# University Project Proposal

## **1. Project Title** Online Hotel Booking System

## **2. Introduction / Background** With the rise of digital technology, booking hotels online has become an important part of the travel experience. Our project aims to develop a simple and user friendly web application that allows users to easily search, book, and manage hotel reservations. It will also help hotel administrators manage rooms and availability efficiently.

## **3. Problem Statement** Traditional hotel booking methods are often slow, have bugs, and require manual effort. Customers face difficulties finding available rooms and comparing prices, while hotel staff struggle to manage reservations efficiently. There is a need for an automated system that simplifies the process for both customers and administrators.

## **4. Objectives**

* Develop a web application for online hotel booking.
* Allow users to search for hotels, view available rooms, and make reservations.
* Enable administrators to manage hotels, rooms, and bookings.
* Provide secure user authentication and payment methods.

## **5. Scope of the Project** Our project will focus on hotel reservation management, including search, booking, and administration. It will not include third party integrations or a mobile application in this phase. In the future versions may include additional features such as map integration.

## **6. Proposed Solution / Methodology** The project will be developed using HTML, CSS, and JavaScript for the frontend. PHP and MySQL will be used for backend and database management. Testing Phase will be performed to ensure system reliability and user-friendliness.

## **7. Tools and Technologies**

* **Frontend:** HTML, CSS, JavaScript
* **Backend:** PHP, MySQL
* **Frameworks:** Laravel
* **Other Tools:** Visual Studio Code, Git / GitHub

## **8. Expected Outcomes**

* A fully functional web-based hotel booking system.
* Admin dashboard for hotel and booking management.
* Secure login and booking confirmation features.
* Improved efficiency in hotel operations and customer experience.

## **9. Project Timeline**

| **Phase** | **Duration** | **Tasks** |
| --- | --- | --- |
| Phase 1 | Week 1–2 | Research and system design |
| Phase 2 | Week 3–4 | Frontend and backend development |
| Phase 3 | Week 5 | Integration and testing |
| Phase 4 | Week 6 | Final report and presentation |

## **10. Team Members and Roles**

* **Mohamed Hussien** – Software Engineer
* **Mohanad Ezz** – Database Developer
* **Youssef Tarek** – Full Stack Developer
* **Mennatuallah Mohamed** – Software Engineer