**Title of the Project**

**Project Proposal**



**By**

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**Abstract**

The Online Hotel Management System is designed to make the process involved in managing a hotel more effective. It integrates functionalities like room availability, food and facility management, and others necessary for a booking system under one platform. OHMS seeks to improve the operational efficiency of hotels and provide a seamless experience for users who wish to book rooms, view amenities, and manage reservations. This will ease both the headache of hotel operations and administrative overhead; it also boasts convenience and friendliness both from the hotel staff and customer usage.

**List of Figures**

Figure ‎11.1 Gantt chart

**Table of Contents**

1. Introduction......................................................................................................................

2. Problem Statment.............................................................................................................

3. Problem Solution.............................................................................................................

4, Literature Review..........................................................................................................

5. Benefits..........................................................................................................................

6. Methodology..................................................................................................................

7. Tools and Technology...................................................................................................

8. Project StakeHolders and Roles....................................................................................

9. Team Members and Individual Task............................................................................

10. Coclusions...................................................................................................................

* **Introduction:**

The hospitality industry has witnessed sea changes with the advent of digital technologies. An online hotel management system is one such end-to-end solution to the problems of hotels and their guests in the new digital environment. This platform enables a hotel to perform its operational tasks, like room availability, food, and other facilities, by logging into the system. In this regard, it offers a more simplified interface to users for searching for hotels, the availability of rooms, reservation, and further inquiry into the services offered at the hotel. OHMS facilitates the overall customer experience more efficiently and hence brings more operational efficiency that resultantly contributes to resource management and heightened customer satisfaction.

* **Problem Statement:**

Most of the education providers are dealing with a system’s built from last century that handles discipline not so great. This manual procedure leads to reporting delays, non-transparent communication paths and no one is held responsible causing cases get lost or neglected. Furthermore, administrators are challenged to keep track of the progress of disciplinary incidents and make sure all cases receive appropriate handling. It is further complicated by the lack of a central platform. To address this, Campus Discipline Connect has designed an online system which will help in easier reporting, tracking and communication between all stakeholders.

* **Problem Solution for Proposed System**

Traditional systems of hotel management involve fragmented and manual processes that are bulky and prone to many errors. Hotels have to struggle hard to manage the bookings of rooms, track the usage of facilities, and coordinate food arrangements. In the process, inefficiency, high administrative work, and dissatisfaction of customers become common. There is an essential requirement for an integrated online platform which can facilitate all these processes in a much easier way by providing real-time information and enhancing hotel management's as well as the guest's experience. The challenge is to develop a robust, user-friendly system that tends to these needs and would integrate well with the already existing operation in hotels.

* **Literature Review / Related System Analysis**

*Related System Analysis with proposed project solution*

|  |  |  |
| --- | --- | --- |
| **Name** | **Weekness** | **Solutions** |
| **Hotel Management Systems** | Limited integration with third-party services. | Implement API integrations for seamless third-party service connections |
| **Property Management Systems** | Poor user interface design leading to poor user experience. | Develop a user-friendly and intuitive interface with modern design principles. |

**Advantages/Benefits of Proposed System**

1. **Increased Efficiency**: Automates routine tasks of booking and managing availability, thereby reducing manual effort and human error.
2. **Enhanced Customer Experience**: This provides the guests with a friendly interface to search, book, and manage their stays with ease.
3. **Real Time Updates**: The update of room availability, facilities, and services on real time assists in decision-making.
4. **Improved management of resources**: It improves the monitoring of the resources, like occupancy of rooms and other food services.
5. **Data Analytics**: Provides insights into customer preference and booking trends, which assists in strategic planning and marketing.

* **Software Process Methodology**

The project will follow the Agile methodology, characterized by iterative development and continuous feedback. This approach allows for flexibility in requirements and ensures the system evolves based on user needs and feedback.

* **Tools and Technologies**

The following table outlines the software tools and the technology that will be used in the implementation off the proposed project, along with their versions and the rationale for their use:

*Tools and Technologies for Proposed Project*

|  |  |  |  |
| --- | --- | --- | --- |
| **Tools And Technologies** | **Tools** | **Version** | **Rationale** |
| MS Visual Studio | 2015 | IDE |
| MS SQL Server | 2015 | DBMS |
|  | CSC 6 | Design Work |
| MS Word | 2015 | Documentation |
| MS Power Point | 2015 | Presentation |
|  | 2.0.5 | Mock-ups Creation |
| **Technology** | **Version** | **Rationale** |
| JavaScript | 6.0 | Programming language |
| Ai Chat Bot |  | BotPress Tool |
| Html | 5 | Web Development |
|  | CSS | 3.0 | Designing |

* **Project Stakeholders and Roles**

The table below outlines the stakeholders involved in the proposed project, along with their roles and responsibilities.

|  |  |  |
| --- | --- | --- |
| **Stakeholder** | **Role** | **Responsibilities** |
| **Project Sponsor** | The University of Faisalabad | Funds the project development by offering all the necessary resources. |
| **Student(s)** | Developer(s) | Responsible for the design, development, of the project. |
| **Project Supervisor** | Supervision | Supervises the development of the project and the development team so it meets academic expectations and objectives. |
| **Final Year Project**  **Committee** | Evaluator | Assesses the project’s performance in terms of its proposed goals and standards by comparing the existing results. |

* **Team Members Individual Tasks/Work Division**

*Team Member Work Division for Proposed Project*

|  |  |  |
| --- | --- | --- |
| **Student Name** | **Student Registration Number** | **Responsibility/ Modules** |
| Zahra Qaiynat | 2021-BS-SE-023 | Lead Development,  Project Management |
| Noor Fatima | 2021-BS-SE-019 | Documentation and Market Research. |
| Muhammad Usman | 2022-BS-SE-083 | Designing AND Ai Chat Bot |

* **Project Domain**

**Web Development**: Creation of a responsive and dynamic web application through the React framework and Node.js.

**Mobile Development**: platform-dependant capabilities and ensuring mobile compatibility for real-time reporting through smartphones.

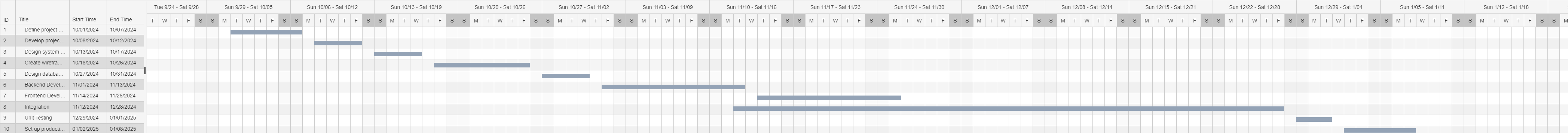
**Middleware/API**: Management of APIs in charge of communication between the front-end through the back-end.

**Database**: secure storage and querying of user data which will be used as input for reporting through MySQL.

* **Gantt chart**

Create the Grant Chart and provide estimated start and end dates of all proposed modules/tasks for each team member. Also identify the dependencies (which tasks cannot be started/completed, until the dependent task is completed). Gantt chart can be created using Microsoft Project.

*Figure ‎11.1 Gantt chart*



* **Conclusion**

This proposal outlines the development of the Online Hotel System, a comprehensive solution designed to modernize and streamline hotel management processes. By integrating functionalities such as room availability, booking management, and facility tracking into a single, user-friendly platform, the system addresses the inefficiencies and challenges faced by traditional hotel management practices. The incorporation of real-time updates and advanced features ensures enhanced operational efficiency and an improved customer experience. With meticulous planning, innovative development approaches, and a focus on user needs, the Online Hotel System is well-positioned to set a new standard in hotel management solutions, ultimately benefiting both hotel staff and guests and leaving a significant mark in the industry.

* **References**

Here are the references with links to the articles for your Online Hotels System project proposal:

1. Ivanov, S., & Webster, C. (2017).

<https://www.emerald.com/insight/content/doi/10.1108/IJCHM-09-2016-0524/full/html>)

2. Ham, S., & Kim, W. G. (2014).

<https://www.tandfonline.com/doi/abs/10.1300/J150v10n01_08>)

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