East West University

Department of Electronics & Communication Engineering

Internship on

Customization of WordPress Themes with the Help of Plugins

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Internship (Industrial Training) Report

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Has been approved by _____

Acceptance

This internship report has been presented to the department of Electronics and Communication Engineering, East West University and submitted for the partial fulfillment of the requirement for degree of B.Sc. in Electronics and Telecommunication Engineering, under complete supervision of the undersigned.

_____   _____

Mr. Mustafa Mahmud Hussain   **Mr. Tahmeed Alam**

Assistant professor   **Director**

Department of ECE   **Insert Technologies**

East West University

Acknowledgement

I, Sampad Shaheen Kobi, would like to express my gratitude to almighty God for giving me strength to perform my responsibility as an intern and complete my report in time

My special thanks goes to Mr. Mustafa Mahmud Hussain, Assistant professor of ECE department, East West University, who was my academic supervisor for the course ETE 498(Industrial Training). He guided me to complete the report successfully by allocating his valuable time.

I would specially like to convey my gratitude to my company supervisor Mr.Tahmeed Alam, Director of Insert Technologies, who gave me the opportunity to do the intern under his department and guided me with lots of effort and time.

Abstract

Studying theory is something that may be very exciting for some. To develop a website from scratch is a very daunting task. During my internship it has helped me in my practical work and understanding. The hand on experience with WordPress has shown the vast opportunities and promises it holds. The themes do not restrict us to its limitations, as it is very much possible to customize the theme according to our needs. This has encouraged and helped in preparing me for my real life work experiences. It will strengthen the foundation of my theory-based education with the practical work.

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Chapter 1

Introduction

1.1 Insert Technologies-Overview:

Insert Technologies is a versatile company, with a vision and hope to create a better World and a brighter tomorrow with efficient computing. We offer high quality IT solutions to companies as well as individuals, without compromising the quality and efficiency. Our objective is to benefit all organization involved in technical implementations at every point of the journey. We treat all our clients personally and with care.

1.2 Vision & Mission:

Our vision is to achieve recognition as a world class IT company offering best value for money to our clients and to exploit technology to its maximum in accomplishing our mission and to provide support beyond the expectation of our clients.
Our Mission is not to have a long list of unsatisfied clients, but a small list full of satisfied clients.

1.3 Services:

A range of services and products that we offer are listed below,

a. Customized Software and web application development (Onshore, Off-shore and Hired Developers)
- Developing enterprise applications using Java, Developer Suit, VB.Net, C# and Visual Basic.
- Expertise on Database Servers like MSSQL, MySQL, PosrgreSQL and Oracle10g.
- Developing cutting edge web applications using PHP, ASP.Net, Rails and J2EE solutions.

b. Web site design and development
We offer professional and affordable Entertainment Website Design packages that accommodate most budgets! All Websites are customized to meet individual needs; small to large web sites, static to dynamic.

c. Domain registration and hosting
Online success starts with a great domain. We make it easy and inexpensive to get the domain you want, fast. We offer all major Top Level Domains (TLDs) and over 25 Country Code Top Level Domains (ccTLDs).

d. E-mail Marketing

Corporate Area: 5,00,000+ Email Address
Covered Area: Corporate employer, CTO, CEO, Managing director, Club members(Like Dhaka club, Gulshan club, Uttara Club, Lions Club etc.),
Different organization member(Like BGMEA, BASIS, FBCCI etc.), Different company owner and directors etc.
Regular Area: Student and Corporate employee.-Total 10,00,000+ email

e. Software testing services

Our Offshore QA lab supports software both for small and large development projects. QA is engaged in the software development process at each stage to assure the quality of a software product and processes involved.

f. Software and Network development consultation

We prides our self on delivering business solutions, on-time, on budget. We can provide assistance with application development, enterprise solutions, network services, hardware sales and help desk support.

g. Data Centre, Network and Server Setup and maintenance

We are dealing in Computer Systems & Peripherals in the region. We specialize in Computer Hardware, Data Centre, Networking and LAN Setup.
We have certified staff for setup of Windows Servers and Cisco Routers.

h. Desktop Publishing (DTP) and Printing

Skilled experts are available to serve your purpose for Graphic design illustration, desktop publishing services and Printing.

1.4 Major Clients:

1. Bangladesh Medical and Dental Council
Product: Application development and Website
2. Yogotex
Product: Web Application and Website
3. Melange Cafe
Product: Insert Restaurant Solutions (IRS)
4. Maven Logistics Limited
Product: Web-site and online parcels tracking system.
5. Rahimafrooz (Bangladesh) Ltd.
Product: Design & Develop a screensaver for the company by using flash.
6. Khilgaon Laboratory High School & College
Product: Insert Institute Solutions (IIS)
7. Modern One Stop Arthritis Care & Research Center

Product: Official web-site

8. AusXpress (parcel services)

Product: Online Tracking System.

9. bdhangouts.com

Product: Develop the company web-site.
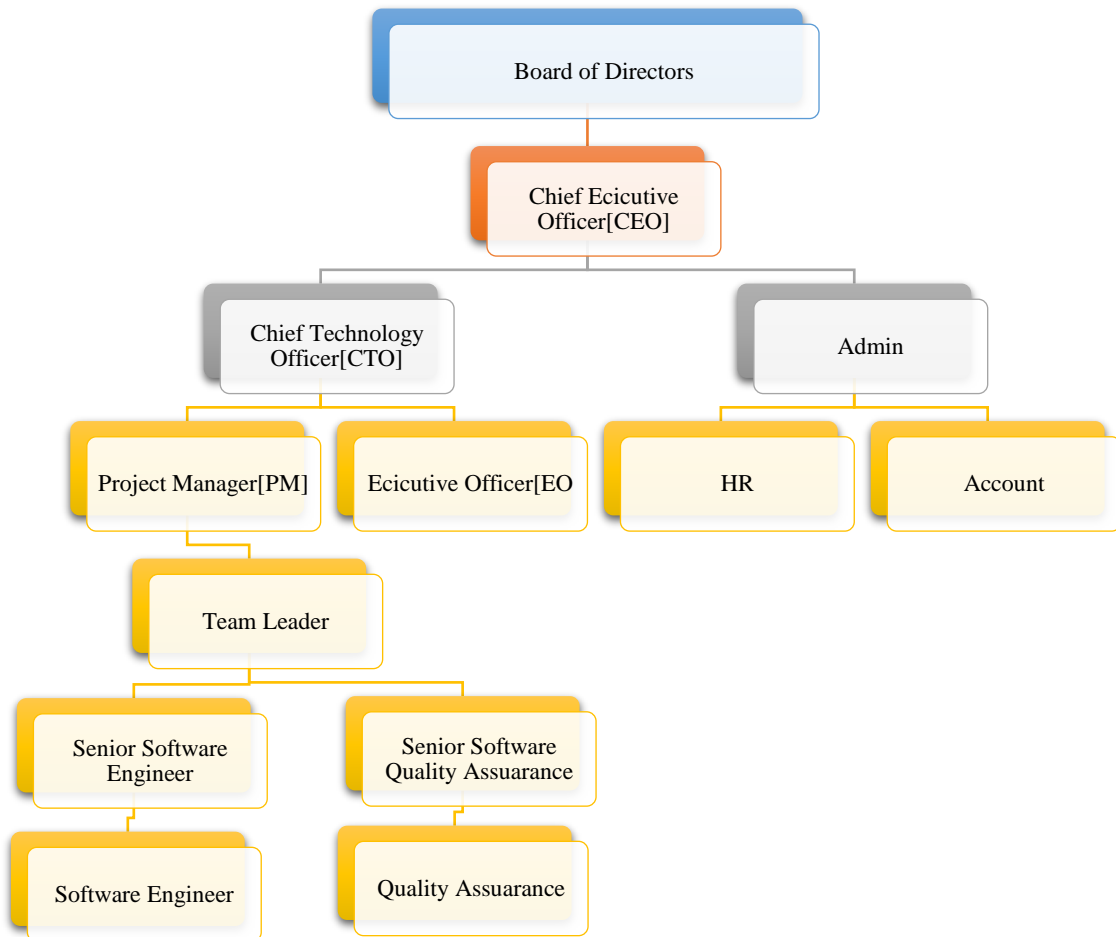
10. Hosaf Group

Product: Web based Inventory Management System.

11. Amin Jute Products

Product: Official web-site

1.5   Organogram:

Organogram of Insert Technologies

Fig.1.1 Organogram

Chapter 2

WordPress

2.1 What is WordPress?

WordPress is an online, open source website creation tool written in PHP. But in non-geek speak, it's probably the easiest and most powerful blogging and website content management system (or CMS) in existence today[1].

2.2 Who uses WordPress?

A good company use WordPress to publish on the web. Many famous blogs, news outlets, music sites, Fortune 500 companies and celebrities are using WordPress.

For example, famous blogs like Mashable and TechCrunch are both on WordPress. News outlets like The New York Times' blogs and CNN's on-air personality blogs all use WordPress, too.

For curiosity about who uses WordPress, heading over to the WordPress site showcase and will display an impressive figures of well-known sites and famous people using WordPress to power their websites[1].

2.3 Why WordPress is so popular?

2.3.1 Plugin Stability & Autonomy:

Most WordPress plugins do not need other plugins which require updates at differing times. This spares the user from extra monitoring and maintenance. If your online business presence has little room for downtime or costly maintenance, this is an ideal platform. The average multi-plugin update takes about 15 minutes if you back up your database manually, a few minutes with a backup plugin, and a few seconds for run-of-the-mill maintenance.

2.3.2 Multisite Option:

One very exciting option recently introduced is the ability to host multiple WordPress sites on the same installation. This feature allows you to create a site for each of your sales agents or representatives without purchasing extra websites or hosting packages.

2.3.3 Plugin Power and Versatility:

Do you need to sell your timeshare? Perhaps you have to list and filter your content, so jobs automatically show on one page and blog posts on another. Are you building an effective and unobtrusive SEO interface for your bloggers? Are you tasked with planning and listing events, or

perhaps selling classified ad space? WordPress is home to many masterwork plugins such as my Calendar**,** List by Post**,** All in One SEO Pack**,** Share This**, and** Advanced Custom Fields**.**

2.3.4   Ease of Use:

If you've ever plodded through hand-coding a website or worked with an unnecessarily complex CMS, you'll be pleased with WordPress's easy learning curve and organization. You can switch themes in under ten seconds, use quick-edit options to insert a tag you forgot without re-opening your article, make a post sticky, or link to existing content from a drop-down menu. When time is money, WordPress is your financial advisor. When you're looking to outsource your web design needs to a tech company you can also rest easy that maintenance won't soak up a large part of your budget.

2.3.5   Themes:

From lightweight frameworks to elegant powerhouses, free and paid themes abound, created by casual coders and professional designers alike. Whether you need a theme geared toward load time, appearance, or features, then WordPress has it.

In short, WordPress is a user-shaped content management system with immense creative and practical potential. A reasonably skilled user can build a site with social sharing, SEO, e-commerce, maps, new post types, and custom site structures in just a few hours[2].

Chapter 3

Plugins

3.1 What is Plugin?

Plug-in applications are programs that can easily be installed and used as part of your Web browser. Initially, the Netscape browser allowed you to download, install, and define supplementary programs that played sound or motion video or performed other functions. These were called helper applications. However, these applications run as a separate application and require that a second window be opened. A plug-in application is recognized automatically by the browser and its function is integrated into the main HTML file that is being presented[3].

3.2 Plugins That We Used:

Here We Used Two Plugins and Themes for this Web site:

➢ **Contact Form7**

➢ **Huge IT Gallery**

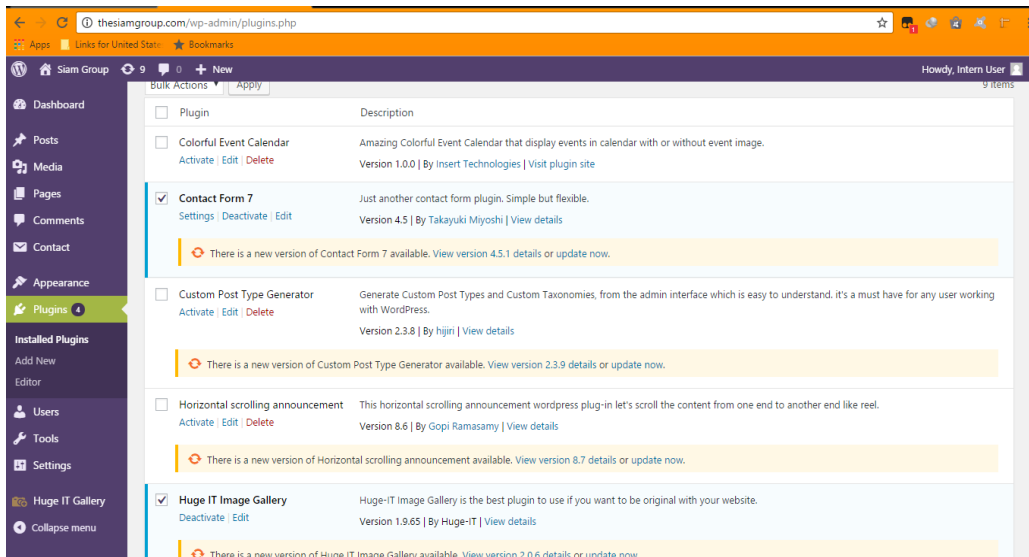The screenshots of the plugins used is shown below.

Fig.3.1 WordPress Plugins

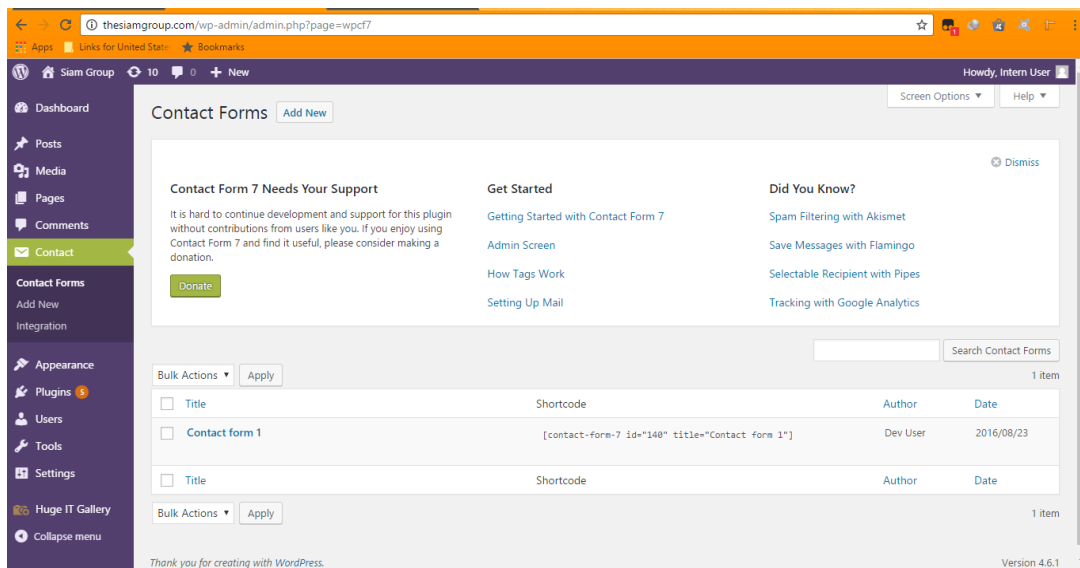### 3.2.1   Contact Form 7:

The main menu of contact form 7

Fig.3.2 Menu of Contact Form7

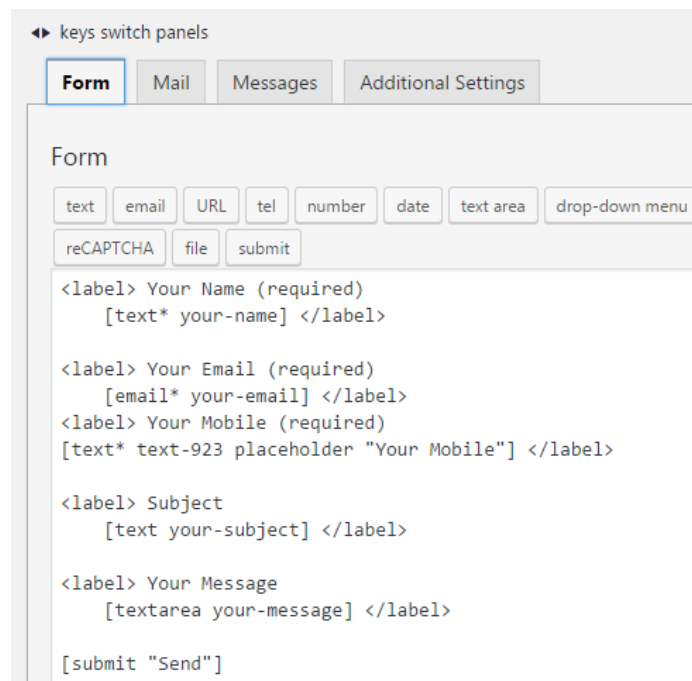### 3.2.1.1   The Key Switch Panels Of contact Form7

Fig.1.3 Form Key Switch Panels
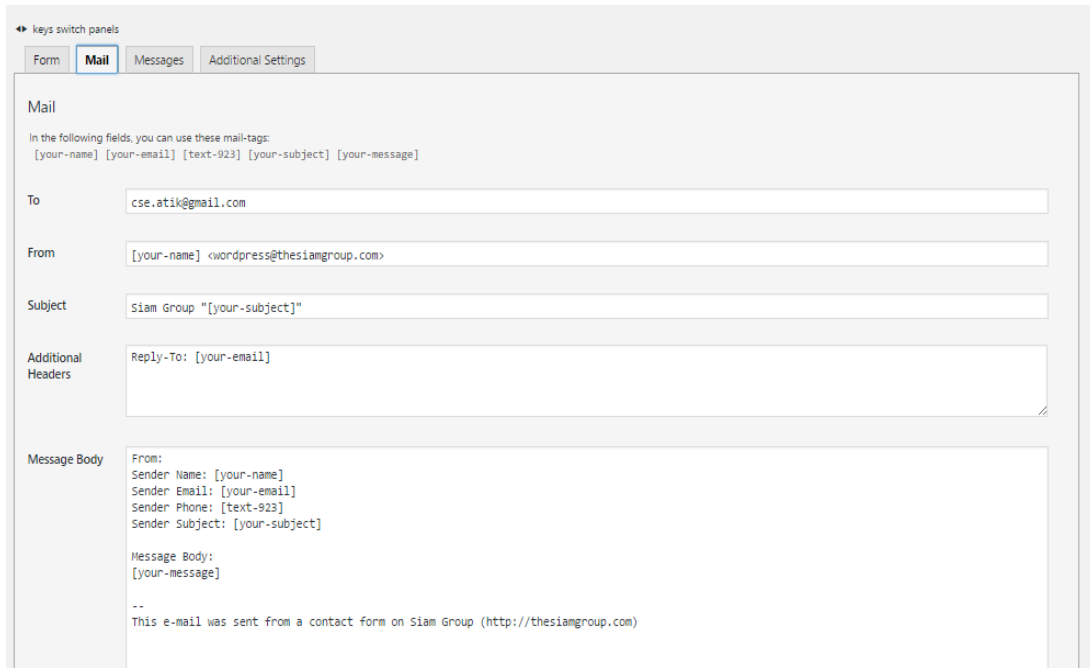
3.2.1.2 Mail Key Switch Panels

Fig.3.4 Mail Key Switch Panels

After Implementing the Contact Form 7 we get the below output
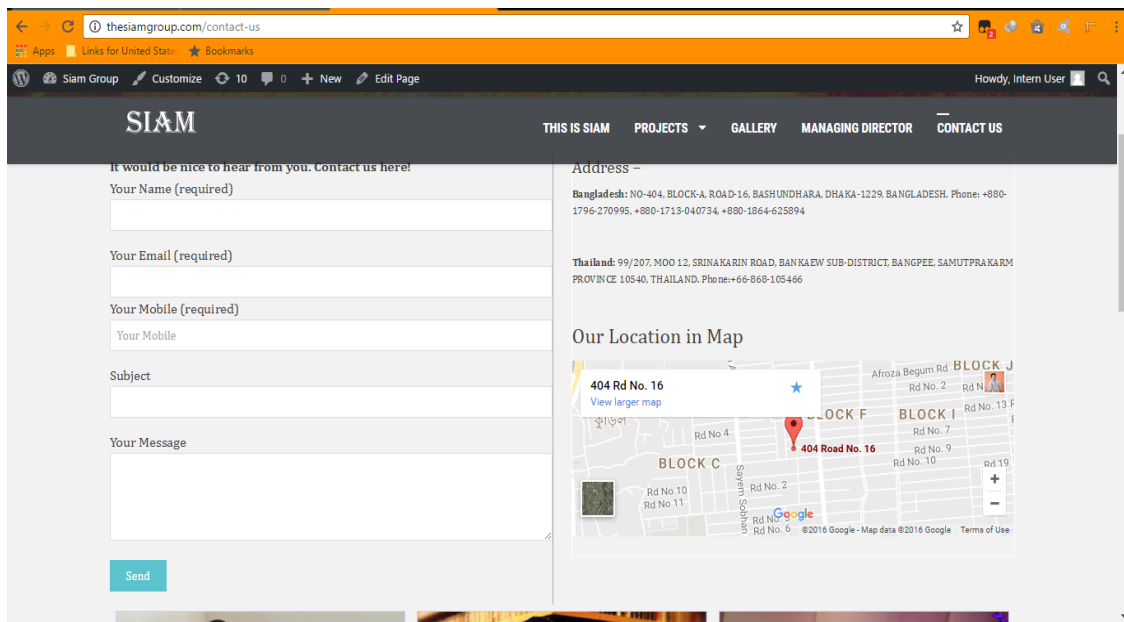
Contact Us Display:

Fig3.5 Contact Us Display

We used this Plugins for some specific reason given below:

- Mail configuration is very easy and fast.

- Contact form is customizable.

- Automatic messages replay generated
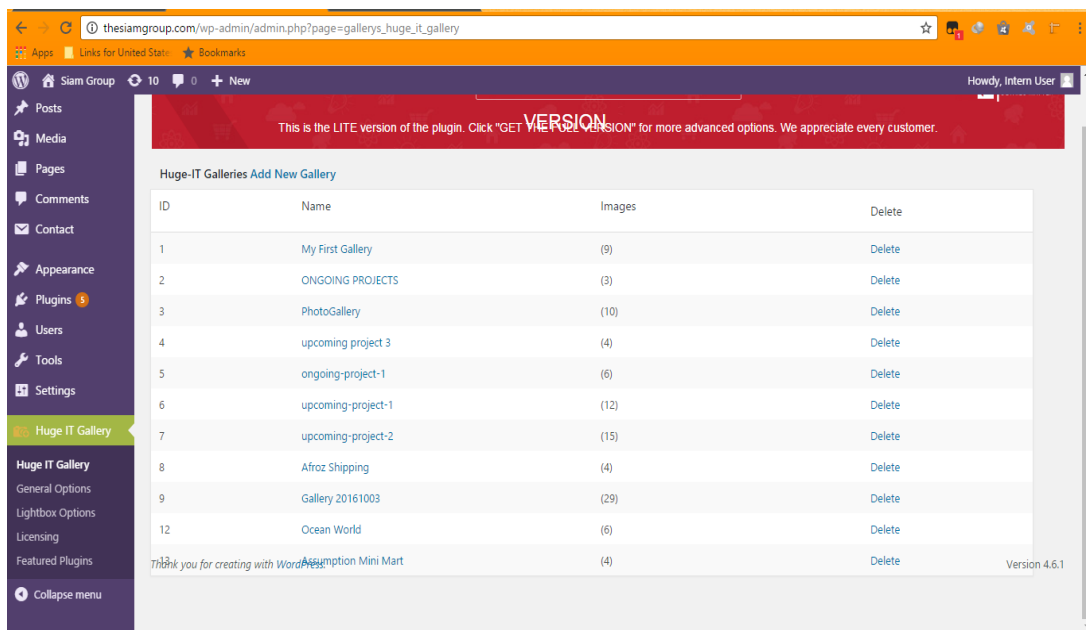
3.2.2 Huge IT Gallery

Fig.3.6 Huge IT Galleries
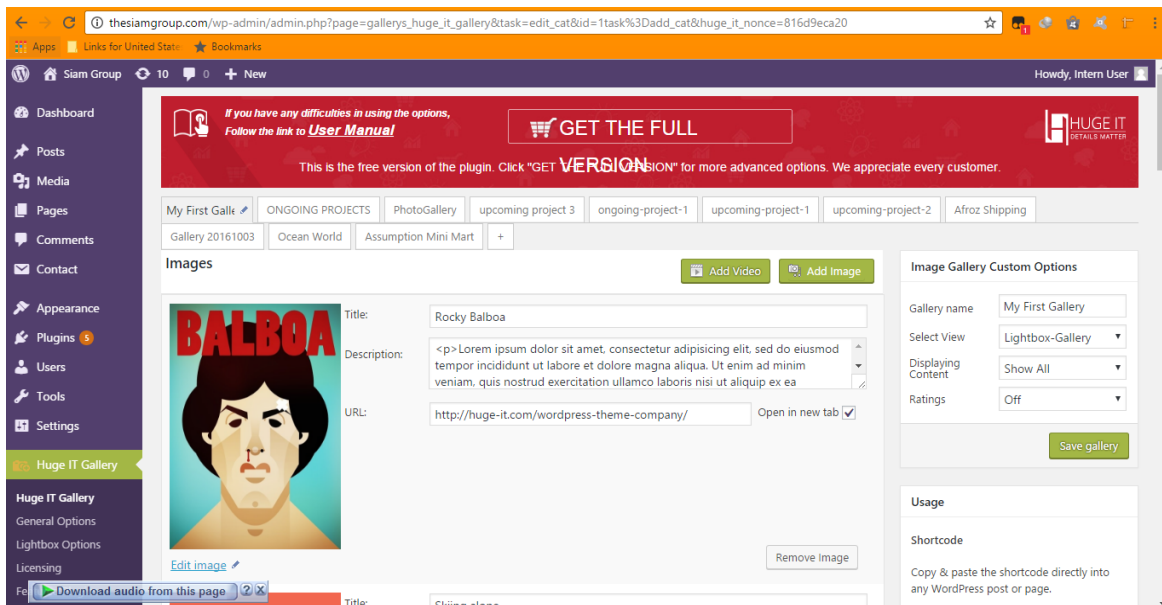
My First Galleries:

Fig.3.7 My First Galleries

3.2.2.1 Why We Used Huge IT Gallery:

- ✓ The Huge IT Gallery is photo gallery plugins it viewing and popup option is nice. The each photo can be show as a slide.

- ✓ There is also arrow indication to go to the next photo or previous photo

- ✓ Description can be added on each and every photos.

- ✓ Link direct option is also available.

- ✓ It's a paid version, so there is no problem with the unwanted advertisement.

Chapter 4

JavaScript

4.1 What Exactly Is JavaScript?

JavaScript is a programming language used to make web pages interactive. It runs on the visitor's computer and doesn't require constant downloads from your website. JavaScript is often used to create polls and quizzes[4].

4.2 JavaScript Advantages

The biggest advantages to a JavaScript having an ability to produce the same result on all modern browsers.

- **Client-Side execution:**

No matter where you host JavaScript, Execute always on client environment to save a bandwidth and make execution process fast.

- **User Interface Interactivity:**

JavaScript used to fill web page data dynamically such as drop-down list for a Country and State. Base on selected Country, State drop down list dynamically filled. Another one is Form validation, missing/incorrect fields to alert users using alert box.

- **Rapid Development:**

JavaScript syntax's are easy and flexible for the developers. JavaScript small bit of code you can test easily on Console Panel (inside Developer Tools) at a time browser interpret return output result. In-short easy language to get pick up in development.

Browser Compatible: The biggest advantages to a JavaScript having an ability to support all modern browser and produce the same result.

- **Make XML Http Request Object:**

XMLHttpRequest is special JavaScript object that was designed by Microsoft. XMLHttpRequest object call as asynchronous HTTP request to the Server for transferring data both side without reloading the page.

Rich interfaces: Drag and drop components or slider may give a rich interface to your site visitors.

- **Fast to the end user:**

 As the script is executed on the user's computer, depending on task, the results are completed almost instantly.

- **Relatively an easy language:**

This is quite easy to learn and the syntax that is close to English.

- Many modern websites now a day's uses JavaScript AJAX methods to fetch data from web servers and render inside web pages at runtime. Rest API used for this purpose and the data fetched is in JSON format[5].

4.3 JavaScript Disadvantages

Biggest disadvantages to a JavaScript, code visible to everyone.

- **Code Always Visible:**

The biggest disadvantages is code always visible to everyone anyone can view JavaScript code.

- **Bit of Slow execute:**

No matter how much fast JavaScript interpret, JavaScript DOM (Document Object Model) is slow and will be a never fast rendering with HTML.

- **Stop Render:**

JavaScript single error can stop to render with entire site. However browsers are extremely tolerant of JavaScript errors.

- **JavaScript does not allow us to read or write files.**

- **Security issues:**

Any JavaScript snippets, while appended onto web pages on client side immediately can also be used for exploiting the user's system.

Doesn't have any multiprocessor or multithreading capabilities.

- **JavaScript render varies:**

JavaScript may be rendered by different layout engines differently. As a result, this causes inconsistency in terms of interface and functionality.

- **A page becomes useless if the script is not working.**

- **Complex script take longer starting and running time.**

- **Buggy JavaScript can crash or take longer time to run and hence increases browser memory and browser might stop responding**[5].

4.4 Uses of JavaScript

- **Input Validation:**

JavaScript can be used to validate the input. Data entered informs should be validated before it is processed. For example, if a user enter email, it must be valid email. JavaScript code can ensure its validity by checking that contain @ symbol and dot(.).

- **Mouse Rollover Effects:**

JavaScript can used to create different buttons with interesting mouse rollover effects. When the user moves the mouse over a button, different effects are generated. It makes browsing more interesting and attractive.

- **Popup Windows:**

JavaScript can be used to create popup windows. These windows are normally used to display important announcements, offers and news etc. Popup windows can be created of different sizes.

- **Dynamic Contents**

JavaScript can be used to generate dynamic contents in a website. For example, the current date and time can be display on a webpage. Different HTML tags can be generated based on the user input etc.

- **User Interaction:**

JavaScript can be used to interest with the user. The input entered by the user can be processed and proper message can be displayed to the user. The interactive capabilities of a website makes it more interesting and productive for the users[4].
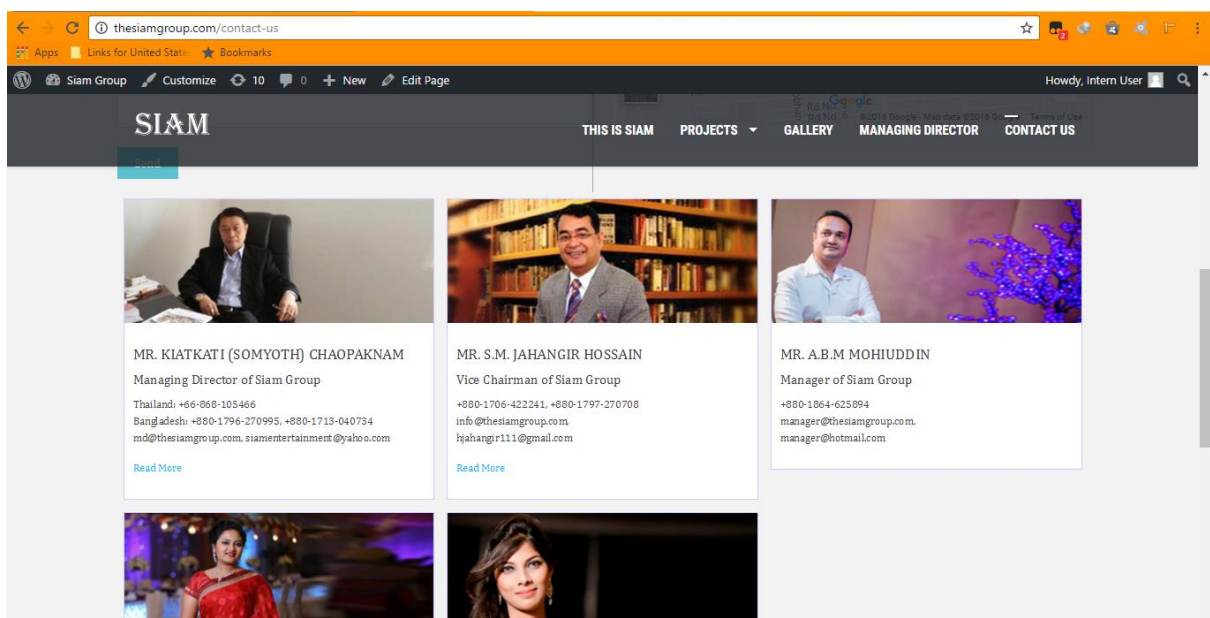

Fig.4.1 User Iteration

The Javascript has been used for the "Read more" function the code used to call the function is displayed below:

```
<a class="btn" data-popup-open="popup-2" href="#">Read More</a>

<div class="popup" data-popup="popup-2">
    <div class="popup-inner">
```

The function used for the pop is displayed below:

```
$('[data-popup-open]').on('click', function(e)  {
    var targeted_popup_class = jQuery(this).attr('data-popup-open');
    $('[data-popup="' + targeted_popup_class + '"]').fadeIn(350);

    e.preventDefault();
});
```
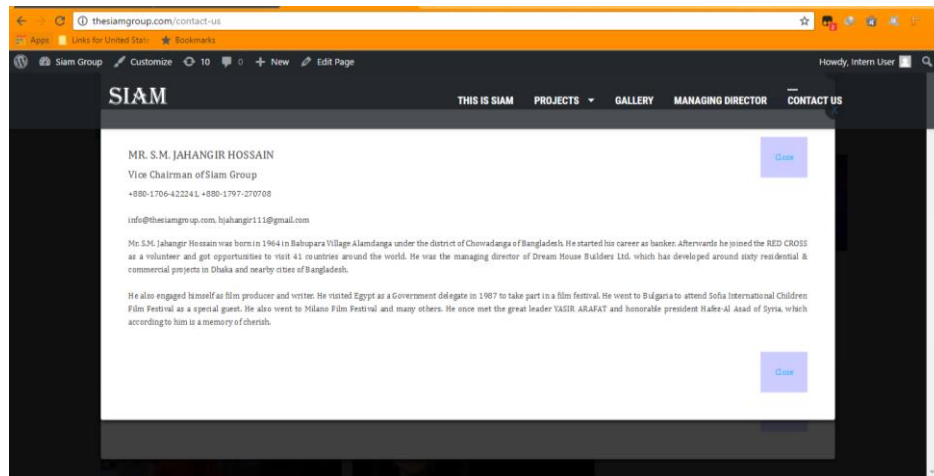
The Pop-up Window display as below

Fig.4.2 User Iteration

Similarly for the closing of the pop up window the code used to call is displayed below:

```
--
</p>
<a class="popup-close" data-popup-close="popup-2" href="#">x</a>
<a href="" class="popclose">Close</a>
```

The function used for close the pop is displayed below:

```
//----- CLOSE
$('[data-popup-close]').on('click', function(e)  {
    var targeted_popup_class = jQuery(this).attr('data-popup-close');
    $('[data-popup="' + targeted_popup_class + '"]').fadeOut(350);
    e.preventDefault();
});
```

After close the Pop-up window the page will back like below

User Iteration

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Read More

Fig.4.3 User Iteration

Chapter 5

Shortcode

5.1 What is Shortcode?

A **shortcode** is a WordPress-specific code that lets you nifty things with very little effort. Shortcodes can embed files or create objects that would normally require lots of complicated, ugly code in just one line. **Shortcode= shortcut**.
With this plugin you can easily create tabs, buttons, boxes, different sliders, responsive videos and much, much more. Turn your free theme to premium in just a few clicks. Using Shortcodes Ultimate you can quickly and easily retrieve premium themes features and display it on your site. See screenshots for more information[6].

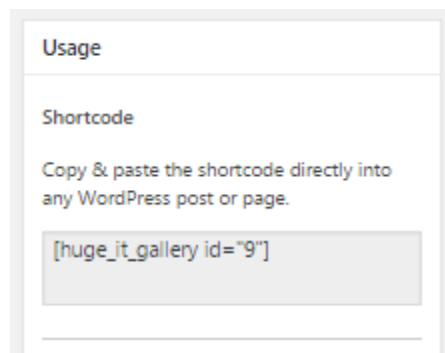## 5.2 WordPress Post:

We use this shortcode to the WordPress post

Fig.5.1 Shortcode
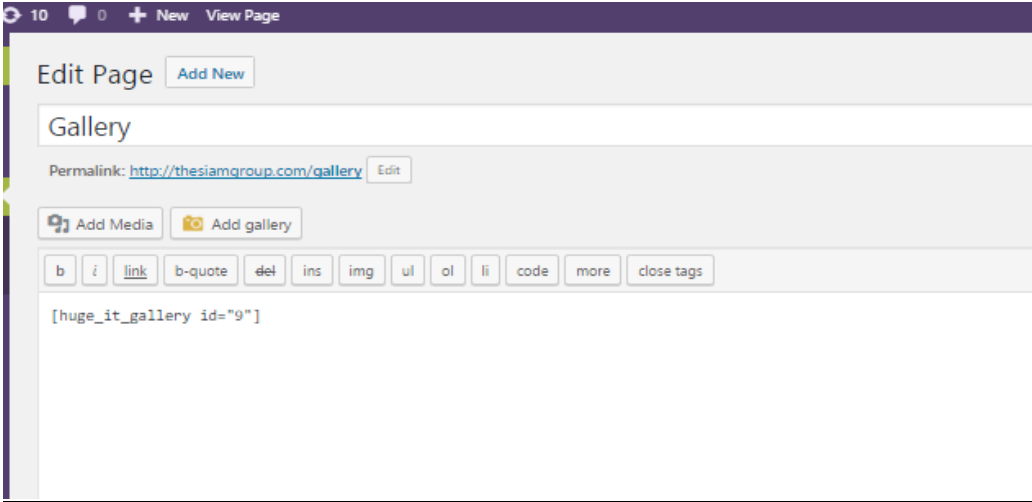
Here we paste the short code in the desired page:

Fig.5.2 Shortcode page

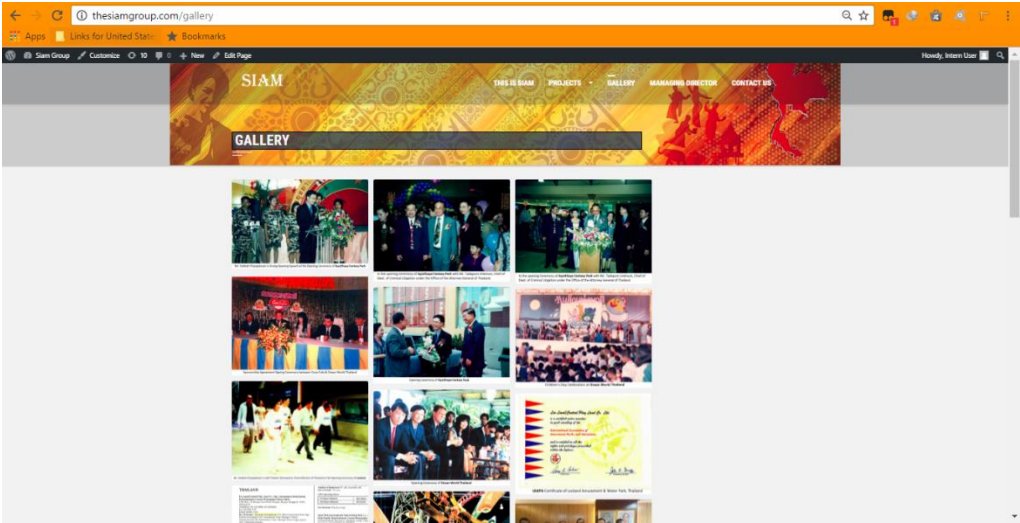And when we finally publish the page the following gallery will be displayed on the page.

Fig.5.3

Chapter 6

Conclusion

We have learnt a lot of things from the courses, but didn't know the applications and sources in real life. During the internship in Insert Technologies I have benefited a lot in the field attachment in a way that has helped me to apply the theoretical knowledge from the university into practice through the many activities/tasks/assignments I was instructed to do. I have learnt many lessons which included; how to create a customized website using WordPress with the help of Plugin, how the working environment runs, etc. The unlimited number of plugins available helps us to choose according to serve the purpose according to our needs. Got different ideas from the different people (employees) at the Organization and this contributed a lot on the knowledge and experience. Finally, internship was fun and therefore I would encourage the Insert Technologies to continue giving students this opportunity to do their academic requirement of internship from their organization.

Reference:

[1] https://ithemes.com/tutorials/what-is-wordpress/

[2] http://www.commonplaces.com/blog/why-is-wordpress-so-popular/

[3] http://whatis.techtarget.com/definition/plug-in

[4] http://javascript.about.com/od/reference/p/javascript.htm

[5] http://www.way2tutorial.com/javascript/javascript_advantages_and_disadvantages.php

[6] https://en.support.wordpress.com/shortcodes/