**Project Proposal**

**On**

**Hotel Booking Management System**

****

**Pradip Dhakal**

**00175009**

**Computing Project**

**Level 5 in Computing**

**Softwarica College of IT and E-Commerce**

**Kathmandu, Nepal**

Submitted to: Niman Maharjan

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# **1. Introduction**

## **Project Introduction**

Thank you for that opportunity to submit a proposal on this website development project. Nowadays, people are too crazy about technology to the internet. People have no time to spend any things but they used devices like mobile phone, laptop and internet for online transaction. My project is about “Hotel Booking Management System”. It helps to book hotel room from online with reasonable price comparison between another hotel.

## **1.1 Justification of the Project**

### **a) Background of the project**

Hotel booking management system is web portal where customer can reserve room, choose room type, how many days you stay in hotel room. This website system can be easily access through browser overall work.

You can also able to subscribe their newsletter for new update and about this hotel. This website is easy to understand and easy to operate for user. For this project I have used pure PHP in programming and my SQL for storing or collection of data.

## **1.2 Problem Statement**

Nowadays, people have no time for queues for long time at hotel counters and lots of work are done in paper. Customer cannot get room with reasonable price. So, this system will help to move digital and user can able to book hotel room before someone reserved. If you will find your best room with affordable price, you feel comfortable to stay at this hotel room.

I think this system will overcome all this problem. This system provides to book hotel room with reasonable price, time reduce, customer experience in hotel.

## **1.3 Description of the project**

### **1.3.1 Features of the project**

Some features of this website are:

* **User can register their information to book room**

User can register their information and book room from anywhere through internet.

* **User can book types of room which is available**

User can able to book what type of room have currently available from anywhere and anytime with type of rooms.

* **User can subscribe their newsletter**

User can get notification or new update about hotel like message and hotel manager call user for information about the service of the hotel.

* **User can rate room**

What user think about hotel services and what type of features they want from this hotel.

* **User can view their user experience**

Customer can share their how they feel about that hotel room and share their experience in hotel services.

* **User can view their hotel gallery**

Customer can able to view about hotel galley.

* **Admin can add, update and delete about which room are available or not.**

Admin only can able to add, update and delete which room are available in that time or not and what price is allocated that room in hotel.

## **1.4 Overview of the project**

This system helps people to know about their services, user experiences at hotel, time and money also save comparison between another hotel.

# **2. Project Scope**

## **2.1 Scope and Limitation**

**Scope**

Hotel booking management system store user information in database like types of room, reasonable price, what number of days user can stay at hotel room. This system helps to reduce lots of paperwork. It also helps to increase user satisfaction about that hotel.

**Limitation**

* In this system user cannot be able to add, update or delete about hotel information,
* This server no faster and it may take too much time to load the system because it is not too large server.

## **2.2 Aims and Objectives**

**Aims**

The main aims of this project are

* To increase user satisfaction about that hotel,
* User can able to get fast and quality services from that hotel,
* Customer can easily access website from anywhere and anytime with the help of internet connection

**Objectives**

The main objectives of this hotel booking management system are:

* To manage all booking rooms, time, price etc
* It helps to reduce manual work in paper,
* Helps to increase hotel reputation or customer satisfaction,
* The bill will be generated by digitally,
* The calculation time will be saved.

# **3) Development Methodology**

In development methodology there are agile method and Waterfall Methodology. For this hotel booking management system, I have used waterfall model for this project. Because this project is small and it does not take long time to developed. That’s why I choose waterfall model is best for small project and it takes no longer time to develop system. Agile methodology is best for large project. That’s why I’m not using this method for this project.

## **3.1 Waterfall Model**

The waterfall model was the first process model to be introduced. This model is step by step process to complete one to another step. It helps to create easy, simple and understanding to use. In this model was derived in different stages are requirement analysis, design, implementation and testing.

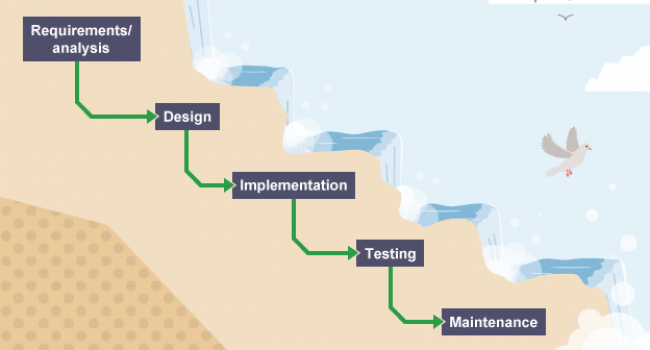


Figure 1:Waterfall Model

In first step analysis, we need to identify the requirement and collect it and document on it. Next step, system design with the help of collected requirement and analysis from previous steps. Then system design to we need to write a code about that system called implementation phrase. After implementation, testing phase which is called as unit testing. This step we need to find out bugs and solve on it. At the last step maintenance, it helps to maintained the system after the deployment. (searchsoftwarequality. techtarget,2019).

## **3.2 Design Pattern**

The design pattern is a reusable or repeatable solution for commonly occurring problem in system development. A design pattern is not complete design to transformed directly into code. For this project, I decided to use MVC pattern.

### **3.2.1 MVC Pattern**

I have used MVC Pattern for this project because it helps to separate code in Model, View and Controller with clear and easy to understand pattern. The MVC Patter are:

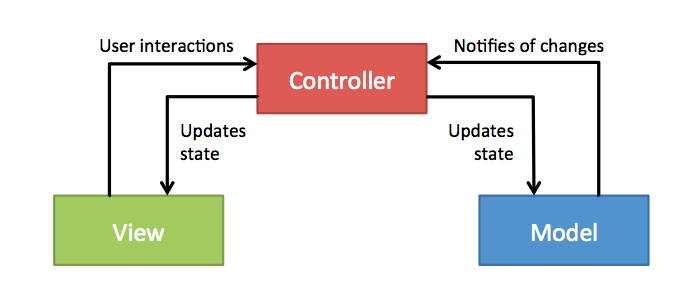


Figure 2:MVC Pattern

**Model:** it helps to handles the logical part of the system.

**View:** It handles presentation of the model or user interface of logic of application.

**Controller:** It helps to handles the user to interact with the model.

## **3.3 System Architecture**

The system architectures are the process where the concepts that will be the support of the definite system are established and it helps to show the relationship between the system component. For this project, I have used 3 tier architectures diagram in below:



Figure 3:3-tier system Architecture

**Presentation Layer:** This is the top level and displays information related to services available on a website. it communicates with other tires to sending results to the browser and other in network.

**Business Layer:** This layer also called middle layer or logical tier or business logic is pulled from the presentation tier. It helps to controls functionality of application by processing.

**Data access layer:** This layer is independent with application and business logic. In this layer is used for storing data and information in server also data are retrieved from here. ([technopedia,2019](http://www.technopedia.com))

# **4 Project Plan-work Breakdown Structure**

## **4.1 Work Breakdown Structure**

The Work breakdown structure is the foundation for project planning and control. It is the process of dividing the huge project into small number of tasks to involving in work and cost estimates, schedule information, actual work effort/ cost expenditure. It helps to save time in system development.

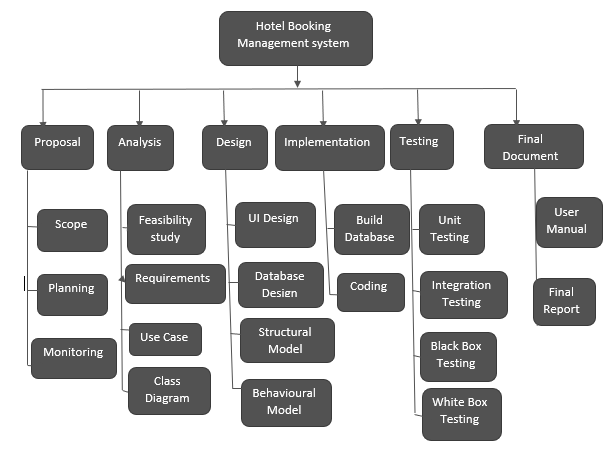


Figure 4:Work Breakdown Structure.

|  |  |  |
| --- | --- | --- |
| **WBS** | **Task Name** | **Days** |
| **0** | **Hotel Booking Management System** | **108 Days** |
| **1**  **1.1**  **1.2**  **1.3** | **Proposal**  Scope  Planning  Monitoring | **16**  5  8  3 |
| **2**  **2.1**  **2.2**  **2.3**  **2.4** | **Analysis**  Feasibility Study  Requirement  Use case  Class Diagram | **28**  8  8  5  7 |
| **3**  **3.1**  **3.2**  **3.3**  **3.4** | **Design**  UI Design  Database Design  Structural Model  Behavioural Model | **26**  7  7  6  6 |
| **4**  **4.1**  **4.2** | **Implementation**  Build Database  Coding | **20**  5  15 |
| **5**  **5.1**  **5.2**  **5.3**  **5.4** | **Testing**  Unit Testing  Blackbox testing  Whitebox Testing  Integration Testing | **7**  2  2  2  1 |
| **6**  **6.1**  **6.2** | **Final Documentation**  User Manual  Final Report | **11**  5  6 |

## **4.2 Milestones**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **Start** | **Deadline** | **No. of Days** |
| **Proposal** | 25th March | 9th April | 16 Days |
| **Analysis** | 10th April | 8th May | 28 Days |
| **Design** | 9th May | 3rd June | 26 Days |
| **Implementation** | 4th June | 24th June | 20 Days |
| **Testing** | 25th June | 1st July | 7 Days |
| **Final Documentation** | 2nd July | 12th July | 11 Days |

### **Description of Milestones**

* **Proposal**

For this task, 16 days are allocated, are divided into 3 parts which are scope for 5 days, planning for 8 days and monitoring and controlling for 3 days.

* **Analysis**

For this task, 28 days are allocated, divided into 4 parts which are feasibility study for 8 days, requirement for 8 days, use case for 5 days and class diagram for 7 days.

* **Design**

For this task, 26 days are allocated, divided into 4 parts which are UI Design for 7 days, Database Design for 6 days, structural model for 6 days and Behavioural for 7 days.

* **Implementation**

For this task, 20 days are allocated, divided into 2 parts which are build database for 5 days and coding part for 15 days.

* **Testing**

Testing 7 days are allocated where unit testing for 2 days, black box testing for 2 days, white box testing for 2 days and integration testing for 1 days.

* **Final Documentation**

Total 11 days are allocated for final documentation in which user manual for 5 days and final report for 6 days.

## **4.3 Scheduling: Gantt Chart**

A Gantt chart is a useful graphical tool which show activities or task performed against time. It helps to show working plan in break into part to part in different pieces. It is commonly used for tracking project schedules. In this project Gantt chart help to show start date and deadline date. So, at below show this project Gantt chart, it is easy to understanding.

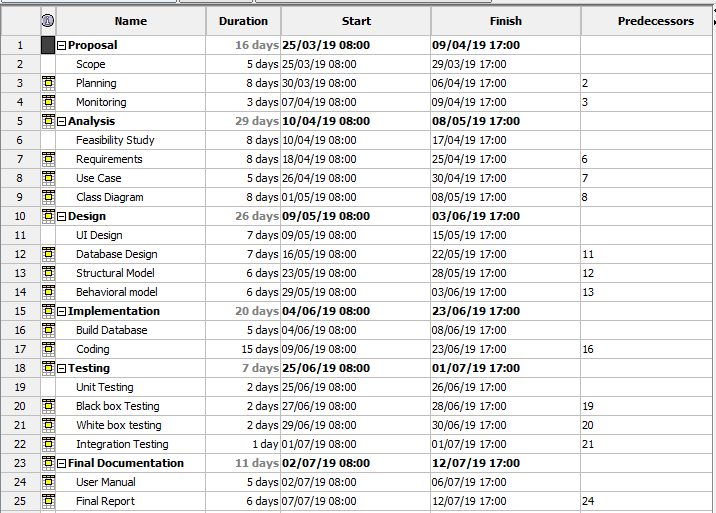


Figure 5: Schedule for Gantt Chart

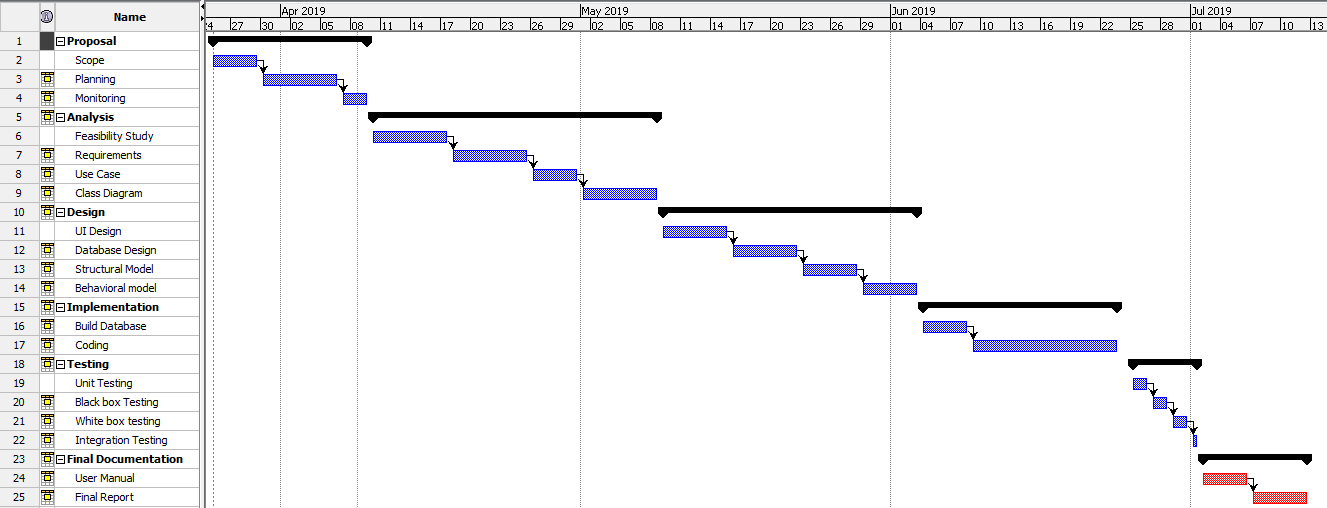


Figure 6:Schedule for Gantt Chart

# **5.Risk Management**

During this project, there are various risks happen while doing this problem. Risk management is the process of classifying the possible risks and controlling threats of the project. In this project, some of the solution to control risks are listed below. (TechTarget, 2019).

* Day to day should be backup data or information,
* Time to time maintain resources,
* Estimate proper budget for project,
* Design attractive interface.

**Impact= likelihood \* consequence**

Risk Likelihood values are shown as follows

|  |  |
| --- | --- |
| Likelihood | Value |
| Low | 1 |
| Medium | 2 |
| High | 3 |

Risk Consequence values are shown below:

|  |  |
| --- | --- |
| Consequence | value |
| Very low | 1 |
| Low | 2 |
| Medium | 3 |
| High | 4 |
| Very High | 5 |

Risk Consequences values are shown below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No** | **Risks** | **Likelihood** | **Consequence** | **Impact** | **Solution** |
| **1.** | **System Failure** | 1 | 3 | 3 | Sometime system does not work properly it shows error, we need to check and maintain system time to time. |
| **2.** | **Old technology** | 2 | 3 | 6 | Technology should be use new and advanced for to get better performance. |
| **3.** | **Network problem** | 2 | 2 | 4 | If sometime one network slow down then we need to another network system for backup |
| **4.** | **Bad Design** | 2 | 4 | 8 | For create good design, give staff training about it. |
| **5.** | **Inside theft** | 2 | 4 | 8 | Increase user satisfaction and monitoring staff activities. |
| **6.** | **Requirements are incomplete** | 2 | 4 | 8 | Requirement analysis and planning should be properly done. |
| **7.** | **Hard disk crack** | 2 | 3 | 6 | we need to do backup plan for save data. |

# **6. Configuration Management**

A configuration management system is used to keep track hardware, software and information of the system. it includes software versions and updates installed on computer system. Tt helps to manage all necessary data kept current and accurate. This process configures the product meets the detailed performance principles of the system.

GitHub id: <https://github.com/pradipdkl/Hotel-booking-management-system>

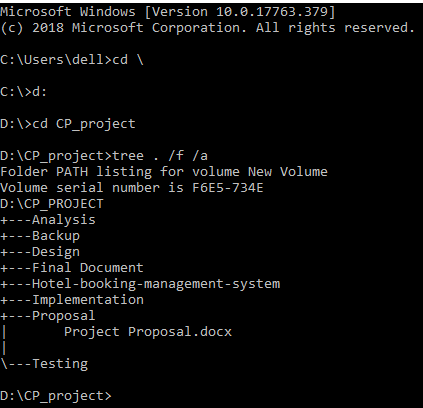


Figure 7:Tree for Configuration of files.

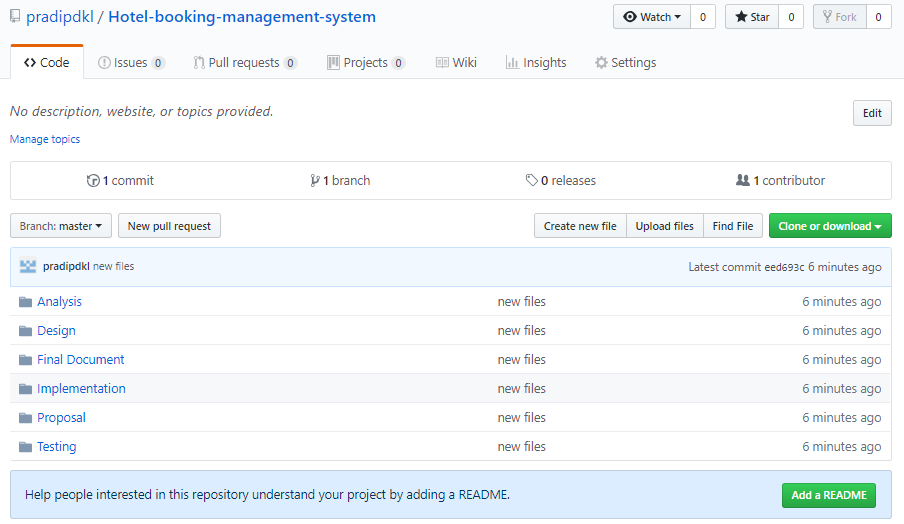


Figure 8: File uploaded in GitHub

# **7. Conclusion**

At this step, this website has a user friendly and good interface design will help the user to control the system without any problem. User can book their hotel room, directly contact to the hotel, share their experience etc. admin could add about available hotel room or not. I think, this proposal helps to clear all points of this project and continue other processes.

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2.Techopedia.com. (2019). *What is Three-Tier Architecture? - Definition from Techopedia*. [online] Available at: https://www.techopedia.com/definition/24649/three-tier-architecture [Accessed 2 Apr. 2019].

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