HOSTEL MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted by

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ABSTRACT

Hostel management by manual way is tedious process, since it involves work load and time consumption. In this system, we can easily manage the hostel details, room details, student records, mess expenditure, mess bill calculation, easy way of room allocation and hostel attendance.

The main feature of this project is easy to allocate for the student and also easy to calculate mess bill.

This project is carried out using Visual Basic as front end and oracle as back end.
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CHAPTER 1

INTRODUCTION

1.1. TO THE PROBLEM

Hostel management gives an idea about how the students' details, room allocation, mess expenditure are maintained in the particular concern. The hostel management system also includes some special features. The administration has the unique identity for each member as well as students' details. The stock management has also held by mess expenditure, the mess expenditure that used to calculate the mess bills of each of the students. The modules of this project are student details, attendance details, room details, mess modules.

Visual Basic 6.0 is used as the front-end tool and Oracle is used as a backend tool. Visual Basic is one of the driven programming languages. The application wizards, menu editor and data reports etc. is very much useful for creating very good professional software.
1.2. TO THE SOFTWARE TOOL

The “visual” part refers to the method used to create the graphical user interface (GUI). Rather than writing numerous lines of code to describe the appearance and location of interface elements, you simply drag and drop pre-built objects into place on screen. If you’ve ever used a drawing program such as paint, you already have most of the skills necessary to create an effective user interface.

It revolves around ready-made objects and it is event-driven that is all the activities in a program are triggered by one event or another. Each object has its own properties, determining its position, size, color, appearance and nature of its text and much more. Each object also has its own event-handling procedures.

Visual basic knows what a button is and how it works? It also works how to handle images, menus, dialog boxes, drive and directory list and much else. The programmer does not have to write code to trap these events the system does that automatically because the program code runs in response to events. The flow of execution is not as fixed in a traditional program.

Operations do not have to follow a set of sequence and can be easily interrupted, suspended or abandoned. The process of program design reflects the nature of the system. You begin by the screen layout events and then any necessary code to co-ordinate the whole program.
Overall Diagram:

USE CASE DIAGRAM:

Use case diagram is a diagram that shows the interaction between user and system to capture the user’s goals.
collect & store the student details
store the availability of hostel & room details
generate & update the attendance details
calculate & generate report for mess expenditure detail for ...
calculate & generate report for mess expenditure detail for ...
request for mess bill report
check and verify mess bill report
update the payment details
display the mess bill report to the student
payment of mess bill to the student
**CLASS DIAGRAM:**

Class diagram is a collection of static elements such as classes and their relationships connected as a graph to each other.

**Sequence Diagram:**

Sequence diagram shows an interaction arranged in a time sequence. It is an alternate way to understand the overall flow of the control of the system program.
student

Administrator

DB manager

give details

enter student details

update

derive details

enter mess item & expenditure details

update

calculate(total mess expenditure)

enter attendance details

update

request for mess bill expenditure

calculate(total mess item expenditure/total no of student)

publish mess fees details

pay the fees

enter the payment details

update
Collaboration Diagram:

1: give details
3: update
5: update
6: calculate (total mess expenditure)
8: update
10: calculate (total mess item expenditure / total no. of
students)
12: mess fees details
13: pay the fees
14: enter the payment details
15: update

student

11: publish

DB manager

Administrato
State Diagram:

State diagram are a familiar technique to describe the behaviour of a system. They describe all of the possible states that a particular object can get into and how the objects state changes as a result of events that reach the object.
Activity Diagram:

It describes the sequence of activity it supports for the conditional and parallel behaviour.

It is a variant of a state diagram in which most of the states are activity states.
METHODOLOGY

It contains four modules in it. They are given below

- Student details
- Attendance details
- Room details
- Mess modules

Students details:

This module consists of the details of the student such as roll number, name, date of birth, address, phone number, year, degree, room no, department name nad etc. here the details are entered and are updated.

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**Sequence Diagram:**

Sequence diagram shows an interaction arranged in a time sequence. It is an alternate way to understand the overall flow of the control of the system program.
Administrator

- enter student details
- edit details
- delete details
- view details by giving rollno

db Manager

- enter student details
- edit details
- delete details
- view details by giving rollno

details are updated

update details

details updated

delete details

details updated
Collaboration Diagram:

1: enter student details
2: update
3: edit details
4: details are updated
5: update details
6: details updated
7: delete details
8: details updated
9: view details by giving roll no
10: details viewed

State Diagram:

State diagram are a familiar technique to describe the behaviour of a system. They describe all of the possible states that a particular object can get into and how the objects state changes as a result of events that reach the object.
**Activity Diagram:**

It describes the sequence of activity it support for the conditional and parallel behaviour.

It is a variant of a state diagram in which most of the states are activity states.
**Attendance details:**

In this module, attendance details are maintained. Hence the up-to-date attendance of each student is maintained.

**USE CASE DIAGRAM:**

Use case diagram is a diagram that shows the interaction between user and system to capture the user’s goals.

![Use Case Diagram](image)

**CLASS DIAGRAM:**

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Sequence diagram shows an interaction arranged in a time sequence. It is an alternate way to understand the overall flow of the control of the system program.
Collaboration Diagram:

1: enter rollno
2: enter attendance details
3: update details
4: details updated
5: updated

State Diagram:

State diagram are a familiar technique to describe the behaviour of a system. They describe all of the possible states that a particular object can get into and how the objects state changes as a result of events that reach the object.
Activity diagram:

It describes the sequence of activity it support for the conditional and parallel behaviour.

It is a variant of a state diagram in which most of the states are activity states.
Room details:

In this module, the room number for the hostel student is allocated and the details of the each students are maintained and updated regularly.

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Sequence Diagram:

Sequence diagram shows an interaction arranged in a time sequence. It is an alternate way to understand the overall flow of the control of the system program.
student

administrator

db manager

enter room details

update

request for room availability

checking

enter room no to view details

allot room no

display the room details
Collabration Diagram:

1: enter room details
2: update
4: checking
3: request for room availability
5: enter room no to view details
6: allot room no
7: display the room details

State Diagram:

State diagram are a familiar technique to describe the behaviour of a system. They describe all of the possible states that a particular object can get into and how the objects state changes as a result of events that reach the object.
Activity Diagram:

It describes the sequence of activity it support for the conditional and parallel behaviour.

It is a variant of a state diagram in which most of the states are activity states.
Mess Modules:

In this module, the mess item expenditure for each student in the hostel is calculated for each month and the mess bill for each student in calculated and displayed.

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Activity Diagram:
It describes the sequence of activity it support for the conditional and parallel behaviour. It is a variant of a state diagram in which most of the states are activity states.
start

enter mess item details (veg, nonveg)

Update

enter payment details

Update

calculate mess bill expenditure per day

display the mess expenditure (veg, nonveg)

calculate mess bill expenditure per month

Display the mess expenditure (veg, nonveg)

generate mess bill & payment report

stop
SYSTEM ENVIRONMENT

Hardware specification:

- Processor: Pentium IV
- Process speed: 1.6 GHz
- Memory: 512MB
- Hard drive: 80
- Keyboard: 107 keys
- Mouse: Microsoft
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<td>Operating system</td>
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<tr>
<td>:Microsoft windows 2000, windows XP</td>
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<td>:Microsoft visual studio</td>
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PROBLEM DESCRIPTION

The project HOSTEL MANAGEMENT SYSTEM has been developed to reduce manual effort and making things faster and efficient.
REQUIREMENT ANALYSIS

6.1. USE CASE DIAGRAM:

Use case diagram is a diagram that shows the interaction between user and system to capture the user’s goals.
CLASS DIAGRAM:

Class diagram is a collection of static elements such as classes and their relationships connected as a graph to each other.
DESIGN

7.1. Sequence Diagram:

Sequence diagram shows an interaction arranged in a time sequence. It is an alternate way to understand the overall flow of the control of the system program.
7.2. State Diagram:

State diagram are a familiar technique to describe the behaviour of a system. They describe all of the possible states that a particular object can get into and how the objects state changes as a result of events that reach the object.
7.3. ACTIVITY DIAGRAMS: