

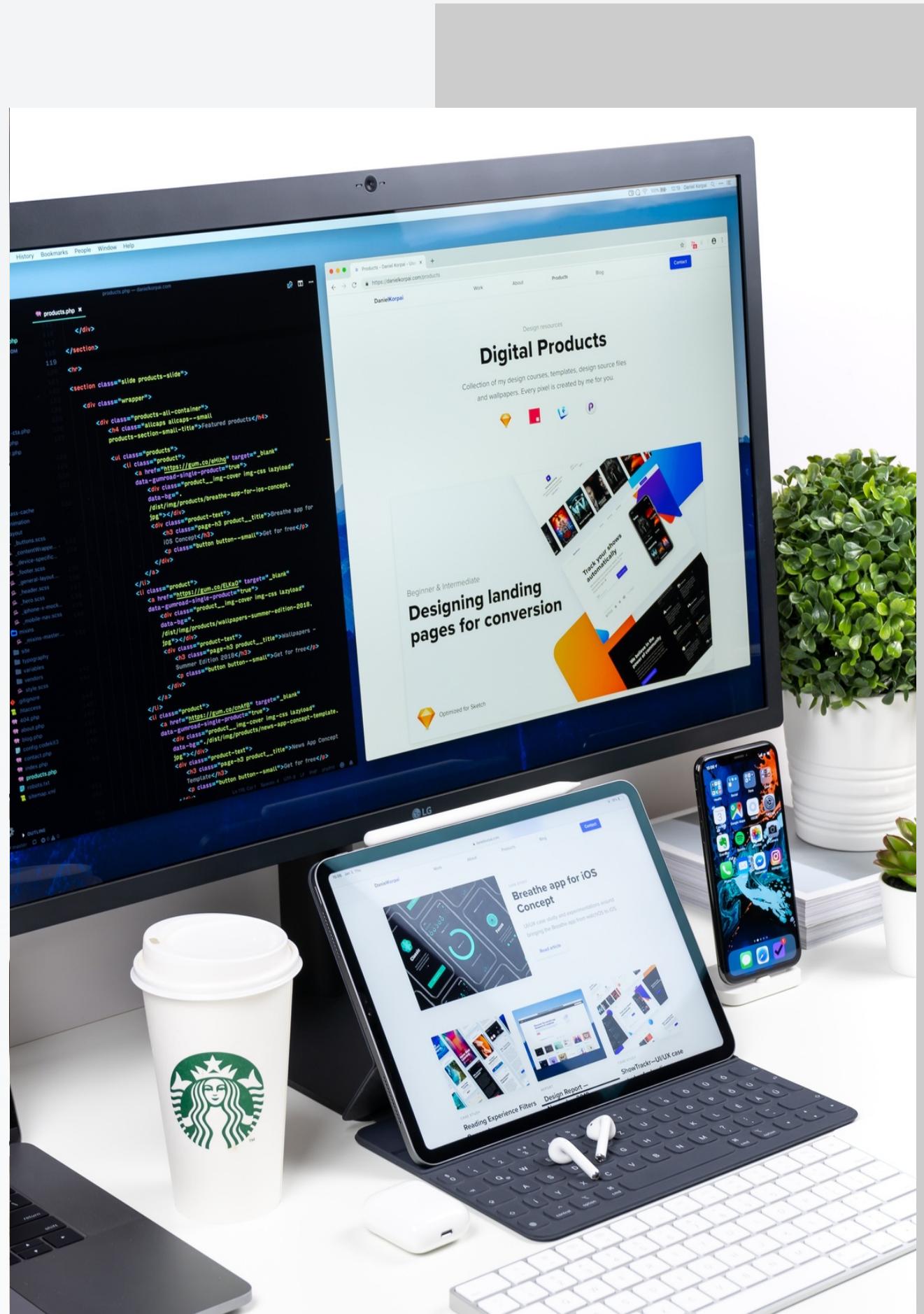
.5'

# EduConnect

# Team Members :

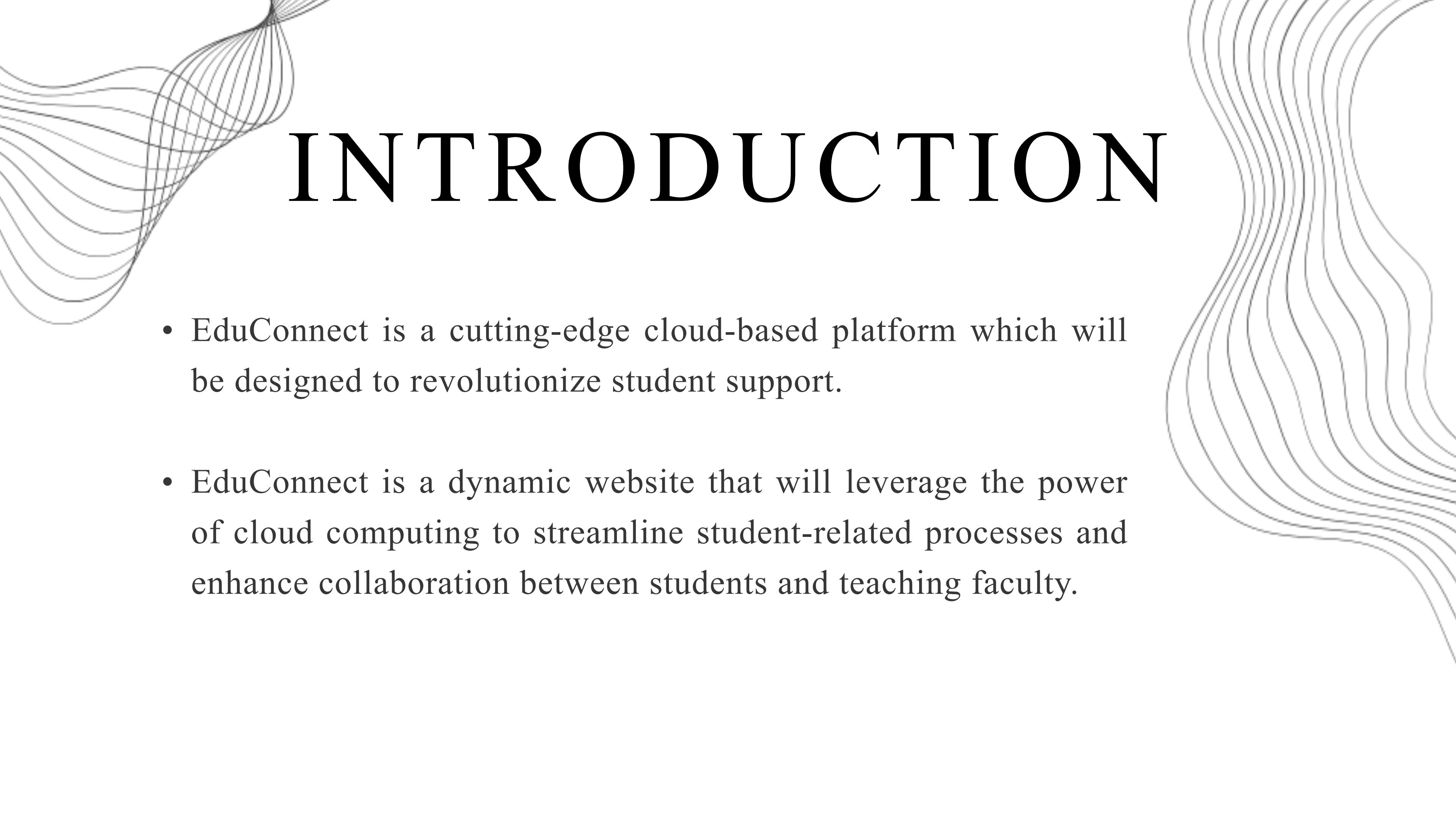
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2.Shreyash Kshirsagar	29
3.Manisha Pandey	42
4.Amarjot Singh Phull	53

Project Guide: Prof.S.M.Satre



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# INTRODUCTION

- EduConnect is a cutting-edge cloud-based platform which will be designed to revolutionize student support.
- EduConnect is a dynamic website that will leverage the power of cloud computing to streamline student-related processes and enhance collaboration between students and teaching faculty.

# ABSTRACT



- The "EduConnect" project introduces an innovative cloud-based student support system designed to reshape the college landscape.
- This Project will revolutionalize the current system to a certain level which will prove to be beneficial for both the Students' and Teachers' Work Environment.

- This dynamic platform will offer real-time monitoring of student reports and facilitates effortless enrollment in a wide array of activities, eliminating traditional manual processes.
- This dynamic platform not only revolutionizes student engagement but also streamlines administrative processes.



# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
1	Fernando Schramm, Vanessa B. Schramm, Emerson S. Aguiar	A web-based procedure for student assistance program selection	The project aims to develop a structured procedure to help Brazilian universities select students for a social assistance grant. The goal is to ensure fair selection by prioritizing candidates with the best overall evaluation across various criteria.	1.Simplicity and Ease of Implementation 2.Reduced Workload 3.Fairness and Objectivity	1.Initial Data Collection 2. Validation and Adaptation 3.Limited to Structured Data	The study outlines a well-structured procedure designed to aid Brazilian universities in selecting students for social assistance grants. Future work aims to refine the procedure further for upcoming selection processes within the collaborating social service department.

# LITERATURE REVIEW

Sr. No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
2	J. Todorov, S. Stoyanov, V. Valkanov, B. Daskalov, I. Popchev	Learning Intelligent System for Student Assistance (LISSA)	LISSA aims to enhance the learning process by offering each student an individual assistant that monitors their academic progress and tasks. This assistant is part of a larger framework known as the Virtual Education Space, which includes various autonomous components such as a student portal.	1. Personalized Learning Support 2. Adaptive Assistance 3. Efficient Time Management	1. Privacy Concerns 2. Limited Domain 3. Technical Challenges	The utilization of intelligent agents in the learning process offers significant advantages by enabling personalized monitoring of students' habits. The flexibility and benefits offered by systems like LISSA signify their potential to become indispensable tools in educational institutions

# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
3	Bo Gao*, Tiezhong Liu	Educational Management Services of College Students based on the System Dynamics	The project creates a simulation model to analyze how investments in student management services affect their development. Results guide strategies for improving these services.	<ul style="list-style-type: none"> <li>1.Comprehensive Approach</li> <li>2.Validation</li> <li>3.Quantitative Analysis</li> </ul>	<ul style="list-style-type: none"> <li>1.Data Limitations</li> <li>2.Limited Scope</li> <li>3.Dynamic Nature</li> </ul>	This study highlights the importance of student-oriented educational management. The proposed simulation model and strategies can guide improvements in services to better support students' development.

# LITERATURE REVIEW

Sr. No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
4	Akram Abu-aisheh, Lynroy Grant, Alan Hadad, and Narendra Sumukadas	Fostering Engineering Students Engagement Using Problem-Based Learning	The study aims to enhance student engagement by improving time-on-task, emotional investment, collaboration, and assignment quality. The overarching goal is to create a seamless learning environment connecting formal classes with informal learning and workplace engagement.	1.Improved Time-on-Task 2. Enhanced Engagement 3. Improved Collaboration	1.Complex Implementation 2. Resource Intensive 3. Time-Consuming	In the face of rapid social change, fostering real-world engagement among engineering students is challenging. The Study highlights the effective implementation of two learning strategies to enhance engineering student engagement amid rapid social changes.

# LITERATURE REVIEW

Sr. No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
5	Chen-Chung Liu, Baw-Jhiune Liu, Tzu-An Hui, *Jomg-Tzong Homg	Web Based Peer Assessment Using Knowledge Acquisition Techniques.	The study aims to enhance web-based peer assessment systems by facilitating the exchange of explicit learning concepts and personal theories between students and teachers during assessments. This is intended to foster reflective thinking and improve learning refinement	<ul style="list-style-type: none"> <li>1. Enhanced Reflection</li> <li>2. Personalized Learning</li> <li>3. Structured Communication</li> </ul>	<ul style="list-style-type: none"> <li>1. Complex Implementation</li> <li>2. Dependence on Technology</li> <li>3. Learning Curve</li> </ul>	This study introduces an innovative methodology to enhance web-based peer assessment through the utilization of knowledge acquisition and data mining techniques. The methodology focuses on promoting contexture awareness within the assessment process.

# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
6	Adil Hassan, Krishan Lal Kumar	Improved teacher-student communication through continuous assessment	The study aims to demonstrate how continuous assessment, through its two-way and dynamic feedback process, enhances communication between teachers and students.	<ul style="list-style-type: none"> <li>1. Enhanced communication between teachers and students.</li> <li>2. Continuous assessment allows for regular monitoring</li> <li>3. Response systems facilitate fast feedback and engagement.</li> </ul>	<ul style="list-style-type: none"> <li>1. Requires careful planning and implementation to ensure consistent assessment.</li> <li>2. May demand additional resources for frequent assessment and feedback.</li> </ul>	In conclusion, optimal results are attained when corrections are implemented at regular intervals during teaching and continuous assessment, fostering teacher-student alignment, especially with an increase in assessment intervals.

# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
7	Yangming Wang, Juanqiong Gou, Wenxin Mu	Research on Data Analysis and Application for College Teacher- Student Communication	The objective of the research is to develop a framework for analyzing teacher- student communication data and using the insights gained from the analysis to improve communication and support the educational process.	<ul style="list-style-type: none"> <li>1. Efficient Communication</li> <li>2. Provides Insights</li> <li>3. Feedback Loop</li> </ul>	<ul style="list-style-type: none"> <li>1. Data Privacy</li> <li>2. Resource Intensive</li> <li>3. Complexity</li> </ul>	<p>The framework contributes to enhancing the overall educational experience by using data-driven techniques to foster better interaction and understanding between teachers and students. Applying these insights to communication processes can lead to more effective guidance and support for students.</p>

# LITERATURE REVIEW

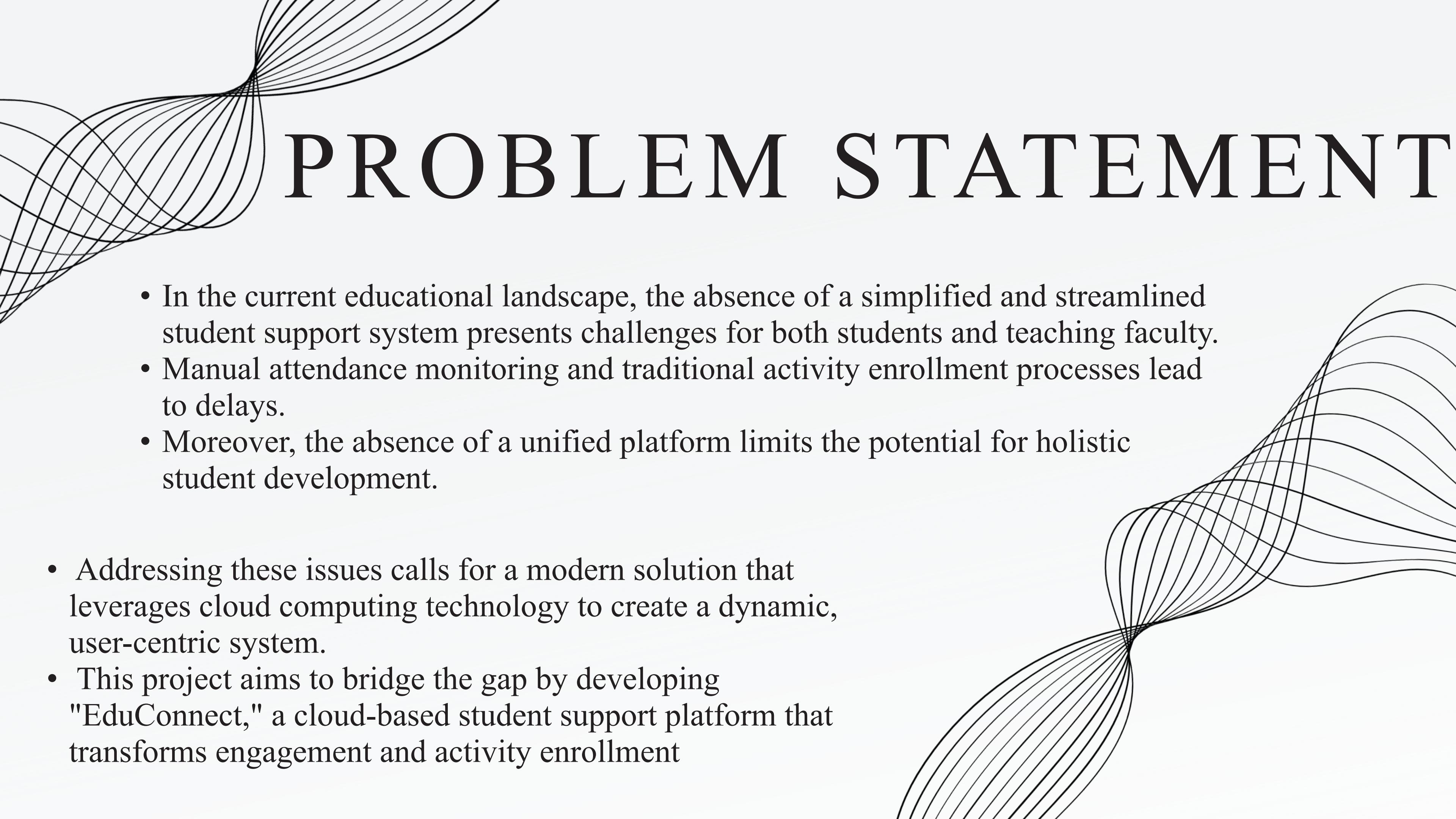
S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
8	J.H. Li1, G.Y. Jin, Y.W. Chen	The Impact of Teacher and Peer Communication on Adolescents' Learning Outcomes	The study uses questionnaires and regression analysis to analyze the relationships between communication styles, emotional and academic learning, and learning motivation between teachers and peers.	<ul style="list-style-type: none"> <li>1.Comprehensive Analysis</li> <li>2.Practical Implications</li> <li>3.Mediating Factors</li> </ul>	<ul style="list-style-type: none"> <li>1.Limited Generalizability</li> <li>2. Measurement Limitations</li> <li>3.Complex Relationships</li> </ul>	The project contributes to the understanding of communication's role in shaping students' educational experiences and offers practical implications for educational practices.

# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
9	Michael Elmore, Koenraad Gieskes	Student Learning as a Function of Attendance in Large Engineering Classes	The study involves comparing student performance and engagement when given the option to attend lectures physically or watch recorded lectures. The primary aim is to understand whether attendance at lectures significantly affects student performance.	<ul style="list-style-type: none"> <li>1. Tracking Engagement</li> <li>2. Accommodating Learning Styles</li> <li>3. Data Analysis</li> </ul>	<ul style="list-style-type: none"> <li>1. Tracking Tool Issues</li> <li>2. Limited Sample</li> <li>3. Single Semester Comparison</li> </ul>	<p>The study concludes that student attendance during the lecture does not significantly affect their midterm exam performance. Instead, the findings suggest that study habits and other factors unrelated to lecture attendance play a more substantial role in student performance.</p>

# LITERATURE REVIEW

S r . No.	Author Name	Title	Objective	Advantages	Disadvantages	Conclusion
10	Atsuo RAZEYAMA, Keiji OSADA	Web-based Software Engineering Education Environmen t Supporting Collaboratio n between the Teacher Side and the Student Groups.	The objective of the project is to create a collaborative software engineering education environment that supports collaboration between student groups and the teacher side.	<ul style="list-style-type: none"> <li>1.Efficient Collaboration</li> <li>2. Enhanced Inspection Process</li> <li>3. Informal Communication</li> </ul>	<ul style="list-style-type: none"> <li>1. Dependence on Technology</li> <li>2. Technical Challenges</li> <li>3. Learning Curve</li> </ul>	<p>The system provides a valuable tool for facilitating collaboration between students and the teacher side, contributing to a more effective software engineering education process. Further iterations and improvements could enhance its usability and impact.</p>



# PROBLEM STATEMENT

- In the current educational landscape, the absence of a simplified and streamlined student support system presents challenges for both students and teaching faculty.
- Manual attendance monitoring and traditional activity enrollment processes lead to delays.
- Moreover, the absence of a unified platform limits the potential for holistic student development.
- Addressing these issues calls for a modern solution that leverages cloud computing technology to create a dynamic, user-centric system.
- This project aims to bridge the gap by developing "EduConnect," a cloud-based student support platform that transforms engagement and activity enrollment

# Requirements

01

02

03

04

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## REACT

The web development trio powers captivates and creates interactive web experiences.

## AWS ACCOUNT

A gateway to harnessing the scalable power and services of Amazon Web Services for cloud computing needs.

## EC2 INSTANCE

Virtual computing environment in AWS, allowing you to run applications and services with customizable computing capacity.

## PYTHON PL

A versatile and user-friendly scripting language, known for its readability and extensive libraries, enabling efficient software development

# OBJECTIVES



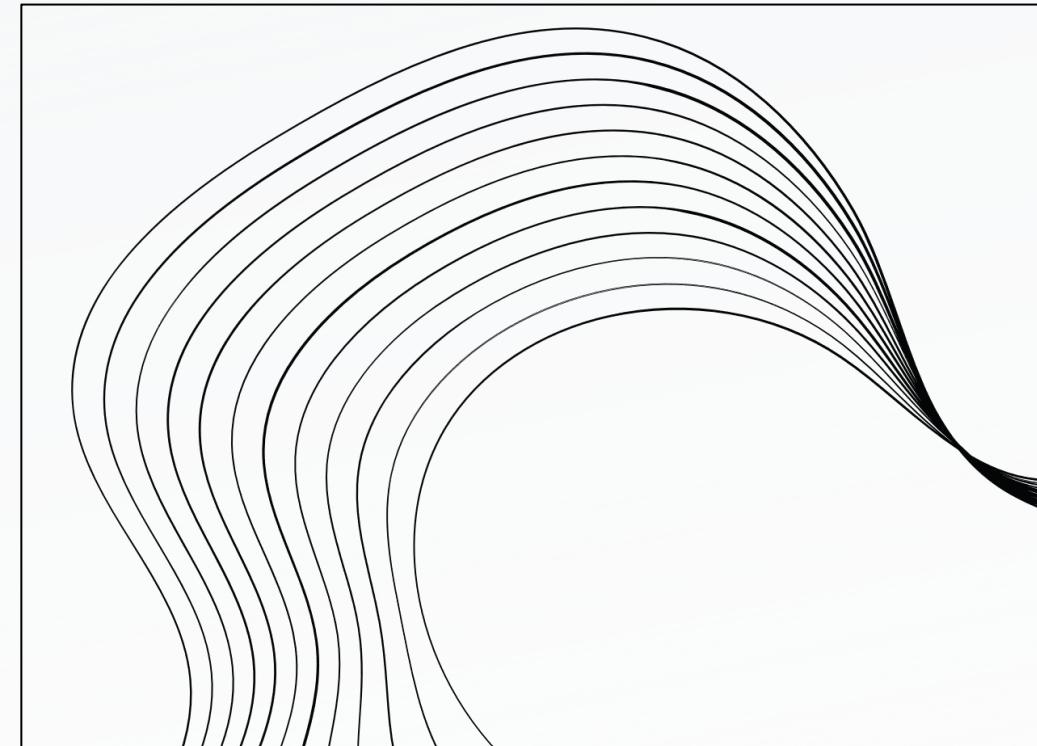
ENHANCE STUDENT ENGAGEMENT AND  
EXPERIENCE



Feedback and Improvement



Academic Resources

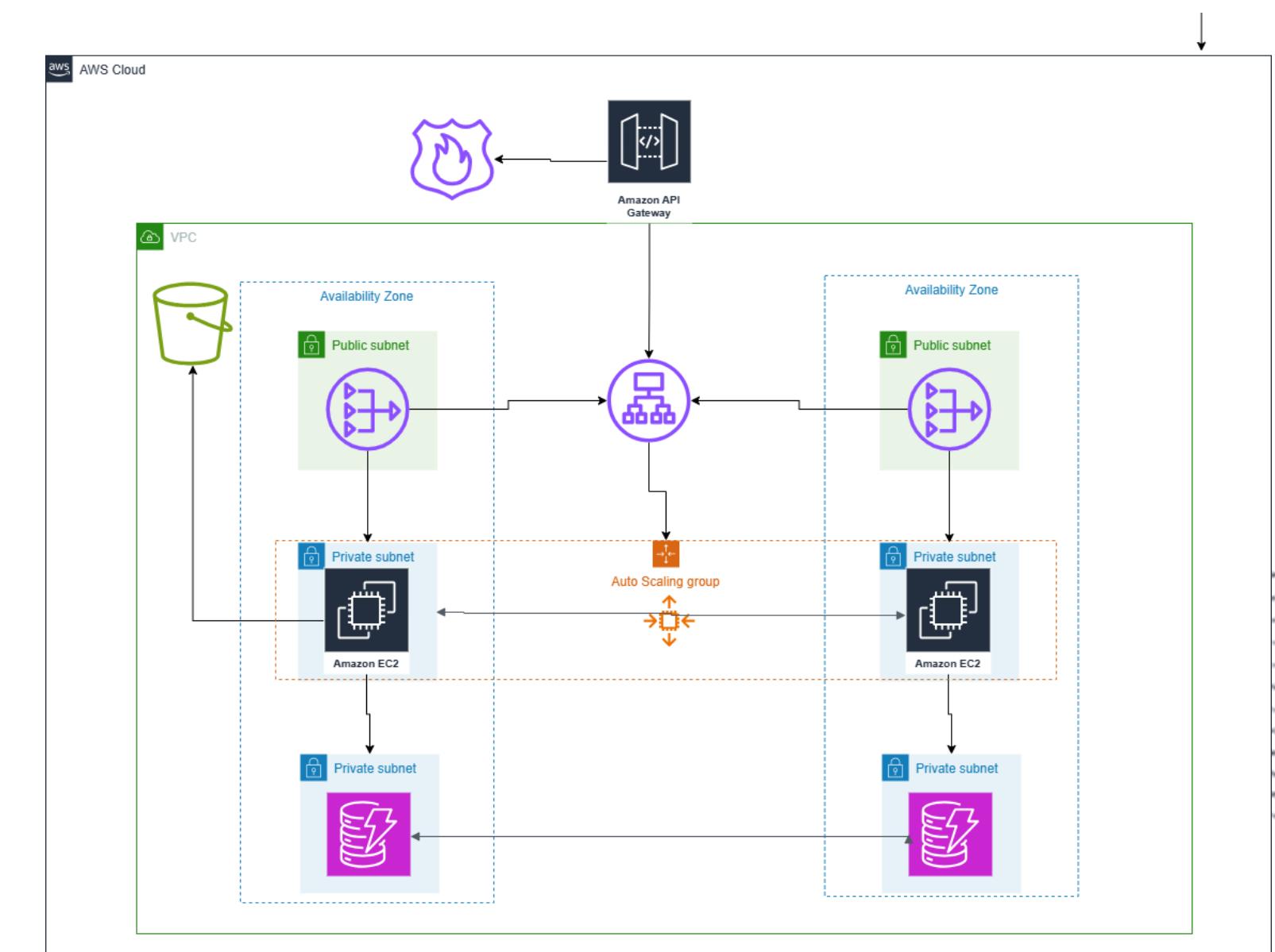
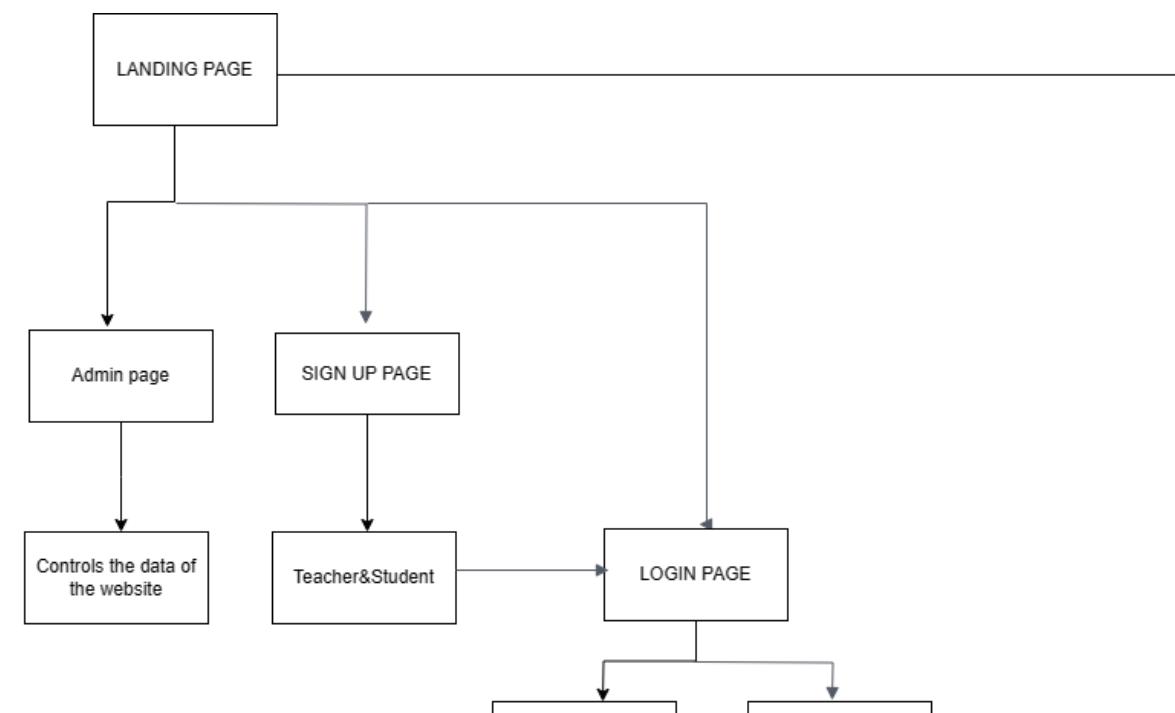


# PROPOSED METHODOLOGY

- System Designing & Technology Selection
- Front & Back-end Development
- Database Setup
- Content Simplification
- Content Structuring
- Integration
- Performance Optimization
- Deployment ( Cloud Based)
- Maintaining the EC2 Instance (Updates and Maintenance)



# PROPOSED ARCHITECTURE



# Design

Figure 1: Landing Page

The screenshot shows the homepage of EduConnect. At the top, there is a teal header bar with the logo 'SSSystem' on the left and 'Home Support' with a user icon on the right. The main title 'EduConnect' is displayed prominently in bold black text, followed by the tagline 'To the Infinity'. Below the title is a dark blue 'sign up' button. To the right of the text is a large, simple line-art illustration of a person wearing a graduation cap and gown. On the left side of the main content area, there is a large image of the Earth. To the right of the Earth, the text 'Welcome to EduConnect' is written in bold, followed by a detailed description of the platform's features: revolutionizing online education with cutting-edge technology, connecting students worldwide, providing interactive virtual classrooms, real-time assessments, and personalized learning paths, allowing access to high-quality education anytime and anywhere.

Welcome to EduConnect

EduConnect revolutionizes online education with cutting-edge technology, offering a seamless and smart learning experience. Our platform connects students with top-notch educators worldwide, providing interactive virtual classrooms, real-time assessments, and personalized learning paths. With EduConnect, students gain access to high-quality education anytime, anywhere, fostering a dynamic and engaging learning environment.

## LANDING PAGE:

Our home landing page has a sign in and login option for both teacher and student it will direct it to the desired page.

Figure 2: Sign-Up Page



SSSystem

## Create new Account

Already Registered? [Login](#)

NAME

EMAIL

PASSWORD

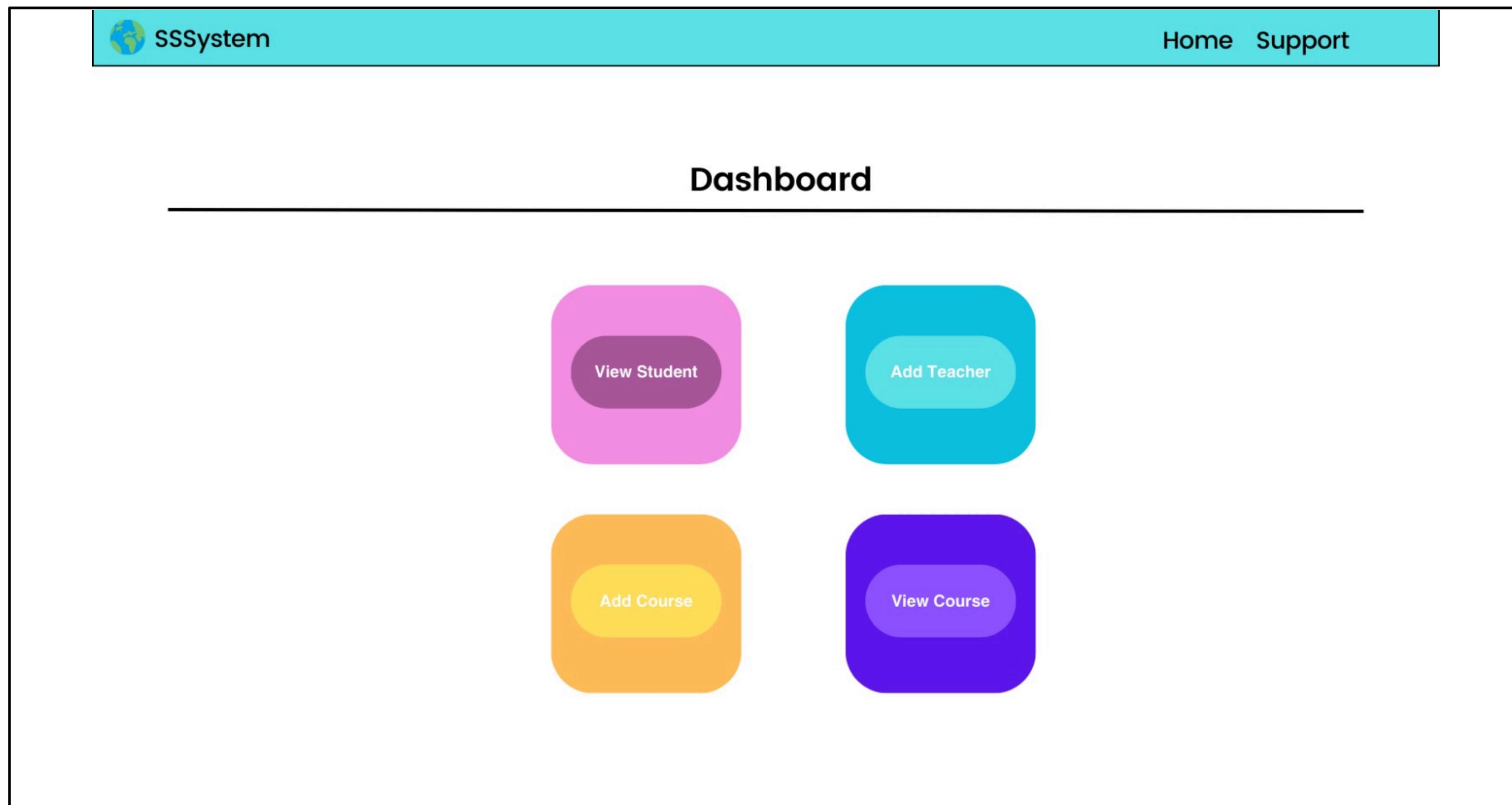
DATE OF BIRTH

[sign up](#)

### SIGN UP PAGE:

It is a registration page which is used to get data from the student and Teacher and the data is stored in cloud.

Figure 3: Admin Dashboard

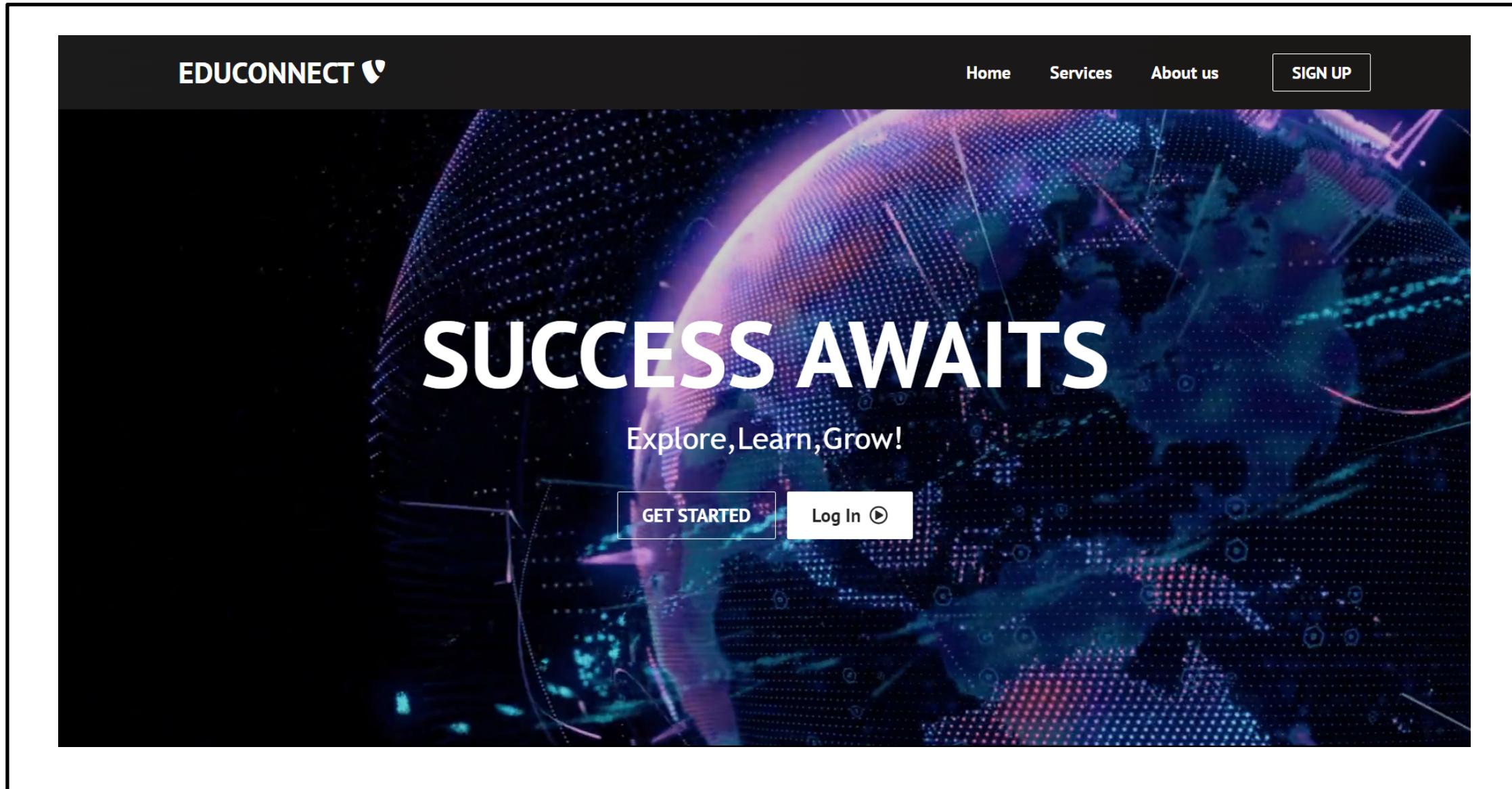


### ADMIN DASHBOARD:

This is the admin dashboard which shows the information about the student, teacher and courses.

# Implementation

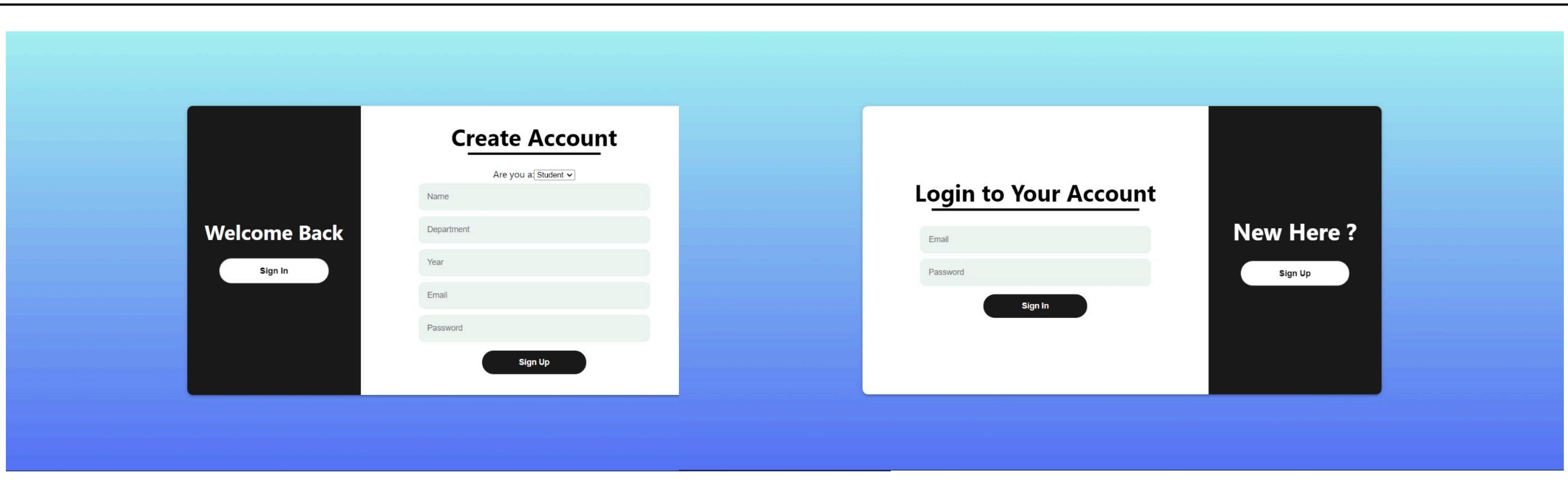
Figure 1: Landing Page



## LANDING PAGE:

Our landing page has a sign up and login option for both teacher and student it will direct it to the desired page. Along with this EduConnect Landing Page Offers various Tabs (Pages) such as Services Page & About Us Page.

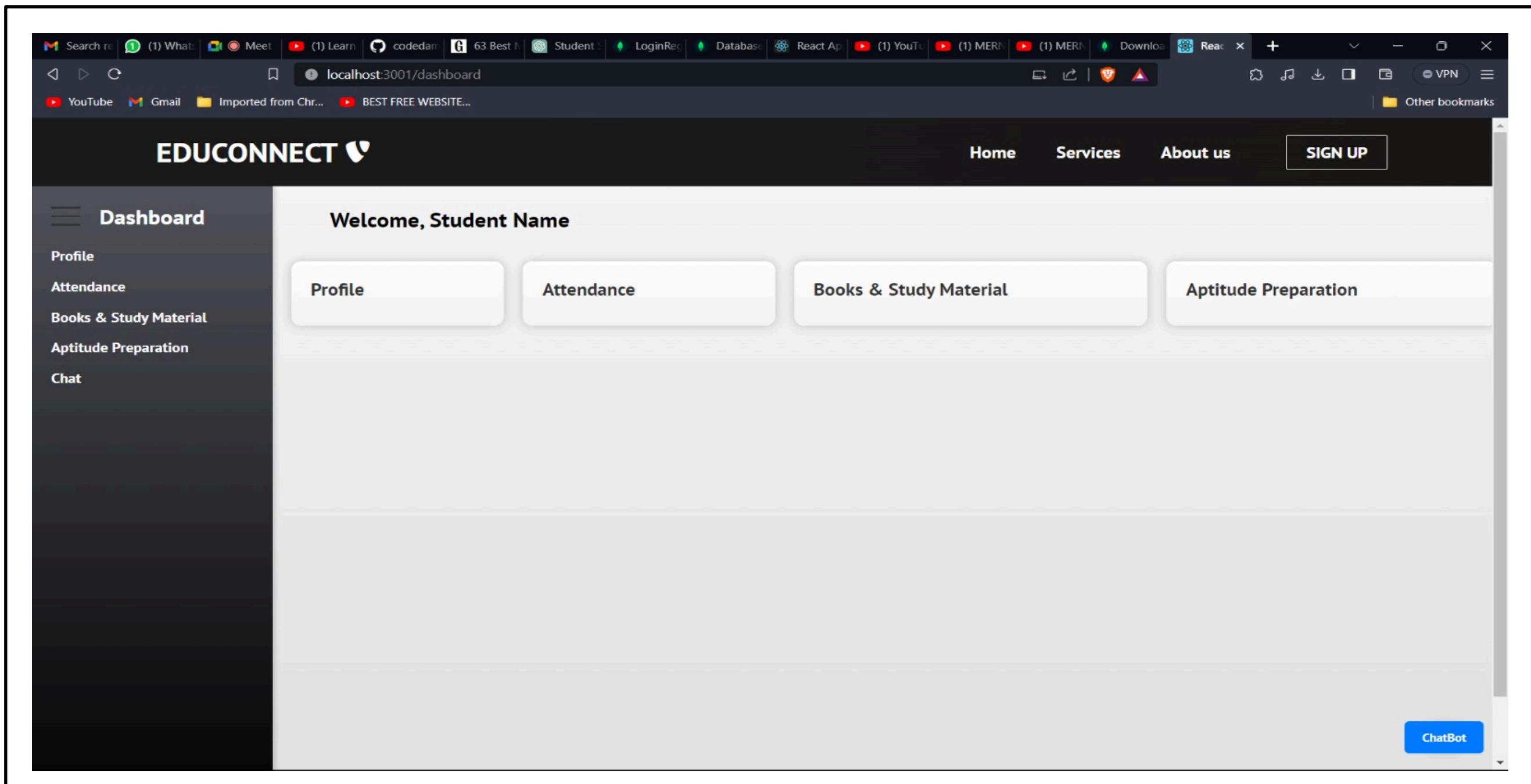
Figure 2: Sign-Up / Login Page



### SIGN UP PAGE & LOGIN PAGE :

It is a registration page which is used to get data from the student and Teacher and the data is stored in cloud. Along with this a Login Tab is also present so as to have a hassle-free Sign-In to desired WebPages.

Figure 3: Student Dashboard



## STUDENT DASHBOARD:

This is the student dashboard which shows the information about the student, his/her profile and various features.

Figure 5: Attendance Viewing – Teacher Side

## Attendance Data

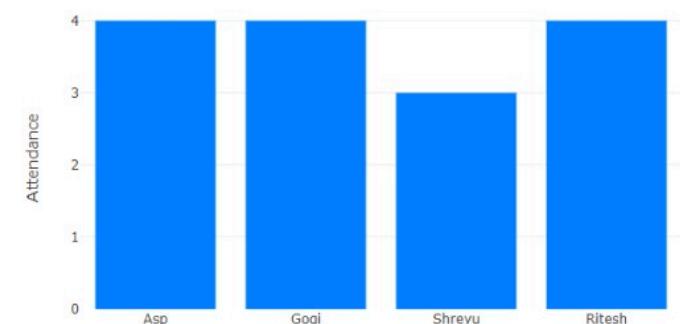
### Teacher 1

User Names	11/02/2023	11/03/2023	11/04/2023	11/05/2023	11/06/2023	Percentage
Asp	1	1	1	0	1	80.00%
Gogi	1	1	1	0	1	80.00%
Shreyu	1	1	0	1	0	60.00%
Ritesh	1	1	0	1	1	80.00%

[Download CSV](#)

### Data Visualization

Bar Chart



## Attendance Data

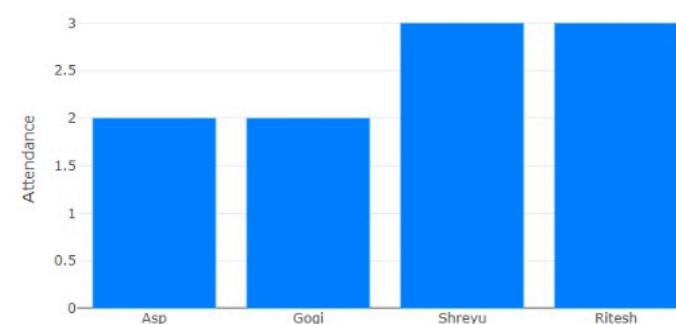
### Teacher 2

User Names	11/02/2023	11/03/2023	11/04/2023	Percentage
Asp	1	1	0	66.67%
Gogi	1	1	0	66.67%
Shreyu	1	1	1	100.00%
Ritesh	1	1	1	100.00%

[Download CSV](#)

### Data Visualization

Bar Chart



## Attendance Viewing-Teacher Side:

This is the representation of how a teacher would see the Attendance of a Student of Respective Subjects.

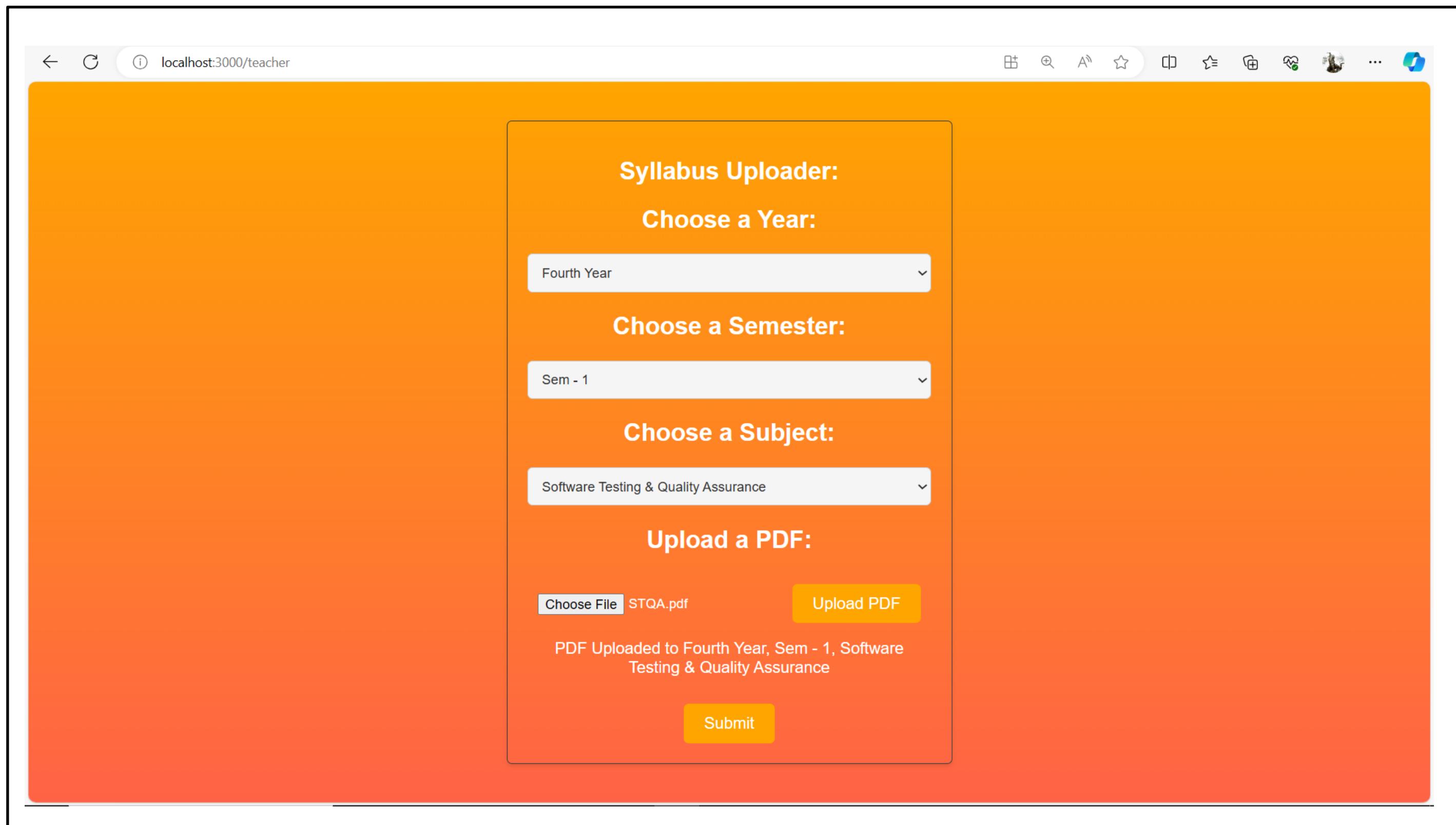
Figure 6: Attendance Viewing – Student Side

User Names	11/02/2023	11/03/2023	11/04/2023	11/05/2023	11/06/2023	Percentage
Asp	1	1	1	0	1	80.00%
Gogi	1	1	1	0	1	80.00%
Shreyu	1	1	0	1	0	60.00%
Ritesh	1	1	0	1	1	80.00%

### Attendance Viewing-Student Side:

This is the representation of how a student would see his/her Attendance of Respective Subjects.

Figure 7: Syllabus & Study Material Uploader



### Syllabus & Study Material Uploader:

A Dedicated Web-Page for A Teacher to Upload Study-Material for Students.

Figure 8: Storage-View of Uploaded Files

The figure consists of two side-by-side screenshots. On the left, a dark-themed terminal window titled 'TERMINAL' shows a MongoDB connection and a JSON document representing a file upload. The document includes fields like 'fieldname', 'originalname', 'encoding', 'mimetype', 'destination', 'filename', 'path', 'size', 'year', 'semester', '\_id', and '\_v'. On the right, the MongoDB Compass interface displays a collection named 'pdfs.pdfs' with 16 documents and 1 index. It shows two documents with identical data, reflecting the uploaded file's details.

Connected to MongoDB

```
{  
  fieldname: 'file',  
  originalname: 'STQA.pdf',  
  encoding: '7bit',  
  mimetype: 'application/pdf',  
  destination: './public/Images',  
  filename: '1699034362123_STQA.pdf',  
  path: 'public\Images\1699034362123_STQA.pdf',  
  size: 5489095,  
  year: 'Fourth Year',  
  semester: 'Sem - 1',  
  _id: new ObjectId('654534faa52b1e1e771212c2'),  
  __v: 0  
}
```

Documents pdfs.pdfs

pdfs.pdfs

16 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

Filter Type a query: { field: 'value' } or [generate query](#)

EXPLAIN Reset FIND Options

ADD DATA EXPORT DATA

1 - 16 of 16

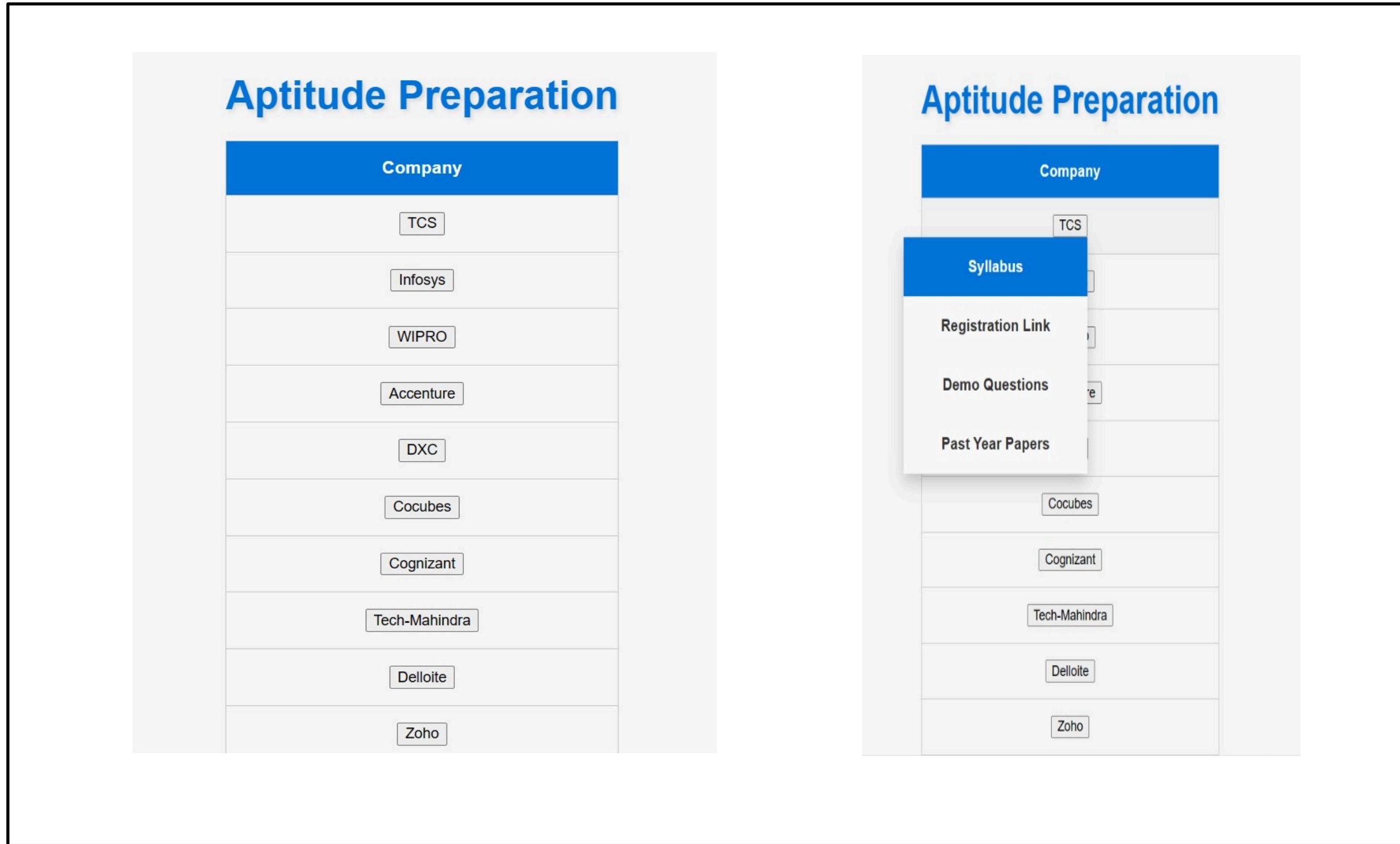
originalname: "AIDS.pdf"  
encoding: "7bit"  
mimetype: "application/pdf"  
destination: "./public/Images"  
filename: "1699030251464\_AIDS.pdf"  
path: "public\Images\1699030251464\_AIDS.pdf"  
size: 4399700  
year: "Fourth Year"  
semester: "Sem - 1"  
\_\_v: 0

\_id: ObjectId('654534faa52b1e1e771212c2')  
fieldname: "file"  
originalname: "STQA.pdf"  
encoding: "7bit"  
mimetype: "application/pdf"  
destination: "./public/Images"  
filename: "1699034362123\_STQA.pdf"  
path: "public\Images\1699034362123\_STQA.pdf"  
size: 5489095  
year: "Fourth Year"  
semester: "Sem - 1"  
\_\_v: 0

## STORAGE-VIEW OF UPLOADED FILES:

This is The Snapshot of how the Files Uploaded by the Teacher will look in the back-end or Databases.

Figure 9: Interface for Aptitude Preparation Feature



### INTERFACE FOR APTITUDE PREPARATION FEATURE:

This is how the Aptitude Preparation will Look in the view of Student-Side.

# CONCLUSION



- In conclusion, the development of "EduConnect" marks a significant step towards enhancing the student support ecosystem.
  - By harnessing the power of cloud computing, we can create a dynamic platform that seamlessly connects students and faculty, which will promote collaboration, convenience, and engagement.
- 
- As "EduConnect" empowers both students and educators, we anticipate a future where technology fuels positive growth and propels the college community into a new era of interconnected learning and development.





THANK YOU

.S.