



GOVERNMENT POLYTECHNIC, NANDED

Information Technology Department

Academic year: 2023-24

Microproject on

Application For Hostel Admission Process

Program Name: Information Technology

Program Code: IF5I

Course Name: CPP

Course Code: 22058

Name of Students

Guided By

1.Namrata Paralkar

Prof. S. H.Bhokare

2.Pragati Lale



MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Mr./Ms. **PARALKAR NAMRATA BALAJI**, **LALE PRAGATI BHAUSAHEB** Roll No. **1525,1522** of 5th Semester of Diploma in **Information technology** of Institute, GOVERNMENT POLYTECHNIC, NANDED (0020) has completed the **Micro Project satisfactorily** in Subject-**CAPSTONE PROJECT - PLANNING** for the academic year 2023-24 as prescribed in the curriculum.

Place : Nanded

Date :

Exam Seat No.: 358140, 358148

Subject Teacher Head of the Department Principal

Prof. S.H.Bhokare Prof.S.N.Dhole Dr.N.L.Janrao

ANEEXURE 1

Evaluation Sheet for the Micro Project

Academic Year: 2023-24 Name of the Faculty: Prof. S.H.Bhokare

Course: CPP Course Code: 22058 Semester: V

Title of the Project: - <u>APPLICATION FOR HOSTEL ADMISSION PROCESS</u>

Cos address by Micro Project:

A: Assess the impact of the project on society.

B: Select ,collect and user required information /Knowledge to solve the problem the task.

Comment /suggestions about team work/leadership/inter-personal communication (if any)

Roll No.	Student Name	Marks out of 6 for performance in group activity (D5 Col.8)	Marks out of 4 for performance in oral/presentation (D5 Col.9)	Total out of 10
1525	PARALKAR NAMRATA BALAJI			
1522	PRAGATI BHAUSAHEB LALE			

(Signature of Faculty)

WEEKLY PROGRESS REPORT

TITLE OF THE MICRO PROJECT:-

" APPLICATION FOR HOSTEL ADMISSION PROCESS "

WEEK	ACTIVITY PERFORMED	DATE	SIGN OF GUIDE
1 st	Discussion and finalization of Topic		
2 ND	Discussion and finalization of Topic		
3 RD	Preparation and submission of Abstract		
4 TH	Literature Review		
5 TH	Collection of Data		
6 TH	Collection of Data		
7 TH	Collection of Data		
8 TH	Collection of Data		
9 TH	Discussion and Outline of Content		
10 TH	Formulation of Content		
11 TH	Editing and 1st proof Reading of Content		
12 TH	Editing and 2 nd proof Reading of Content		
13 TH	Compilation of Report and Presentation		
14 TH	Seminar		
15 TH	Viva-voce		
16 TH	Final submission of Micro project		

Sign of the Students

Sign of the Faculty

1525 -

1522 -

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Chapter I: Introduction

Title - Modernizing Hostel Admissions:A Comprehensive Digital Application Project

Abstract

The "Streamlining Hostel Admission Process" is a comprehensive digital application project aimed at revolutionizing the traditional hostel admission process. In an era of digital transformation, this project seeks to enhance efficiency, accessibility, and user experience for both hostel administrators and applicants. By developing a user-friendly web-based application, this project enables prospective students to submit hostel admission applications seamlessly and provides administrators with a centralized platform for efficient management and processing. This abstract provides a glimpse into the project's key objectives, features, and anticipated outcomes, highlighting its potential to modernize and optimize the hostel admission process in educational institutions.

Keywords: Hostel Admission, Digital Application, Efficiency, Transparency, User Experience

1. Introduction

The "Modernizing Hostel Admissions" project represents a pioneering endeavor to revolutionize the hostel admission process within educational institutions. The surge in demand for quality accommodation coupled with the advent of technological advancements necessitates a comprehensive overhaul of the traditional and often cumbersome manual admissions system. This digital application project is envisioned to transform the way hostel admissions are managed and experienced, with a focus on enhancing efficiency, transparency, and the overall user experience for both applicants and administrators.

2. Background

Traditional hostel admission processes have predominantly relied on paper-based applications, creating a significant burden for both students and administrative staff. Manual processing is not only time-consuming but also prone to errors and document misplacement. As the higher education sector continues to grow and diversify, the need for a more streamlined and tech-savvy approach becomes increasingly evident. The "Modernizing Hostel Admissions" project takes inspiration from these challenges and aims to leverage technology to create a secure, user-friendly, and efficient system.

3. Objectives

The core objectives of this project are as follows:

3.1. Digital Application Platform

Develop a robust web-based application platform that enables students to complete and submit hostel admission applications online, eliminating the need for physical paperwork.

3.2. Streamlined Application Review

Implement an automated system for reviewing applications. This automation not only speeds up the application review process but also ensures fairness and transparency in decision-making.

3.3. Real-time Communication

Enable real-time communication between applicants and hostel administrators through the digital platform. This facilitates quick query resolution and updates on the admission process.

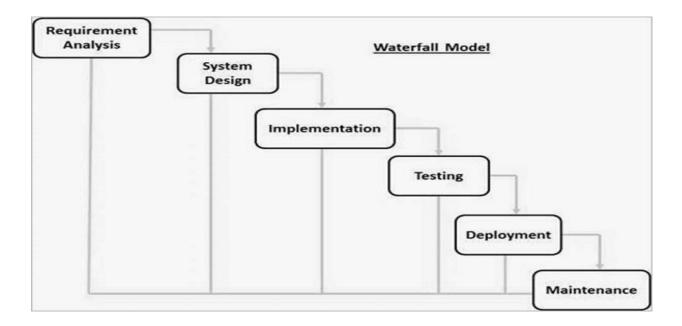
3.4. Centralized Data Management

Create a centralized database that securely stores all relevant applicant information, offering authorized personnel easy access while ensuring data integrity.

3.5. Enhanced Security

Implement stringent security measures to safeguard applicant data and protect the system's integrity against threats.

3.6 Methodology Development Model



The sequential phases in Waterfall model are -

Requirement Gathering and analysis – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

- **System Design** The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- Implementation With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next

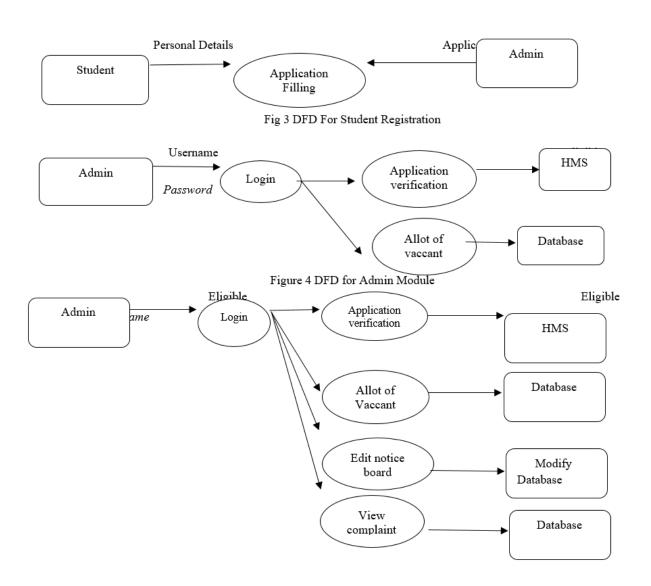
- phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- **Integration and Testing** All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment of system** Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- **Maintenance** There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

Logical Database

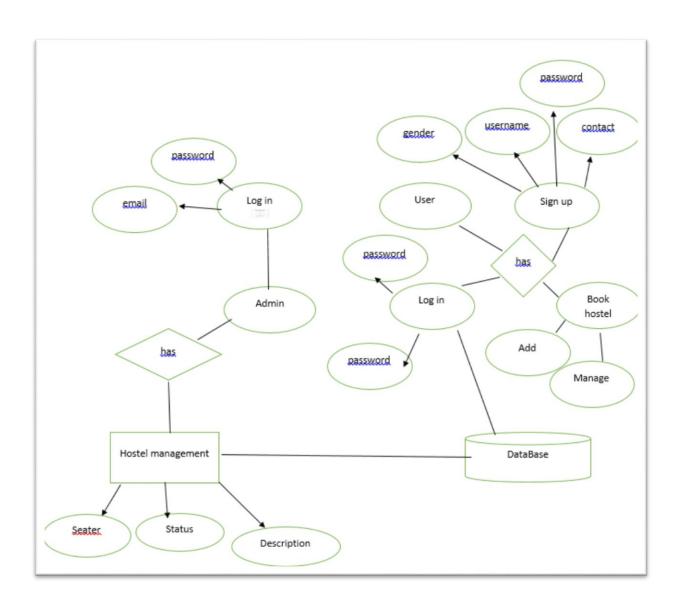
Sno.	Entity	Attribute	
1	Admin	• Id	
		 Password 	
2	Room	Room id	
		• Name	
		• Bed	
		• Status	
		 Description 	
3	Student	• Student Id	
		 Student Name 	
		 Parents Name 	
		 Parents Contact 	
		 Department 	
		• year	
		• Room	
		 Percentage 	
4	User	• User Id	
		User password	

4.Data Design

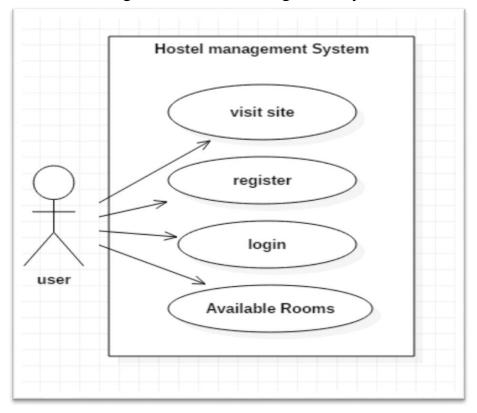
- **4.1 Data Model:** A database model is a type of data model that determines the logical structure of a database and fundamentally determines in which manner data can be stored, organized and manipulated.
- Data flow Diagram for Student Registration and Admin Login



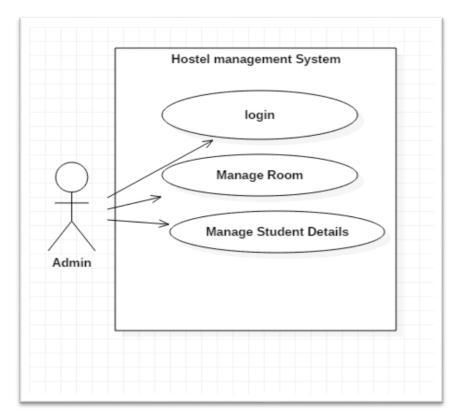
• ER Diagram



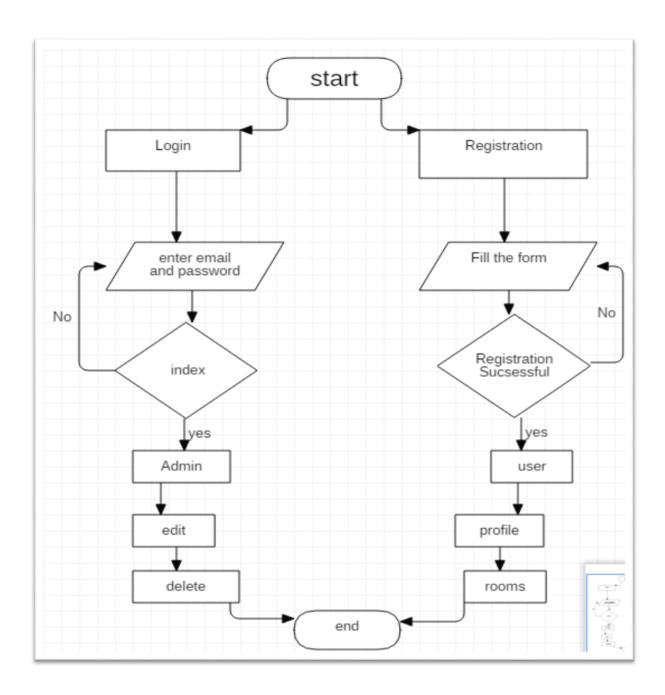
• Figure: Use case Diagram of Hostel Management System



• Figure: Use case Diagram of Hostel Management System



• Flowchart of Hostel Management System



Chapter II: Task and Activities Performed

2.1 Problems

- ➤ Data store on the Paper may be lost, Stolen or destroyed due to natural calamity.
- > Time consuming Process.
- > Chances of Human error.
- Lack of Security.
- ➤ Difficult to maintain or update records all the records
- Updating Process

2.2 Features

The "Modernizing Hostel Admissions" project will include a range of innovative features:

• User-Friendly Interface

The digital application platform will boast an intuitive and user-friendly interface, ensuring a seamless navigation experience for applicants.

Document Upload

Applicants will have the ability to securely upload required documents directly to the system, eliminating the risks associated with physical document submission and loss.

• Application Tracking

Applicants will be able to track the status of their applications in realtime, providing them with transparency and peace of mind throughout the admission process.

• Automated Review

The system will employ automated algorithms to assess applications against predefined criteria, thereby ensuring fair and efficient processing. This feature minimizes human bias and error.

• Administrator Dashboard

Hostel administrators will have access to a dedicated dashboard within the system. This dashboard will enable administrators to manage and review applications, communicate with applicants, and make informed admission decisions.

Notifications

Automated notifications will be sent to applicants to provide updates on the status of their applications and communicate any additional requirements, further enhancing transparency and communication.

• Secure Data Storage

Applicant data will be securely stored with regular backups and stringent security measures in place to protect sensitive information from unauthorized access and potential data breaches.

2.3 Improvement

- ➤ Provide Quick response.
- > Avail Information When ever needed.
- ➤ Highly Security.
- Easy to handle, Update and keep record.
- > Backup data are easily generated.

3. Expected Outcomes

The "Modernizing Hostel Admissions" project anticipates several significant outcomes:

3.1. Efficiency

The digital application system is expected to dramatically reduce the time and resources required for the management of hostel admissions. Automated processes will expedite application review and decision-making, allowing administrators to focus on more strategic tasks.

3.2. Transparency

Both applicants and administrators will benefit from increased transparency in the admission process. Applicants can track their application status in real-time, reducing uncertainty and anxiety. Administrators can access application data more efficiently, facilitating their decision-making process.

3.3. Accessibility

The online platform's accessibility will transcend geographical barriers, allowing applicants from various locations to submit their hostel admission applications. This feature simplifies the application process for international students and diversifies the pool of potential hostel residents.

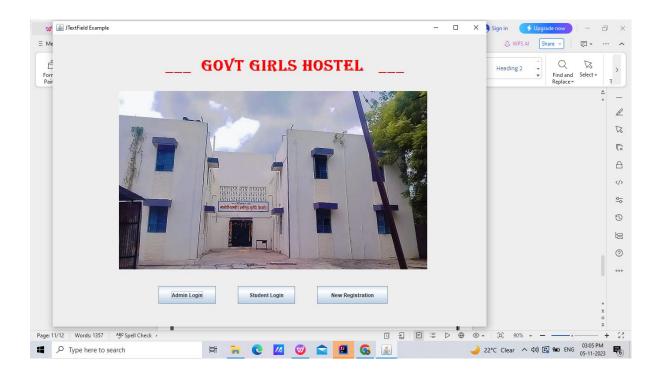
3.4. Data Security

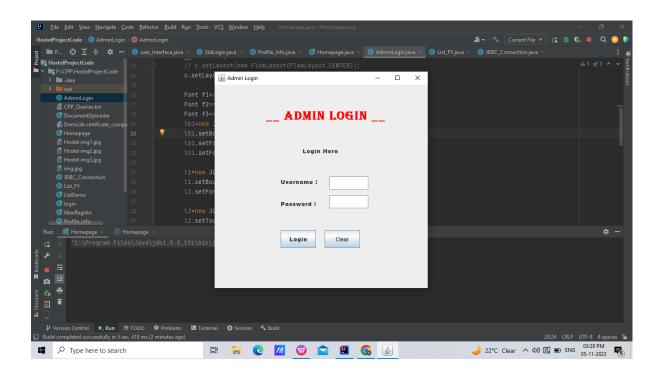
Stringent security measures will be in place to protect applicant data, ensuring the privacy and integrity of sensitive information. This not only complies with data protection regulations but also instills confidence in applicants regarding the safety of their personal data.

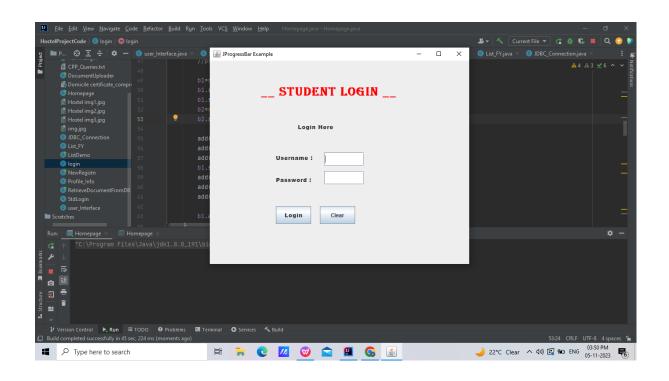
3.5. Improved User Experience

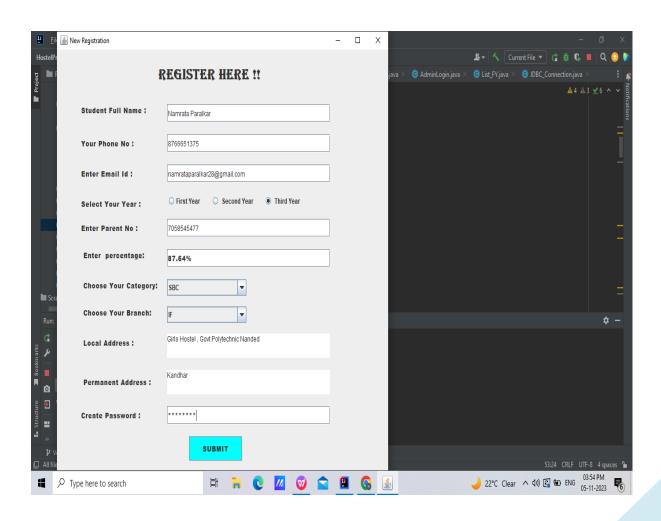
Ultimately, this project aims to enhance the overall experience for applicants. By making the admission process smoother, more convenient, and transparent.

Expected Output









Chapter III: Discussion and Conclusion

31. Conclusion

The "Modernizing Hostel Admissions" project represents a significant step forward in embracing technology to optimize the hostel admission process in educational institutions. By creating an efficient, transparent, and secure digital application platform, this project will not only streamline administrative tasks but also provide a more user-friendly experience for hostel applicants. The anticipated outcomes of this project are poised to benefit both students and administrators, marking a substantial advancement in hostel admission processes across educational institutions.

In a world increasingly reliant on digital technology, this project showcases the potential of technology to enhance and modernize essential administrative processes, ensuring that hostel admissions are a seamless and equitable experience for all stakeholders. The digital transformation brought about by this project is expected to set a new standard for hostel admissions, ultimately benefiting educational institutions and their student communities alike.

> REFERENCES

https://www.tutorialspoint.com/ https://www.geeksforgeeks.org/

> RESOURCES USED

- Laptop
- Mobile
- Internet