



**Daffodil**  
*International*  
**University**

## **Lab Final**

### Project Documentation

Project: Hall Management System

Name: Mizanur Islam Nuha

Id: 0242220005341002

Section: A      Batch: 39<sup>th</sup>

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## DECLARATION OF PROJECT

Author Full Name: Mizanur Islam Nuha

Student Id: 0242220005341002

Title of Project: Hall Management System

Academic Session: 2022

I, the author, hereby declare that the project becomes the property of Daffodil International University (DIU) and to be placed at the department of Software Engineering. I also give permission to the DIU to reproduce this project in whole or in part for the purpose of research or academic exchange only.

Certified by:

---

SIGNATURE

STUDENT ID:181-35-2302

Date:

---

SIGNATURE OF SUPERVISOR

NAME OF SUPERVISOR: MD. SHOHEL ARMAN

Date:

## ACKNOWLEDGEMENT

First and foremost, all thanks to Allah for giving the strength to start and complete my project.

Secondly, I want to thanks Daffodil International University for giving me a great chance to hence myself and also developing this project, thirdly I want to appreciate my department of software engineering especially our honorable head Dr. Imran Mahmud sir and my dear teachers for excellence teaching and providing such incredible study.

This project is called Hall Management System and it's about new way to register and keeping the information of the students in safe and secure, really i am very proud and happy to make this project and remark one of my dreams done.

I also want to thanks my dear parents for their encouragement and endless support and my friends who also gave hand for this project Finally, I want appreciate my dear teacher **Md Shohel Arman** for his excellence teaching and advices during my study of his course as well as my project.

Thanks

Sakibul Hasan Chowdhury

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Github link: <https://github.com/Nuha1002/Software-Development-Capstone-Project->

## LIST OF ABBREVIATIONS

In my project I have used all this abbreviation

fname =First Name

uname= User Name

nid=National Id

add = Address

gname =Guardian Name

## For Design Symbols

%

\*

<

>

—

\$

~

.

## Hall Management System

### ABSTRACT

As the name specifies “HALL MANAGEMENT SYSTEM” is a software developed for managing various activities in the Hall. For the past few years, the number of educational institutions is increasing rapidly. Thereby the number of hostels is also increasing for the accommodation of the students studying in this institution. And hence there is a lot of strain on the person who are running the hostel and software's are not usually used in this context. This particular project deals with the problems on managing a hostel and avoids the problems which occur when carried manually. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system Which is more user friendly and more GUI oriented.

## CHAPTER 1:

### INTRODUCTION 1.

In our current era of automated systems with it being either software or hardware, it's not advisable to be using manual system. Hall without a management system are usually done manually. Registration forms verification to other data saving processes are done manually and most at times, they are written on paper. Thus, a lot of repetitions can be avoided with an automated system. The drawbacks of existing systems lead to the design of a computerized system that will help reduce a lot of manual inputs. With this system in place, we can improve the efficiency of the system, thus overcome the drawbacks of the existing manual system. This system is designed in favor of the hostel management which helps them to save the records of the students about their rooms and other things. It helps them from the manual work from which it is very difficult to find the record of the students and the mess bills of the students, and the information of about those ones who had left the hostel years before.

### 2. Obstacles

I have faced some obstacles while I was writing the code of this project. Because this is a huge project and it actually needs to use different types or topics in c language. Also, after coding of the project we have to write a gain the documentation of this project so it's little bit pain full but thanks to Allah we have successfully done it.

### 3. Technology Requirement(Software and hardware)

Software and application platform

➤ Code Blocks

Hardware:

Unfortunately, there is no hardware used in my project.



#### 4. Support

Provide the full support for maintenance. Give proper support so that the project will run smoothly.

#### 5. Milestone and Reporting

- Analysis
- Development
- Testing

Milestone	Tasks	Hours	Date
1	Analysis	60	
2	Development		
3	Testing		

#### 6.Training

Give proper training to control the whole project. To maintain properly without any issue.

#### 7.Contact me

You can contact me in any of the below ways:

Email: [nuha22205341002@diu.edu.bd](mailto:nuha22205341002@diu.edu.bd)

Mobile: +8801776113622

## 8. Requirement Elicitation

### 1. Admin

#### Task of Admin:

- Add Student.
- Modify Student Information
- View Room Information
- Meal Edit
- Bill Information
- Setting

#### System Task:

- ❖ It will automatically save Added Student Information.
- ❖ It will automatically Update Student Information if it Modified.
- ❖ It will save all information.
- ❖ It will display and show the entered data.
- ❖ It will automatically Generate previous month's Bill if new month entered.

## CHAPTER 2: PROJECT METHADOLGY AND USER MANUAL

This is the home page of my project as you can see, I have created a lot feature and you have to select one of these options.

Press 1. Add Student

Press 2. Modify Student Information

Press 3. View Room Information

Press 4. Meal Edit

Press 5. Bill Information

Press 6. Settings

Press 0. Exit

```

                                     ::::::::::::::::::::::::::::::
                                     :::: HALL MANAGEMENT SYSTEM ::::
                                     ::::::::::::::::::::::::::::::

DIU's Garden                        Month: Dec-2023

1 :: Add Student
2 :: Modify Student Information
3 :: View Room Information
4 :: Meal Edit
5 :: Bill Information
6 :: Settings
0 :: Exit

Enter Choice >> 1|
```

### 1. Add Student:

- A. Room Number
- B. Student ID
- C. Student Name
- D. Department of Student
- E. Batch
- F. Contact Number
- G. Home District

```
HALL MANAGEMENT SYSTEM >>      ADD STUDENT
```

```
Enter Room No: 107
Checking room... Free space: 4
Enter Student's ID/Roll: 1041
Checking ID... OK
Enter Student Name: Sakibul Hasan Chowdhury
Enter Department: SWE
Enter Batch: 39
Enter Phone no: 01733851761
Enter Home District: Habigonj
```

```
Add Success!!!!!!!
Do you want to add more? (y/n) >>
```

Press Y to add more student or N to Back to home page.

## 2. Modify Student Information:

Search desire student using Student id:

```
HALL MANAGEMENT SYSTEM >>      MODIFY STUDENT INFORMATION
```

```
Enter Student ID/Roll: 1041
Searching ID... Found!!

Student Information:
Room No       : 107
ID No        : 1041
Name         : Sakibul Hasan Chowdhury
Department   : SWE
Batch        : 39
Phone No     : 01733851761
Home District : Habigonj
```

```
Type '1' to Edit :: '2' to Delete :: '0' to Go Back >> 1
```

Press 1 to Edit student information or 2 to delete student information.

Edit:

Enter again, Student ID, Student Name, Department of Student, Batch, Contact Number, Home District

```
HALL MANAGEMENT SYSTEM >>      MODIFY STUDENT INFORMATION
```

```
Enter Student ID/Roll: 1041
Searching ID... Found!!

Student Information:
Room No       : 107
ID No        : 1041
Name         : Sakibul Hasan Chowdhury
Department   : SWE
Batch        : 39
Phone No     : 01733851761
Home District : Habigonj
```

```
Type '1' to Edit :: '2' to Delete :: '0' to Go Back >> 1
```

```
Enter new Data:
Room No       : 107
Student Roll/ID : 1041
Enter Student Name : Sakibul Hasan Chowdhury
Enter Department : SWE
Enter Batch      : 39
Enter Phone No.  : 01729920279
Enter Home District : Habigonj
```

### 3. View Room Information:

```

::::::::::::::::::::::::::::::::::
::: HALL MANAGEMENT SYSTEM :::
::::::::::::::::::::::::::::::::::

      Month: -

1 :: Add Student
2 :: Modify Student Information
3 :: View Room Information
4 :: Meal Edit
5 :: Bill Information
6 :: Settings
0 :: Exit

Enter Choice >> 3|
```

Press 3 to view room information.

Then press A to view all room at a time or enter room number to view specifically.

```
HALL MANAGEMENT SYSTEM >>          VIEW ROOM INFORMATION

Enter 'A' to view all rooms or Enter Room Number: A|
```

#### 4. Meal Edit:

```
HALL MANAGEMENT SYSTEM >>          MEAL ON / OFF
Enter Student's ID/Roll: 1041|
```

Enter student id to see his/ her meal information or to add or delete meal information.

```

HALL MANAGEMENT SYSTEM >>      MEAL ON / OFF

Enter Student's ID/Roll: 1041
    Searching ID... Found!!

Student Information:
    Room No      : 107
    ID No       : 1041
    Name        : Sakib
    Department   : SWE
    Batch       : 39
    Phone No    : 01733851761
    Home District : Habigonj

    Meal Days    : 1 (3 Meals) [Month: Dec-2023]

MEAL INFORMATION OF ID 1041

Total Meals: 3 (1 Days)

Day ::: B    L    D
1  ::: ON   ON   ON
2  ::: -    -    -
3  ::: -    -    -
4  ::: -    -    -
5  ::: -    -    -
6  ::: -    -    -
7  ::: -    -    -
8  ::: -    -    -
9  ::: -    -    -
10 ::: -    -    -
11 ::: -    -    -
12 ::: -    -    -
13 ::: -    -    -
14 ::: -    -    -
15 ::: -    -    -
16 ::: -    -    -
17 ::: -    -    -
18 ::: -    -    -
19 ::: -    -    -
20 ::: -    -    -
21 ::: -    -    -
22 ::: -    -    -
23 ::: -    -    -
24 ::: -    -    -
25 ::: -    -    -
26 ::: -    -    -
27 ::: -    -    -
28 ::: -    -    -
29 ::: -    -    -
30 ::: -    -    -
31 ::: -    -    -

1 : Add/Edit Meal(s) || 0 : Cancel >> |

```

## 5. Bill Infromation:

Enter 5 to get bill information.

Press 1 for Show all bill

Press 2 for Show bill by ID

Press 3 for show bill by room

Press 4 to generate HTML file

```
HALL MANAGEMENT SYSTEM >>      BILL INFORMATION
```

```
1 :: Show All Bills
2 :: Show Bill By ID
3 :: Show Bills By Room
4 :: Generate HTML
0 :: Back
Enter Choice >> 1|
```

Showing all bill by pressing 1:

```
Showing Result: (Page 1)

      Press any key to go to next page or 'Esc' to go back

Room    Roll      Name                Dept.  Batch  Meals  Meal Charge  Service Charge  Fuel & Spices
Hall Charge  Total
107     1041     Sakib                SWE    39     3       0.00         0.00          50.00
50
100.00

All records loaded. Press any key to go back..
|
```

## 6. Settings:

Press 1 to set Hall name

Press 2 to update month

Press 3 to set Hall charge

Press 4 to set Service charge

Press 5 to set Fuel & Spices Charge

Press 6 to set Meal charge

Press 7 to change password

```
SETTINGS
1 :: Hall Name (DIU HALL 1)
2 :: Month (Dec-2023)
3 :: Hall Charge (50 TK)
4 :: Service Charge (10.00%)
5 :: Fuel & Spices Charge (50.00 TK)
6 :: Meal Charge
7 :: Change Password
0 :: Go Back

Enter Choice >> 1|
```

Updating Hall Name:

```
Hall Name: DIU HALL 1
Enter New Hall Name: DIU HALL 1|
```

### 0. Exit:

Press 0 to exit the system.

## 8. Design & Implementation

Software language use

- C language

## 9.REQUIREMENT SPECIFICATION

Windows OS Xp, Windows Vista or Windows 7. At least 2.0 GHz  
Processor speed, At least 40 GB Hard Disk Capacity and 512 RAM



## 10.File management

In my project I have used a lot of files to manage and store the data; I have created a separate file for every function I added to my project.

SRS ID	Title	Description	Requirement type	Priority
EK-01	Add student	To add new student	FR	High
EK-02	Modify Student Information	To modify old students information	FR	High
EK-03	View Room Information	To view room information	FR	High
EK-04	Bill Information	To check total bill of students	FR	High
EK-05	Setting	To edit hall information and update new charges	NFR	Medium

## 11. Use case:

Use case	Add Student
Goal	To add new student
Precondition	N\A
Success end condition	Enter student details to add him
Failed end condition	If students information not correct, he cannot be added to hall
Primary actors	Admin
Secondary actors	
Main success scenario	Action

Use case	Modify Student Information
Goal	To update old students information
Precondition	N\A
Success end condition	Enter New information to update to specific student according to their id number
Failed end condition	If students ID not found, Unable to modify information
Primary actors	Admin
Secondary actors	
Main success scenario	Action

Use case	View Room Information
Goal	To view room information
Precondition	N\A
Success end condition	Show the room information according to the entered room number
Failed end condition	If entered wrong room number, room not found.
Primary actors	Admin
Secondary actors	
Main success scenario	Action

Use case	Bill Information
Goal	To check total bill of students
Precondition	N\A
Success end condition	Show All bill information
Failed end condition	If want to see bill using id and entered wrong id, bill not found.
Primary actors	Admin
Secondary actors	
Main success scenario	Action

Use case	Setting
Goal	To edit hall information and update new charges
Precondition	N\A
Success end condition	Enter New details to update hall information
Failed end condition	If entered wrong password, password can not change
Primary actors	Admin
Secondary actors	
Main success scenario	Action

### CHAPTER 3: CONCLUSION AND RECOMMENDATION

The main aspect behind hall management system is that it enabled me to bring out the new ideas that were sustained within us for many for many days. This project offers without any difficulty voting. It's the work of Hall management. Hall management is used by a number of hall today. Developing a good system is critical to the success of the system to prevent system failures and to gain wide acceptance as the best method available. A good Hall management system requires ten characteristics which this system already has. In analyzing, designing, implementing, and maintaining standards, we considered these characteristics as the foundation.

## **RECOMMENDATIONS FOR FUTURE WORKS**

Alhamdulillah finally I have successfully completed my project, I have a lot of aspects in future plan now this is only software but I want to convert it in a real and working project also I want make a new design for my project so it will look more attractive in addition to that I am going to add extra features in the project and it will be more helpful and effective.

Also, currently I have implemented this project using c language but I want to implement it a more and better language to enhance the efficiency of the project.

1. In this Project are some Fault. In future I customized all the problems.
2. It's not an Online Based Project. But in future I will try to online based project.

## **REFERENCES :**

1. Teach you r self C by Herbert Schildt
2. Data structure with C by Seymour Lipschutz

## **Use Case Diagram: Hall Management System**

