The hotel management system

UNDERGRADUATE PROJECT

Submitted in partial ful_llment of the requirements of software development project 1 for the degree of
B.Sc Engg. in CSE
By

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The hotel management system

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Declaration of Authorship

……..

We, **Jubair Ibna Jaman, Abdullah Al Ahad Abir, Farzana Yasmin Shikta,** declare that this
project," The hotel management system," and the work
presented in it are our own. We con_rm that:
_ This work was done wholly or mainly while in candidature for a B.Sc Engineering in CSE
degree at this University.
_ Where any part of this software development project has previously been submitted for a
degree or any other quali_cation at this University or any other institution, this has been
clearly stated.
_ Where we have consulted the published work of others, this is always clearly attributed.
_ Where we have quoted from the work of others, the source is always given. With the
an exception of such quotations, this thesis is entirely our work.
_ We have acknowledged all primary sources of help.
_ Where the thesis is based on work done by ourselves jointly with others, We have made clear
exactly what was done by others and what we have contributed to me.

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CERTIFICATE

This is to certify that the project entitled" The hotel management system" "
and submitted by **Jubair Ibna Jaman : (19202103011)**
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in partial ful_llment of the requirements of embodies
they do the work under my supervision.

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Date: 10-03-2021

Dedication

We are dedicated to our parents for all their love and inspiration.

Abstract

The purpose of this research, computerized hotel management system with Satellite Motel Ilorin, Nigeria as the case study is to understand and make use of the computer to solve some of the problems encountered during manual operations of the hotel management. Finding accommodation or a hotel after having reached a particular destination is quite time-consuming and expensive. Here comes the importance of an online hotel booking facility. Online hotel booking is one of the latest techniques in the internet arena that allows travelers to book a hotel located anywhere globally and according to their tastes and preferences. In other words, online hotel booking is one of the excellent facilities of the internet. Booking a hotel online is not only fast as well as convenient but also very cheap. Nowadays, many of the hotel providers have their sites on the web, which allows the users to visit these sites and view the facilities and amenities offered by each of them. So, the proposed computerized online hotel management system is set to find a more convenient, well organized, faster, reliable, and accurate means
of processing the current manual system of the hotel for both near and far customer

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APPROVAL

This project "The hotel management system" " Submitted by **Jubair Ibna Jaman : (19202103011)Abdullah al Ahad Abir : (19202103031)Farzana YasminSikta : (19202103033)**
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Engineering (CSE), Bangladesh University of Business and Technology (BUBT) under the
supervision of Dipu Akter Shila; Teaching Assistant, Department of Computer Science and
Engineering has been accepted as satisfactory for the partial ful_llment of the requirement for
the degree of Bachelor of Science (B.Sc. Engg.) in Computer Science and Engineering and
approved as to its style and contents.

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1.1 Introduction

Here we have highlighted the hotel management system while explaining the various facilities in our hotel.
And this kind of benefit is being used to make this project structures color function array files.
The hotel booking system is described below :
First, you have to enter the hotel's name, go to the hotel page, and log in. If the customer is unknown, then he has to register again. A list of what packages are available in the hotel will come and what kind of container the customer will choose. After choosing the box, there will be a payment option where he has to pay half the booking. When the booking is completed, the booking number will be sent to the customer to understand that his hotel booking has been completed. Then there will be an exit option at the bottom where the customer will exit the page when pressed. Finally, to cancel the booking, go to the hotel page and select the cancel option. However, there will be a condition that you have to inform at least three days before your booking will be canceled.

Project Review

Login: After a search, he will Log in Our system and book a room in our hotel.

Booking: With the help of a booking system, the customer can easily book his hotel or resort room

Search: Customer will search our hotel through search option and then login if he likes.

Rent services: Rent service is a system that helps customer book a room for 3 to 4 days in a hotel

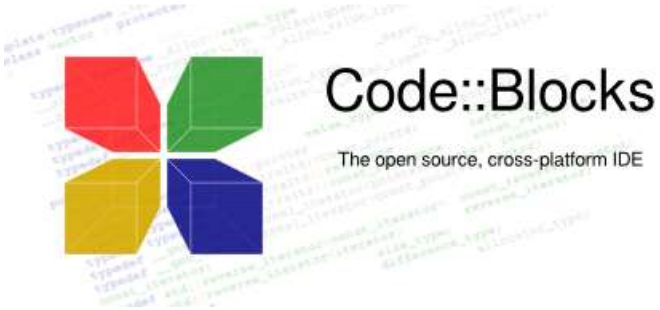
Payment: The customer will pay them by money or card. Online payment No offshore was kept.

Special Event Services: We have a special event service in our hotel for Eid, Puja, Christmas, Valentine's Day, 31st fast night, which will be given in the hotel package.

Software

3.1.1 Code::Blocks

Code::Blocks is a free, open-source, cross-platform IDE that supports multiple compilers, including
GCC, Clang, and Visual C++. It is developed in C++ using wxWidgets as the GUI toolkit.
Using a plugin architecture, its capabilities and features are de_ned by the provided plugins.
Currently, Code::Blocks is oriented towards C, C++, and Fortran. It has a custom build system
and optional Make support.
Code::Blocks is being developed for Windows and Linux (the latest macOS version is 13.12
released on 12/26/2013) and has been ported to FreeBSD, OpenBSD, and Solaris.



Code::Blocks

After releasing two release candidate versions, 1.0rc1 on July 25, 2005, and 1.0rc2 on October
25, 2005, instead of making a _nal release, the project developers started adding many new
features, with the _nal release being repeatedly postponed. Instead, there were nightly builds of
the latest SVN version made available daily.[citation needed] The _rst stable release

was on February 28, 2008, with the version number changed to 8.02. The versioning scheme
was changed to that of Ubuntu, with the major and minor numbers representing the year and
month of the release. Version 17.12 is the latest stable release; however, for the most up-to-date
performance, the user can download the relatively stable nightly build or download the source code
from SVN. Jennie Limited distributes a version of Code::Blocks customized to work with its
microcontrollers.[Wikipedia].

Programming Language

C Language

C (/si/, as in the letter c) is a general-purpose, imperative computer programming language,
supporting structured programming, lexical variable scope, and recursion during a static type
the system prevents many unintended operations. By design, C provides constructs that map
e_ciently to typical machine instructions, and therefore it has found lasting use
in applications that had formerly been coded in assembly language, including operating systems, as well
as various application software for computers ranging from supercomputers to embedded systems.

C_ LANGUAGE.

Many later languages have borrowed directly or indirectly from C, including C, C#, Unix's
C shell, D, Go, Java, JavaScript, Limbo, LPC, Objective-C, Perl, PHP, Python, Rust, Swift,
Verilog and SystemVerilog (hardware description languages). These languages have drawn many
of their control structures and other basic features from C. Most of them (with Python being
the most dramatic exception) are also very syntactically similar to C in general. They tend
to combine the recognizable expression and statement syntax of C with underlying type systems,
data models, and semantics that can be radically di_erent.[Wikipedia.

Enter for admin access

,,

Login

```
****************************************
        Welcome To Our Hotel
       Thanks For Choosing  Our Hotel
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>


Login page


          Enter -1 For ADMIN access -
          Enter -2 For USER access  -
```

Admin Panel

```
Access granted!

        Enter -1 To ENTER new guest -

        Enter -2 To VIEW booked guests details -

        Enter -3 To FIND room number of existing guest -

        Enter -4 To FIND guest of occupied room -

        Enter -5 To Edit -

        Enter -6 To Delete  -

        Enter -7 Exit  -
>>
```

Booking of new Guest

```
>> 1

Enter guest name - Astik

Enter their room number - 5

Rent service (yes/no) - yes

Payment sytem (Cash/Card) - card
Name: Astik     Room: 5 Rent: yes       Payment: card

Done
Would you like to continue? (y/n)
```

Find the guest details

```
>> 2
jubair 3 yes cash
shikta 2 no card
sobuj 20 yes card
toha 23 yes card
fahim 15 no cash
Astik 5 yes card
Would you like to continue? (y/n)
```

Find Room Number Of Existing Guest:

```
>> 3

Enter guest name to find -Astik

 Guest found!
 Name  is Astik
 Room number is 5
 Rent service: yes
 Payment system: card
Would you like to continue? (y/n)
```

Find occupied Room

```
>> 4

Enter room number to find -5

 Room found!
 Name  is Astik
 Room number is 5
 Rent service: yes
 Payment system: card
Would you like to continue? (y/n)
```

Edit

```
>> 5
SL No and details:
1       jubair 3 yes cash
2       shikta 2 no card
3       sobuj 20 yes card
4       toha 23 yes card
5       fahim 15 no cash
6       Astik 5 yes card

Enter serial no to edit: 1
Enter new name: jubair
Enter new room no: 10
Enter new rent servces: no
Payment method : card

New details are:
jubair 10 no card
Successfully edited!
Would you like to continue? (y/n)
```

Delete

```
>> 6
SL No and details:
1       jubair 10 no card
2       shikta 2 no card
3       sobuj 20 yes card
4       toha 23 yes card
5       fahim 15 no cash
6       Astik 5 yes card

Enter serial no to delete: 1
Successfully deleted!
Would you like to continue? (y/n)
```

Exit

```
>> 7

Process returned 0 (0x0)   execution time : 58.966 s
Press any key to continue.
```

Enter for user access

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Available Room

```
                    Enter -2 For USER access  -    2

        Enter - 1 View available rooms -

        Enter - 2  Booking of room -

        Enter - 3  Special event service -

        Enter - 4 About us  -

        Enter - 5 Exit  -
1
Available rooms are:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18
19.
20
Would you like to continue? (y/n)
```

Booking room of Guest

```
2

Enter guest name - kabir

Enter their room number - 4

Rent service (yes/no) - yes

Payment sytem (Cash/Card) - card
Name: kabir     Room: 4 Rent: yes       Payment: card

Done
Would you like to continue? (y/n)
```

Special Event

About Hote

```
4
About Hotel:
------------------------------Welcome To Our Hotel AJS------------------------------


Thank you for using our services. This is one of the best 4-star hotels in this city. We are providing the best facilities and overall best services. Our hotel has some great reputations. This is stand in the mi
ddle of the city.


It has a great view of the outside and inside. It looks amazing from the bottom to the neck.


Our hotel has 100 employees. They are work hardly.
They have some good behaviors. They are all well-educated and highly committed.


There are three buildings. All are well decorated and clean. All furniture is quite good. There are 3 swimming pools around the hotel buildings


The services we are providing are:
1> Hotel booking.
2> 24 hours of quality services.
3> Rent services.
4> Well payment services.
5> Great booking deal.
6> Well Security.
7> Very Special events services.
Like >
1. ĺÇÿÉid.
  2. Puja.
 3. Christmas.
 4. Honeymoon.
5. Valentine.
6.  31 st Night.

We are trying to give our best services to the clients. This is the main reason that they come back again. We are highly committed to our services. Thanks for choosing our hotel for your stay. Stay well and stay
 happy.


Would you like to continue? (y/n)
n
```

CODE :

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>

//Method Declaration

void enter_name();
void find_name();
void find_room();
void checkout_guest();
void view_bookings();

//Instance Field Declaration
FILE* view;
FILE *fp;
FILE* enter;
char admin_entry[20] = {'y'};
char user_entry[20] = {'y'};

//structure defined to store name, Room, rent service, and payment system
required
struct hotel
{
   char name[20];
   char room[20];
   char payment[5];
   char rent[4];
}h;

//main method
int main(){

   int a,b,c;

    //Welcome screen

system("COLOR  70");

        printf(" \t\t  ****************************************\t\n");
```

```
    printf(" \t\t\t  Welcome To Our Hotel \t\t\n");
    printf(" \t\t\t Thanks For Choosing  Our Hotel    \n");
    printf(" \t\t  >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>\t\n");
    printf(" \t\t   \n");

    printf("\t\t\t\n\n          Login page              \n\n");


printf("\n\t\t\t Enter -1 For ADMIN access -  \t");
printf("\n\t\t\t Enter -2 For USER access  -  \t");
 scanf("%d",&a);


   switch(a){
      case 1:{
         char pass[10];
         char filepass[10];
         int i;

         FILE *passw;
         passw = fopen("pass.txt","r");

         //admins password prompt
         printf("\nPlease enter the password to continue - ");



         for(i=0; i<6; i++){
            scanf("%s",pass);
            fscanf(passw,"%s",filepass);
            if (strcmp(filepass,pass) == 0) {
               printf("\n\nAccess granted!\n");
               fclose(passw);
               break;

            }
            else{
             printf("\nIncorrect password, please try again.");
             printf("\nYou have %d trys left ",5-i-1);
             printf("\n\nEnter password >> ");
            }
            if(i==4){
               fclose(passw);
```

```
            return 0;
        }
    }

     //re-entry if
    while(admin_entry[0] =='y'){
    printf("\n\t Enter -1 To ENTER new guest - \t\n");
     printf("\n\t Enter -2 To VIEW booked guests details - \n");
          printf("\n\t Enter -3 To FIND room number of existing guest -
\n");
    printf("\n\t Enter -4 To FIND guest of occupied room - \n");
    printf("\n\t Enter -5 To Edit - \n");
    printf("\n\t Enter -6 To Delete  - \n");
    printf("\n\t Enter -7 Exit  - \n");
    printf(">> ");
    scanf("%d",&b);

    switch(b){

        case 1:{
            enter_name();
             break;
        }
        {
    case 2:
            view_bookings();
            break;
         }
        case 3:{
            find_name();
            break;
        }
        case 4:{
            find_room();
            break;
        }
        case 5:{
            edit();
            break;
        }
        case 6:{
            delete();
            break;
```

```
            }
        case 7:{
            exit(0);
        }
        default:{
            printf("\n Wrong entry!");
        }
    }
    //enter again?
    printf("Would you like to continue? (y/n)\n");
    scanf("%s",admin_entry);

    }
    if(strcmp(admin_entry,"n") == 0){
        printf("Exiting...\n");
        printf("\n >Exited<\n\n");

        return 0;
    }
    else{
        printf("Wrong entry!\nExiting...\n");
        return 0;
    }
    break;
}

case 2:{
    while(user_entry[0] =='y'){
    printf("\n\t Enter - 1 View available rooms -  \n");
          printf("\n\t Enter - 2  Booking of room -  \n");
    printf("\n\t Enter - 3  Special event service -  \n");
          printf("\n\t Enter - 4 About us  -  \n");
          printf("\n\t Enter - 5 Exit  -  \n");
    scanf("%d",&c);
    switch(c){
        case 1:{
            FILE* view;
            view = fopen("rooms.txt","r");
            printf("Available rooms are:\n");
            while(fscanf(view,"%s",h.room) != -1){
            printf("%s \n",h.room);
            }
            fclose(view);
```

```
        break;
    }

    case 2:{
        enter_name();
        break;
    }
    case 3:{
        printf("Special Events:\n");

        FILE * fp = fopen("special_events.txt", "r");
        char ch;

        while(fscanf(fp, "%c", &ch) != -1)
            printf("%c", ch);

        printf("\n");

        fclose(fp);

        break;
    }
    case 4:{
        printf("About Hotel:\n");

        FILE * fp = fopen("about_hotel.txt", "r");
        char ch;

        while(fscanf(fp, "%c", &ch) != -1)
            printf("%c", ch);

        printf("\n");

        fclose(fp);

        break;
    }
    case 5:{
        exit(0);
    }
}

printf("Would you like to continue? (y/n)\n");
```

```
            scanf("%s",user_entry);

            }
            if(strcmp(user_entry,"n") == 0){
               printf("Exiting\n");
               printf("\n >Exited<\n\n");

               return 0;
            }
            else{
               printf("Wrong entry!\nExiting\n");
               return 0;
            }
            break;
         }
      }
}

void delete(){
   FILE * fp = fopen("hotelnew.txt", "r");
   int i, j, sl_no;

   if(!fp){
      printf("Something went wrong!\n");
      printf("Press any key to go back... ");
      getch();
      return;
   }

   struct hotel ara[1000];

   i = 0;
   while(fscanf(fp, "%s %s %s %s", ara[i].name, ara[i].room, ara[i].rent,
ara[i].payment) != -1)
      ++i;

   printf("SL No and details:\n");
   for(int j = 0; j < i; ++j)
      printf("%d\t%s %s %s %s\n", j+1, ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

   printf("\nEnter serial no to delete: ");
   scanf("%d", &sl_no);
```

```
    fclose(fp);

    fp = fopen("hotelnew.txt", "w");

    for(j = 0; j < sl_no-1; ++j)
        fprintf(fp, "%s %s %s %s\n", ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

    for(j = sl_no; j < i; ++j)
        fprintf(fp, "%s %s %s %s\n", ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

    fclose(fp);

    printf("Successfully deleted!\n");

    return;


}


void edit(){
    FILE * fp = fopen("hotelnew.txt", "r");
    int i, j, sl_no;

    if(!fp){
        printf("Something went wrong!\n");
        printf("Press any key to go back... ");
        getch();
        return;
    }

    struct hotel ara[1000];

    i = 0;
    while(fscanf(fp, "%s %s %s %s", ara[i].name, ara[i].room, ara[i].rent,
ara[i].payment) != -1)
        ++i;

    printf("SL No and details:\n");
    for(int j = 0; j < i; ++j)
```

```
        printf("%d\t%s %s %s %s\n", j+1, ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

    printf("\nEnter serial no to edit: ");
    scanf("%d", &sl_no);

    printf("Enter new name: ");
    scanf("%s", h.name);
    printf("Enter new room no: ");
    scanf("%s", h.room);
    printf("Enter new rent servces: ");
    scanf("%s", h.rent);
    printf("Payment method : ");
    scanf("%s", h.payment);

    printf("\nNew details are:\n");
    printf("%s %s %s %s\n", h.name, h.room, h.rent, h.payment);

    fclose(fp);

    fp = fopen("hotelnew.txt", "w");

    for(j = 0; j < sl_no-1; ++j)
        fprintf(fp, "%s %s %s %s\n", ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

    fprintf(fp, "%s %s %s %s\n", h.name, h.room, h.rent, h.payment);

    for(j = sl_no; j < i; ++j)
        fprintf(fp, "%s %s %s %s\n", ara[j].name, ara[j].room, ara[j].rent,
ara[j].payment);

    fclose(fp);

    printf("Successfully edited!\n");

    return;
}

//method declare to enter name
void enter_name(){

    FILE *tmp1;
```

```
    FILE *tmp2;

    printf("\nEnter guest name - ");
    scanf("%s",h.name);
    printf("\nEnter their room number - ");
    scanf("%s",h.room);
    printf("\nRent service (yes/no) - ");
    scanf("%s",h.rent);
    printf("\nPayment sytem (Cash/Card) - ");
    scanf("%s",h.payment);

    printf("Name: %s\tRoom: %s\tRent: %s\tPayment: %s\n", h.name, h.room,
h.rent, h.payment);

    //entering guests
    fp = fopen("hotelnew.txt","a");

    if( fp == NULL){
        printf("\nFile not found");
        exit(1);
    }
    else{
        fprintf(fp,"%s %s %s %s\n",h.name,h.room,h.rent,h.payment);
        printf("\nDone\n");
    }


    fclose(fp);
}

//method defined to find quest name
void find_name(){
    char buffer[20];
    char entered_name[20];
    int guestFound =0;

    printf("\nEnter guest name to find -");
    scanf("%s",entered_name);

    fp = fopen("hotelnew.txt","r");
    while(fscanf(fp,"%s %s %s %s",h.name,h.room,h.rent, h.payment) != -1){
    if(strcmp(h.name,entered_name) == 0){
                    guestFound = 1;
```

```
                printf("\n Guest found!");
                printf("\n Name  is %s",h.name);
                printf("\n Room number is %s",h.room);
                printf("\n Rent service: %s",h.rent);
                printf("\n Payment system: %s\n",h.payment);
      }
    }
    if(guestFound == 0){
        printf("\nGuest %s not found!\n", entered_name);
      }
    fclose(fp);
}

//method definition for guest checkout
void checkout_guest(){
    char buffer2[20];
    char checkout_name[20];
    char add_room[20];

    FILE *tmp;

    printf("Enter guest too checkout ");
    scanf("%s",checkout_name);

    fp = fopen("hotelnew.txt","r");
    tmp = fopen("tmp.txt","w");

    if(fp == NULL){
    printf("File not found");
    exit(1);
    }
        else{
       while(fscanf(fp,"%s %s %s",h.name,h.room,h.rent) != -1){
          fgetc(fp);
                fgets(h.payment, 20, (FILE*)fp);
                      if(strcmp(h.name,checkout_name) != 0){
              fprintf(tmp,"%s %s %s %s",h.name,h.room,h.rent,h.payment);
            }
            else{
              strcpy(add_room,h.room);
            }
       }
       printf("Room checked out!");
```

```
    }

    fclose(fp);
    fclose(tmp);
    remove("hotelnew.txt");
    rename("tmp.txt","hotelnew.txt");

    //enter room back into available rooms list
    view = fopen("rooms.txt","a");
    printf(" add is %s",add_room);
    fprintf(view,"%s",add_room);
    fclose(view);

}

//method definition for finding rooms avalaible
void find_room(){
    char buffer[20];
    char entered_room[20];
    int roomFound =0;
    FILE *fp;
    printf("\nEnter room number to find -");
    scanf("%s",entered_room);

    fp = fopen("hotelnew.txt","r");
    while(fscanf(fp,"%s %s %s %s",h.name,h.room,h.rent, h.payment) != -1){
    if(strcmp(h.room,entered_room) == 0){
                    roomFound = 1;
                   printf("\n Room found!");
                   printf("\n Name  is %s",h.name);
                   printf("\n Room number is %s",h.room);
                   printf("\n Rent service: %s",h.rent);
                   printf("\n Payment system: %s\n",h.payment);
      }
    }
    if(roomFound == 0){
        printf("\nRoom %s not found!\n", entered_room);
      }
   fclose(fp);
}

//method defined to view bookings
void view_bookings(){
```

```
    enter = fopen("hotelnew.txt","r");

    while(fscanf(enter,"%s %s %s %s",h.name,h.room,h.rent,h.payment) != -1){
        printf("%s %s %s %s\n",h.name,h.room,h.rent,h.payment);
    }
}
```