Hostel Management System

Our Team Members

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1

Introduction

Let’s start with the first set of slides

Hostel Management system is the system that manages the student data, staff data, students' admission process and create receipt for the fees paid by the student who stay in the hostel.

The hostel management system will be one of the important projects that will simplify the work of the institutions in getting the seats booked in the hostels with great ease.

2

Earlier System

Let’s start with the second set of slides

Hostel Management system are desktop-based application that can only be installed in a computer.

Problem Statement

- No Security of Data.
- No Proper Records of Student in case of emergency.
- Unable to do booking of your hostel room online.
- Manual collection of fees.

Problem Statement

- High Data Redundancy.
- The system can only be assessed from one computer
- No clear communication between hostel management and student.
- No proper way to request any maintenance required.

Problem Statement

- You can’t pay your hostel fee in instalments like your tuition fee if you are in rough days
- If you are new student in new city you have to carry all of your luggage to one hostel to another to find room for you. Which is one of the great problems.

3

Proposed system

Let’s start with the third set of slides

Our System is not like any traditional management system that all the files are stored in one system.

No way of Globally accessing files

Our proposed System is web application that can be assessed from any part of the world you just need to host your application on a server.

Functional Requirments

- Student must be able to pay fee online
- Student must be able pay fee in installments.
- Student must be able to request change of room.
- Student must get email about his pending fee before last date

Functional Requirments

- Student must be able to pay with credit card.
- Student must be able complain illegal activity in hostel anonymously.
- Students must be able to request maintenance.

Functional Requirments

- Admin must view the list of all students.
- Admin must update available rooms.
- Admin must allocate someone to fix the problem complained by student.
- Admin must received emails about students that haven’t submitted fees.

Non Functional Requirments

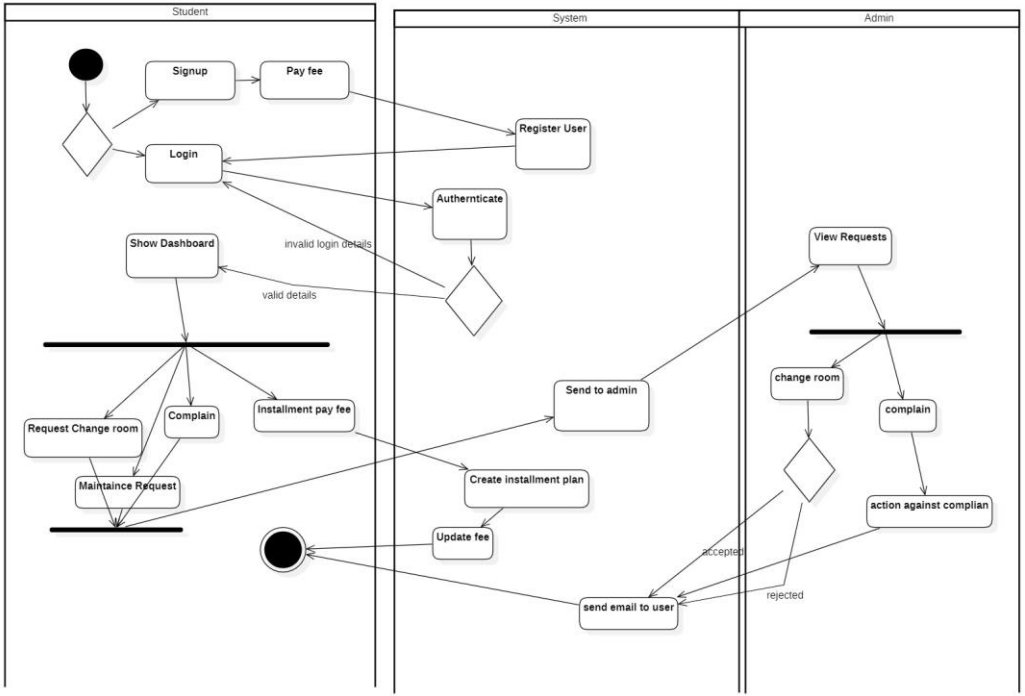
- Application must should be able to handle large number request
- Application can run on any type of browser
- It should be available 24/7
- All the payments transaction should be secure and encrypted

Non Functional Requirments

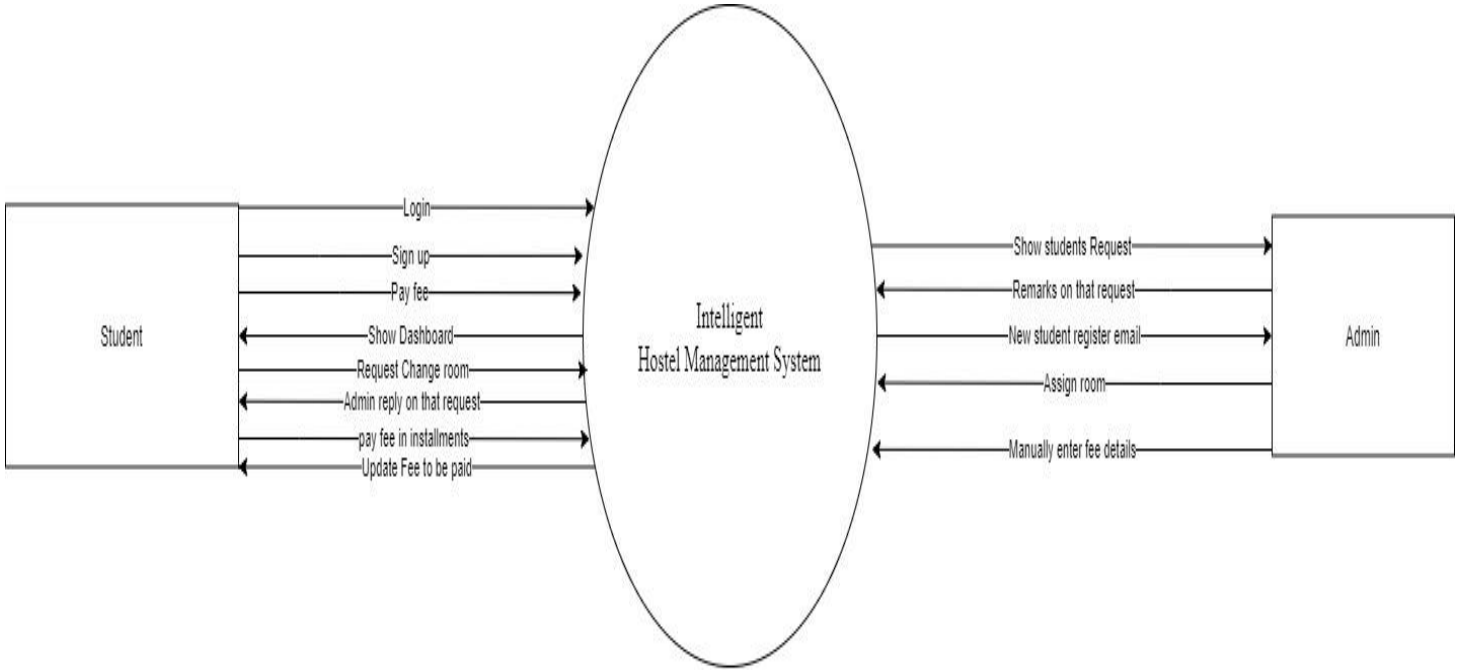
- User personal data should be protected and can only be view by only admin or allowed persons
- The application should load less than five second
- The application should be fast enough

USE Case Diagram

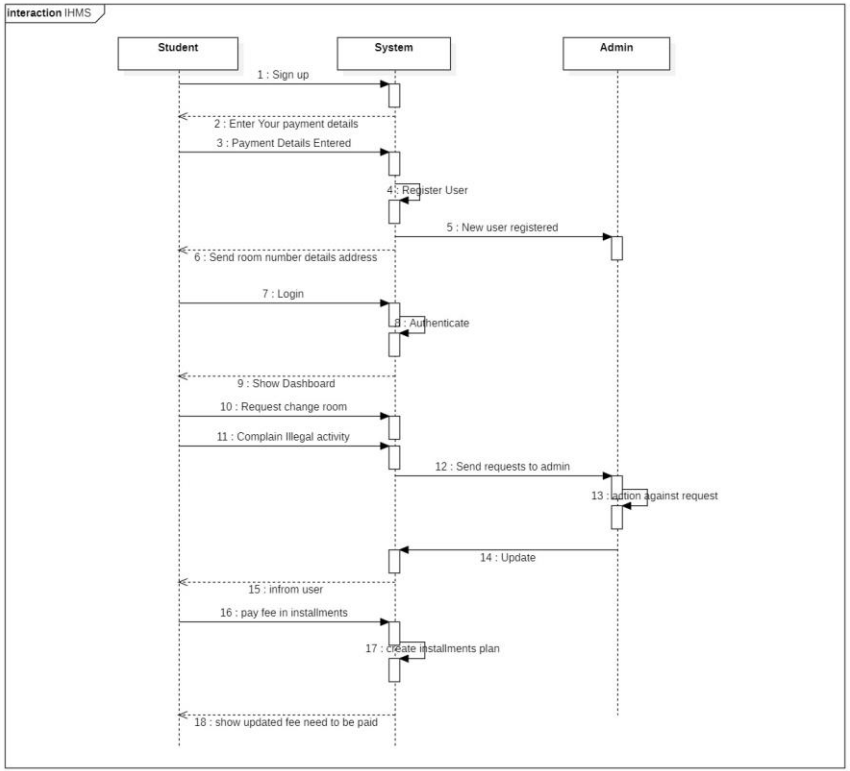
Activity Diagram



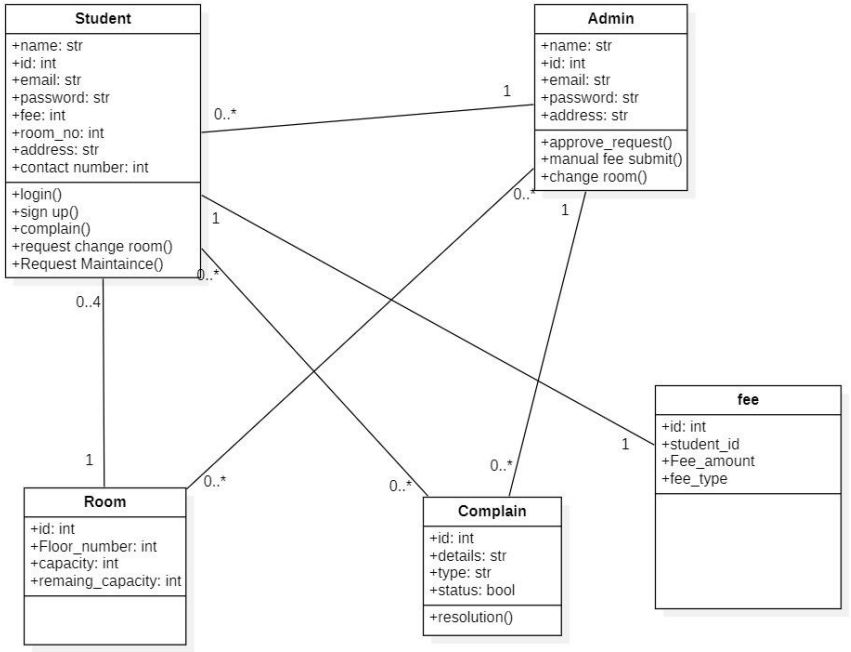
DFD Level 0 Diagram



Sequence Diagram



Class Diagram



4 Methodology

Let’s start with the fourth set of slides

Software development methodology refers to structured processes involved when working on a project. Software development methodology provides a platform for developers to work together more efficiently as a team.

It formalizes communication and determines how information is shared within the team.

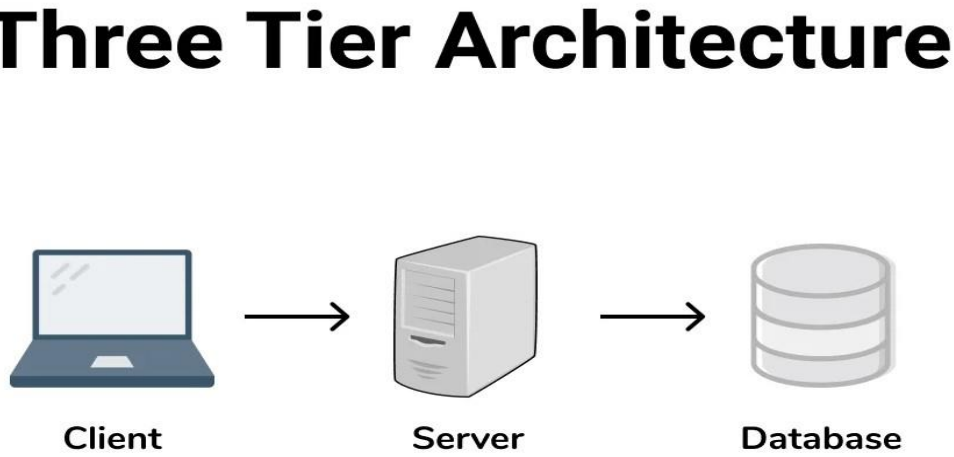
Today, many IT companies agree that employing a software development methodology is crucial for their team.

However, the subject of which method is the best remains in question. That's because there isn't one. Each methodology has its pros and cons.

Three-Tier Architecture

- Client Side
- Server Side
- Database back-end

Three-Tier Architecture



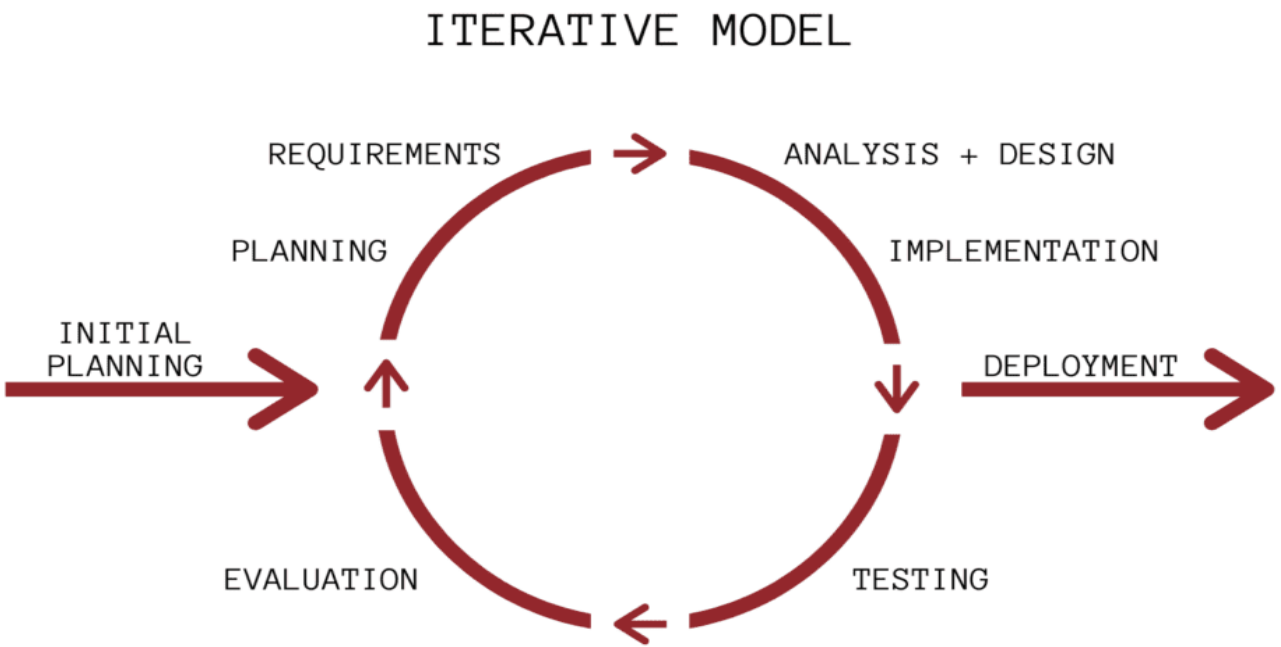
Iterative model

In the Iterative model, iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed.

Iterative model phases

- Planning phase
- Analysis and design phase
- Implementation phase
- Testing phase
- Evaluation phase

Iterative model phases



5 System Implementation and Testing

Let's start with the fifth set of slides

Implementation

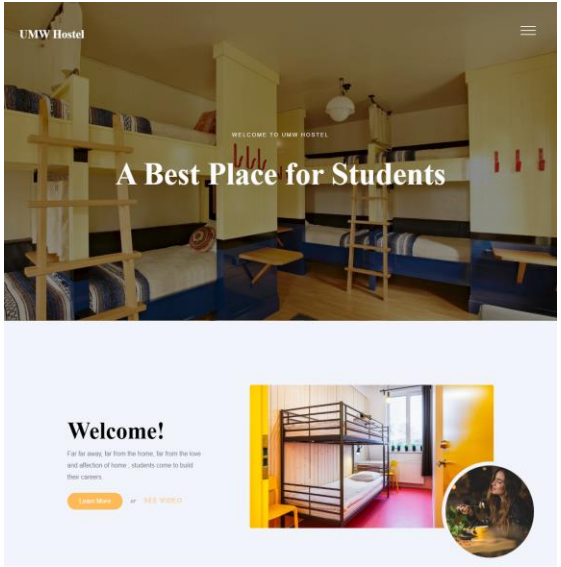
- Languages we used
  - Django for backend
  - HTML CSS JavaScript Bootstrap For Fort end
- Database
  - MySQL
- Hardware
  - 2.0 GHz Processor speed and 2Gb RAM or 4GB RAM

Django

Why we use the Django framework?

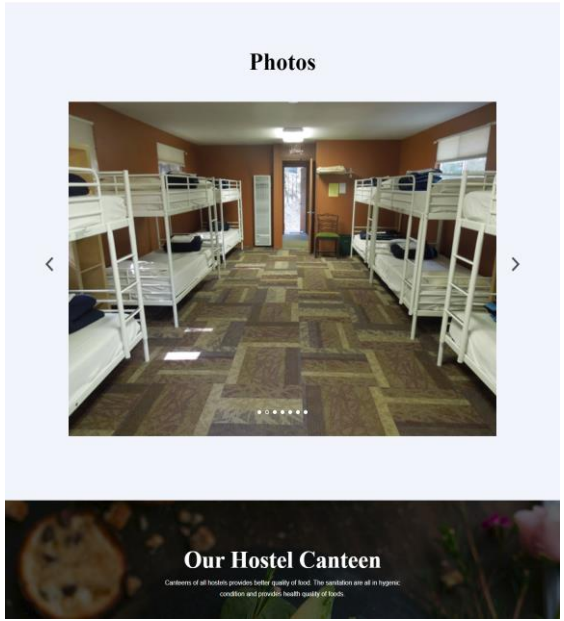
- It is fast and simple
- It is secure
- It is well established
- Django Rest Framework

Home Page

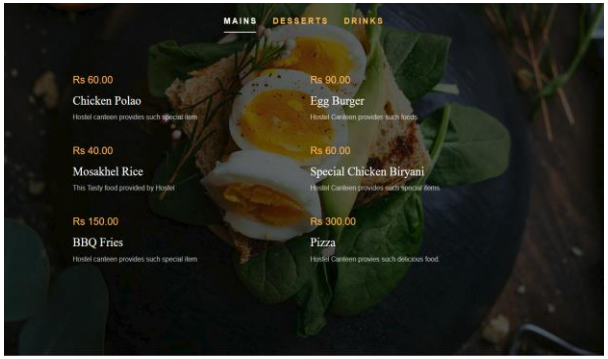

UMW Hostel
WELCOME TO UMW HOSTEL
A Best Place for Students
Welcome!
Hostels

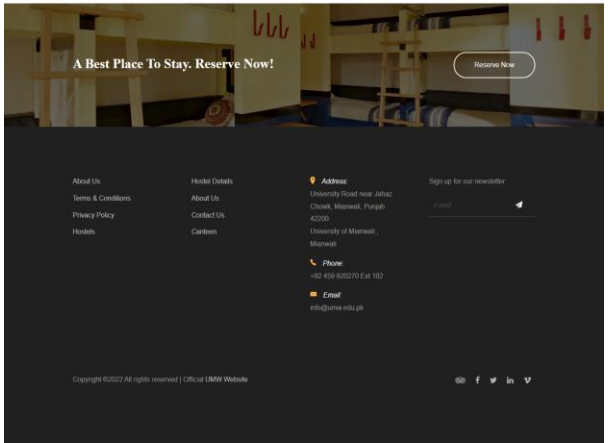
Home Page

Boys Hostel
Staff Hostel
Girls Hostel


Photos
Our Hostel Canteen
Canteens of all hostels provides better quality of food. The sanitation are all in hygenic condition and provides health quality of foods

Home Page


MAINS
DESSERTS
DRINKS
Rs 60.00
Chicken Polao
Hostel canteen provides such special item
Rs 90.00
Egg Burger
Hostel Canteen provides such foods
Rs 40.00
Mosakhel Rice
This Tasty food provided by Hostel
Rs 60.00
Special Chicken Biryani
Hostel Canteen provides such special items
Rs 150.00
BBQ Fries
Hostel canteen provides such special item
Rs 300.00
Pizza
Hostel Canteen provies such delicious food


A Best Place To Stay. Reserve Now!
Reserve Now
About Us
Terms & Conditions
Privacy Policy
Hostels
Hostel Details
About Us
Contact Us
Canteen
Address:
University Road near Jalsaz Chowk, Mianwali, Punjab 42200
University of Mianwali , Mianwali
Phone:
+92 459 920270 Ext 102
Email:
info@umw.edu.pk
Sign up for our newsletter
Email
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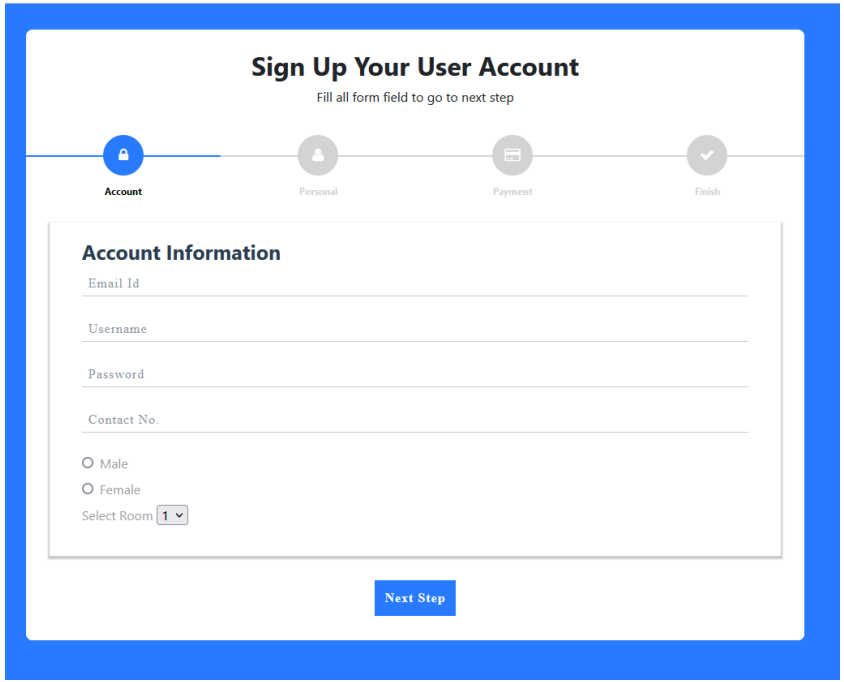
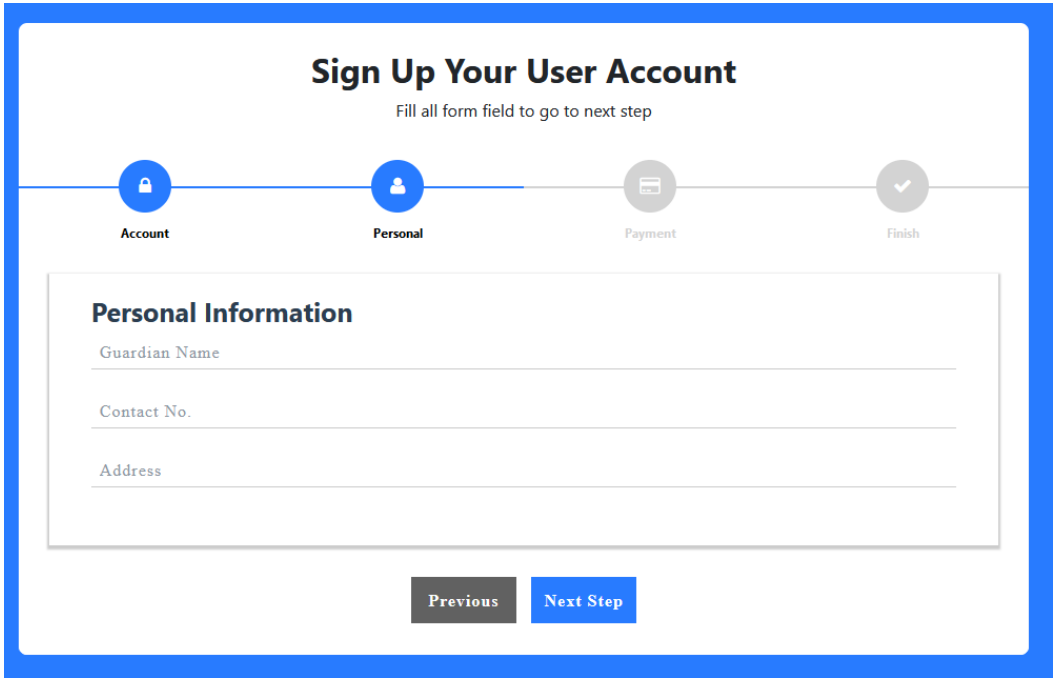
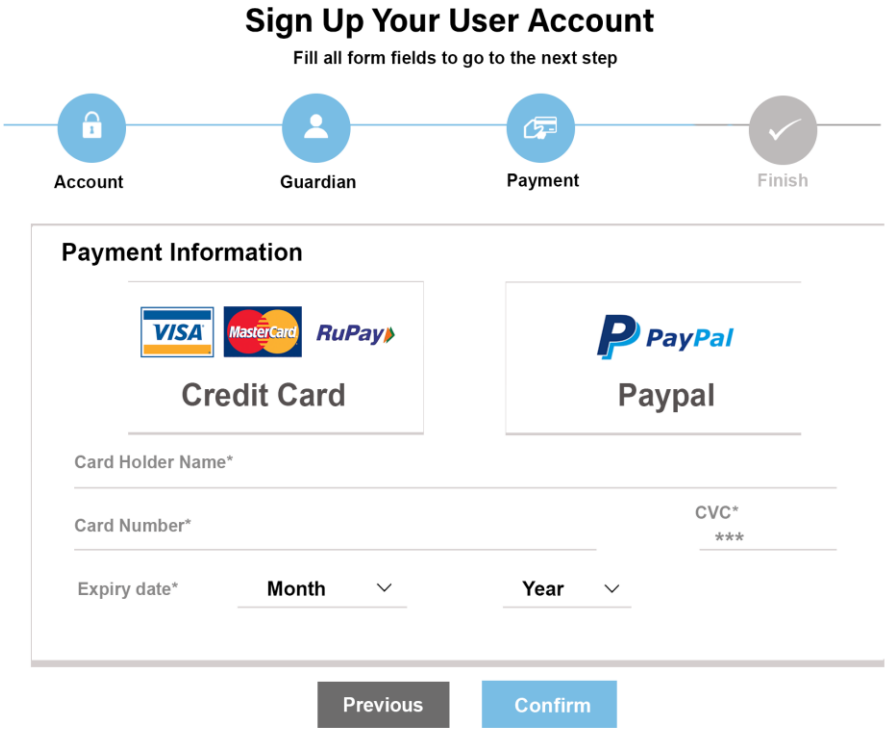
Signup Page


Sign Up Your User Account
Fill all form field to go to next step
Account
Personal
Payment
Finish
Account Information
Email Id
Username
Password
Contact No.
Male
Female
Select Room
1
Next Step

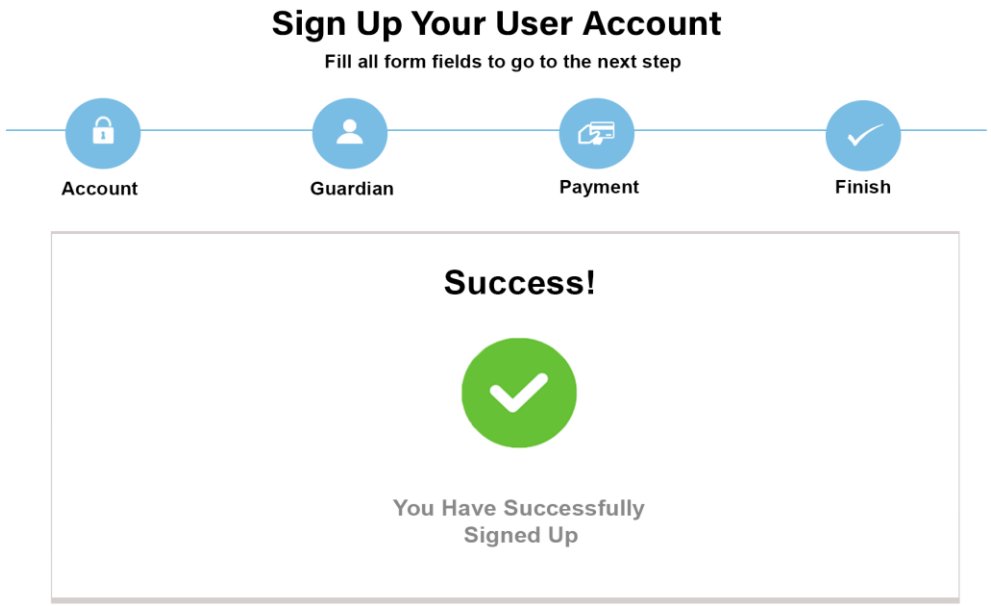
Signup Page


Sign Up Your User Account
Fill all form field to go to next step
Account
Personal
Payment
Finish
Personal Information
Guardian Name
Contact No.
Address
Previous
Next Step

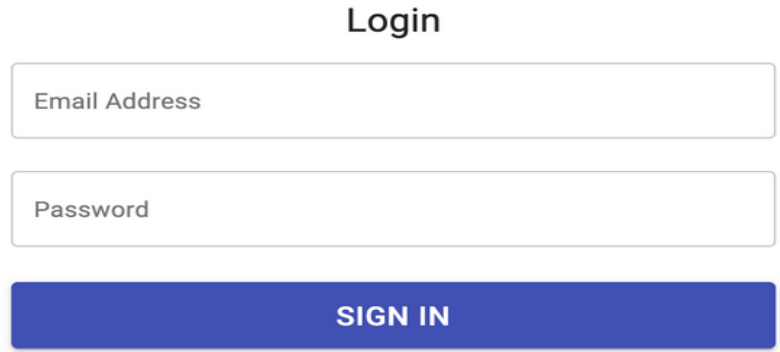
Signup Page


Sign Up Your User Account
Fill all form fields to go to the next step
Account
Guardian
Payment
Finish
Payment Information
Credit Card
Paypal
Card Holder Name*
Card Number*
CVC*
***
Expiry date*
Month
Year
Previous
Confirm

Signup Page


Sign Up Your User Account
Fill all form fields to go to the next step
Account
Guardian
Payment
Finish
Success!
You Have Successfully
Signed Up

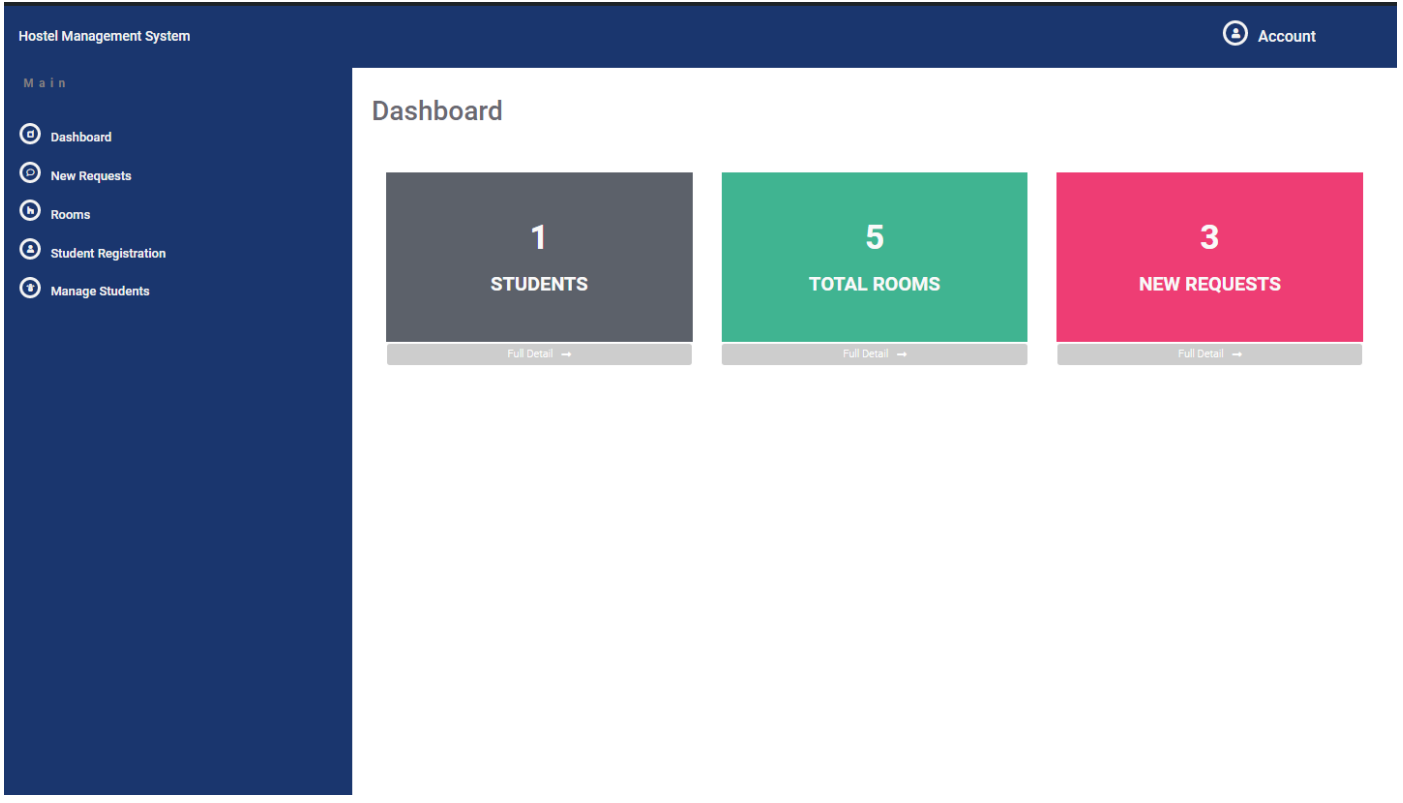
Login Page



Admin Dashboard

- He can change the room of student on Request
- He can Assign someone on maintenance task
- He can take action against complain
- He can manually submit Fee of the student
- He can view the List of All the student
- He can update Room Available
- He can generate report of total revenue

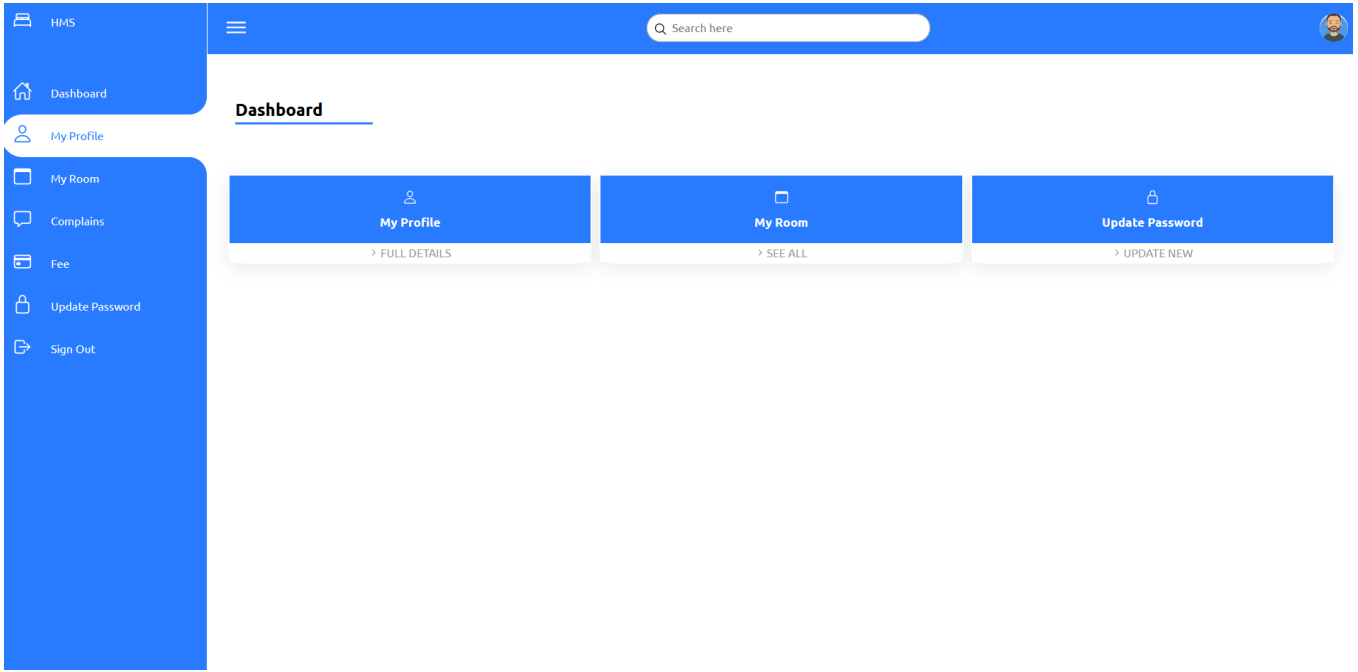
Admin Dashboard



Student Dashboard

- Can Request of Room change
- Complain illegal activity
- Request Maintenance
- Pay Online
- Pay in Installments
- Put notice in Lost And Found section

Student Dashboard



Feasibility Study

Economic Feasibility:

Our project is very economic friendly the costly of our project is very minimum it only requires development cost after that there will be only maintenance cost and hosting cost.

Feasibility Study

Operational Feasibility:

The Project has been developed in such a way that it become very easy even for a person with very little knowledge. It is very User Friendly

Testing Introduction

Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not.

In simple words, testing is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

Purpose of Testing

- To identifying defects in the application.
- The most important role of testing is simply to provide information.
- To check the proper working of the application while inserting updating and deleting the entry of the data.

Testing Methods

- Unit Testing
  - We Have tested our application each function separately to make sure all the functional requirements are working.
- White Box Testing
  - We have tested our application logic through varies test cases to make sure it only take correct input. Incorrect input will not be taken

Testing Methods

- Black Box Testing
  - sets of input techniques that fully exercise all functional requirements for a program.
  - black box testing tests the input data is correct and whether we are getting the desired output.
- Alpha Testing
  - Acceptance testing is also sometimes called alpha testing. We have tested our application that it meets all the functional requirements and it is according to user requirements.

Testing Methods

- Beta Testing
  - a system is delivered among a number of potential users who agree to use it.
  - The customers then report problems to the developers. This provides the product for real use and detects errors

Testing Methods

- Validation Testing
  - Validation testing was performed to ensure that all the functional and performance requirements are met.
- System Testing
  - It is executing programs to check logical changes made in it with intention of finding errors. a system is tested for online response, volume of transaction, recovery from failure etc.
  - System testing is done to ensure that the system satisfies all the user requirements.

6 conclusion

Let’s start with the sixth set of slides

Conclusion

- This Project Offer User to enter data through simple and interactive manner
- User is provided to pay fee in installments
- Data storage and retrieval will become feaster and easier to maintain