**Hotel Management System Project** **Report**

The **hotel management system project**is software developed to maintain and manage the various hotel task and processes. Its main goals are to increase income, streamline operations, and eliminate human labor. To elaborate more details on the hotel management system project report, the documentation is also discussed.

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| **Project Name:** | **Hotel Management System** **Project Report** |
| **Abstract**: | The primary goal of hotel management is to maintain a steady influx of visitors and guests. This management is also used to promote the hotel’s extensive range of services and USPs. Another feature offered by the software is to know the benefit of visiting customers through marketing campaigns. It also allows the admin to operate the entire system from a single online interface, giving them more power and flexibility. |
| **Modules**: | • Customer Management • Services Management • Rooms and Accommodation Management • Reservation Management • Customer Transaction Monitoring • Employee Management • Expenses and Revenue Management |
| **Documentation**: | Introduction, RRL (Review of Related Literature), Methodology, Evaluation, and Recommendations |
| **Diagrams (UML):** | ER Diagram, Use Case Diagram, Data Flow Diagram, Class Diagram, Sequence Diagram, and Activity Diagram |
| **Source Codes:** | PHP, Laravel, CodeIgniter, Java, Django, C, Python, and VB.Net. |
| **Developer**: | ITSourceCode |

**Hotel Management System Project Report**: Content

The table below reveals the full content of the **Hotel Management System Project Report**. It reveals the overall description of the project’s needs in its development.

***Hotel Management System Project Report****: Content*

**Hotel Management System Project Abstract**

The **hotel management system project abstract**states the solution and the problems faced by hotel management. It should contain the project definition and goals.

**Abstract:** The hotel management system aims to maintain and manage the various hotel tasks and processes. It is primarily responsible for hotel management in the database’s core section. This also gives information on the various hotels and their current availability status.

In fact, guests can come to the website and register with the system by providing the required information. Each registered guest can request unit reservations. Then the guests were given information about the availability of the units according to their request.

The application also enables the admin to operate the entire system from a single online interface. This gives the admin more power and flexibility. In addition to this, the system covers room booking, staff management, and other hotel management services.

Furthermore, the users can use the system to advertise available rooms. The customers may see and reserve rooms from the comfort of their own homes too. Then the admin has the authority to approve or reject a customer’s booking request. As a result, the system is used by both consumers and admin to control hotel activities on the go.

**Hotel Management System Project Proposal**

The **Hotel Management System Project proposal** gives solutions to the major problems faced by various hotel management. It includes a brief introduction of the project, problem statement, solution, and scope.

This **proposal for the hotel management system** (project) has a collection of reasons why it should be developed and implemented.

**Problem Statement**:

Traditional hotel management does not include all functions, such as the location of the consumer, the amount of payment for the reservation, and what they are doing right now. Additionally, most hotels were experiencing a lot of issues affecting their reliability, performance, efficiency, and effectiveness.

**Significant issues:**

* Customers’ reservations are inefficient.
* Unable to promote the services that they desire.
* Hotel information is inaccessible.
* Data insertion and retrieval are tough.
* Report generation is challenging.
* Information delays in the collection and processing of client data.

**Solution**:

To address the aforementioned issues, creating a computerized hotel management system is proposed. This proposal will help in effectively and efficiently hotel management. The **proposed hotel management system project** will maintain and manage the various hotel tasks and processes.

Moreover, the system is primarily responsible for hotel management in the database’s core section. It also gives information on the various hotel services as well as their current status. Guests can come to the website and register with the system by providing the required information.

**Project Scope:**

The **hotel management system software** automates major hotel processes like COD generation, billing, and keeping track of daily transaction data. Its database can also be controlled and modified by the admin.

**Hotel Management System Project Modules**

* **Customer Management:**this module manages the activities that happen in customer management. The customer management module helps the hotel admin with securing all the customer transactions and accommodation.
* **Services Management**: in order to compete with the other companies, this module must be present in the system. This will save and monitor the services rendered by the crews to the customers. Of course, the services were all based on what the hotel offers
* **Rooms and Accommodation Management:** checks and updates all rooms and accommodation status to provide quality services for customers. It also lightens the job of the hotel admin because it records all the customer’s transactions.
* **Reservation Management**: this module is applied to customers who were fond of reservations before availing of services. It secures the accommodation details requested. Obviously, this module lets the customer avail and choose the accommodation that they want.
* **Customer Transaction Monitoring:** This task requires a lot of effort to do, even so, it should still be present in the system. It secures all the customer’s transactions as well as its status.
* **Employee Management:** refers to the endeavor of assisting employees in doing their best work each day. This is applied in order to meet the organization’s wider goals. It also encompasses a wide range of jobs and responsibilities, nevertheless, almost all of them will be categorized and handled properly.
* **Expenses and Revenue Management:** this is the fluid of their business and it secures all the revenue records. It also monitors the calculation of the system’s expenses.

These modules must be present in creating the Hotel Management System Project to satisfy the needs in managing Hotel transactions. Through this, the management and monitoring of customers would be much easier for the Hotel admin and employees.

**Diagrams for Hotel Management System Project**

The UML diagram for hotel management system aids as a blueprint for the project documentation. These diagrams are explained according to their roles in the project development.

**Hotel Management System ER Diagram**

[**Hotel Management System ER Diagram**](https://itsourcecode.com/uml/hotel-management-system-er-diagram-best-database-design-2021/) – describes the logical structure of the system’s database or data storage. It is done by identifying the hotel management process entities, their properties, and the interactions between them.

The ER Diagram is referred to as the **hotel management system project database design**. This ER diagram is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships.

*Hotel Management System ER Diagram*

The **database design for Hotel Management System** is the same as its ER diagram. Both of them were used to emphasize and determine the **hotel Management system database** (data storage). This is also used as the system’s structure in terms of data storing.

**Hotel Management System Use Case Diagram**

[**Hotel Management System Use Case Diagram**](https://itsourcecode.com/uml/hotel-management-system-use-case-diagram/) – is depicted as a graphical representation of the **hotel management system’s behavioral structure**. It is composed of processes (use cases) and users or “actors”.

The **use case diagram** specifies how the hotel management system responds to a request. Each use case is broken down into a series of fundamental steps. It starts with the user’s goal and ends with the achievement of that goal.

*Hotel Management System Use Case Diagram*

The **hotel management system use case diagram in UML** is the visual representation of the user and system interaction. It also assists in defining and organizing project requirements.

Clearly, the use case diagram provides a clear picture of hotel management software’s relationships with use cases and actors.

**Hotel Management System DFD**

[**Hotel Management System DFD Levels 0 1 2**](https://itsourcecode.com/uml/hotel-reservation-system-dfd-levels-0-1-2-data-flow-diagrams-2021/) – represents the flow of [data](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjT6N3e9MXvAhXQMN4KHcV9BNAQFjAJegQIIBAD&url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FData&usg=AOvVaw0yeZh35IcOq7qPFoKRV4rA) and the [transformations](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiWi-H69MXvAhXUaN4KHbioAvcQFjAJegQINhAD&url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FData_transformation_(statistics)&usg=AOvVaw2_p3ycbjOn7o8IiqRGOFZh)in the Hotel Management System. It demonstrates how information flows across hotel management. It also contains the numerous sub-processes the data flows through, data inputs and outputs, and data stores.

Additionally, the data flow diagram uses standardized symbols and terminology to define diverse entities and their relationships. Information technology specialists and systems analysts use DFD to describe and visualize flows of data within the hotel management system.

*Hotel Management System DFD Level 0*

DFD Level 0 (context diagram) provides a general summary of the entire system. It is modeled to display as a single, high-level process. This also shows an overview of the project’s relationships with external entities.

*Hotel Management System DFD Level 1*

The hotel management system DFD level 1 is considered as an “exploded perspective” of the context diagram. It encompasses that each of the primary sub-processes that make up the entire system is expounded in DFD level 1. This means that the DFD level is the continuation of level 0.

*Hotel Management System DFD Level 2*

The highest level of abstraction in DFD is level 2. It shows the fundamental system modules as well as the data flow between different modules. Additionally, it displays the data flow within the modules indicated in the Level 1 modules.

**Hotel Management System Class Diagram**

[**Hotel Management System Class Diagram**](https://itsourcecode.com/uml/hotel-management-system-class-diagram-uml/) – is a designed diagram that shows the system’s relationships and classes. This diagram guides the programmers along the hotel management system development.

In addition to this, the class diagram in UML contains the **class attributes**, **methods,**and **relationships**. These contents help in emphasizing the class structure of the hotel management system.

*Hotel Management System Class Diagram*

**Hotel Management System Sequence Diagram**

[**Hotel Management System Sequence Diagram**](https://itsourcecode.com/uml/hotel-management-system-sequence-diagram-uml/) – is a UML model that shows the sequence of events in hotel management. It is used to understand how the hotel management system works. This involves processes and messages to be carried out in sequence, emphasizing the sequence of events.

Furthermore, the sequence diagram displays a chronology that starts at the top and gradually lowers to indicate the order of interactions. Each object has a column, and arrows are used to symbolize the messages that are transmitted back and forth.

*Hotel Management System Sequence Diagram*

**Hotel Management System Activity Diagram**

[**Hotel Management System Activity Diagram**](https://itsourcecode.com/uml/hotel-management-system-activity-diagram-uml/) – visually displays a series of actions or the flow of control in a system. It is a common tool in business process modeling. Additionally, proponents can outline the procedures in a use case diagram.

However, activities might be sequential or concurrent while being modeled. This kind of flowchart illustrates how business and software processes work.

*Hotel Management System Activity Diagram*

This hotel management system activity diagram is used to document the implementation of system processes as well as to define the use cases.