

# **Online Hotel Management System**

Rahim Sayyed<sup>1\*</sup>, Onkar Patharkar<sup>2</sup>, Akash Tarade<sup>3</sup>, Kishor Temkar<sup>4</sup>, Jadhavb Sujata Ashok<sup>5</sup>

<sup>1,2,3,4</sup>Student, Department of Computer Engineering, Vishwabharati Academy College of Engineering &

Polytechnic, Ahemdnagar, India

<sup>5</sup>Professor, Department of Computer Engineering, Vishwabharati Academy College of Engineering & Polytechnic, Ahemdnagar, India

\*Corresponding author: sayyed442@gmail.com

Abstract: In the fast advancement of society today, alongside the promotion of PC innovation and the broad utilization of the Internet, varying backgrounds are applying the PC the execute framework to their very own ventures. As an individual from the administration business, the inn business is additionally growing quickly. So as to incorporate the fast advancement of PC system and lodging industry, to give better help to purchasers and to improve the administration proficiency of inns, lodging data the board frameworks have developed. This article depicts an administration stage for hotel web based booking and visitor data and profit calculation of hotel.

## Keywords: Profit calculation, Proficiency.

# 1. Introduction

Presentation in the 21st century time, economy and innovation are growing quickly. System innovation isn't a long way behind, however it's likewise accessible to varying backgrounds. As one of the administration ventures, the inn business is additionally growing quickly. So as to coordinate the quick improvement of PC system and lodging industry and to give better assistance to customers and to make inn the executives progressively proficient, lodging data the board frameworks ought to be used. Lodging data, the executives is something other than straightforward convenience and settlement business handling, yet a thorough inclusion of the administration segment. As an individual from the administration business, the inn, from the client's booking to the checkout, the entire procedure is client focused, and therefore gives effective and thorough support of the customer. Lodging data, the board framework is an assistance stage for purchasers and inn supervisors to screen key parts, including buyer booking the board, visitor room the board, framework client the board, lodging the board and registration the executives. The framework gives more comfort to common shoppers booking strategies, yet in addition for the inn front work area chiefs to give a progressively productive assistance.

## 2. Existing System

# A. Introduction

The current Online Hotel Management System relies upon numerous profoundly prepared people to deal with visitors. Such a framework is inclined to mistake and deferrals. Guests might not have a predictable encounter and must be made a fuss over recalling commonplace things, for example, installments and cafés. A great deal of desk work is produced and it is hard for an administrator to experience every one of these reports. Designation of rooms dependent on expected opening is additionally troublesome as it requires additional work with respect to the representatives. The expenses of running such a lodging is likewise incredible.

Limitation:

- a) Manual room booking process is very time consuming.
- b) Manual room booking process required more paper work.
- *c)* There are more chances of error and mistake in manual room booking process.

## 3. Proposed System

#### A. Introduction

To conquer the issue of manual framework, online lodging the executives framework is focal target of online inn the board is to give online office to booking software can manage and keep records of hotel.

#### Ease of Use:

The framework has the accompanying points of interest:

- a) Easy to work, the up.
- b) Hotel room data the framework is focused on giving clients better help.
- c) For the organization staff to give increasingly advantageous and productive method for working when utilizing the room the board stage.

# System frame

The framework design comprises of three layers.

*UI layer:* This layer incorporates normal UI and manager interface. Right off the bat new clients must enlist record and afterward sign in. The framework head can perform related tasks on the visitor room data, or handle the registration, and so forth. Before going into the lodging data the framework, clients must be verified. Just when the right client data is input and the framework prerequisites are met can the client enter the



framework and access the framework characterized assets.

*Business rationale layer:* Dealing with the primary business of the framework, including room reservations, client the board, visitor room the executives and verifiable visitor data the executives.

*Information stockpiling layer:* It incorporates the fundamental information for the database server, information stockpiling, support and treatment of enrolled and executive information, room information, supporter membership data and records.



Fig. 1. Architecture diagram

Above fig. shows the architecture diagram of online hotel management system. This figure shows the of system. Architecture of online hotel management system four module these are as follows:

- 1. Administrator' User Management Module
- 2. Room Management Module
- 3. Reservation Room Module
- 4. Consumption Management Module



Fig. 2. Sequence diagram

# 4. Technical Details

The system uses php language because it is a server side language which enables users to transmit data to a database and it can also be used to implement Dijkstra algorithm. A database is required to store user data. Therefore, MySQL has been used to meet this requirement.

In order to create the structure of the system and provide a proper lay-out, the system uses HTML and CSS respectively. Later, java script is also used to interact with user inputs. 1) The above technical details have been applied according to the general principles suggested by Jacob Nielsen for interaction designs which are (Visibility, Match between the system and the real world, User control and freedom, Consistency and standards, Error prevention, Recognition rather than recall, Aesthetic and minimalist design, help users recognize and recover from errors, and Help and documentation).

2) Entity Relationship Diagram (ERD)

The entity relationship diagram (ERD) shows the tables and the relationships, for example the relations (connections) It is used as the basis. The diagram shows the tables, primary key(s), foreign key(s) and composite key(s), the red dot indicate the primary key and the blue dot indicate the foreign key(s) and composite key. Refer to figure (4), which shows Entity relationship diagram.



Fig. 3. ER Diagram

# 5. Conclusion

With the development of different types of inn industry, inn administrations keep on expanding, the quantity of shoppers is additionally rising. Client data is expanding the measure of information, diminishing work effectiveness. This to a limited degree, influences the inn's huge scale improvement and financial interests. The vast majority of the current lodging the board frameworks need a high design

Condition, and the interface are intricate and hard to comprehend. The framework takes care of the majority of the current issues. The interface is basic and lovely and the activity steps are direct. As this framework is built up, the primary objective is to diminish the quantity of staff, trailed by buyer gatherings. This can lessen the booking inconvenience and can abbreviate the whole room booking process, both for inn directors and buyers.



Acknowledgement

We would like to thank the Prof. Jadhav S. A., Our Guide and Prof. Aher S. M. HOD Department of Computer Engineering for their classification scheme. And we would also like to thank the anonymous reviewers for their constructive and valuable comments that significantly contributed to improving this paper.

#### References

- [1] Nexteam "Booking Engine On-line hotel reservation system with management availability" 2016.
- [2] Commeasure Pte Ltd., "How are travelers currently using online hotel reviews?"

http://www.commeasure.com/blog/how-are-travelers-currentlyusingonline-hotel-reviews#.Vp4mUvnhC70.

[3] Jingda Yang. Research and Design of Hotel Management System Model. 2013 International conference on education technology and information systems, 2013, Vol. 65, pp. 1136-1140.

- [4] B. M. Noone and A. S. Mattila, "Hotel revenue management and the Internet: The effect of price presentation strategies on customers' willingness to book," International Journal of Hospitality Management, 28, 2009, pp. 272-279.
- [5] D. Frechtling, "Forecasting Tourism Demand: Methods and Strategies", Butterworth, Heinemann, Oxford, 2001.
- [6] G. R. Bitran, and S. V. Mondschein, "An Application of Yield Management to the Hotel Industry Considering Multiple Day Stays", Ope Res., vol. 43, no. 3, pp. 427-443, 1995.
- [7] X. Guo, L. Ling, C. Yang, Z. Li and L. Liang, "Optimal pricing strategy based on market segmentation for service products using online reservation systems: An application to hotel rooms", Int. J. of Hospitality Mgnt., vol. 35, no. 12, pp. 274-281, December 2013.
- [8] L. Ling, Y. Dong, X. Guo and L. Liang, "Availability management of hotel rooms under cooperation with online travel agencies", Int. J. of Hospitality Mgnt., vol. 50, pp. 145-152, 2015.
- [9] Z. Schwartz, "Advanced booking and revenue management: Room rates and the consumers' strategic zones", Int. J. of Hospitality Mgnt., vol. 25, no. 3, pp. 447–462, September 2006.
- [10] S. P. Ladany, "Optimal market segmentation of hotel rooms the nonlinear case". Omega, vol. 24, no. 1, pp. 29–36, January 1996.