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| --- | --- | --- | --- | --- |
| **Family Name(s)** | | Wulon | | Module No.  Faculty Date Stamp  (or signature and date) |
| **Forename(s)** | | **Yussif Muniru** | |
| **ID Number(s) (from your student card)** | | **050916006** | |
| Estimated Time taken (hrs) (per student for group coursework) | |  | |
| **Lecturer** | **Mr. Kwame Owusu Afram** | | Lab group / Tutorial group / Tutor (if applicable) | |
| **Module Code and Title** | **GTUC 206CDE REAL WORLD PROJECT** | |  | |
| **Assignment No. / Title** |  | | Extensions & late submissions allowed: | |
| Estimated Time | Assignment type: (Individual/Group) | | % of Module | Hand out date: |
| Penalties: Marks will be reduced by 10% of the original mark for every week late. No work will be accepted that is more than two weeks late. If you are unable to submit coursework on time due to extenuating circumstances you may be eligible for an extension. | | | | |
| Declaration: I/we the undersigned confirm that I/we have read and agree to abide by the University regulations on plagiarism and cheating and Faculty coursework policies and procedures. I/we confirm that this piece of work is my/our own. I/we consent to appropriate storage of our work for checking to ensure that there is no plagiarism/ academic cheating.  Signature(s): -------------------------------------- -------------------------------------- -------------------------------------- -------------------------------------- | | | | |



APPENDIX A: Coursework Front Sheet

GHANA TECHNOLOGY UNIVERSTY COLLEGE/COVENTRYUNIVERSTY

FACULTY OF COMPUTING & INFORMATION SYSTEMS

*Section A – To be completed by the student - PLEASE PRINT CLEARLY*

##### Section B - To be completed by the assessor

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| --- | --- | --- | --- | --- | --- | --- |
| **Marks breakdown and Assessor’s Feedback** | | | | | Max | Awarded |
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|  |  |
| *Please continue on the reverse of this sheet if needed.* | | | | | | |
| Assessor’s name | | Assessor’s signature | | Total | | |
| Coursework Mark | Extension Agreed until: (Yes / No) | | Deduction for Late Submission (Penalty) | Final Mark | | |
|  |  | |  |  | | |
| Date:  Signed internal moderator: | | | Date:  Programme Leader Signature: | | | |

This work may have been moderated. You may find additional comments in the work.

Note: The results on this script are provisional, subject to SAB/PAB review

**List of Carrers to research On**

* Software engineering.
* Computer Scientist.
* Network engineering.
* Web development.
* Android development.

After much consideration I have chosen Web development as my career to research on.

**Job Description.**

Web development is a field of work that deals with the building of web applications for the internet. Web applications or websites are sometimes referred to as ‘Sites’. Web applications here being websites. It involves basic, intermediate or advanced knowledge in some popular technologies like html, CSS, JavaScript. There these websites are built with special technologies called programming languages. Which include html, CSS, JAVASCRIPT. People are into web development are referred to as Web developers. They can be grouped into two:

* Frontend developers or designers.
* Backend developers.

Frontend developers take the role of the site presentation. How attractive and interactive the site is, how easy it’s the web site on the basis of navigation by the user, etc.

Backend developers handle the core logic of the site. Task like login the user into the site and maintaining his status as being logged in, showing the user the trending news in the user’s locality, etc.

In web development there are several personality traits that help a lot in the day to day life of the developer. Some include:

* Being Self-motivated.
* Ability to be observant.
* Thinking critically.
* Always ready to ask questions.
* Being pragmatic in answering questions.

Also some special skills may be needed from time to time on different projects. These include:

* Proficiency in programming.
* Ability to work with little supervision.
* Ability to work with little resources.
* Mastering the act of optimization and organization, etc.

**Working Conditions**

Usual working hours for web developers is normally 8 hours with permanent jobs. Some companies hire and pay based on project completions. Working during weekends is mostly employed to complete a project if time is of the essence. Working overtime is a normality in the web development world since this get’s projects completed on time.

* Age Requirements for web developers is not really a problem. But in Ghana, working under the age of 15(fifteen) is illegal. So the requirement for web development when one is 15(fifteen) or above is a strong requirement.
* Gender requirement in web development is no problem at all. Since there are so many males and females at almost every development company.
* Physical requirement with sites development is a big issue, since one has to be physical able in order to press a key, see what is display on the screen of a computer, hear what is said from the computer, etc.
* Physical layout of every workplace for development is any space that makes it comfortable, easy, secure and convenient to access, manipulate and distribute or share development progress between the team members.
* As any field of work web development does not come but without hazards. Some risks associated with web development are:

1. Insomnia(sleeplessness).
2. Chronic stress.
3. Moving repetitively.
4. Screens flashing in the eyes of the person. Etc.

**Wages and Earnings**

Wages and earnings in web development vary and depend on various factors. These factors include, the company you are working for, your number of years of experience in the field of web development, how recognized are your works, etc. Some benefits come alongside the employment as a web developer, some are listed below:

* Some companies may pay you overtime for your work if the overtime really helped them with them in meeting a specific deadline or a specific target.
* The starting wage vary from country to country since the minimum wage may differ from country to country. The starting wage in Ghana for developers since around GHC 600. This is not a fixed value since several companies pay varied amounts depending on your experience and productivity.
* The top wage for web developers in GHANA is really unknown. Depending on the project it can go up to even GHC 1 million (for projects like those linked to the government).
* For the average wages one can get like GHC 1200. Now this is always some how a standard deviating from the norm of the top and starting wages which kind of vary .
* Now future earnings of any developer in general is quite difficult to determine. In the field of web development, it may be roughly estimated to be between GHC 12000 to GHC 30000.
* Many companies don’t really cater for the costs of medical, dental or insurance for the developer. But some major companies may do so.

**Career Path**

Mostly People begin web development with first basic frontend-development. Learning and practicing basic languages like html and CSS.

Later moving up by adding some JavaScript, then later php or python.

Diving into the outlook for employing web developers, it is expected that the employment of web developers shoots up to 15% from the year 2016 to the year 2026. This is better than the average projection for other jobs.

There are three basic levels for web development. These are basic ,intermediate and advanced levels.

These levels are differentiated based on the skill level of the developer.

For the basic level, one is still considered a beginner and starts learning the basic syntax of the programming languages.

For the intermediate level, one should have had fair knowledge in the basic syntax , algorithm and logic of the programming languages. But not a deep understanding of them.

With the advance level, developers are expected to be proficient at least in one particular language depending on them being either frontend or backend developers.

**Education and Training Requirements**

The field of web development is quire easy taking it one step at a time. People usually get trained online for web development . But it can be done offline too in class actually. It usually involves both the students and teachers working with the same basic technologies.

Like downloading sublime text, having a browser like Google Chrome , having to download a server like wamp, etc.

The student usually watches and learns from the teacher by doing exactly what the teacher does and doing the same thing. This watch and practice way of learning makes web development extremely interactive.

The work experience required for this job in GHANA is usually not required but the developers work so far is usually requested.

The type of is mostly formal. In a classroom online or offline.

It may take one 1 to 3 months in learning web development based on the persons schedule and intellectual ability. For online courses it usuall costs around GHC 1500 to GHC 12000. But offline can go from GHC 1000 to GHC 4000.

No special licenses or certificates are needed for web development.

Web development is so much connected to technology in almost all its disciplines.

The post-graduate institution that I will like to further my education in web development are

* UNIVERSITY OF STRASBOURG.
* EAST LONDON UNIVERSITY.

**Post-Graduate Institution 1.**

|  |  |
| --- | --- |
| **Post-Graduate Institution location** | UNIVERSITY OF STRASBOURG |
| **Name of program** | [**Master in Web Development**](https://www.masterstudies.com/Master-in-Web-Development/South-Africa/East-London-University/) |
| **Brief Description** | This degree was hugely influenced by employers expressing their need for employees with database management skills, web development, network security, etc. So this program was design to meet these demands. This is achieved by combining areas of understanding and problem solving. |
| **Admission Requirements** | * Bachelor Degree in Computer Science , Programming or equivalent. * Applicants with a 3-year minimum demonstrable professional hands-on experience can also apply. |
| **Courses Studied – First Year** | UNKNOWN |
| **Why I want to learn/train here** | Problem solving has always being the beacon of technological growth, so getting hands-on training in understanding and problem solving makes me so enthusiastic to study in UNIVERSITY OF STRASBOURG. |

**Post-Graduate Institution 2.**

|  |  |
| --- | --- |
| **Post-Graduate Institution location** | EAST LONDON UNIVERSITY |
| **Name of program** | [**CAWEB Master’s in Website Creation, Multimedia and Localization**](https://www.masterstudies.com/CAWEB-Master%E2%80%99s-in-Website-Creation-Multimedia-and-Localization/France/University-of-Strasbourg/) |
| **Brief Description** | This program offers both on campus and distance learning options for students. It main advantage is it’s combination of IT skills with language proficiency. This opens so many doors of opportunities for students. |
| **Admission Requirements** | * Bac +4 (4-year graduate degree) or professional experience of at least 3 years or Accreditation of Previous Experience; * A very good level in French, English and a third language (see Taught Languages); * Basic knowledge of software and taught languages (see languages and software for website creation, image processing and translation). |
| **Courses Studied – First Year** | UNKNOWN |
| **Why I want to learn/train here** | Because of the ability to learn over long distances and combining that with the strong proficiency in international languages like French, English, etc. This opens up so many humongous opportunities for a web developer. |

**Education Path**

The courses that best fit my chosen career include:

* Mobile Application programming.
* Back-end Programming.
* Font-end Programming.
* Database Architecture and Design.
* Cross-platform programming.

Electives 1. Theory of computing Grade required \_\_\_\_\_\_\_\_\_\_\_\_

2. Computer Organization Grade required \_\_\_\_\_\_\_\_\_\_\_\_

3.  Introduction to Database Systems  Grade required\_\_\_\_\_\_\_\_\_\_\_\_

4. Advanced Object Oriented Software

Design and Development  Grade required\_\_\_\_\_\_\_\_\_\_\_\_

5. [Computer Graphics Systems Design](http://www.sfsu.edu/~bulletin/courses/36453.htm) Grade required\_\_\_\_\_\_\_\_\_\_\_\_

**Work Experience/Volunteer Experiences/External Courses**

* Involvement in the designing of a database system for the community hospitals. The community hospitals have a system of storing valuable patient information which is the ancient folder system. By migrating to a digital system, I was involved in the creation, optimization, maintenance of the hospital data system.
* Involvement in creating a web application for the Senior High School in my community. This task involved creating, designing, optimizing, enhancing the User Interface of the application for showing the school’s past history, academic records, sports records, Administration board, dormitories, fee payment system, etc.

**Networking**

|  |  |  |
| --- | --- | --- |
| **Name** | **Relationship** | **How They Can Help** |
| 1.Samuel Amanor | Coach | By giving me expert advice on business ventures in my chosen career. |
| 2. Peter Asiedu | Coach | By assisting me with connections to global computer and technological giants for them to help me enhance my skills in my chosen career. |
| 3.Madam Sangeetha | Teacher | Assisting me in first-hand hands-on programming in android applications. |
| 4.Dr. Brown Acquaye | Teacher | Assisting me in first-hand hands-on training in database management. |
| 5.Kofi Ofosu Nkansah | Coach | Assisting me meet the right people and help me publish my work on the right platform. |

**Evaluating Competencies**

|  |  |  |
| --- | --- | --- |
|  |  | Why would it be useful |
| Technical competencies | Knowledge in html, css, javascript,php, jquery. | These technologies drive modern web design. Firm and deeper knowledge in them makes you a sort after commodity. |
| Managerial Competencies | * Proper communication skills. * Proper problem solving skills. * Customer focus skills. | The main move behind almost every single entrepreneurship is to gather profit. And the gathering of profit can be achieved by proper communication skills, proper problem solving skills, customer focus skills, etc. |
| Personality competencies | * Self-awareness. * Self-management. | Being self-aware is imperative for the working with teams and sharing ideas in web development. This is key since every where one goes there are people to work with. |

**Career Statement of Purpose**

“The computer was born to solve problems that did not exist before.” — Bill Gates.

I am a young programmer with a passion for programming and database management. This passion was furthermore strengthened by my research in selecting a career. Web development as discipline of science is fascinating and joyous to be part of. Continuing to pursue web development after school will be an understatement if I were to say that I will love to pursue it. My interests in web development and programming in general makes me more convinced and after this research, makes me more that more passion driven to pursue it. I enjoy modelling real world projects and processes into code (thus web applications).

The ability to sell a ball of banku on web page, hire a taxi on a web application, enter the marks of students after a test, etc gives me more confirmation that “this is the place for me”. During my research and working with colleagues I come to the realization that web development is not just about staying behind a computer and typing code or thinking out algorithms, but it is a community, a family, a brotherhood. This community has ethics, rules, bonds that take make them stand out from every other community or occupation. These bonds, rules, ethics drive not just the applications they design but the life they live.

With these bonds, I say “let me be part of this community”, contribute my quota to the ever-evolving beacon of digital connections.

During my research to discovering my passion for web development I also discovered enthusiasm to venture into front-end design. As a backend developer that was some how annoying at first and time wasting. Since backend developing is almost all the time straight forward and logic based. I found my love and zeal to venture and explore this new field in web development. I was quite time wasting a bit but brought some nice visual effects to the project at the end of the day. I realised that the enjoyment in frontend design was not just from the color patterns and combinations, different font types, stylish icons, animations of drop downs, transitioning of elements or position of images, but it is about the research to find a specific solution in other web applications for my own web site. Like visiting Facebook or google hangout to find out how live chat is design in code.

Also in the course of some short experience as a web developer, exploring the world of connectivity of several web developers all and around the world and sharing code with them, ignited the new flame of a digital ecosystem of information. Quite response from the community and sharing my code and ideas on the platform. Such platforms like stackoverflow.com really does the work of connecting we the developers which are really find amazing.

Having in heart is not just only the enjoyment of web development but the zeal to build applications like stackoverflow.com, github.com, Udacity Facebook ,etc. I found an amazing new interest in database management systems whereby the storing of data and normalization of tables was the order of the day. I was so much happy to discover that there are best practices in every part of web development. From the front-end to the backend. From php to Sql. From hashing to isolation of the database by creating users. From sanitizing user input to prepared statements. It was amazing to realise that every column in the database table (since database are made up of tables. And every database should at least have one table) matches onto a specific property in php.