**Travel and Accommodation Services Platform for HappyHolidayss (Pvt) Ltd.**

**Final Report**

Name: **Chandrakumaran Subiharan**

London Met ID No: **21038365**

London Metropolitan University

**Declaration**

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**Module Leader: Prof. Ruvan Student ID: 21038365**

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**Dedication**

**Acknowledgements**

I would like to take this moment to thank our dearest project supervisor, Mr. Dimuthu Thammitage for assisting and guiding me regarding each and every aspect of this project. I would like to acknowledge his cooperation in each supervision meeting held.

Also, I would like to thank Mrs. Yamuna Nawarathne who showed patience toward us all throughout the project by providing suggestions.

Would also take this moment to thank my parents for their massive encouragement all the way from day to night. All of the support given by everyone made me strong to behold this project.

This was a great opportunity for me having being doing individual coursework which covers each and every aspect of the system development. I gained and am increasing precious research knowledge and experiences while doing this project. And was able to gather more knowledge and proven the subject. Last but not least, I thank all of my fellow batch colleagues for their support throughout the project.

Thank you.

Chandrakumaran Subiharan

**Abstract**

Travel and Accommodation Services system is a web-based application that allows travelers to check for home rentals, tour packages and for accommodation providers to list their property and manage it. At HappyHolidayss (Pvt) Ltd, the traditional method of the Tourist and Partner management system is presently in use which involved the use of papers for storing client/partner information. With this method, there is always a long queue, loss of data, incomplete clients/partner information, and inaccuracy. An online Travel and Accommodation system will be implemented for Happy Holidayss (Pvt) Ltd to solve the existing problems. This system too mainly focuses on component operations like selling Travel and Accommodation Services to customers with a wide variety of Categories and analyze company transaction information under a single framework. Moreover, the convenient features to increase the customer service letting to access a variety of information and the flexibility of the database information makes this system as an idyllic Travel and Accommodation Platform for any.

The basic objective of this extension is to create a web-based Travel and Accommodation Platform for Happy Holidayss (Pvt) Ltd that grants clients to see and reserve a tour, homes in online also for the administrators to manage partners and earnings. There are various web-based travel and accommodation systems which were arranged utilizing the comparable innovations.

The solution was designed and constructed by adhering to the three-tier architecture method along with an Object –oriented approach for the coding phase. The coding was carried out by using PHP version 7.4, JavaScript, jQuery and design was carried out using HTML5 and CSS along with MySQL for database construction process. Apache Xampp server was used as the web server due its limitless compatibilities with PHP applications.

The project has been completed and this report demonstrates the work carried out from scratch. Each chapter describes the work carried out in each phase until the final implementation of the aforementioned Web-based Travel and Accommodation Platform for HappyHolidayss (Pvt)Ltd.

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**Abbreviations**

TAMS - Travel and Accommodation Management System

B2B - Business-to-Business

B2C - Business-to-Consumer

C2B - Consumer-to-Business

C2C - Consumer-to- Consumer

HTML - Hypertext Markup Language

CSS - Cascading Style Sheets

MySQL - My Structured Query Language

U.S - United States

IT - Information Technology

DOI - Diffusion of Innovation

OTA - Online Travel Agency

ERP - Enterprise Resource Planning

OOP - Object Oriented Programming

UML - Unified Modeling Language

GUI - Graphical User Interface

DFD - Data Flow Diagram

SDLC - System Development Life Cycle

PHP - Hypertext Preprocessor

PDA - Personal Digital Assistance

JSP - Java Server Pages

ASPX - Active Server Pages Extended

GHz - Giga Hertz

ERD - Entity Relationship Diagram

PC - Personal Computer

RDBMS - Relational Database Management System

RAM - Random Access Memory

OS - Operating System

TB - Tera Byte

GC - Google Chrome

MF - Mozilla Firefox

ME - Microsoft Edge

# **Chapter 1 Introduction**

People today are living completely different lives than they were years ago since the advent of technology. Technology is one of the main ways to change the world. Whenever, people want to book a stay or tour package also list their property and travel packages, they should go to travel agency in person or they should call them. But this project (Online travel and accommodation platform) will help to connect clients with bookings and listing properties/travel packages on happyholidayss (Pvt)Ltd. agency. “The ultimate promise of technology is to make of a world that we command by the push of a button.” (Volker Grassmuck)

Advances in technology have revolutionized the way we do things. It has provided us with the means to improve our lives and to maximize our sources, our time and our efforts. With the use of these technologies, many transactions have become faster, more efficient, more accurate and more efficient for processing. Technology is important in today's world because it performs numerous functions in many of the most significant aspects of modern society, such as business, communication and education. (Importance of information technology in today world, 2020)

HappyHolidayss (Pvt) Ltd is Travel and Accommodation Services providing Agency located  
in Colombo, Sri Lanka. The business model they currently using is consumer-to-business  
which It is the transfer of services, it is a business model where end users create products and  
services that are used by business and institutions. When it comes to Happyholidayss (Pvt)Ltd  
the accommodation service providers are the end users who serve their accommodation services as product to Happyholidayss (Pvt)Ltd.



Figure 1 Happy Holidayss (Pvt)Ltd Logo (Author Designed)

The current system used by this agency to manage their internal and external process is a paper-based system in all information of transaction are recorded and stored in a logbook. Operation it takes time to look for what they need and it is not efficient because the owner spends a lot of time in finding the record of the old transaction. They’re spending a lot of time in changing the records of transaction if the filled up with wrong information due to human error, according to the manager of this travel agency. because they keep on doing their job manually, it resulted to a very messy office, lots of papers around the desks and information gathered, the proponents came up with an idea of proposing a system that is relevant to the needs of the travel agency, highly efficient to meet their needs and most of all simple. They need to use automated system to make easier with their business. The proposed HappyHolidayss (Pvt) Ltd Travel and Accommodation Services online Platform aims to organize data that computerized the process of managing their valuable customers and partners details and transaction by creating an online travel marketplace while changing the organization business model by C2B to C2C.

Computerized travel and accommodation services platform will be used to track all information pertaining to customer bookings, partners properties management and travel package management within agency. Simply put it is a retail business, that sells travel related products and services to customers, on behalf of suppliers, such as home rentals and tour packages.

The most reason to choose a project like this TAMS is often to form another sort of opportunity for the nationwide new clients to book or list property with all necessities. Which can permit customers to look and make reservation (homes, tours) and for partners (service providers) to list their property, travel packages.

The clients get the opportunity to preserve their claim account by registering in with the personal details and they can search and reserve services. The partners will have additional and main functions, such as managing the home bookings, managing listed travel packages. Finally, the system administrator will have the all-important functionalities that can manage the whole system such as transaction management, client’s management, partner verification and so on. And these functions are not accessible to general users such as maintaining accounts and inserting, deleting, updating and other functions... In addition, the application will use HTML, CSS, JavaScript and jQuery for Frontend development. PHP to implement business execution in the back-end logic, and MySQL as the project database, finally it will be run the project on XAMPP local server technology.

## **Goals**

The main goal is to perform quality, accurate and efficient work from the proposed automated travel and accommodation management system. To build and successfully deploy to happyholidayss(pvt)ltd. for internal use as well as for public use.

**1.1.1 Aim of the project**

The aim of this study is to eliminates the use of paper for storing records in company and develop an interactive web-application that helps potential customers to book a stay and for Partners to list their property in an easy manner. With this system, apart from deciding to make payments at the service provider counter, payments can also be done via online also clients will get enough information about the various travel and accommodation services in Sri Lanka that may ease their travel. Moreover, to business process automation by HappyHolidayss (Pvt)Ltd.

**1.1.2 Objective of the project**

* To arouse the marketing strategies of the business by accommodating digital marketing approaches to the proposed application at the business.
* User Friendly is provided in the app with various controls and the rich user interface system.
* Design a web-based system that makes information more detailed, efficient and accurate and reduces the delay encountered so far with the existing manual system.
* To develop aiming the administrative end whereas the majority access will be guaranteed for the administrator of the application.
* To develop this application in order to reduce the manual payment method which are done using Bank deposits.
* To preserve money which are intended to be wasted at calling the agency or visiting (for customer beneficiary).
* This can give the good security for user information because data is not in client machine.
* The employee information can be stored in centralized database which can be maintained by the system.
* To explore the problems encountered in the management of the existing manual system.
* It can be accessed over the Intranet.
* Manage customers and partners in the source market, and query performance at any time.

## **Motivation**

Technology and tourism are currently two of the fastest growing sectors in the context of the globalization of the world economy. This trend creates an unprecedented opportunity for the development of businesses, institutions and tourist destinations, as well as a growing demand for trained professionals in both fields of knowledge. Tourism organizations are now faced with the challenge of integrating new information and communication technologies into the development of new management and marketing models to strengthen their competitiveness. (Kyrylov, 2020)

Tourism is travel for recreational, leisure, religious, family purposes, usually of limited duration. Tourism is considered an essential activity for nations because of its direct effects on the social, cultural, educational and economic sectors of national societies and their international relations. However, tourism is emerging as one of Sri Lanka's most functional industries. It has a great impact in our nation by helping to create employment opportunities, developing infrastructure and a very rich source of income. By solving this particular problem of tourism management at the national level, it helps to improve the infrastructure development of the country and attracts more tourists. It provides services such as a good transport and communications network, affordable and comfortable housing, essential infrastructure and superb facilities. (Kyrylov, 2020)

The reason to be motivated to undertake a project like this is to preserve more time from busy lifestyles, especially for the college and university students these days from the experiences gained. Moreover, doing a project like this primarily motivates to take challenges which have interesting research background. It provides the prospect to learn about new areas which are very useful for the society by now. One of the major achievements which can be gained is by integrating the manual and automated spheres together to make the whole process as an automated application.

The capabilities like time management are a must which needs to be with author for the resource demands inside this project when meeting with deadlines. Also, sometimes unexpected issues might bounce in when the project commence and should be ready to develop solutions to move forward with the project. When it comes to any type of project like this is to plan properly about the resources and also must eligible to forecast the estimates and the predictions. One of the most important things is to have a knowledge in between everything from business to IT field. It may not seem to be a necessity but it will help to have a basic familiarity within the industry and the types of projects too.

## **Method**

The project was commenced and carried out as follows;

The methodologies which took over to the development of the project is mentioned in the chapter 5. With the meeting took over with the client, all the necessary user requirements were able to identified and outlined to a specification. Step by step, the requirements needed from the developers’ side was identified and put into thought with the client requirements. System designing was done directly after the system analysis and requirement gathering by outlining sketches, prototypes, UML and other relevant DFD diagrams. The developer was able to implement the first few front-end designs which are login, registration and main index of public portal. With the selection of SDLC model, the developer took steps to unit test the system together by showing the designed interfaces to the client to get more live feedbacks.



Figure 2 SDLC of project

The project was carried out by holding to the three-tier architecture. The main reason to select the three-tier architectural plan is because it is the client-server architecture in which the user interfaces, data access and storage and the business processes are managed. Moreover, any of the three tiers can be upgraded independently when needed. According to the previous experiences gained it was easier for the author to select when making changes in the logic of the business and when changing for new GUI environments, this plan is faster and easier. The reusability of the logic is immense, like it can be used with other projects and will be helpful for further use. The database is more secured because the clients cannot access it directly. The resistance to change, availability, reusability and scalability is high in this architecture.

The diagram architecture of the system is based as follow;

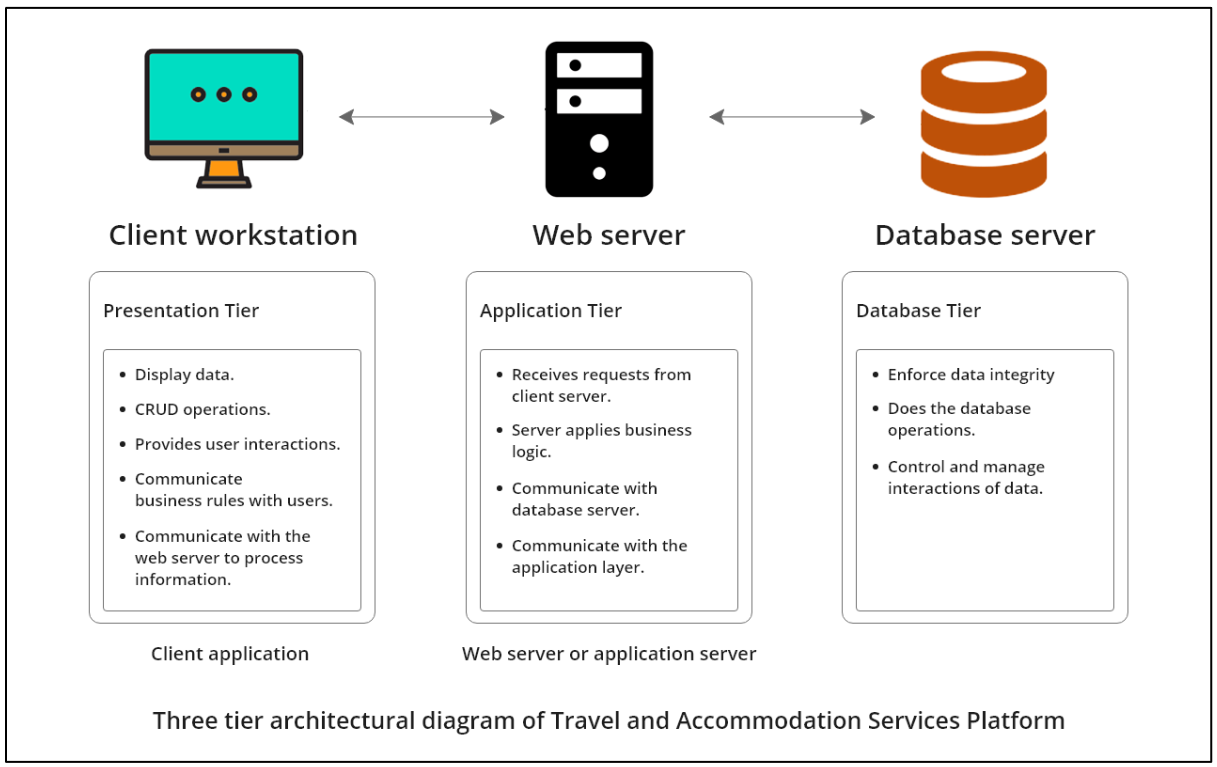


Figure 3 3 Tier architecture

Beneath the quantitative method dependence is put on inquire about methods to acquire the information. it is much more helpful to summarize information utilizing quantitative models. The nature of questionnaires is in a general sense qualitative in conception, since they include a few of the abilities within the development, and administration of it; but on quantitative in its extreme execution; since the results are more often than not communicated in quantitative terms. There are two sorts of information that can be collected: primary and secondary data. Primary data are data the author of the project have collected for their observational consider. That have been done through questionnaires and surveys. After looking at the reason of this study, it has been chosen to utilize a blend between qualitative and quantitative inquire about in arrange to assemble a more profound knowledge on the accessible information.

**Applied Method**

For the reason of gathering pertinent essential information for this proposal work, two distinctive methods were utilized as phone interviews and surveys to the real client and for few common public customers of them.

***The questionnaires were measured and coded as clarified in Appendix B and in chapter 6.***

## **Overview**

To foster a web-based application for the proposed solution, various Technologies should be considered and perceived. These incorporate the three-tier architecture (mentioned in chapter 1 - 1.3), server and side scripting techniques, the implementation techniques like PHP, programming languages (like JavaScript, jQuery, HTML 5 and CSS), and relational database (like MySQL).

**Incorporating of the web application and database**

In this project, MySQL is utilized as the backend database. MySQL is an open-source DBMS. MySQL is a relational DBMS which stores information in various tables, instead of in one goliath table. These tables can be referenced to one another, to get to and keep up with information easily. Can be utilized to change needs because of the efficiency. To work on the presentation, MySQL is multi-threaded database engine. Numerous users can perform read activities at the same time, yet while writing, just hold up another user that requirements admittance to the information being refreshed.

The public portal client requesting from this web-based commerce site ought to have the alternative to urge information about the platform of happyholidayss(pvt)ltd, select things they wish to purchase and yield installment data when checking out. The store organization were given the capacity to take after slants and interaction of the book things to prepare the orders. So an productive database is fundamental for the upkeep and the improvement of this site. Essentially in a static Web page, all the content is distinguished and set when the page is created.As the developer get to a static page as for the solution of Emma, the page reliably appears a comparable data and alter once in a while concurring to the regulatory needs. In a dynamic Web page of course the substance contrasts subordinate on client data and data got from outside sources.

A data-based Web page is specified when a client clicks a hyperlink or a button on a Web page structure. Within the event that the ask comes from clicking a hyperlink, the joins specifies either a Web server program or a Web page that calls a Web server program. In a few cases, the program plays out a static address, for case, retrieve all information required from the Stock. This address doesn't require any client input, because the results changes depending on when the request is made. The request is made when the client can click a button, rather than a hyperlink, the web server program commonly uses the structure inputs to create an address.

For instance, the client may choose five books to be bought and what's more, at that point yield the commitment to the web server program. The web server program at that point, at that point, administrates the arrange, making a effective Web page response to assert the trade. In either case, the web server is liable for sorting out the inquiry results by including HTML labels. The web server program at that point, sends the program's yield back to the customer's program as a Web page.

**Website page Programming Options**

As all other Ecommerce stages this web application can make data-based Web pages by using

server side and client side taking care of advancements or a half breed of the two. With server-

side preparing, the web server gets the interesting Web page demand, performs all processing

critical to create the page, and a short time later sends it to the client for appear within the

client's program. Client side dealing with is done on the client workstation by having the client

program execute a program that collaborates directly with the database.

**Technologies acquired:**

HTML which is the standard markup language is utilized to develop the application forms. HTML components structure the website, everything being equal. Is use to make interactive forms. It gives a way to make organized documents by indicating primary semantics. It can insert scripts written in dialects, for example, JavaScript which influence the conduct of HTML pages.

CSS was expected to permit to isolate content from design so HTML could perform a greater amount of the capacity that it was initially based on the markup of content, without stress over the plan and layout. CSS are the specialized specification for a design. A stylesheet for a Web page fills a similar need, yet with the added functionality of likewise telling the web browser how to deliver the document being seen.

What recognizes PHP from something like client-side JavaScript is that the code is executed on the server, producing HTML which is then shipped off the client. The client would get the consequences of running that content, however would not know what the underlying code was. Can even arrange the web server to handle all the HTML documents with PHP, and afterward it's absolutely impossible that the client can determine what have at the disposal.

Methodology used

Source Code Editor

Frameworks

# **Chapter 2 Background and Problem Statement**

## **Introduction**

The primary mode of travel services marketplace and management in happyholidayss agency is done manually and in order to gain more profit and add efficiency for the transaction purposes, the clients decided to come up for a automated system to manage the marketplace and public online booking to increase the accuracy in placing reservations and managing it. This chapter basically analyze the existing relevant literature about online travel and accommodation platforms and ecommerce.

**2.1.2 Background**

At present, an enormous applications and websites can be found easily regarding the Travel ecommerce field. Simply by giving a click to a web browser, can be easily navigated in to a variety of websites.

Ninety-one percent of U.S. consumers use the Internet to book travel online, rather than going to a physical travel agency, due to the speed, time, convenience, and satisfaction of using it. The Internet offers consumers the advantage of making travel purchases online by dealing directly with travel suppliers (Hashim, Ismail, Awang, & Safri, 2014). Internet travel sales totaled over $ 565 billion in 2016 (Agag & El-Masry, 14 2017). Internet sales will increase continuously over time; as more and more businesses adopt Internet application systems (Del Chiappa, 2013). Economic growth and IT development are driving high demand among international travel customers (Wei-Lin & Hsin-Pin, 2012). Travelers actively search various websites (e.g., Expedia, Priceline, and Airbnb) on the internet to meet their travel needs and find deals. The travel industry has faced drastic changes when it comes to B2B e-commerce and B2C e-commerce as many people purchase travel products and services over the internet (Siddiqui & Khan, 2016). Travel agencies should adopt e-commerce technology to increase their competitive advantage and boost their marketing efforts (Menon & Yao, 2017). Information and communication technologies, e-commerce applications have a great influence on businesses around the world. Internet application systems such as e-commerce and B2B have grown since 2011.

## **Literature Review**

Present the ‘state-of-the-art’ of product/systems in this area. You should organize this in some other way than by company or by date in order to show your understanding!

## **Problem Statement**

Clearly state the problem that you are attempting to solve in your project

# **Chapter 3 project management**

Introductory Paragraph

## **Approach**

Discuss how you planned the project, and why you planned it the way you did

## **Initial Project Plan**

Show your initial project plan in the form of a Gantt chart and a brief description, showing planned dates. If your task names are not self-explanatory, provide a table to explain the tasks.

## **Problems and Changes to the Plan**

Identify problems you faced that caused you to change the plan, and justify the changes.

## **Final Project Record**

Show your final project plan in the form of a Gantt chart and a brief description, showing actual dates.

# **Chapter 4 feasibility study**

Terms, a feasibility study involves taking a judgment call on whether a project is doable

Introductory Paragraph

## **Time feasibility**

Time Feasibility is the most important for project success. A project will fail if not completed on time.

## **Cost feasibility.**

Helps organizations assess the viability, cost, and benefits associated with projects before financial resources are allocated

## **Scope feasibility**

Scope of Feasibility Studies are in depth technical evaluations of your **objectives**

## **Technical feasibility.**

There will be high possibilities of implementing the propose system

## **Economic feasibility**

Analysis of a project's costs and revenues in an effort to determine whether or not it is logical and possible to complete

# **Chapter 5 design**

Introductory paragraph

## **Introduction your choice of proposed network system**

## **Hardware and software requirements**

## **Evaluating of solutions**

Solution evaluation in project analysis is the assessment of existing, or potential solutions. Discuss how well your solution solves the problem.

# **Chapter 6 implementation**

Introductory paragraph

Implementation is the carrying out, a method, or any design, idea, model, specification, and standard or for doing project. (E.g. firewall configurations, any configurations). Then if you want to include screenshot for the document. You can include screenshots.

# **Chapter 7 testing and verification**

You must include test plan and test cases for this task.

# Chapter 8 EVALUATION and CONCLUSION

You must include critically EVALUATION and CONCLUSION from your project. (Summaries the project and your solution in one or two paragraphs.

# References

Include a list of references cited in the report here. Either use the [numbered] or [name’date] convention

# Appendices

Interim Progress Reports

Company letter.

Progress approval form and Project commencement meeting sheet.