# FINAL YEAR INTERNSHIP REPORT ON WEB DESIGN AND DEVELOPMENT

 $\mathbf{BY}$ 

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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# DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH MAY 2019

#### APPROVAL

This internship titled "FINAL YEAR INTERNSHIP REPORT ON WEB DESIGN & DEVELOPMENT", submitted by Md. Akhlaqur Rahman Siddiqui, ID No: 152-15-5724 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 03-05-2019.

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#### **DECLARATION**

I hereby declare that, this internship report has been done by me under the supervision of Mr. Shah Md Tanvir Siddiquee, senior lecturer, Department of CSE Daffodil International University. I also declare that neither this internship report nor any part of this has been submitted elsewhere for award of any degree or diploma.

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#### ACKNOWLEDGEMENT

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I fell grateful to and wish my profound our indebtedness to **Mr. Shah Md Tanvir Siddiquee**, Senior Lecturer, Department of CSE Daffodil International University, Dhaka. He guided me to finish this task successfully. His endless patience ,scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this internship.

I would like to express my heartiest gratitude to **Dr. Syed Akhter Hossain**, Professor and Head, Department of CSE, for his kind help to finish my internship and also to other faculty member and the staff of CSE department of Daffodil International University.

My deepest gratitude goes to MD Shamsuzzaman Adil, CEO, ZHOST BANGLADESH who give me this nice opportunity to work in the ZHOST BANGLADESH. In completing my internship program in ZHOST BANGLSDESH, I got help from different people who assisted me with various information, data and advice. I am grateful to the following person for their sincere cooperation.

Finally, I would like to mention my gratitude to all the programmer's and employees of IT Division, value plus computer system limited, Dhaka for supporting me and giving me pleasurable working experiences and helping me prepare this report.

#### **ABSTRACT**

Website design and development is one of the great aspects of computer professional's jobs. In this Internship report is aimed to improve and use the knowledge of website design and development acquired during my internship period. The main objective of this internship were web design and development. To develop a web based application or software there are many programming languages. There are two parts on it like frontend and backend web development. Some of language are only used for the frontend and backend design of the software. For example HTML, CSS, Bootstrap Framework etc. There are also some other programming languages that are used to develop the dynamic functions of the software or application. For example-PHP, JavaScript, SQL, Laravel Framework etc. Nowadays there are also some framework's that use vastly. Frameworks are basically structured programming by using Model, View, and Controller. It is also called as MVC. If we develop web based application that is very useful for us because we can access it from anywhere of the world. It is very helpful for our daily life. Day by day the demand of web application is growing up. That is why I choose "web design and development ". Working in ZHOST BANGLADESH added huge experiences in my upcoming career. Solving real life problems was another key issue. This report takes us through all the details of were web design and development knowledge and experience gathered during this internship period.

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

Web design and development is one of the best choice as a carrier. Day by day the importance of web development is growing up. Every company should mush have a website. Website development is apace growing round the globe as a tool of business development. Today our life is majorly based on computers.

Based on market place situation I want to build my carrier on it. I also love to work on it. Tw5During my internship period I work with the practical knowledge. Zhost Bangladesh was a good choice to build up my professional experience. I really thankful to zhost team for supporting me. Hare I have completed many web design and build up a small web project. I use raw PHP, HTML, CSS, Bootstrap and MYSQL to build up this project. Now I am starting to learn laravel to become a full web stake developer.

#### 1.2 Motivation

Now a days the demand of web based application is growing up. Web based application is easy to understand. When I am on the way to start internship it seems to me that I am in primary level as developer, so if I build up me with a developer team in an official environment is will batter for me. So I have choose internship as my final project. In I want to develop my carrier as a web developer.

#### 1.3 Internship Objectives

Here are some objective to choose internship:

- Make me professional as a developer.
- To see how to work professionally.

To see how developers, make solution to overcome a problem.

To find out the duties and responsibilities of developers.

To find out how developers keep a good relationship with clients.

To gain more experience.

To build up a strong networking.

1.4 Introduction to the Company

About zHost Bangladesh

zHost is an IT type organization. zHost Bangladesh have expertise on wide range of web

services such as website design & development, domain & web hosting solution and

various server solutions. They are not only working for the best result but also for the

perfection. zHost Bangladesh founded in 2015 and since then they are consistently

growing IT and web hosting company in Bangladesh. They have dedicated Support

Team and large number of happy customers with 100% satisfaction.

Mission

Their mission is to lead web hosting industry as well as web development industry in

Bangladesh and maintain world class standard.

Website: https://www.zhostbd.com

zHost Bangladesh

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Email: info@zhostbd.com

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#### 1.5 Report Layout

In this chapter 1, I have discussed about the introduction of internship, motivation, internship objective, introduction to the company later followed by the report layout. The rest of the report arrangement is as follows:

In chapter 2, I will discuss about the organization. This chapter also deals with the Product and Market Situation, Target Group, SWOT Analysis and Organizational Structure.

In chapter 3, discussion about the Foreword and Duty, training attended assigned responsibilities and performed tasks during the period of internship.

In chapter 4, I will discuss about Internship Outcomes, problem and solutions and also learning outcomes.

Finally, some Scope for further career, conclusion and discussion explained in chapter 5.

#### **CHAPTER 2**

#### **ORGANIZATION**

#### 2.1 Introduction

zHost Bangladesh is established in 2015 as a private company. zHost Bangladesh founder name is MD Shamsuzzaman Adil. This is an IT type organization. zHost Bangladesh have expertise on wide range of web services such as website design & development, domain & web hosting solution and various server solutions. They are not only working for the best result but also for the perfection.

Having already 1000+ clients their service are web design, web development, online business consultancy, Domain hosting, vps hosting and online marketing service provided. The company had separate division for Desktop application, web development, and Domain hosting and online marketing service provided.

There is an awesome working environment. Highly configured computer provided for each employee. Employers in the office can immediately finds technical supports help whenever needed. The daily attendance of employee ensured properly. After all there is a good friendly environment in office.

The working ours starts in zhost at 11:00 am and closed in 7:00 pm. Every employee must have to serve 8 hours per day. But there is an extra support team who gives 24 hours service shifting working ours for domain and hosting solution.

Their mission is to lead web hosting industry as well as web development industry in Bangladesh and maintain world class standard. [1]

#### 2.2 Product and Market Situation

Day by day the demand of web sites or web application is growing up. If you look on current market place about 90% industry must have a website. If you want to be a blogger how you can blog without a website? So I want to say if we look after the current market demand we can easily find out the market situation of web development. Besides that, you must need a domain and hosting for this website.

Zhost provide these both service. And now we have about 1000 plus clients. So it is sure that our product and market situation is good enough to lead.

#### 2.3 Target Group

Our target is mostly on local people of our country. We have an expert marketing team who not only promote our company but also aware people about modern industry. Suppose if you a business man but you don't have a website! Then we say you are missing huge opportunity to spread your business. They are the part of our target group. We say their about benefits of website and how he can promote his business with a website. We also target on student who have enough time to writing. Blogging can be good choice for them because you can earn a good amount of money with that and its growing up their knowledge level. For blogging you need only a website and domain hosting as well as your passion. So it another target group. Moreover our target is to lead web hosting industry as well as web development industry in Bangladesh and maintain world class standard.

#### 2.4 SWOT Analysis

SWOT analysis is a strategic planning technique used to help a person or organization identify the Strengths, Weaknesses, Opportunities, and threats related to business competition or project planning.

SWOT analysis basically discuss about the strength, weakness, opportunities and threats of any project or work.

Strengths	Weaknesses	Opportunities	Threats
Convenient	High costs for rent	Continued marketing development	Supermarkets moving to 24 hours
Rich brand equity	High staff salaries	Increasing product	Supermarkets moving to online deliveries

TABLE 2.4: SWOT ANALYSIS

## 2.5 Organizational Structure

There are main 3 division in our company

- 1. Web hosting management team
- 2. Web design & development team
- 3. Sells & Marketing team

Mainly our CEO MD. Samsuzzjaman Adil, CEO control the whole team and each team has a team leader. The leader leads their team and maintain or separate the work among the team members. Sells and marketing team also control the all about accounts. Every team has a nice cooperation with each other's.

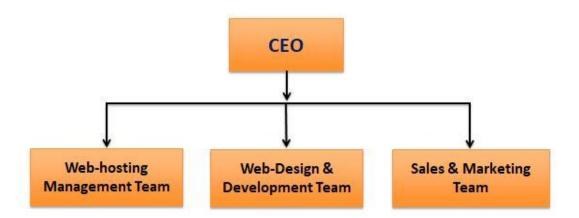


Figure 2.5: Organizational Structure

#### **CHAPTER 3**

# TASKS, PROJECTS AND ACTIVITIES

#### 3.1 Daily Task and Activities

At the first stage I was in very primary level as a designer and very little idea about development. So according my trainer suggestion I had been started from the very stacks. Every day I have noted the task that I have learned or completed and consult about that with my trainer. He always supports and suggest me what should I learn. Day by day I improved myself. Here is the list of program that I have learned well

- Html5
- Css3
- JavaScript
- Bootstrap
- Php
- Oop(basic)
- Ajax(basic)
- Sql & Mysql

Now I am starting to learn laravel framework to become a full stack web developer. I also learn about whm that means web hosting management. I also make some video tutorial on zhost Bangladesh you tube channel on web hosting management.

#### 3.2 Events and Activities

Generally, a web designer creates the look, lay-out, and features for a website. The job involves graphical design as well as programming. When a website is successfully

created, a developer helps with maintenance and additions to the website. Work with development teams for maintaining the site up-to-date and prioritizing needs, among other tasks:

- Writing and editing content
- Designing webpage layout
- Determining all technical requirements
- Updating websites
- Generate necessary back up files
- Solving code problems

#### 3.3 Project Task and Activities

I have completed many small project few of them only for practice design and few for development. It will be batter when I clearly learned laravel. So I have created may project using html, css, bootstrap, php and mysql.

#### 3.3.1 Necessary Environment

#### **Install Software**

As a text editor I have used sublime text, notepad ++. Php is a server side language. So I have installed xampp for work with it, which include apache and mysql automatically.

Front-end Design

Front-end Design is the most important part of a web site, because user only can see

front-end portion. For front-end design I use html5, css3, JavaScript, jQuery and

bootstrap.

**Back-end Development** 

For back-end I used raw php and mysql. All the connection setup are done by php. With

php we can easily connect and manipulate data from database. Mysql is one of the most

popular database system used in php.

**3.3.1 Project-01** 

**Project name: Blood Lab** 

Front-end design is the most important part in the design section, because the user only

can see the front-end design. As it is a donor searching website so I tried to make the

web site very simple so that people can easily find donors. I have create this webpage

using HTML5, CSS, JavaScript, iQuery Bootstrap, PHP, MYSQL. It is fully

responsive and user friendly.

Home page

Home page of this site shown in figure 3.1. People can easily find out donor by

selecting blood group or selecting district or both.

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Figure 3.1: Home Page

#### **Explore and Footer Part**

Explore Part is shown in figure 3.2 you can register as a donor also can register behalf others.

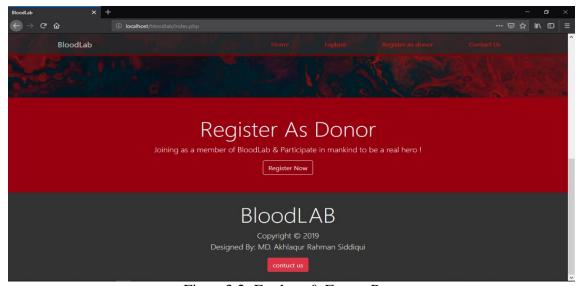
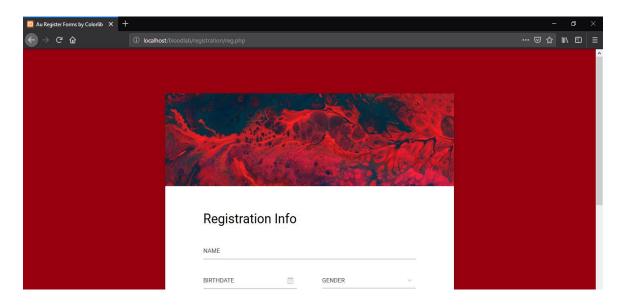


Figure 3.2: Explore & Footer Part

# **Registration Form**

Registration form shown in figure 3.3.you can register by submitting necessary information as a donor.



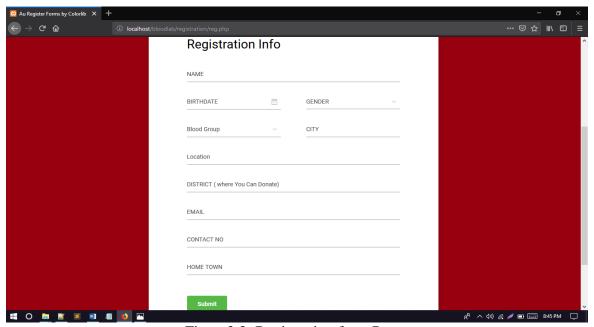


Figure 3.3: Registration form Part

# **Contact Us part**

Contact Us Part is shown in figure 3.4

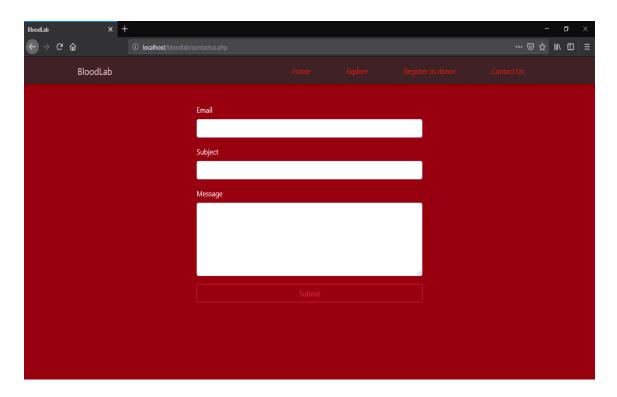


Figure 3.4: Contact Us Part

# Searching result part part

Searching result part is shown in figure 3.5. When you search for donors the resulting page will be look like this .You can see donor name, district, blood group, contact number and living location from hare. Actually these data is not valid, I input them only foe test purpose.

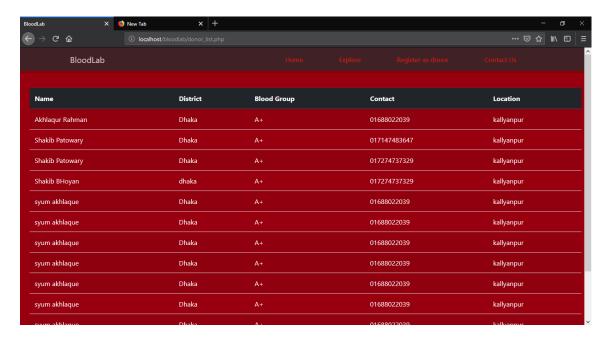


Figure 3.5: Searching Result Part

#### **Project-2**

# **Project name: MyBlog**

It was only for practice designing and responsive web site. I have create this Design using HTML5, CSS3, and Bootstrap only. It is fully responsive and user friendly.it is a single page website. There are only four section home, explore, create and share. The screenshot of this web page given below.

Restaurant site web page is shown in figure 3.6

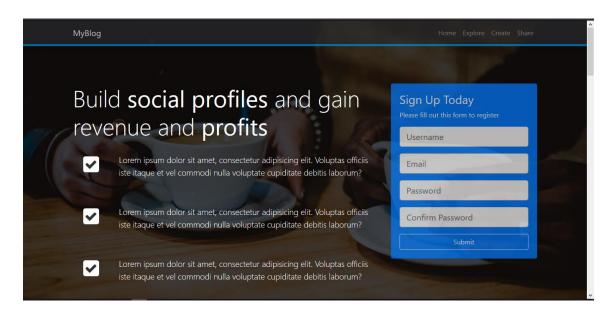


Figure 3.6: Home Section.

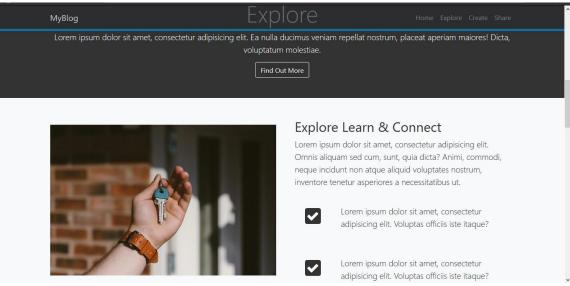


Figure 3.7: Explore Section.

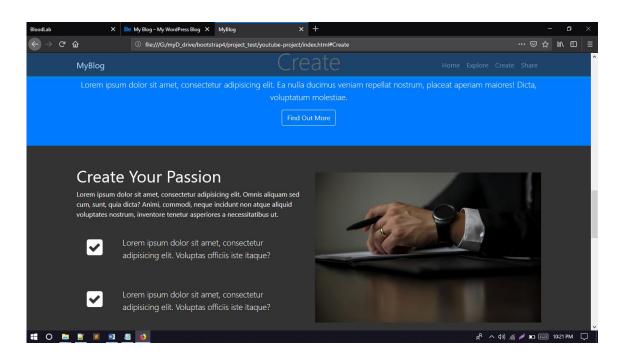


Figure 3.8: Create Section.

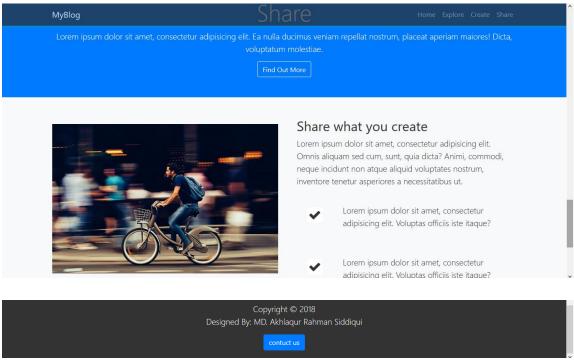


Figure 3.9: Share & Footer Section.

#### 3.4 Challenges

#### **Scalability**

Scalability is a very difficult things for web developers to manage. Scalability is load equalization between the servers, hence when the load increases (i.e.More traffic on the page) further servers are often further to balance it..[4]

#### UI/UX

In the era of smartphones, web-developers may have expected to develop UI/UX that's responsive and easy. If this application frustrates users, then it is difficult to maintain the customer's loyalty. Another part is Website navigation often neglected by developers.

#### **Performance**

Slow web-applications applications are failure and as a result, customers absquatulate your web site, so damaging your revenue moreover as name. Some of the performance issues developers' faces are Poorly written code, Un-Optimized Databases, Unmanaged Growth of data, Traffic spikes, Poor load distribution, Default configuration, Troublesome third party services, etc. [4]

#### **Knowledge of Framework & Platforms**

Frameworks are boost performance, offer libraries of coding and extend capabilities, so developers need not do hand-coding web applications from the ground up. Frameworks provide options like models, APIs, snippets of code and different components to develop dynamic internet applications. [4]

#### **Security**

Security is the things that the web developers need to consider at every stage of SDLC (software development life cycle). There are so many things to consider when it comes to web application security such as denial of service attacks, database malfunctioning, the safety of user data, unauthorized access to restricted parts of the website, etc. [4]

#### **CHAPTER 4**

#### COMPETENCIES AND SMART PLAN

#### **4.1 Competencies Earned**

In the time of internship I really learn about the practical and real things about web developers. Here I see how should be a life of a developer and compare to me. I also saw managing client system. I learned about user management system also numerous things about self-control, monetary control, controlling administration.

#### 4.2 Smart Plan

To make a web site I always follow such a smart plan

Firstly, we have to choose a smart outlook for the website. This outlooks depends on what kind of people are the users of this site, how about their test and what they want. Based on this we should make a ui design first.

Then we have to start coding and divided the design into different segments and complete it part by part. It is batter if use bootstrap for responsive.

When our basic design will be complete then we start to make the web site dynamic by php and my sql.

Then start to check website in different device like mobile, tab late, desktop etc. and take necessary stapes for responsive

Finally, we can release our site.

#### 4.3 Reflections

My aim is to be an expert full stack web developer and I am working with it. This part is to make an expert web portfolio that presentations substance and Information that would be appeared to a point of view manager. The web empowers us to evacuate land compels and seek after more open doors for work in the expert. I am working on portfolio sites. I believe that it will be a great asset for my future.

#### **CHAPTER 5**

#### CONCLUSION AND FUTURE CAREER

#### 5.1 Discussion and Conclusion

I have earned a lot of experience and really this is a great opportunity for me to complete this internship on "Web Design and Development" at zhost. During this internship I saw most practical things. Now I have clearly understood what I should learn .As I start my internship from very stacks I cannot completed laravel framework properly but I am on the way. Then I will go for modern web development like node js and react which have a nice future I think. Now I can learn and this process will be continue.

Overall, I can say that this internship motivate me very much really it is useful for my career, I have learned a lot and got chances to implement. It helped me to enrich my working experience in software based company. Those experiences I gathered from the internship will surely help me in near future in my career.

#### **5.2 Scope for Further Career**

Now I have an experience. I think finding a good primary job will not be very difficult for me. This internship add a little experience level to my career. So as a successful internship trainee my future scopes will be:

To be a web designer

To be a full stack web developer

To be a software engineer

To be security Engineer

To be a project manager.

Whitout these I can work from anywhere as a free launcher and there are too many companies in abroad where I can work from anywhere [3] [2]

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# **Appendix**

#### **Appendix A: Internship Reflection**

I had started my internship journey September 2018 when I am in 10th semester. Really it was a great turning point for me. At the initial stage of my internship I had too many lackage. So according to my trainer suggestion I started to learn designing first from the very stack. Then I completed my designing part within two or three months. Then I moved on back end. I learn php and mysql very well. Then I started to create dynamic website. I learned about admin management system and role management system. And finally I create a website on blood donation which is shown on this report. Now I have ability to create and kinds of website with php. But it will be more easy when I will be completed a framework of php like laravel. So I am working on it.

I had been choose internship as my final year project because I notice that in most of job circular then want little job experience. Now I have understood what are the necessity or importance of experience. Without web development I also learned about web hosting management.

Finally, I can say that this internship is really useful for my career, I have learned a lot and got chances to implement. It helped me to enrich my working experience in software based company. Those experiences I gathered from the internship will surely help me in near future in my career.

#### **Appendix B: Company Detail**

zHost Bangladesh is an it type organization established in 2015 as a private company. zHost Bangladesh founder name is MD Shamsuzzaman Adil. zHost Bangladesh have expertise on wide range of web services such as website design & development, domain & web hosting solution and various server solutions. They are not only working for the best result but also for the perfection.

Having already 1000+ clients their services are web design, web development, online

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