NOAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY



LAB REPORT

Course Title: DATABASE MANAGEMENT SYSTEM LAB

Course Code: CSTE 3106

SUBMITTED TO:

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Dept. of Computer Science and Telecommunication Engineering

Software User Manual For Hotel Management System

Version 1.0

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Developing Hotel Management System with JavaFX and phpMyAdmin

ABSTRACT

This project involves the development of a Hotel Management System using JavaFX technology and phpMyAdmin database technology.

The Hotel Management System is a comprehensive software solution designed to streamline and enhance hotel operations. This system offers an intuitive and accessible interface for managing reservations, guest services, and administrative tasks efficiently. It encompasses essential features like centralized reservation management, room allocation, guest check-in/check-out procedures, and billing management. The system is constructed using robust Object-Oriented Programming principles, ensuring scalability, maintainability, and extensibility of the codebase. Employing a structured Model-View-Controller (MVC) architecture, the system segregates functionalities into distinct modules for enhanced organization and adaptability. This project demonstrates the utilization of cutting-edge technology to empower hoteliers with a versatile tool that optimizes operations, elevates guest experience, and contributes to efficient management of hotel resources.

KEYWORDS

JavaFX, Hotel Management System, User Interface, Object-Oriented Programming, Mode-View-Controller, Code modularity, Maintainability, Resource Optimization, Operations Enhancement, Data Security.

INTRODUCTION

In the contemporary hospitality industry, the demand for seamless management solutions has grown exponentially, paralleling the evolution of digital technologies. The Hotel Management System represents a pivotal response to this demand, aiming to revolutionize hotel operations and guest experiences. With the advent of digitalization in hospitality services, the need for an efficient, centralized system for managing reservations, guest services, room allocation, and billing has become paramount. This project endeavors to develop a sophisticated yet user-friendly software solution tailored to the hospitality sector. Leveraging advanced programming paradigms and technologies, this system aims to offer a comprehensive interface facilitating streamlined operations, from guest check-in to check-out, encompassing reservation handling and meticulous billing management. Embracing the principles of modularity and scalability through Object-Oriented Programming, the project aspires to create a robust system capable of adapting to the dynamic landscape of the hotel industry, ensuring not just operational efficiency but also an elevated standard of guest satisfaction.

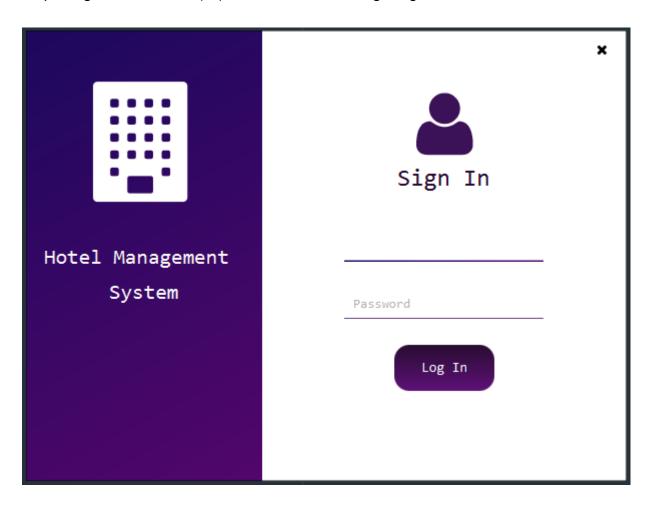
Requirements

The minimum requirements for running the software required to run the Hotel Management System listed below:

- Microsoft Windows 7/8/10/11
- IntelliJ IDEA / Eclipse
- Scene builder
- JDK 21
- JavaFX 21
- XAMPP Control Panel v3.3.0

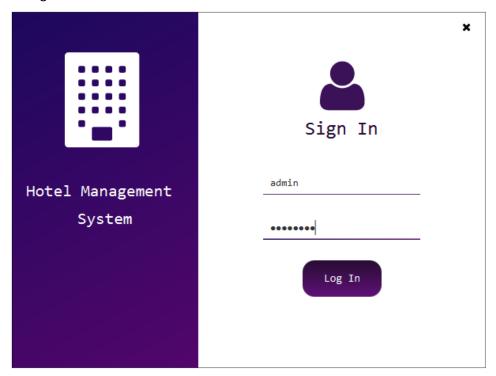
USER INTERFACE

The opening user interface (UI) would look like the figure given below:

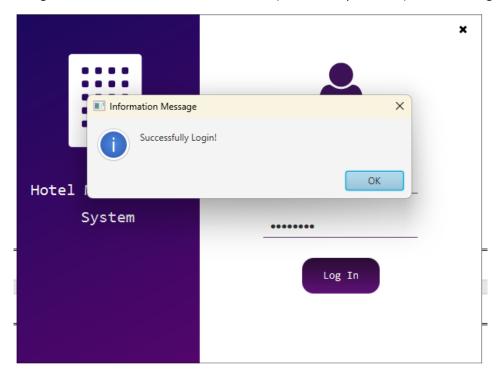


USER GUIDELINES

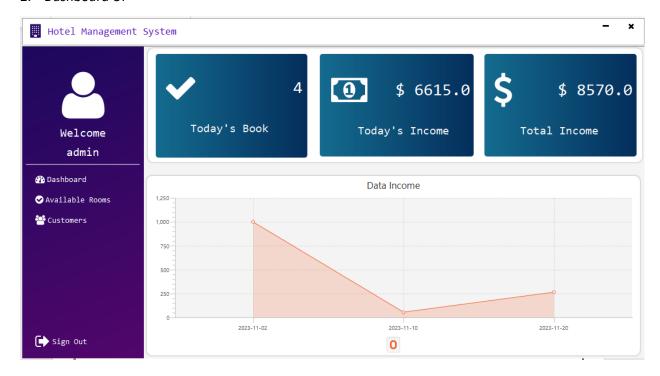
1. Sign In as admin user



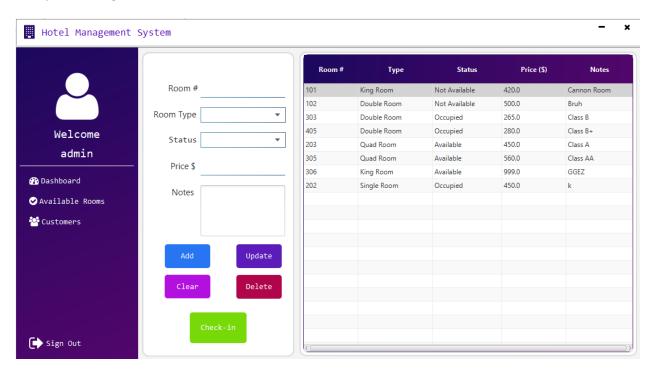
For Sign In admin users must use credentials (username, password) and click "Log In" Button.



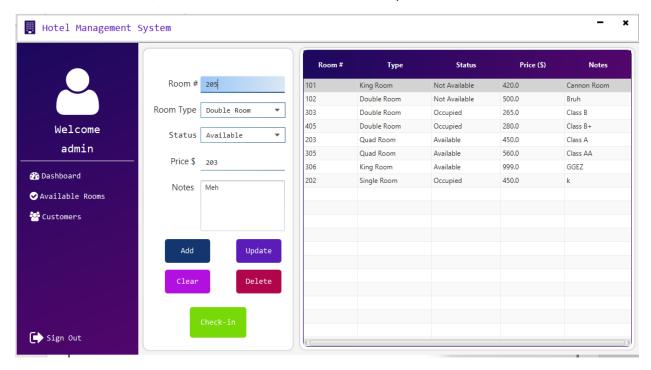
2. Dashboard UI



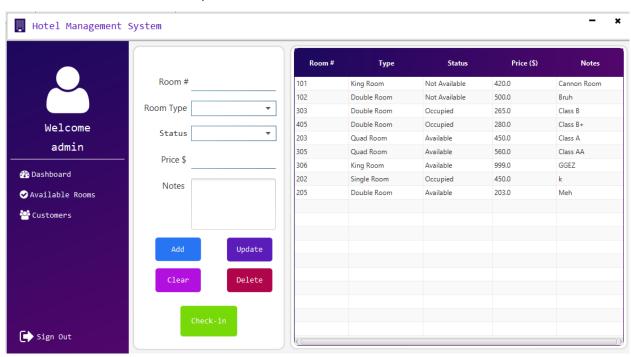
3. Upon Clicking on "Available Rooms" this UI will be shown:



4. With "Add" Button, one can add new rooms to the inventory.

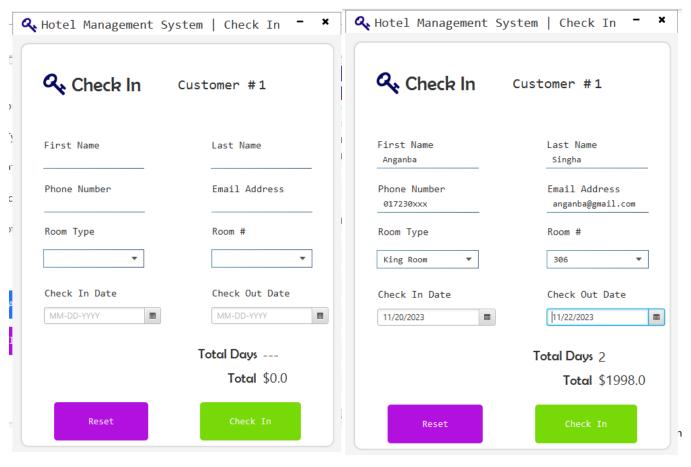


Room # 205 has been successfully added!



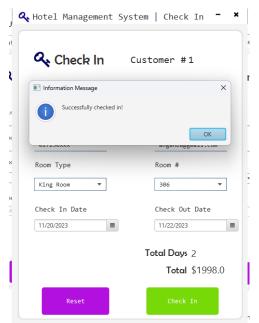
In same manner, one can use "Update" to update the database, "Clear" to clear the selected data, "Delete" to delete the data from the database.

3. Upon clicking "Check-in" Button new stage will pop up!

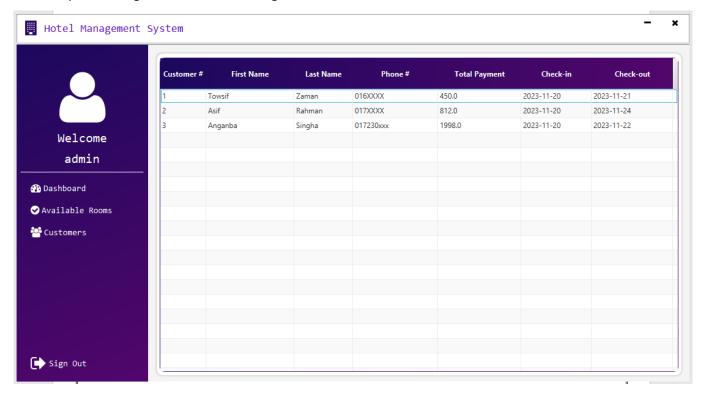


To Check In new customer, admin must fill up all the blank fields with necessary details and click "Check In" button.

With "Reset" button, admin can reset the boxes value.



4. Upon Clicking "Customers" following UI will be shown:



5. Upon clicking "Sign Out" following UI will be shown:

