATION:

TECHRITOMA Inc has its headquarters in the south west region of Cameroon in Buea.

It has its work space at the university of partnership with the orange digital work space. Found in the campus of the university of Buea.

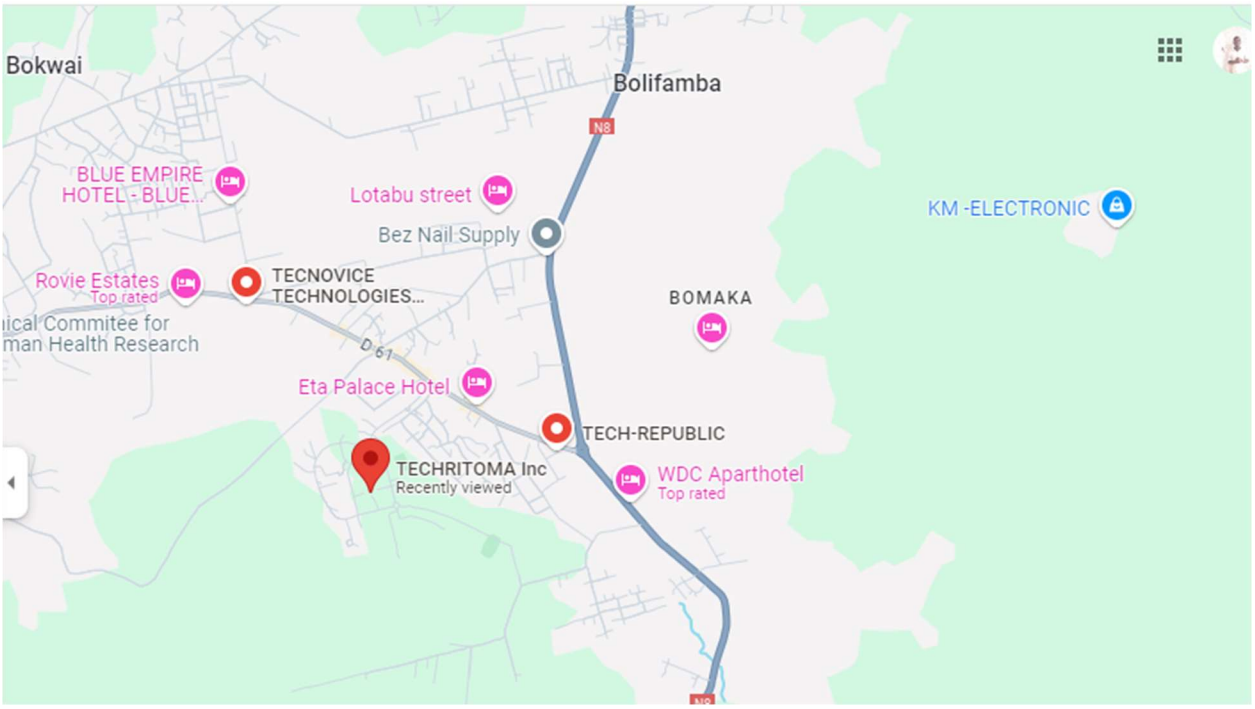


*Fig 1: Company Location*

# CHAPTER 2: ACTIVITIES AND OBSERVATIONS

## Internship Activities:

During my 6 weeks of internship at TECHRITOMA Inc., I had various activities i carried out both in form of tasks and learnings. These activities will be described below in weeks.

## Week 1:

On my first day of internship which was a Friday, I was given a rundown of the internship program which was drafted by my field supervisor and was also given rules and regulation to follow which made my stay at the internship ground profitable and easy. Then we had a session for introduction for all the interns that were present there. After that we were divided into groups of 6 of both boys and girls then asked to identify 5 problems in the society, we will like to provide tech solutions to solve them during our internship.

I and my team members researched and came up with these five ideas project:

- Food Ordering and Delivery Website.

- Hospital Management website.

- Heath Reach Management System.

- Study Progress Trakker.

- Local Business Management Website

Out of these 5 project ideas my team and i came up with, we did a presentation before our coordinator and other interns explaining to them problems each project ideas are to solve. We were evaluated and the HEALTH REACH MANAGEMENT SYSTEM project idea was validated for us to work on by our coordinator.

## Project Idea Description.

The main idea behind the health reach management system is interconnecting all hospitals around a geographical area so as to recommend them to patients based on certain criterial. The following criterial include: hospitals profile ratings, various specialties, specialist profile, and facility details. The problem this project will solves is if we take a close look around, people or patients rather die not because they couldn't be treated but because they found their self in the wrong hospitals and which that hospital could not handle such illness as a result to that the die. With the health reach management system, patients will be able to find out the detail services, specialties, and other activities offered by a particular hospital before going to that hospital for

treatment that way it will help save lives especially in points of emergencies. Below is a point-by-point explanation scope idea of the health reach management system

## . Hospital Listing and Information:

- Display a comprehensive list of hospitals in a defined area (e.g., city, region, country).
- Allow users to filter hospitals by ratings, location, specialties and their specific website.
- Provide detailed information about each hospital, including: Name, address, contact information, website, and social media links.
- Operating hours, emergency services availability.
- Specialties and services offered (e.g., cardiology, oncology, pediatrics, specific diseases).
- Hospital staff and doctor's profiles (with qualifications and experience).

## User Review System:

- Allow registered users to submit reviews and ratings for hospitals they have visited.
- Include fields for user experience, waiting times, staff friendliness, cleanliness, etc.
- Display review summaries and average ratings for each hospital.

## Search and Navigation & Online Appointment booking:

- Implement search functionalities for hospitals, and specific services.
- Allow users to book appointments with specific doctors or departments at hospitals.
- Integrate with hospital appointment systems or provide a dedicated system for scheduling.
- Enable users to select preferred dates and times for appointments.
- Send appointment confirmations and reminders via email or SMS.
- Provide a mechanism for users to cancel or reschedule appointments.

## Admin and Staff Panel:

Provide a dedicated admin panel to:

- Manage hospital information, including updates and edits.
- Moderate user reviews and ratings.
- Monitor website usage and analytics.
- Manage user accounts and permissions.
- Add new hospitals that takes partnership with the system.
- Control appointment booking settings and availability.

## Development:

I and my team members decided to use the following languages for development.

- Front-End: HTML (hypertext markup language), CSS (cascading style sheet), JavaScript, Bootstrap.
- Back-End: PHP (hypertext preprocessor).
- Database: MySQL, phpMyAdmin.

**Day 2 (Wednesday):** Then we started writing an SRS (Software requirement specification) for our project.

My team mates and I made some few researches on how to write a software requirement specification. We completed our software requirement specification document we were writing and we presented it to our field supervisor and he asked us to add some specifications on our document.

**Day 3(Thursday):** we had a brief discussion with our field supervisor on how to develop a professional web management system. He asked us to follow the SDLC (software development life cycle) step by step. after the meeting we were asked to start the design face of our project using an application called Figma. My team mates and I made some few research on how to use this software to created our UI (user interface design) we downloaded some videos and studied them how to use this app FIGMA to design our web application.

**Day 5(Friday)**: We started the design using Figma. We designed the home page for our system and the features that we had to implement there were added. After break we had a presentation of GITHUB and GIT. We were helped in creating our GitHub accounts and set it up. I created my GitHub account and some repositories.

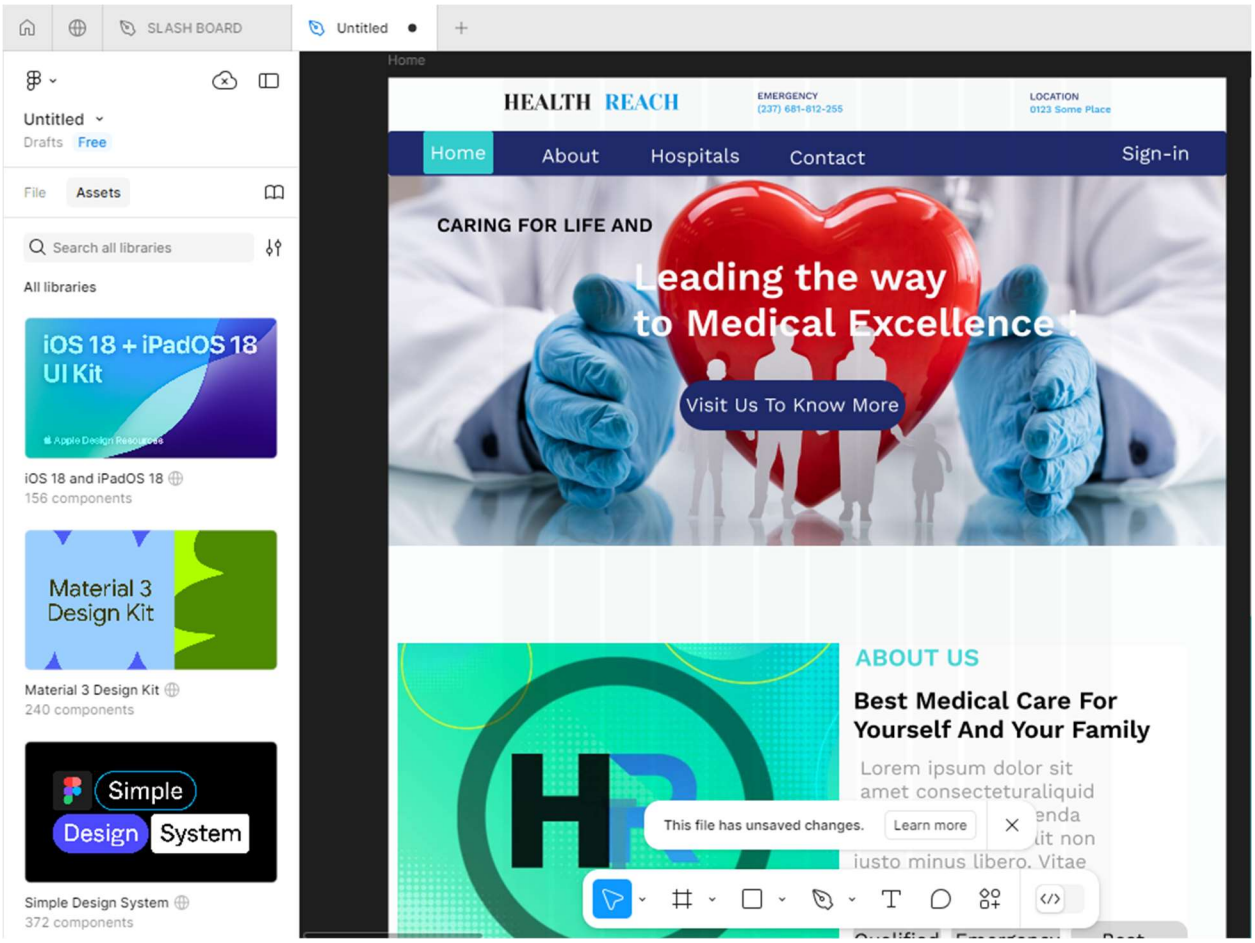


*Fig 2: HOME PAGE DESIGN WITH FIGMA*

**Day 6(Saturday):** we had another session on how to work on GitHub as a team, create a repository and push code on GitHub using Gitbash. After that I succeeded to push my code on GitHub and I created so many repositories and pushed my code online on GitHub that day.

Some of the basic GitHub commands I learned were:

- Git init
- Git status
- Git commit -m
- Git add.
- Git push

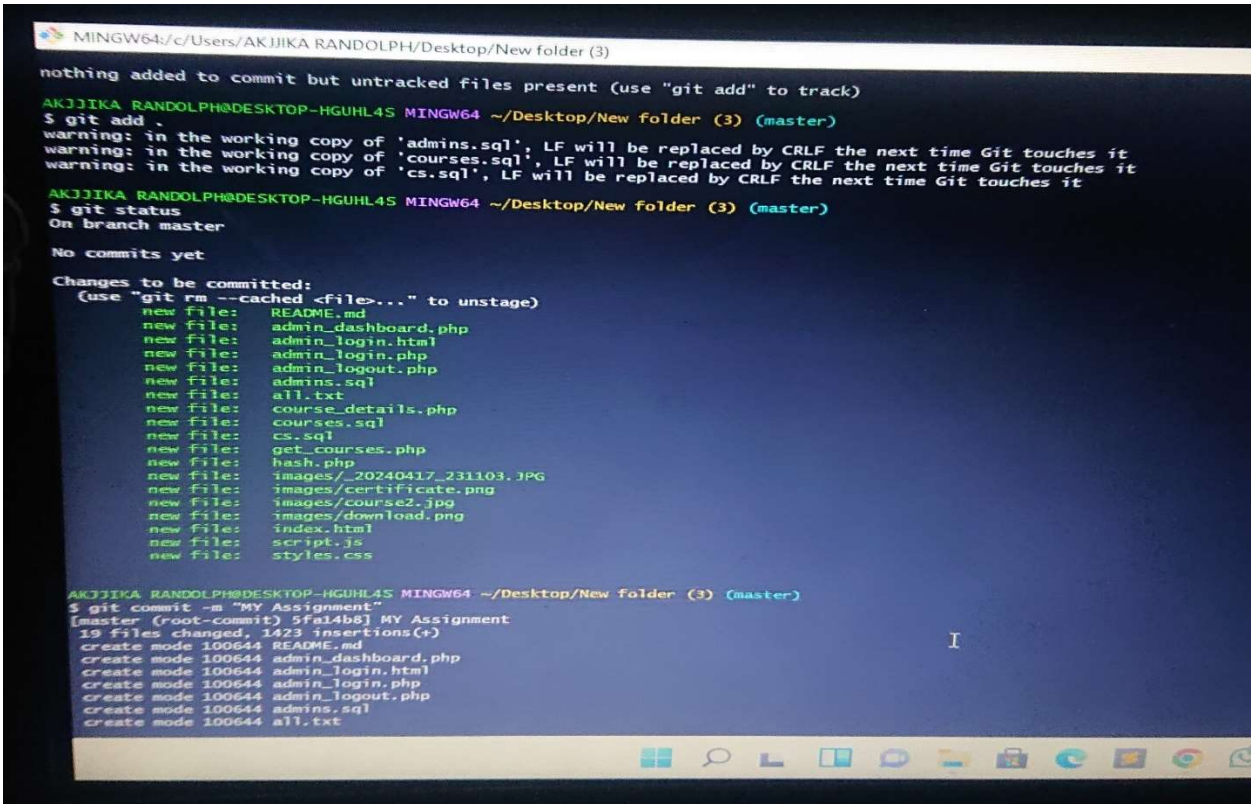


*Fig 3: GitHub tutorial*

**Observation:** my first week was not bad just for some little challenges like lack of internet and light as also an issue given that during that time the town had some little challenges so we had to go home very early.

## Week 2: Activities:

**Day 1 (Tuesday)**: Still working on the user interface design of my project with my team mates adjusting it to match with our software requirement specification document.

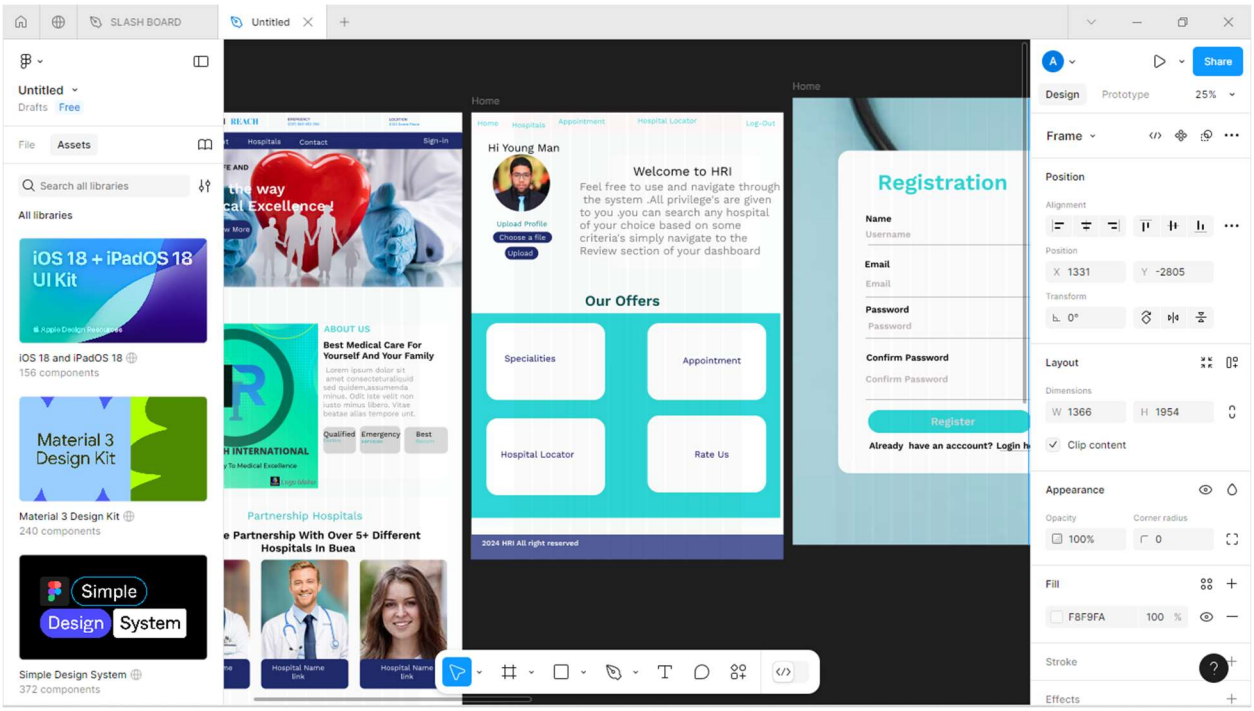


*Fig 1: USER DASHBOARD DESIGN USING FIGMA*

## Day 2(Wednesday):

We had a presentation on what we have done so far. My team mates and I had to present before everyone what we were working on. After the presentation some changes were made and we were asked to redesign our work using professional colors and images.

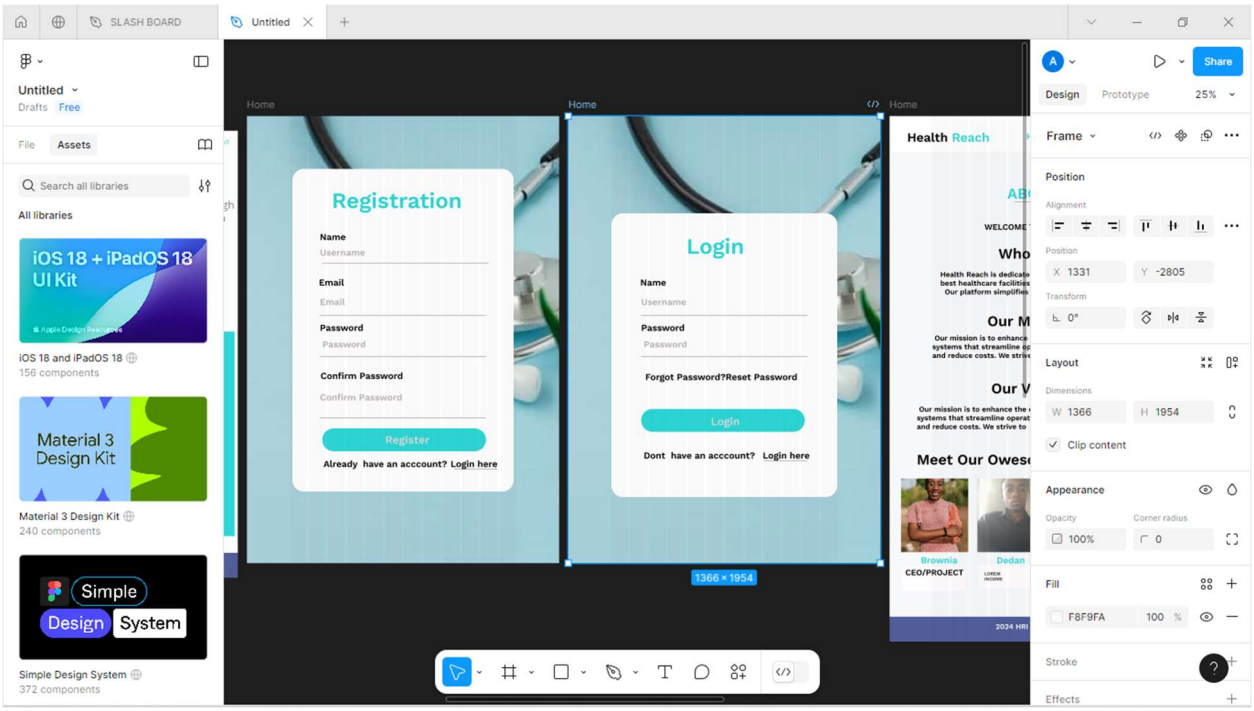


*Fig 5: REGISTRATION AND LOGIN DESIGNUSING FIGMA*

**Day 3(Thursday):** we continued with our design of the user interface. We succeeded to design the contact page, login and registration page for our project.

**Day 4(Friday):** Using Git bash Commands to push, commit, create branches under GitHub repositories. I Had to push my previous designs and software requirement specification document on GitHub in other to be able to pull them back each time I needed to do some update on my website

**Day 5 (Saturday):** We had sports sessions (joking and football.)

## Week 3 Activities:

This week we all were asked to start the development of our web management system using HTML (hypertext markup language), CSS (cascading style sheet), and JavaScript.

**Day 1(Tuesday):** we had a brief session with our field supervisor where we discussed on the various languages we were to use like HTML, CSS and java script to develop the front end for our project and how we should use them. My team mates and I divided the task we had I was the person in charge of developing the login, registration and dashboard for our system

**Day 2 (Wednesday):** I continued the writing my HTML, CSS and java script code for my own part of the project (registration, login, dashboard, hospital page) that was given to me.

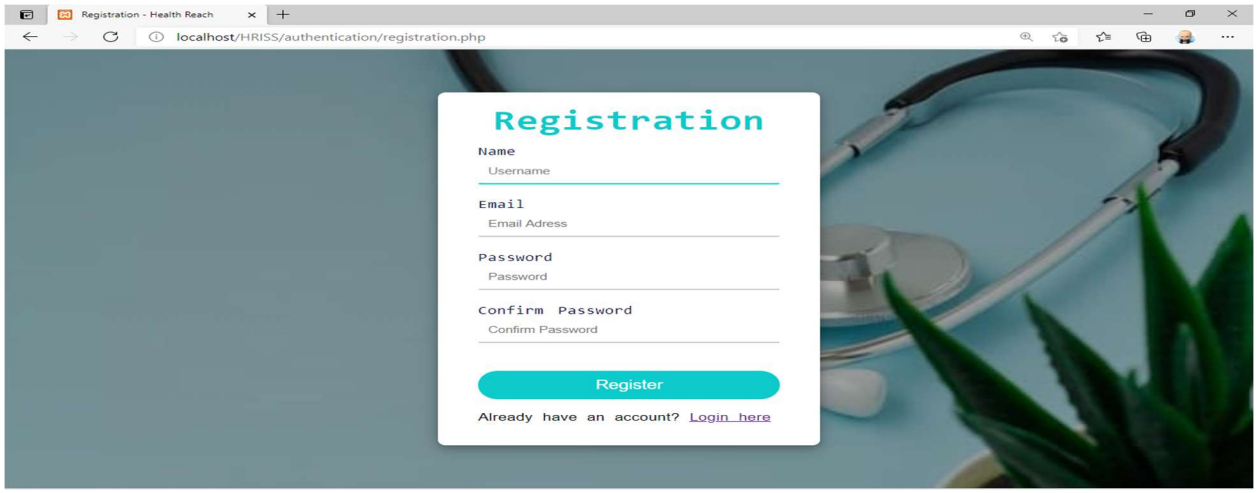


*Fig 6: registration page suing html, CSS, php*

**Day 3 (Thursday):** still working on my own part of the work. After break my team mates and i had to seat together and combine what we have done and after that we presented our work to the field supervisor and he helped us with some changes and showed us how to go about it.

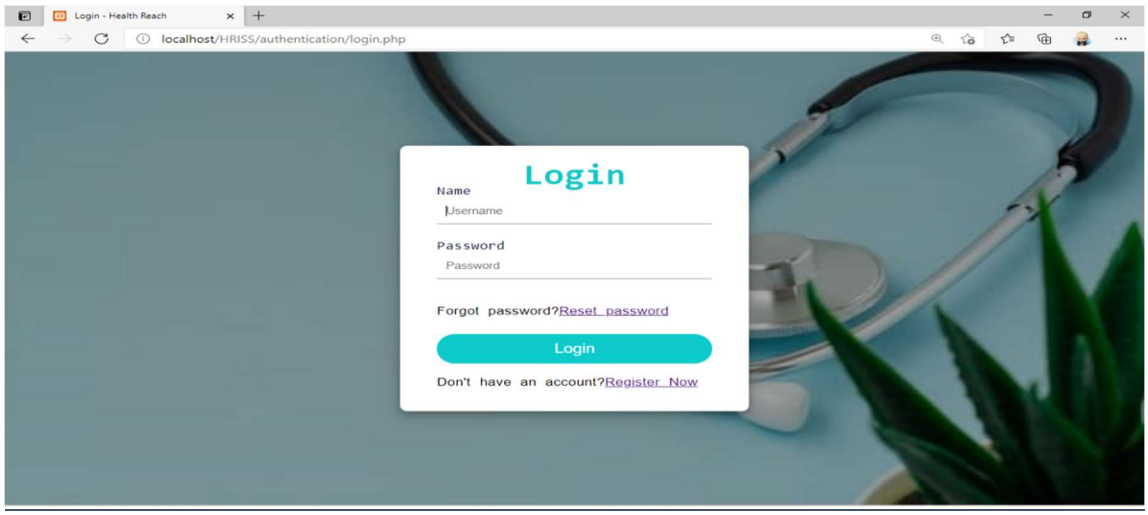


*Fig 7: Login page using html CSS and php*

**Day 4 (Thursday):** I continued with the development of our web management system working on the dashboard of our system:

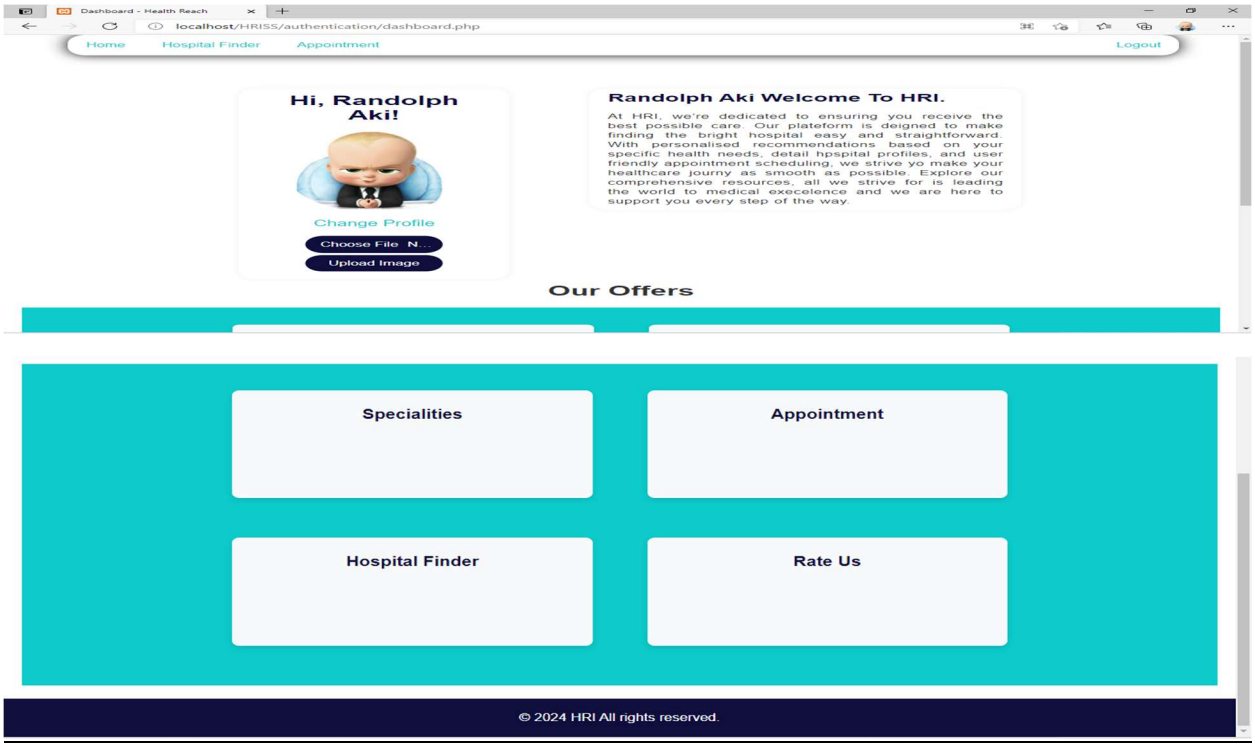


*Fig 8: User dashboard page using html, css, php, bootstrap*

## Week 4: Activities

During this week we were asked to start working on the back end of our project using php (hypertext preprocessor) and MySQL database. Day 1(Tuesday): On the first day of this week, we were asked to install a local webserver that we will use for our project. We were instructed on how to install and set up the environment for use. I installed Xamp (cross platform Apache MySQL Perl) as my own web server.

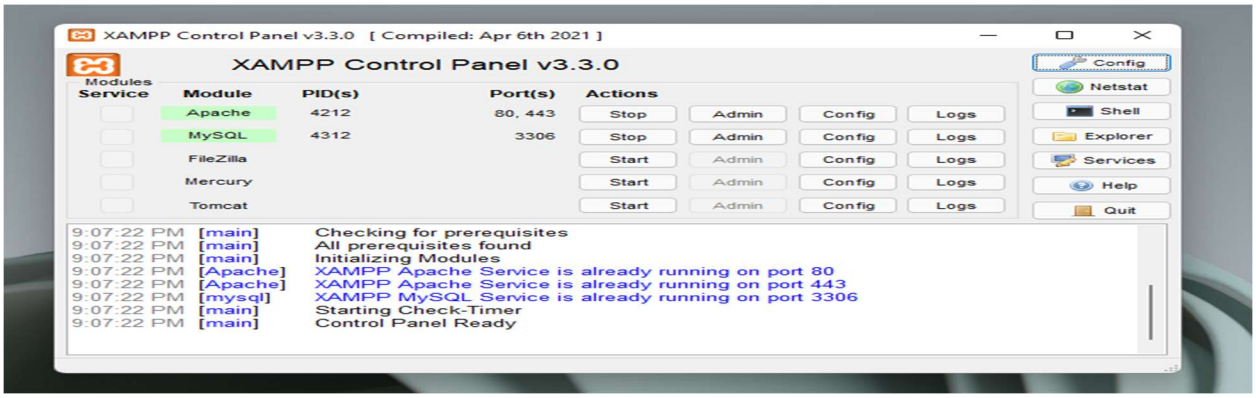


Fig 9: installation of webserver XAMP

I started with the backend of my registration login and dashboard for the users of the system. I was able to used PHP and a MySQL with the local web server XAMP. after break we had a brief presentation by some of our seniors on what php is all about and how to us it for the back end of our project. I was able to register patients through mu system and their information stored in the data base. The diagram to show how patients were registered successful into the system is below.

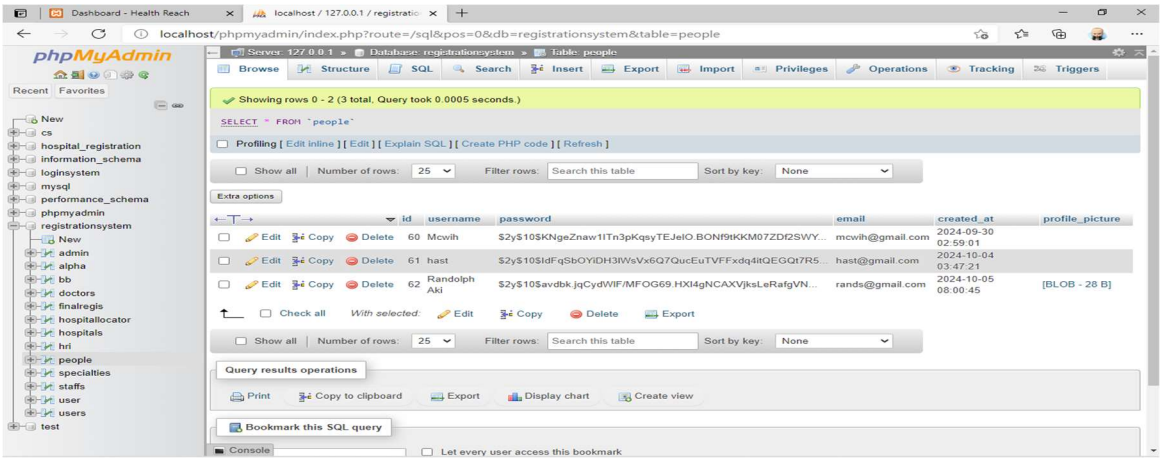


*Fig 2: Backend registration of patient to the system with php with hashed password*

## Week 5: Activities

During this week we were given the task to combine the individual work that each one was doing and get ready for presentations. Some of our supervisors worked round helping us to set out project as one and prepare for presentations.

We later had a simple presentation on programming a calculator using HTML, CSS and php by one of our seniors of level 300.

## Week 6: Marketing week

After a long engaging period of internship, we were brief on how to market the company product and we were sent to the field which we brought back positive results as many of the people we talked to had to join the companies' various platforms. We also had to gather information from bus station as the company had in speculation to create an online booking system so as to safe time for their customers.

## Observations:

During my 6 weeks of internship at TECHRITOMA Inc I observed and learned the following:

## Technical skills:

- Hands on experience with programming languages like (HTML, CSS, BOOTSTRAP, JAVASCRIPT and PHP).
- Familiarity with development frameworks and tools like (GIT, slack).
- Understanding of database management system like (phpMyAdmin, MySQL).
- Exposure to agile development methodologies.

## Soft skills:

- Effective communication with team members and supervisors
- Collaboration and team work on the project.
- Time management and task prioritization
- Problem solving and debugging techniques especially in php (hypertext preprocessor).

Industry insight:

I understood the software development life cycle in a more practical form due to the activities we were carrying and the various tasks given to us by my supervisor.

# GENERAL CONCLUSION:

In conclusion, my 6 weeks internship at TECHRITOMA Inc was an invaluable experience that exceed my expectations .AS a first-year software student, I had the opportunity to apply theoretical knowledge in a real-world setting, gaining practical skills and industrial insights.

Throughout this internship i learned so much from enhancing my problem-solving skill and debugging techniques to gaining hands on experience with programing languages (php, JavaScript, html, CSS, bootstrap) and so on.

## As professional skills:

- I have learned how to build a professional website using HTML, bootstrap, java script and php
- I learned how to put my work on power point and do presentations
- I learned how to use GitHub, when working on a project with a team
- I learned how to create a software requirement specification document and work according to it.
- In conclusion, the internship experience was extremely instructive and I am looking forward to more of such experiences as I pursue my academic dreams, and
- I have improved on my communication skills so as to easily market the company products

## Final thoughts:

I am grateful for the experience and knowledge gained during my internship at TECHRITOMA Inc. I highly recommend this internship to fellow students seeking a comprehensive and enriching experience in software development.

I will like to express my sincere gratitude to:

- Eng. Andropov Ajuatah Ajebua for guidance and support.
- my team mates (Health Reach Team) for their collaboration and friendship.
- TECHRITOMA Inc for providing this invaluable opportunity.
- **My internship pictures:**