

C Programming Mini Project Report

1. Title Page

Project Title: Hotel Room Booking System

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Course: Programming in C

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2. Abstract

The Hotel Room Booking System is a C programming mini project designed to manage hotel room reservations efficiently. The program allows users to book rooms, view available rooms, cancel reservations, and display customer details. It uses structured programming concepts such as functions, arrays, loops, and conditional statements to manage booking data.

This project helps in understanding real-world implementation of programming logic in hotel management systems.

3. Introduction

Managing hotel room bookings manually can be time-consuming and error-prone. This project provides a simple console-based solution for handling hotel room reservations.

Problem Being Solved:

Manual booking errors

Difficulty in tracking available rooms

Lack of organized customer records

Why This Project is Useful:

Automates booking process

Maintains structured customer data

Reduces manual errors

Applications:

Small hotels

Lodges

Educational demonstration projects

4. Objectives

To understand structured programming concepts

To use loops and conditional statements effectively

To implement arrays and functions

To develop logical problem-solving skills

To simulate a real-world booking system

5. Tools & Technology

Programming Language: C

Compiler: GCC / CodeBlocks / Turbo C

Platform: Windows / Linux

6. System Requirements

Hardware:

Minimum 4GB RAM

Basic computer system

Software:

C Compiler

Any IDE or Text Editor (CodeBlocks / VS Code / Turbo C)

7. Methodology / Algorithm

Start the program

Display the main menu:

Book Room

View Available Rooms

Cancel Booking

View Customer Details

Exit

Read user choice

Perform corresponding operation:

Store customer data

Update room status

Display information

Repeat until user exits

End program

8. Flowchart

Copy code

Start



Display Menu



Get User Choice



Process Booking / Cancellation / View



Display Output



Exit

9. Program Code

(Paste your complete GitHub project C code here)

You can copy the full source code from:

Hotel-Room-Booking-System

10. Sample Input / Output

Sample 1: Booking a Room

Input:

Copy code

Enter choice: 1

Enter customer name: Rahul

Enter room number: 101

Output:

Copy code

Room booked successfully!

Sample 2: Viewing Available Rooms

Input:

Copy code

Enter choice: 2

Output:

Copy code

Available rooms: 102, 103, 104...

11. Result

The Hotel Room Booking System program was successfully compiled and executed. The system correctly performs room booking, cancellation, and displays room availability as expected

12. Applications

Hotel reservation management

Academic mini project

Beginner-level software system

Learning file handling and data management concepts

13. Conclusion

The Hotel Room Booking System demonstrates fundamental C programming concepts such as:

Functions

Arrays

Structures

Loops

Conditional statements

It provides practical experience in designing a simple management system using structured programming.

14. Future Enhancements

Add file handling for permanent data storage

Improve user interface

Add billing system

Add admin login authentication

Convert into GUI-based application

15. References

C Programming textbooks

Online tutorials

Class notes

Official documentation of C language