

PROJECT REPORT

ON

Student Portal

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR SEMESTER V OF

T.E. (Information Technology)

 $SUBMITTED\ BY$

Goutam Chandnani (8)

Himanshu Menghani (37)

Bhavishka Mulchandani (40)

Roshni Talreja (66)

UNDER THE GUIDANCE OF

PROF. Pooja Shetty

DEPARTMENT OF INFORMATION TECHNOLOGY V.E.S. INSTITUTE OF TECHNOLOGY 2023-24

Certificate

This is to certify that project entitled

"Student Portal"

Group Members Names

Mr. Goutam Chandnani (8)

Mr. Himanshu Menghani (37)

Miss. Bhavishka Mulchandani(40)

Miss. Roshni Talreja (66)

In partial fulfillment of the degree of TE. (Sem V) in Information Technology for the Project is approved.

Prof.Pooja Shetty

External Examiner

Dr.(Mrs.)Shalu Chopra H.O.D Dr.(Mrs.)J.M.Nair Principal

Place: VESIT, Chembur

Declaration

We declare that this written submission represents Our ideas in our own words and where others' ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

(Signatures)

Name of the Students Goutam Chandnani (8) Himanshu Menghani (37)

Bhavishka Mulchandani (40)

Roshni Talreja (66)

ACKNOWLEDGEMENT

The project report on "Student Portal" is the outcome of the guidance, moral support and devotion bestowed on our group throughout our work. For this, we acknowledge and express our profound sense of gratitude to everybody who has been the source of inspiration throughout the project preparation. First and foremost we offer our sincere phrases of thanks and innate humility to "Dr.(Mrs.)Shalu Chopra (HOD)", and "Pooja Shetty (Professor)" for providing the valuable inputs and the consistent guidance and support provided by them. We can say in words that we must at the outset tender our intimacy for receipt of affectionate care to Vivekanand Education Society's Institute of Technology for providing such a stimulating atmosphere and conducive work environment.

Contents

1	\mathbf{Intr}	oduction	1
	1.1	Introduction	1
	1.2	3	1
	1.3	Motivation for the work	2
	1.4		2
	1.5	Organization of the report	2
2	$\operatorname{Lit}\epsilon$	rature Survey	3
	2.1	Introduction	3
	2.2	Problem Definition	3
3	Des	ign Implementation	5
	3.1	1 /	5
	3.2		5
	3.3	Hardware Requirement	5
	3.4	Software Requirement	6
	3.5	UML Diagrams	6
		0	6
		9	7
		3.5.3 Activity Diagram	8
		3.5.4 Sequence Diagram	9
		3.5.5 ER Diagram	0
		3.5.6 Flow Chart Diagram	1
		3.5.7 Gantt Chart	2
		3.5.8 Timeline Chart	2
4	Res	ults and Discussion 1	
	4.1	Code	3
	4.2	Screen Shots	5
5	Cor	clusion 1	7
	5.1	Summary	7
	5.2	Future Scope	7

Abstract

A student portal is a web-based platform designed to provide students with access to a range of educational resources and services. The main purpose of a student portal is to facilitate communication between students and their teachers, as well as provide students with a centralized location to access important resources related to their academics. This can help to increase student engagement and promote a more collaborative learning environment.

Student portals can also offer a range of benefits to educational institutions, including increased efficiency in administrative tasks, and improved communication with students regarding sharing of their achievement-based resources. Additionally, a well-designed student portal can help to attract and retain students by providing a high-quality resource management experience that is both convenient and accessible.

Therefore use of student portals has become increasingly widespread in recent years, as educational institutions seek to leverage technology to enhance the learning experience and provide students with the tools they need to succeed in their studies.

Keywords-Web-based platform, Academic resources, Discussion forums, Online resources, Collaboration, Learning environment, Administrative tasks, Communication, C.V. generation, Student progress.

Introduction

1.1 Introduction

With the increasing use of technology in education, student portals have become a popular way for educational institutions to provide students with convenient access to a range of resources and services. A student portal is a platform that allows students to upload their achievements and generate an automated C.V. out of it while faculty can access those uploaded achievements and use them for record purposes.

Student portals have many benefits, both for students and educational institutions. For students, they provide a location for uploading and accessing information and academic achievement-based resources, making it easier to stay organized and engaged with their records. They also offer opportunities for automated information-based C.V. generation where the student gets a custom-made out of their information and uploaded achievements.

For educational institutions, student portals can help to streamline administrative academic record-based tasks and improve record maintenance with students. They can also provide valuable data on student progress and performance, which can be used to identify areas where additional support or resources may be needed.

1.2 Aim and Objectives

The main purpose of a student portal is to provide students with a centralized location to access various educational resources. These portals are designed to make it easier for students to manage their resources with their Faculties.

Some of the key functions of student portals include:

- 1. Achievement management: Student portals allow Faculties to view students' uploaded achievements, access them with features like view and print achievement, and get a C.V. generated out of it.
- 2. Automated C.V. generation: Student portals provide access to a custom-made C.V. which also acts as a summary of a student's academic achievements, his/her details all in the form of a C.V.

1.3 Motivation for the work

The real motivation behind the Student Portal Project is to develop a user-friendly platform that facilitates seamless achievement management and access to academic achievement-based resources for students like certificates for Hackathons, Tech events, courses completed, etc. The portal will provide features such as user registration, reset password, achievement section and automatic C.V. generation. It would help show all students' data in a well-structured and user-friendly manner.

1.4 Scope of Project

The development of our college's specialized Student Portal is tailored precisely to the unique needs of our institution. This system excels in consolidating and managing student data with a user-friendly interface, enabling faculty and administrative staff to efficiently handle customized data fields and attributes. In addition to data security measures, the system's standout feature is its ability to generate personalized curriculum vitae (CVs), allowing students to create professional CVs based on their academic achievements. The system also supports multiple customizable CV templates tailored to our college's specific requirements. Compliance makes this system an invaluable asset for our college's data management and student engagement.

1.5 Organization of the report

The project report for the student portal with automated C.V. generation and academic record management is structured as follows: It begins with an introduction highlighting the increasing role of technology in education and the significance of student portals.

The process of requirement gathering and user interface design is explained. The key functionalities, such as automated C.V. generation and academic record management, are presented with an emphasis on their benefits for students and educational institutions. It addresses potential challenges and concludes by underlining the advantages of the portal for enhancing record management and student engagement, with an eye toward future enhancements.

The report discusses the necessity for a portal and its core features, addressing challenges. The technical aspects, including system architecture and data management, are detailed.

Literature Survey

2.1 Introduction

In the realm of Achievement Management Systems for students, a comparable challenge is witnessed. In traditional systems, students were required to tediously upload their data through Google Forms, and teachers were burdened with the task of reviewing all the individual responses. One of the foremost issues in the current systems for achievement management is the heavy reliance on manual data entry. In the educational context, students are compelled to repetitively enter their data through Google Forms, consuming time and subject to errors. This manual process is fraught with the potential for inaccuracies, leading to incomplete or outdated information. This approach results in complications when tracking students' achievements across various fields, hindering the ability to provide a holistic view of a student's progress and achievements. Additionally, the increasing volume of student data and achievements generated in the digital age poses a significant challenge. The current system's infrastructure may struggle to manage this deluge of information, leading to data overload, processing delays, and difficulties in storing and managing the ever-expanding data.

2.2 Problem Definition

In the modern educational landscape, there is a pressing need for a dynamic and efficient platform that streamlines the process of storing students' academic achievement data and storing it. This problem is rooted in the complexities and time-consuming nature of collecting student achievement data, which traditionally involves uploading their achievement data several times. The challenge at hand is to develop a platform that automates this process, making it user-friendly and generating a highly customizable to cater to the diverse academic experiences and career goals of students. The problem statement can be broken down into several key components:

- 1. Data Collection and Integration: The first major challenge is to efficiently collect and integrate diverse data from students. This includes academic achievements, personal details and other relevant information. The data may be scattered across different sections in forms, making consolidation a complex task.
- 2. Customization: Students come from various academic disciplines and career paths, each requiring a distinct CV format. The system must offer a high degree of customization to allow students to create CVs tailored to their goals.

3. CV Generation: Developing a platform that translates the collected data into a professional CV format.

These challenges highlight the need for solutions in the fields of data collection and storage. The provided literature reviews aim to address some of these challenges by exploring the potential of technology, to enhance efficiency, and accessibility in data collection and consolidation initiatives.

Design Implementation

3.1 Proposed System

The proposed system for a modern student portal aims to streamline academic record management and enhance student engagement through a user-friendly platform. This system will provide students with the ability to upload and access their academic achievements, while also offering automated C.V. generation based on these accomplishments. For faculty, the portal will enable efficient record-keeping and provide valuable data for assessing student progress. The student portal represents an invaluable tool for educational institutions, offering convenience and insights to benefit both students and faculty.

3.2 Requirement Gathering and Analysis

The requirement gathering and analysis for the student portal project involves conducting and understanding the specific needs and pain points of students, faculty, and administrative staff. The gathered insights will be used to define functional and nonfunctional requirements, including features such as user registration, and automated C.V. generation capabilities. Additionally, the user interface design, scalability, and future enhancements will be addressed, ensuring that the system aligns with user expectations and regulatory compliance, while also allowing for future improvements in student engagement and academic record management.

3.3 Hardware Requirement

Monitor: Color Monitor Ram: 4 GB or More

Hard Disk: 20 GB or More

Operation System: Windows or any stable OS

3.4 Software Requirement

Search Engine: Chrome

IDE: VS Code

Connectors: SQL Connector Backend-Server: Node.js Database: MongoDb

3.5 UML Diagrams

3.5.1 Use Case Diagram

Use Case Diagram for Student portal

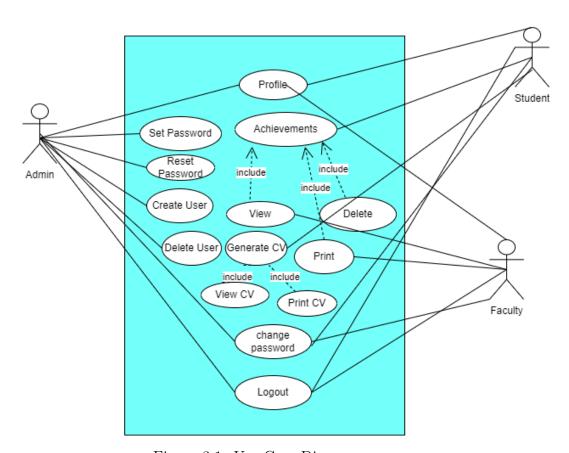


Figure 3.1: Use Case Diagram

3.5.2 Class Diagram

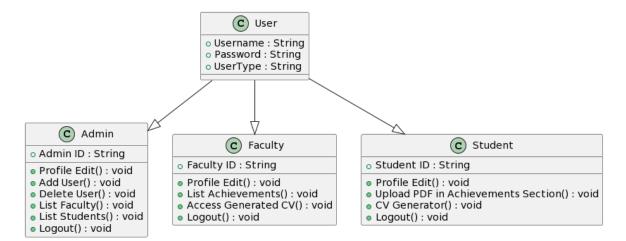


Figure 3.2: Class Diagram

3.5.3 Activity Diagram

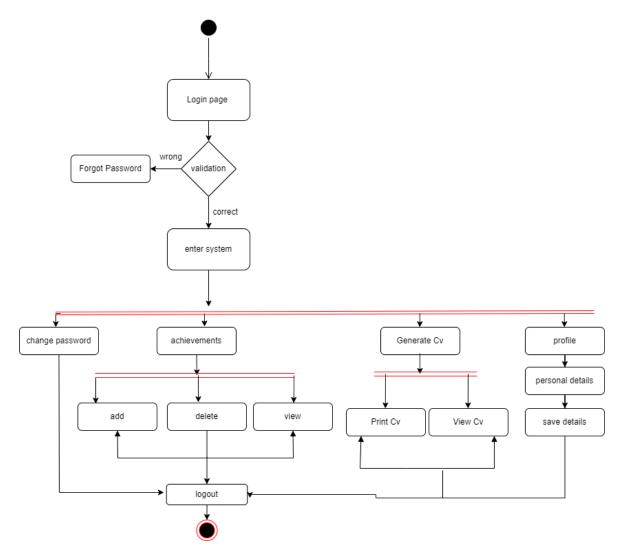


Figure 3.3: Activity Diagram

3.5.4 Sequence Diagram

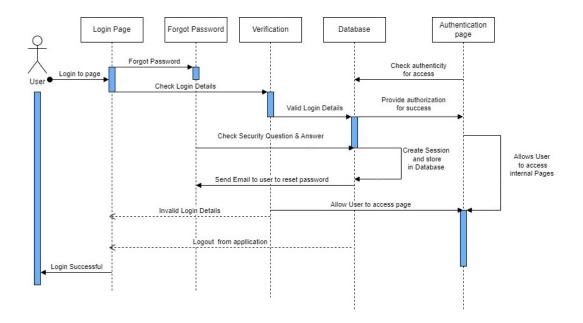


Figure 3.4: Sequence Diagram

3.5.5 ER Diagram

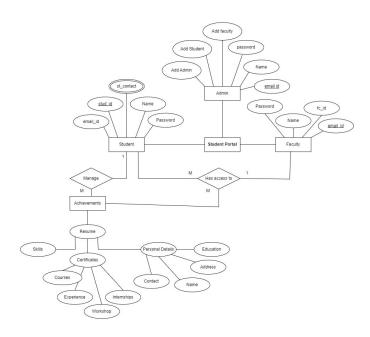


Figure 3.5: ER Diagram

3.5.6 Flow Chart Diagram

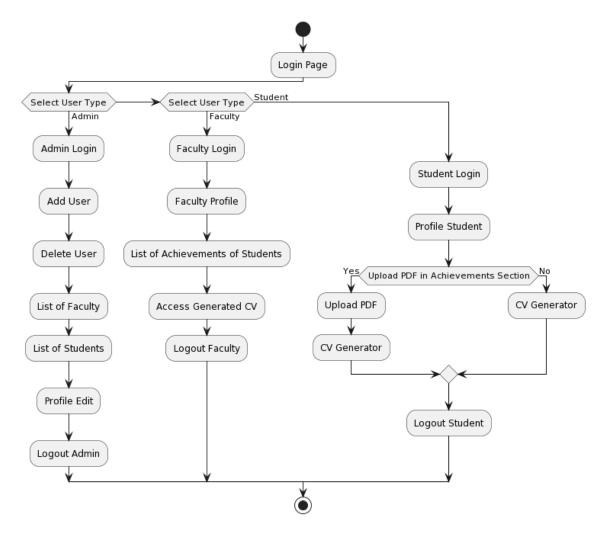


Figure 3.6: Flow Chart Diagram

3.5.7 Gantt Chart

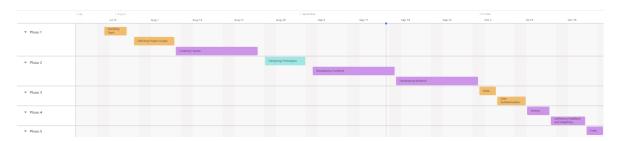


Figure 3.7: Gantt Chart

3.5.8 Timeline Chart

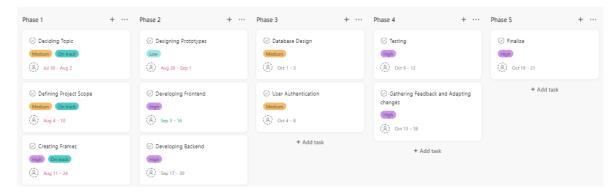


Figure 3.8: Timeline Chart

Results and Discussion

4.1 Code

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title > Faculty Home Page </title >
k rel="stylesheet" href="f.css">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs</pre>
font-awesome/5.15.3/css/all.min.css">
    \langle style \rangle
        body {
           background-image: url(home.jpg);
            background-size: cover;
            background-repeat: no-repeat;
    </style>
</head>
<body>
    <header>
        <h1>Welcome, Faculty!</h1>
    </header>
    <div style="text-align: center;">
        <div class="nav">
<img class="logo" src="logo.jpg" alt="Logo">
<a href="fhome.html"><i class="fas fa-home"></i> Home</a>
<a href="profile.html"><i class="fas fa-user-edit"></i> Profile</a>
<a href="achievement.html"><i class="fas fa-file"></i> Achievement</a>
<a href="cv.html"><i class="fas fa-book"></i><br/>br> C.V. </a>
 <a href="logout.html"><i class="fas fa-sign-out-alt"></i> Logout</a>
        </div>
    </div>
```

```
<main>
       <section class="profile-section">
           <h2>Your Profile </h2>
       </section>
       <section class="courses-section">
           <h2>Your Courses</h2>
           <a href="#">Course 1</a>
              <a href="#">Course 2</a>
           </section>
       <section class="assignments-section">
           <h2>Your Assignments</h2>
           ul>
              <li>>a href="#">Assignment 1</a> - Due Date:
              <span class="due-date">October 15</span>
              <li>>a href="#">Assignment 2</a> - Due Date:
              <span class="due-date">October 20</span>
           </section>
       <section class="achievements-section">
           <h2>Your Achievements</h2>
           <li>>a href="#">Achievement 1</a></li>
              <li>>a href="#">Achievement 2</a></li>
           </section>
   </main>
   <footer>
       © 2023 Student Portal
   </footer>
</body>
</html>
```

4.2 Screen Shots

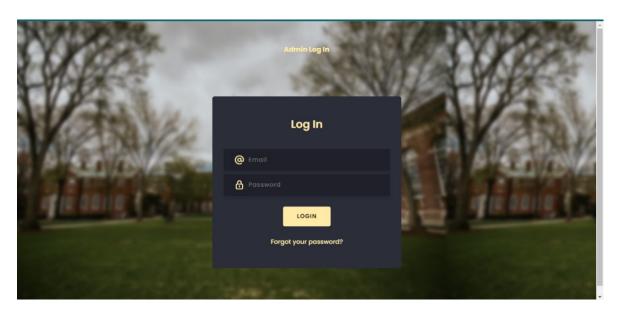


Figure 4.1: Login Page

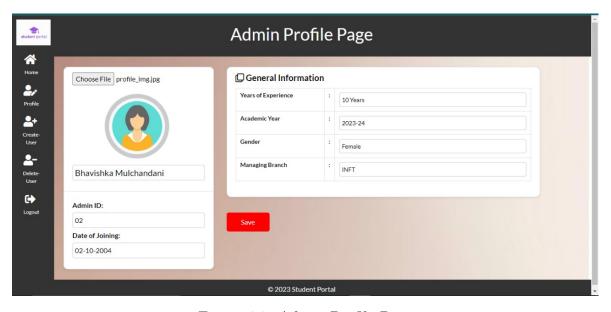


Figure 4.2: Admin Profile Page

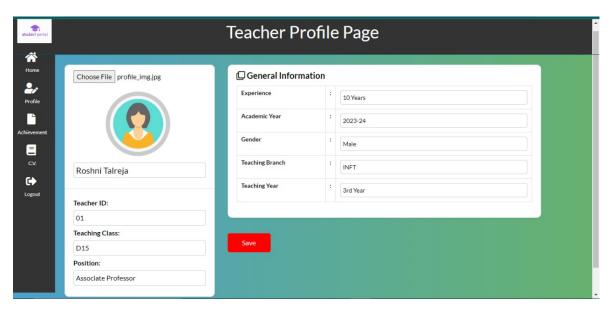


Figure 4.3: Teacher Profile Page

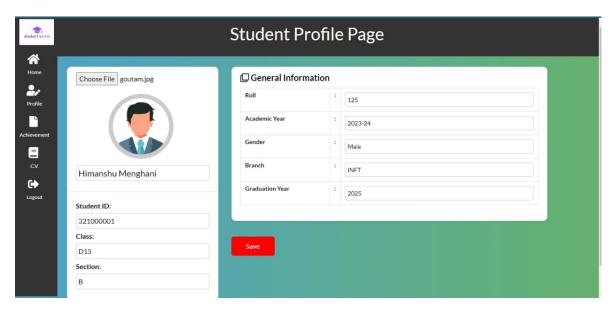


Figure 4.4: Student Profile Page

Conclusion

5.1 Summary

Our web application simplifies data collection and storage for faculty while enhancing the user experience through a user-friendly interface and intuitive stepped processes. It streamlines data management by allowing the admin to input student data into profiles and student upload achievements, eliminating the need for redundant data entry when generating CVs. This efficient approach not only minimizes the burden of manual data input but also empowers users to effortlessly create professional CVs from consolidated information, making it a valuable tool for academic institutions.

5.2 Future Scope

The portal will grant students access to a wealth of digital resources through an extensive online library. This library will include e-books, research papers, and academic journals, equipped with search and citation tools to aid in research projects. Furthermore, the student portal will facilitate continuous improvement through the collection of feedback and surveys. Students will be able to provide their insights on courses, instructors, and the overall educational experience, enabling institutions to make necessary enhancements for a better learning environment.

References

- [1] Rosmasari et al., "Usability Study of Student Academic Portal from a User's Perspective," 2018 2nd East Indonesia Conference on Computer and Information Technology (EIConCIT), Makassar, Indonesia, 2018, pp. 108-113.
- [2] Mitali D. Mahajan, Sanika S. Kaginkar, Aabhas G. Janbandhu, Prof. Pournima Kamble, "Online Resume Generator", IJARSCT Volume 2, Issue 2, April 2022
- [3] F.M. Enescu, G. Şerban and M. Jurian, "Web Platform for E-Learning," 2019 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitesti, Romania, 2019, pp. 1-6,