TRIBHUVAN UNIVERSITY

INSTITUTE OF SCIENCE AND TECHNOLOGY

Sagarmatha college of science and technology



A **final year internship report on**

Wind horse tours

At

Halftone Designs Pvt. Ltd

Submitted By:

Urgen Sherpa (TU Exam Roll No. 3328/070)

Submitted To:

CSIT Department

Sagarmatha College of Science and Technology,

Sanepa, Lalitpur

February 4 , 2018

# **Table of Contents**

[Table of Contents i](#_Toc507958396)

[List of Figures ii](#_Toc507958397)

[Chapter 1: Introduction 1](#_Toc507958398)

[1.1 Introduction of internship 1](#_Toc507958399)

[1.2 Organization Overview 1](#_Toc507958400)

[1.2.1 Contact Details 2](#_Toc507958401)

[1.3 Project overview 2](#_Toc507958402)

[1.4 Problem Statement 2](#_Toc507958403)

[1.5 Objectives of the project 3](#_Toc507958404)

[1.6 Scope/Limitation of the project 3](#_Toc507958405)

[1.7 Responsibilities Assigned 3](#_Toc507958406)

[1.8 Duration and work procedure for the projects 6](#_Toc507958407)

[1.8.1 Time scheduling 6](#_Toc507958408)

[Chapter 2: Analysis 7](#_Toc507958409)

[2.1 Requirement Analysis 7](#_Toc507958410)

[2.1.1 Functional Requirement 7](#_Toc507958411)

[2.1.2 Non-functional Requirement 9](#_Toc507958412)

[2.2 Feasibility Analysis 10](#_Toc507958413)

[2.2.1 Technical 10](#_Toc507958414)

[2.2.1 Operational 10](#_Toc507958415)

[2.2.3 Economic 10](#_Toc507958416)

[Chapter 3: System Design 11](#_Toc507958417)

[3.1 Web interface 11](#_Toc507958418)

[3.2 Site structure 12](#_Toc507958419)

[3.3 Flowchart 12](#_Toc507958420)

[Chapter 4: Implementation 14](#_Toc507958421)

[4.1 Front-end tools 14](#_Toc507958422)

[4.2 Back-end tools 14](#_Toc507958423)

[Chapter 5: Testing 16](#_Toc507958424)

[Chapter 6: Conclusion 17](#_Toc507958425)

[REFERENCES 18](#_Toc507958426)

[APPENDICES 19](#_Toc507958427)

# List of Figures

Figure a-General architecture of PSD to html/css conversion 5

Figure b-Flowchart(a) 6

Figure c-Flowchart(b) 7

Figure d: Site structure 8

Figure e: Work scheduling 9

# Chapter 1: Introduction

## Introduction of internship

[1]An internship is an opportunity offered by an employer to potential employees, called interns, to work at a firm for a fixed, limited period of time. Interns are usually undergraduates or students, and most internships last for any length of time between one week and 12 months. Internships offer students a hands-on opportunity to work in their desired field. They learn how their course of study applies to the real world and build a valuable experience that makes them stronger candidates for jobs after graduation.

With the aim of acquiring hands-on training in the web designing and development, the author had done internship at Halftone Designs Pvt. Ltd. as front end web developer. The objectives of the internship are as follows:

* To experience and understand the work ethics, professional standard and technology used by an organization to achieve their goals.
* To get knowledge and experience in handling real world project.
* To become competent in order to land permanent job in related fields.

## 1.2 Organization Overview

**Halftone Designs Pvt. Ltd. is one of the leading website design and development company of Nepal. This company was founded in 2011 and is located at Dillibazaar - Kathmandu, Nepal.**

**Halftone Designs mainly provide services regarding graphic designing, logo designing, website designing, web application development, Ecommerce solutions and web application maintenance. In addition to this, the company has also run training classes in the field of graphic designing, web designing, web application development, mobile application development etc. The contact information of the company are as follows:-**

### ****1.2.1 Contact Details****

* Halftone Designs Pvt. Ltd.
* Physical address: Abhiyan Marg, Kathmandu, Nepal
* Telephone: +977-1-4421754/+977-9851142573/+977-9803042573
* Website: http://htd.com.np/
* Email: info@htd.com.np
* Facebook: <https://www.facebook.com/halftonedesigns/>

## 1.3 Project overview

“Wind horse tours” is a web-based application which aims to provide the information of the services it provides to the trek and tour lovers. Basically, it is a tour operating company which was officially launched in Bhutan in 1998 to provide trek and tour services. The trek and tour services are provided in four different countries which are Nepal, Bhutan, India and Tibet.

## ****1.4 Problem Statement****

Most of the people love to travel, trek and tour to new places and countries. For the purpose of trekking or tour, people used to contact the travelling and trekking company for getting authentic information, hassle-free trekking, sense of security, expert consultation etc. So, the trek and tour companies need reliable and effective medium to provide the detail information about their background, their provided services and more information regarding trek and tours. Furthermore, they also need an effective medium to provide consumer oriented services like checking the availability of trips and tours, reservation and payment gateways.

## 1.5 Objectives of the project

The objectives of the project to be done during internship are as follows:

* To bring the company profile, information and services they provide regarding trek and tours online.
* To facilitate people with the services of reservation, payment and checking the availability of trips, tours and treks online.

## 1.6 Scope/Limitation of the project

Now-a-days web application acts as a bridge between the customer and the companies. Web application provides all kinds of information and the services the user needs. The project wind horse tours help users to find all types of tours and treks details, their availability, date, reservation, payment and news etc. The interface of wind horse tours is smooth, user friendly and very efficient. The customer can easily find all the information and services they need from this web application without any difficulties.

There is limitation of this application also which are listed below:

* Internet connection required.
* User must know English language.
* Web browser is must in order to browser the web application.

## 1.7 Responsibilities Assigned

The author had done the front-end part of the project i.e. to convert PSD template file to html5/css3 and to add responsive theming by using fluid grids, fluid images and responsive design.

First of all, before the actual development process, website template is designed by graphic designer using photoshop. Then the actual development process of photoshop template to website begins using html5 and css3. After that, javascript and jquery is used in order to add interactivity, animations and other effects to the static page.

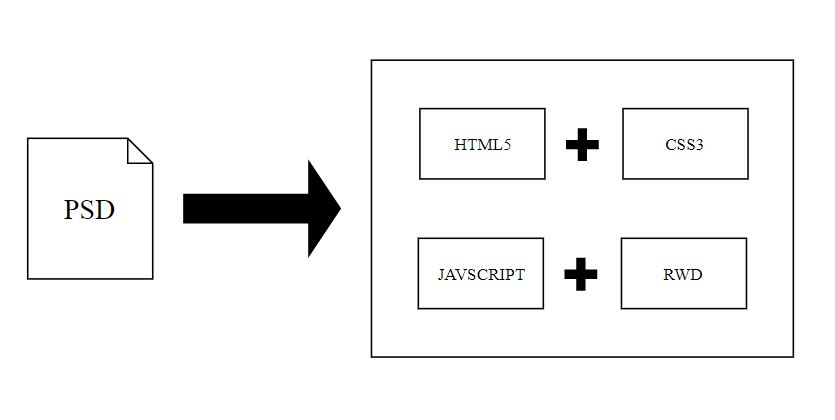


Figure -General architecture of PSD to html/css conversion

The above figure shows the general architecture of PSD to html/css conversion. For the better understanding, the workflow of the process and steps taken in front end development are shown by the flowchart below:

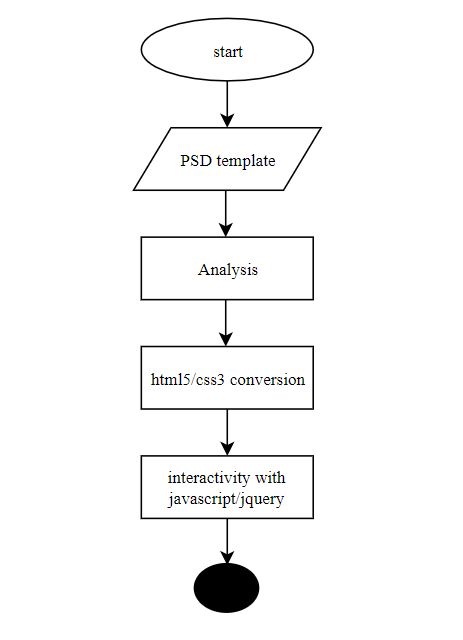


Figure b-Flowchart(a)

The above figure is the first part of the flowchart which shows the initial phase of converting PSD template to html5 and css3. After converting it to html and css, further process of adding animation, effects and interactivity is done through javascript and jquery.

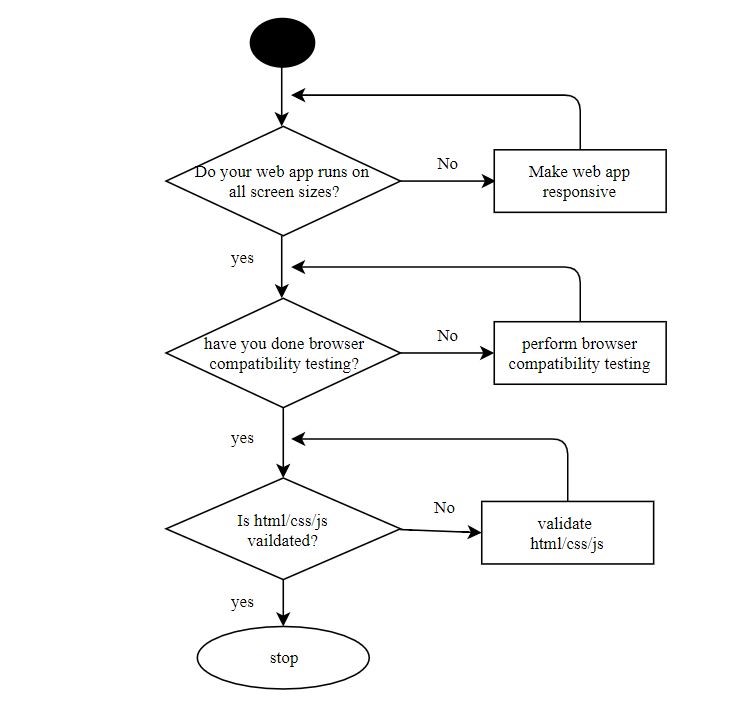


Figure c-Flowchart(b)

The above flowchart is the last part of the flowchart which shows the final phase of task of front end web developer. When the development or coding part of the user interface from PSD template is finished, then responsive design is added which should be compatible to all screen sizes. After that browser compatibility is tested and validation of html, css and javascript is done online.

## 1.8 Duration and work procedure for the projects

|  |  |
| --- | --- |
| Start date | 23rd Ashwin, 2074 |
| End date | 20th Magh, 2074 |
| Position | Front end developer |
| Mentor | Mr. Raju Maharjan |
| Supervisor | Manish Aryal |
| Office hour | 10:00am – 5:00 pm |

### 1.8.1 Time scheduling

The time schedule for the internship and the work that have been done during the internship are as follows:



Figure d: Work scheduling

# Chapter 2: Analysis

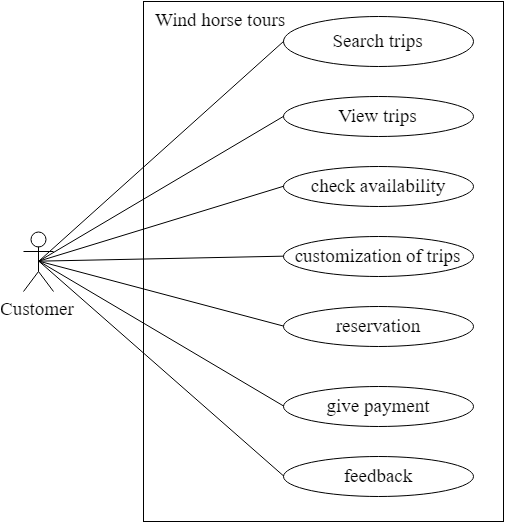
## 2.1 Requirement Analysis

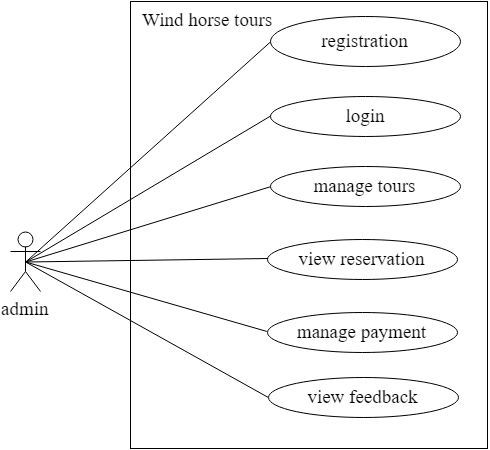
Requirement analysis is the process of precisely identifying, defining, and documenting the various requirements that are related to a particular business objective. Requirements gathering helps in clearly understanding the needs of the customer, defining the scope of the project, and assessing the timescales and resources required to complete it. There are two types of requirement which are as follows:

### 2.1.1 Functional Requirement

What the system must do is termed as functional requirement. Functional requirements state the services that the system provides. It states how the system should react to particular inputs and how the system should behave in particular situation. The functional requirement of the web application are as follows:

1. Search trips: A user should be able to search the tours and trips based on destination, trip type, activity type and date.
2. View trips: The user should be able to view the details of the trips on request.
3. Check availability: The user should be able to check if the particular trip is available or not.
4. Customization of trips: The user should be able to customize the trips according to his/her interest.
5. Reservation: The user should be able to reserve/book the trips and tour.
6. Give payment: The user should be able to give payment through the available payment services via secure channel ensuring the security of user details.
7. Feedback: The user should be able to provide feedback based on the services, facilities and experience they get after using the services from the company.





### 2.1.2 Non-functional Requirement

Non-functional requirement are the requirements that are not directly concerned to the specified function delivered by the system. They may relate to the emergent system properties such as reliability, response time and store occupancy. Following are few non-functional requirements for wind horse tours:

1. The system should be implemented as a standalone web application.
2. The system should be compatible with the latest and oldest browsers.
3. The system is independent. It is not being integrated with any other software.
4. The system should secure the data and information of the client.

## 2.2 Feasibility Analysis

Feasibility study is a test of system proposed according to its work ability, impact on the organization, ability to meet user needs, and effective use of resources. The feasibility study of this application which had been carried out are as follows:

### 2.2.1 Technical

The application is technically feasible because the web application can be accessed through any devices like mobile, tablet, laptop etc. in the presence of internet. The application is developed by software developers using the current existing tools and technology and servers are cloud-based server.

### 2.2.1 Operational

This application is operationally feasible because the user/customer can get all the information and services it needed by using this web application. Through this application, the user can get the information of the background of the company and the services it provides and can use the services efficiently.

### 2.2.3 Economic

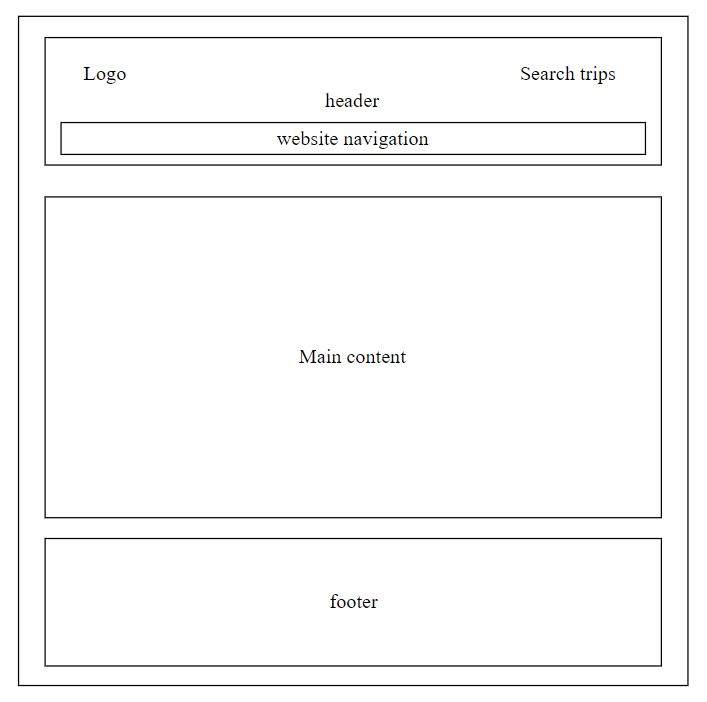
Economic feasibility is the analysis of a project's costs and revenues in an effort to determine whether or not it is logical and possible to complete. This application is economically feasible because this application is made using open source software and the server is hosted on cloud which is cheaper than traditional way of buying and maintaining the server.

# Chapter 3: System Design

System design is important in software development because it defines the architecture, components, modules, interfaces and data for a system. The system design of the project is defined by following subtopics:

## 3.1 Web interface

The web interface is the interface between the user and the software. The web interface is displayed through web browser which allows the users to interact with the system. The web interface of the application is based on grid-based layout. Html5 has been used for structuring the layout, text and images and CSS has been used for applying the grid-layout and design as defined by the PSD template file of the project.



The above figure tells about the basic web interface of the application. On the top, we have header which is contained by the company logo, trips search bar and navigation bar. On the center, there is the presence of the main content which contains all the information, forms, pictures etc. Basically, the main content is the place in which actual information about the trips, company etc. is located. And on the bottom there resides the footer which mainly contains the contact details, its main and branch office location and link to social networking site.

## 3.2 Site structure

A clear, logical website structure aids navigation and orientation. The site structure tells how the individual subpages are linked to each other. The structure of the web page are as follows:

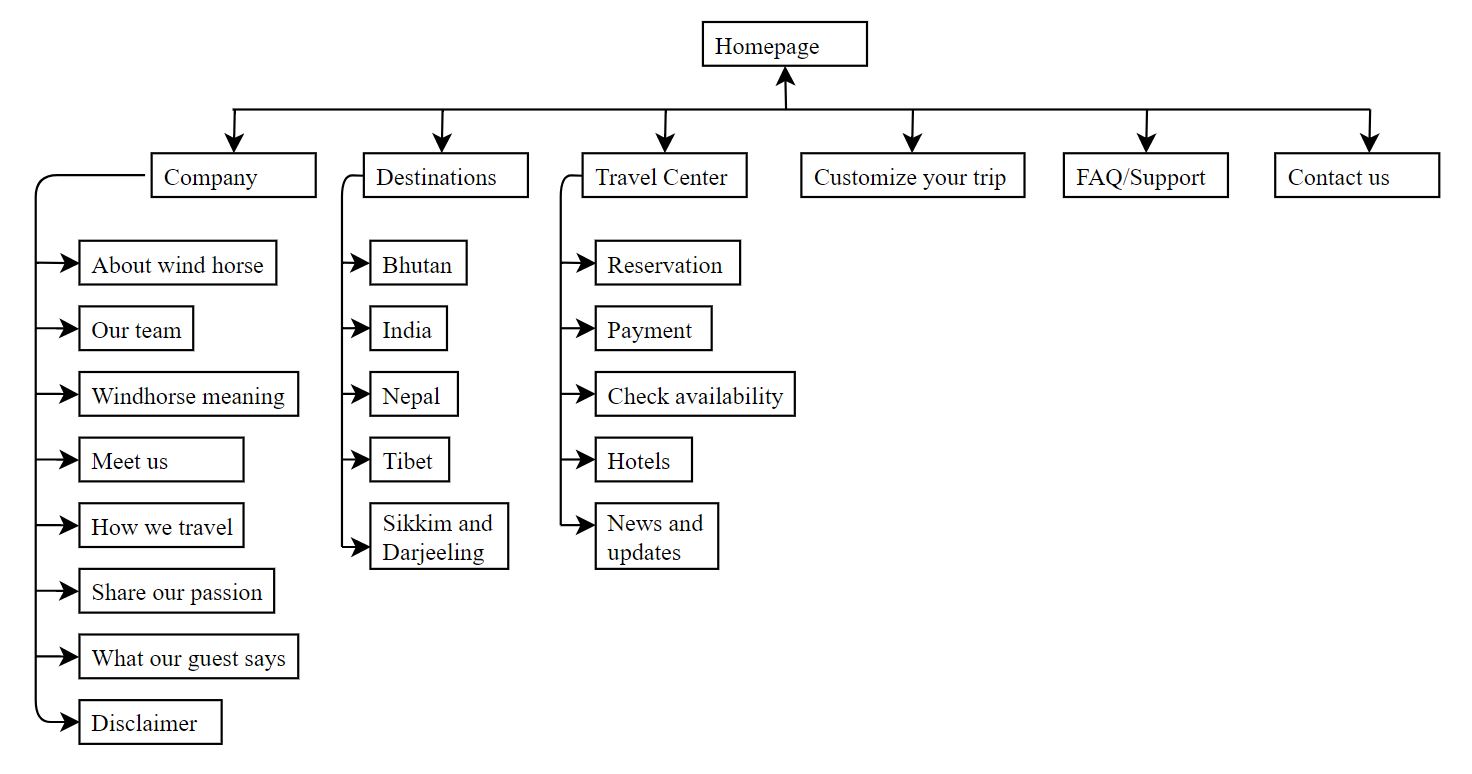
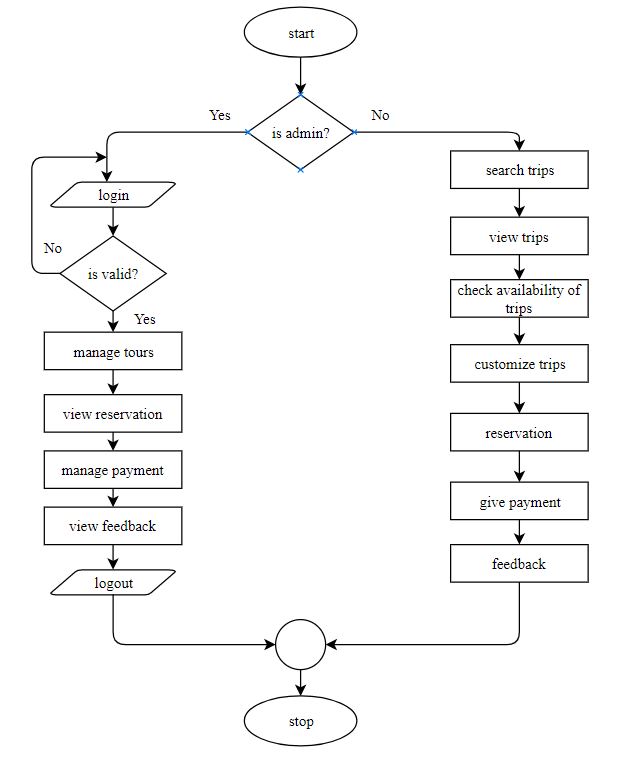


Figure d: Site structure

The above site structure of the web application refers all the major section and its respective subpages. The major section also acts as navigation bar in the application. On the top, there is the homepage and on the second level, there is the navigation bar or major sections of the page which leads to its subpages.

## 3.3 Flowchart

The flowchart is a diagram which describes about the sequence of the movements or actions of the people or things involved in complex system.



## 3.4 Directory structure

# Chapter 4: Implementation

## 4.1 Front-end tools

The front-end tools and technologies used in this project are as follows:

1. Photoshop cc 2017

Photoshop cc 2017 is used to measure the pixel value of the layout and to extract the image/logo.

1. Sublime text 3

Sublime text 3 is used as text editor to code html, css and javascript.

1. Html5

Html5 is used to create the basic structure and content of a webpage. It marks the contents up into different structural types, line paragraphs, blocks, lists, images, tables, forms, comment etc.

1. Css3

Css3 is used to design the contents of a webpage. It tells the browser how each type of element should be displayed, which may vary for different media (like screen, print or handheld device.

1. Javascript/jquery

Javascript is used to define the interactive elements of a webpage that helps to engage user. It tells the browser how to change the web page in response to events that happen (like clicking on something, or changing the value in a form input).

Jquery is javascript library. The purpose of jquery is to make javascript easier to use on website.

## Back-end tools

1. PHP
2. Apache
3. Mysql
4. inMotion Hosting

# Chapter 5: Testing

# Chapter 6: Conclusion

# REFERENCES

|  |  |
| --- | --- |
| [1] | "1," 20 3 2017. [Online]. Available: https://www.wikijob.co.uk/content/internships/advice/what-internship. [Accessed 28 11 2017]. |
| [2] | P. Christensson, "1," Sharpened productions, 5 2 2013. [Online]. Available: https://techterms.com/definition/web\_design. [Accessed 9 12 2017]. |

# APPENDICES