CAMPUS VIEW

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INTRODUCTION

- What is Campus View?
  - A software tool for educational accreditation processes.
  - Helps in assessing course and program outcomes efficiently.
- Why Accreditation Matters?:
  - Ensures academic quality and continuous improvement.
  - Essential for institutional recognition by NAAC/NBA.
- Role of Automation in Accreditation
  - Reduces manual workload for faculty.
  - Provides accurate and data-driven insights.

PROBLEM STATEMENT

Educational institutions face challenges in accurately evaluating Course Outcomes (CO) and Program Outcomes (PO) due to manual calculations, inconsistent performance metrics, and inefficient data management.

The lack of automation leads to errors, delays, and difficulties in classifying students based on their academic performance. Additionally, feedback analysis remains underutilized, limiting insights for teaching improvements and curriculum enhancements.

Moreover, generating comprehensive reports for NAAC/NBA accreditation demands significant manual effort, affecting efficiency and accuracy.

OBJECTIVES

- Automate CO-PO Attainment Calculation for accurate academic evaluations.
- Classify Students as weak or bright based on performance metrics.
- Enhance Data Management and User Experience for efficient academic decision-making.

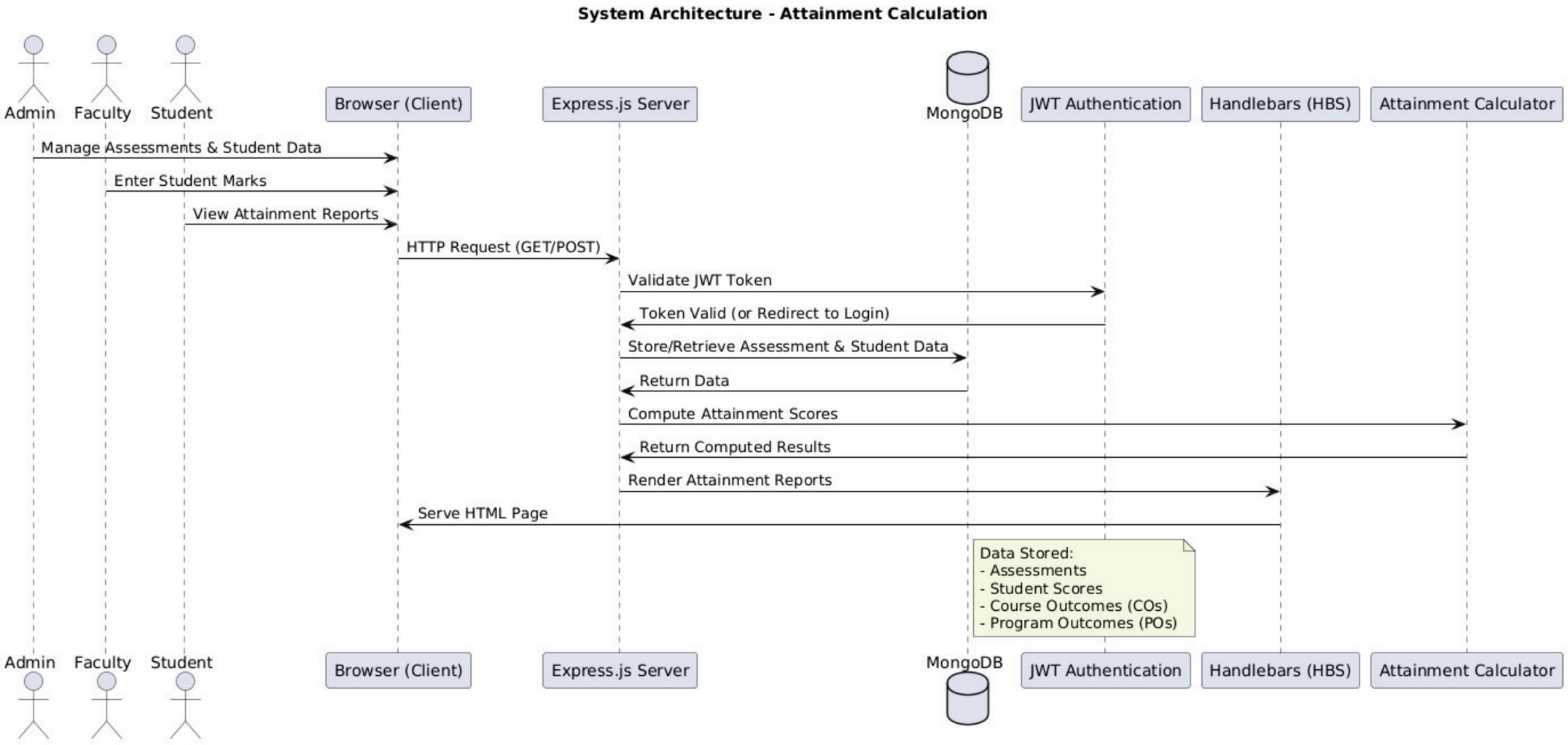
LITERATURE SURVEY

"The Study on the Assessment of Program Quality through CO-PO Mapping and its Attainment" (2022)

PROPOSED SYSTEM

- Primary Goal:
  - Develop a single application for seamless accreditation support.
- Specific Objectives:
  - Generation of Attaintment tools by admin
  - Automate CO-PO attainment calculations.
  - Provide student classification based on performance.

ARCHITECTURE


System Architecture - Attainment Calculation
Admin
Faculty
Student
Browser (Client)
Express.js Server
MongoDB
JWT Authentication
Handlebars (HBS)
Attainment Calculator
Manage Assessments & Student Data
Enter Student Marks
View Attainment Reports
HTTP Request (GET/POST)
Validate JWT Token
Token Valid (or Redirect to Login)
Store/Retrieve Assessment & Student Data
Return Data
Compute Attainment Scores
Return Computed Results
Render Attainment Reports
Serve HTML Page
Data Stored:
- Assessments
- Student Scores
- Course Outcomes (COs)
- Program Outcomes (POs)

KEY MODULE

Module 1:

- User Management Description: Handles authentication, role-based access, and user profile management. Technologies Used: Node.js, Express.js, JWT Authentication, MongoDB. Functionality:
- Admin, Faculty, and Student roles.
- JWT-based authentication for secure access.
- CRUD operations on user profiles.

KEY MODULE

Module 2:

- Assessment Management Description: Allows faculty to manage assessments and enter student marks. Technologies Used: Node.js, MongoDB, Handlebars (HBS).
- Functionality:
  - Faculty can create/edit/delete assessments.
  - Students' scores are stored and retrieved securely

KEY MODULE

Module 3:

- Attainment Calculation Description: Computes attainment scores for Course Outcomes (COs) and Program Outcomes (POs). Technologies Used: Node.js, MongoDB, Attainment Calculator.
- Functionality:
  - Fetch student marks and course data.
  - Compute attainment scores based on predefined formulas.
  - Store and retrieve computed results.

IMPLEMENTAION DETAILS: DATASETS USED

- Hardware Requirements:
  - Minimum 4GB RAM (8GB recommended)
  - Intel Core i5/i7 processor
  - 500GB HDD / SSD recommended

- Software Requirements:
  - Operating System: Windows/Linux/Mac
  - Database: MongoDB
  - Frameworks:

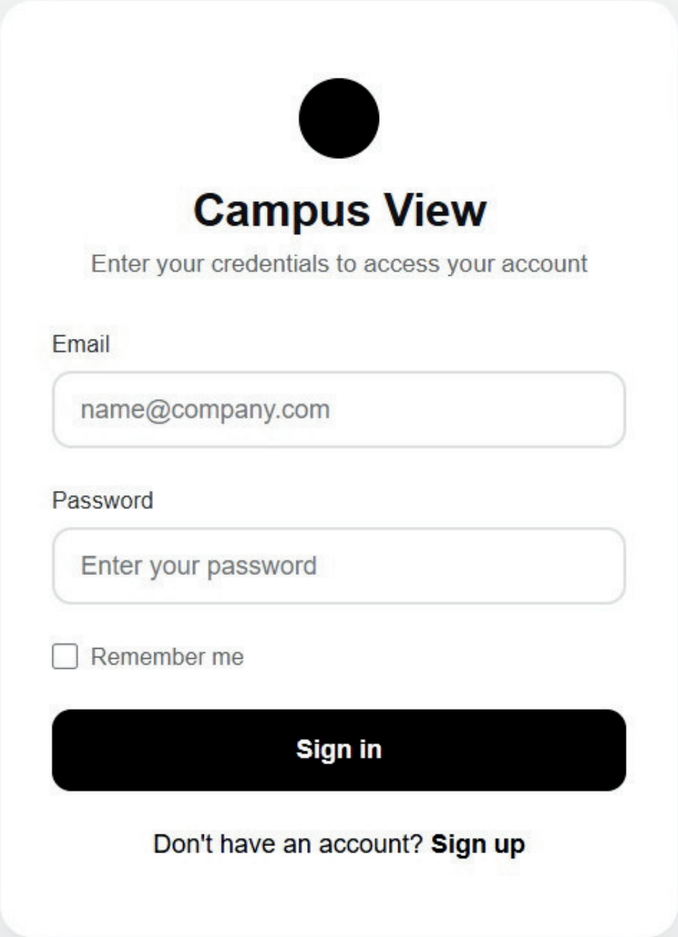
IMPLEMENTAION DETAILS: ASSOCIATED DATASETS

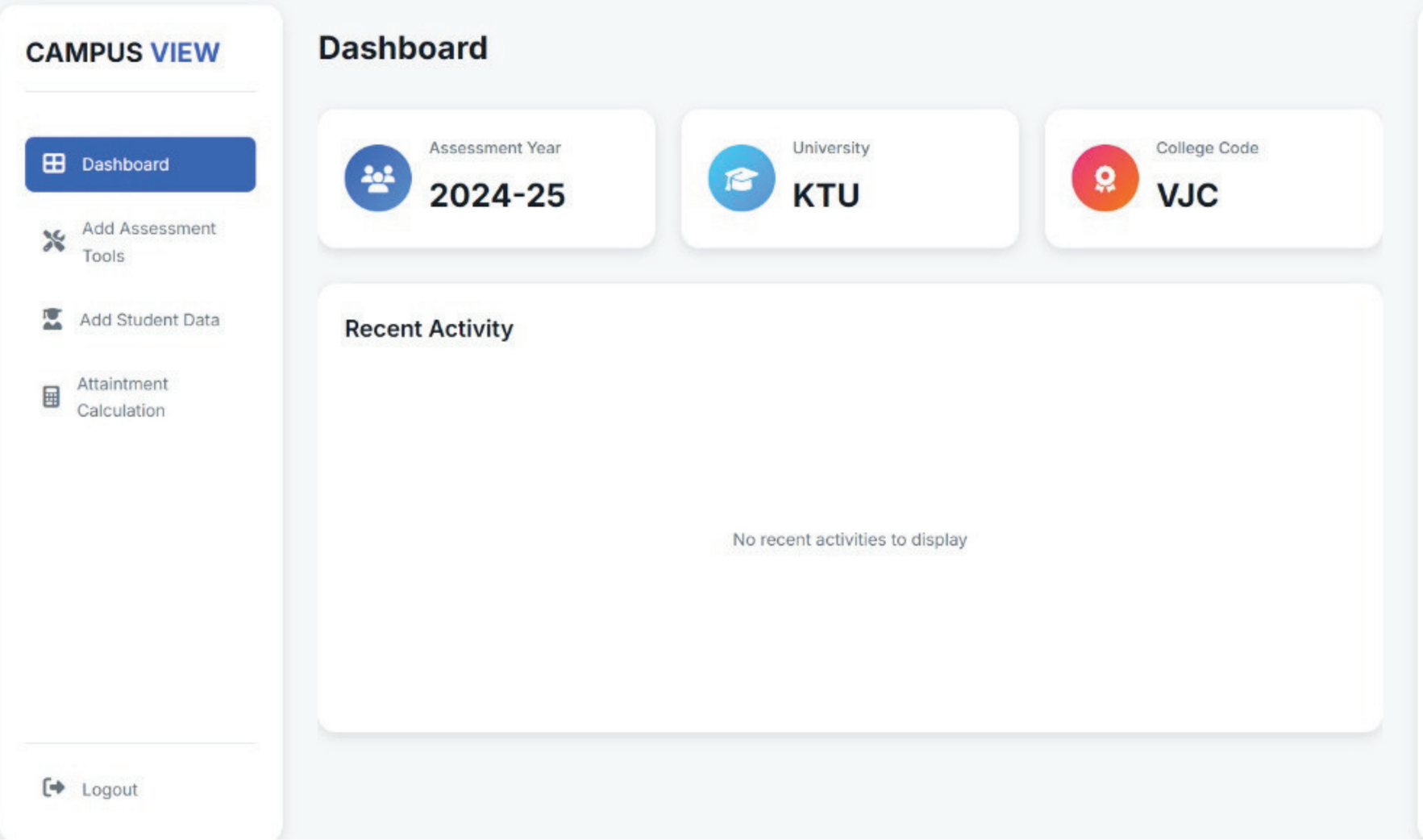
- Primary Datasets:
  - Student marks & academic records
  - CO-PO attainment values from previous years
  - Faculty evaluations and feedback responses
- Data Sources
  - University grading systems
  - Survey responses from faculty/students
  - Accreditation reports & previous assessments

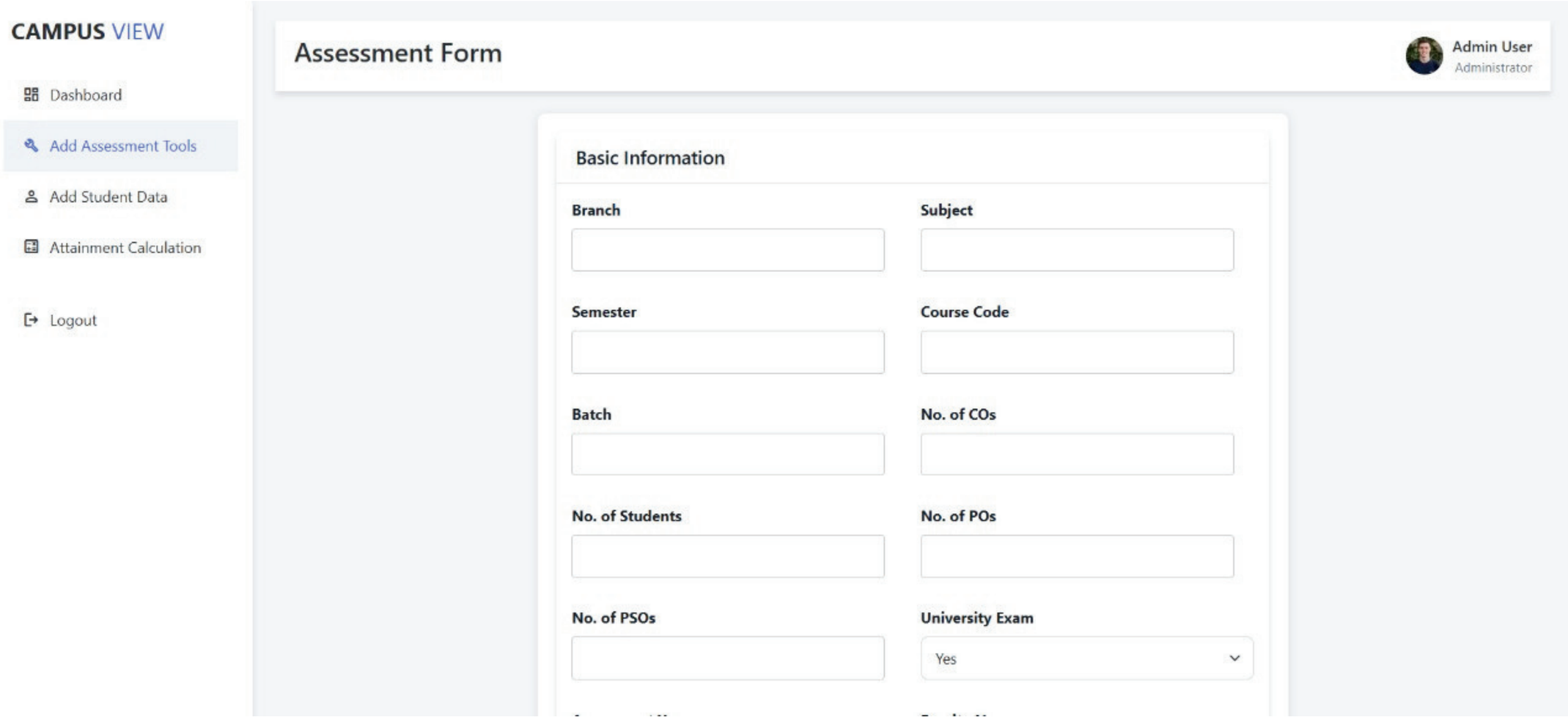
IMPLEMENTAION DETAILS: MODULE DESCRIPTION

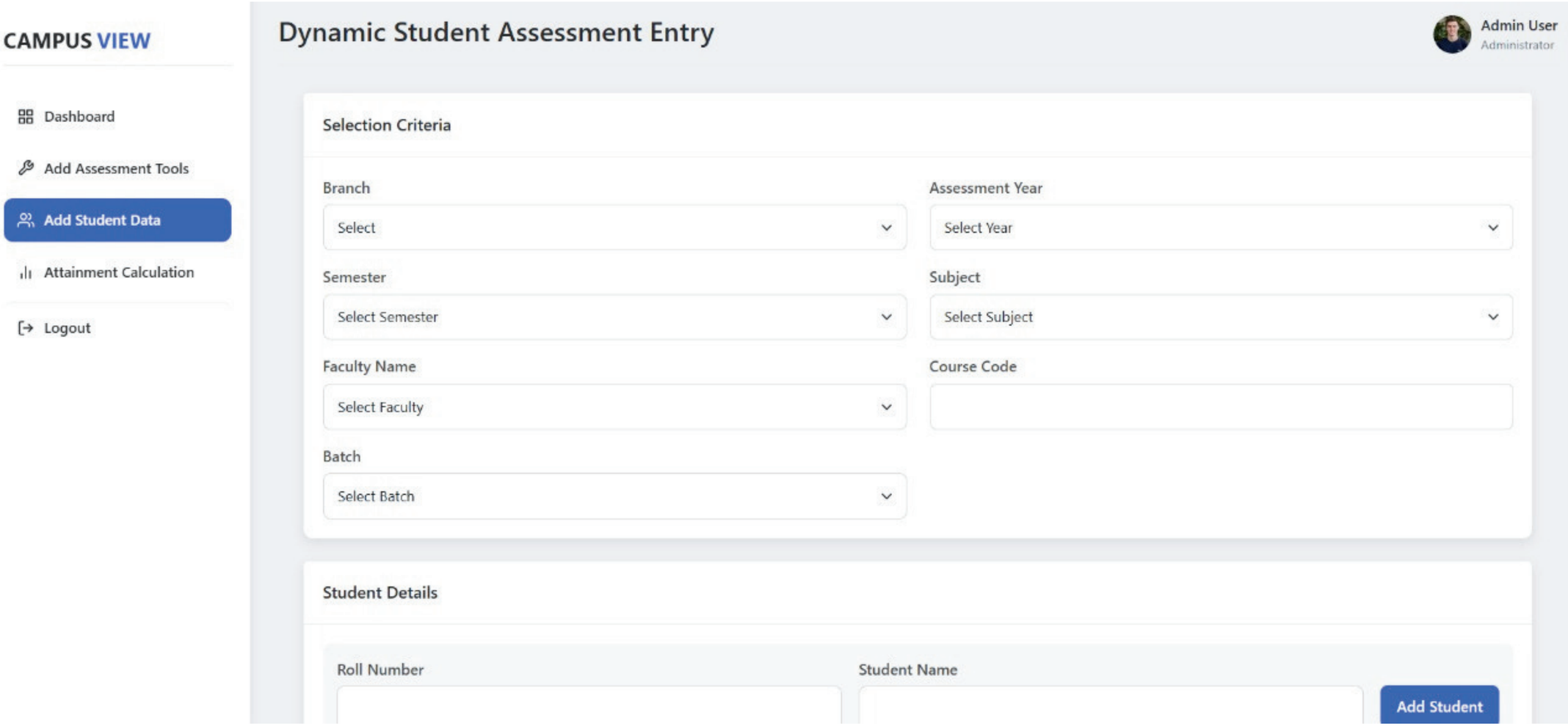
- Module 1:CO-PO Attainment Calculation
  - Uses predefined correlation values (1,2,3)
  - Fetches student performance data
  - Calculates attainment percentage
- Module 2: Student Classification
  - Categorizes students for targeted intervention
  - Student marks and faculty evaluation data.
- Module 3 :Feedback Analysis
  - Uses weighted scoring system
  - Processes faculty and student surveys
- Module 4: Criterion 2 Report Generation
  - Generates structured NAAC/NBA reports
  - Automates data compilation from different sources

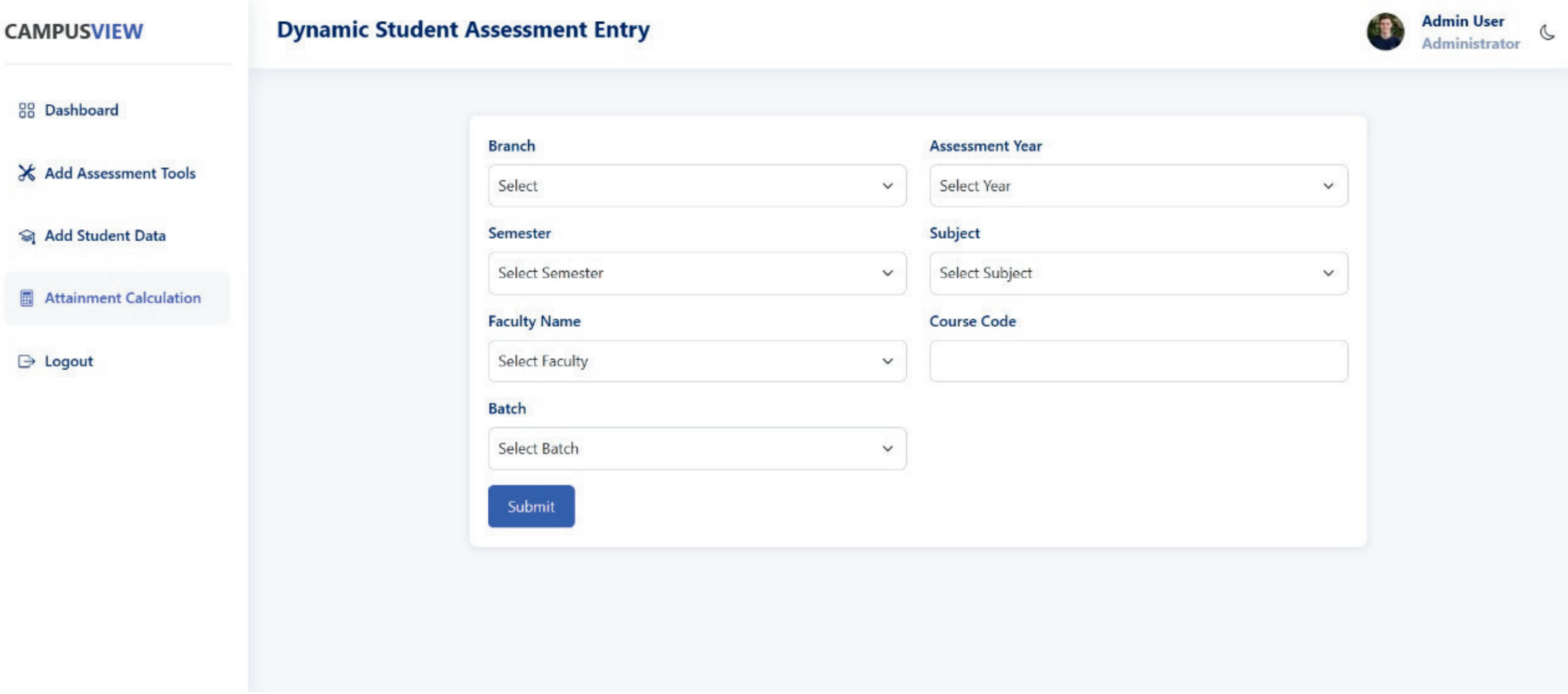
SCREENSHOTS




CAMPUS VIEW
Dashboard
Add Assessment Tools
Add Student Data
Attaintment Calculation
Logout
Dashboard
Assessment Year
2024-25
University
KTU
College Code
VJC
Recent Activity
No recent activities to display
Admin User
Administrator


CAMPUS VIEW
Dashboard
Add Assessment Tools
Add Student Data
Attainment Calculation
Logout
Assessment Form
Admin User
Administrator
Basic Information
Branch
Subject
Semester
Course Code
Batch
No. of COs
No. of Students
No. of POs
No. of PSOs
University Exam
Yes


CAMPUS VIEW
Dashboard
Add Assessment Tools
Add Student Data
Attainment Calculation
Logout
Dynamic Student Assessment Entry
Admin User
Administrator
Selection Criteria
Branch
Select
Assessment Year
Select Year
Semester
Select Semester
Subject
Select Subject
Faculty Name
Select Faculty
Course Code
Batch
Select Batch
Student Details
Roll Number
Student Name
Add Student


CAMPUSVIEW
Dashboard
Add Assessment Tools
Add Student Data
Attainment Calculation
Logout
Dynamic Student Assessment Entry
Admin User
Administrator
Branch
Select
Assessment Year
Select Year
Semester
Select Semester
Subject
Select Subject
Faculty Name
Select Faculty
Course Code
Batch
Select Batch
Submit

Assessment Result

Admin
Administrator

Course Outcome Attainment Data

Student Name	Roll No	C212.1 Marks	C212.1 Total	C212.1 Percentage %	C212.2 Marks	C212.2 Total	C212.2 Percentage %	Student Category
Krishnadev P Melevila	1	29	37	78.38	31	51	60.78	**Average**
Alan Shaji	2	32	37	86.49	35	51	68.63	**Bright**
Aniruddh Ajay	3	21	37	56.76	42	51	82.35	**Average**
Robin George	4	26	37	70.27	36	51	70.59	**Average**

Course Outcome Attainment Summary

Course Outcome	Average Percentage	Attainment Level
C212.1	72.97	3 (High)
C212.2	70.59	3 (High)

Assessment Result

Admin
Administrato

Course Outcome Attainment Summary

Course Outcome	Average Percentage	Attainment Level
C212.1	72.97	3 (High)
C212.2	70.59	3 (High)

Student Category Summary

Category	Number of Students	Percentage
Bright	1	25.00%
Average	3	75.00%
Weak	0	0.00%

RESULT

PERFORMANCE ANALYSIS

- Comparison with Manual Methods:
  - Accuracy improvement: ~30-40%.
  - Time reduction: ~50-60%.
- Software Efficiency:
  - Handles large datasets efficiently.
  - Macro-based automation speeds up calculation.
- Scalability
  - Can be adapted for multiple departments and institutions.

CONCLUSION

- Campus View automates key accreditation tasks.
- Reduces faculty workload and increases accuracy.
- Provides actionable insights for academic improvement.

REFERENCES

- https://journaleet.in/articles/a-case-study-on-the-assessment-of-program-quality-through-co-po-mapping-and-its-attainment?utm_source=chatgpt.com
- https://naac.gov.in/index.php/en/assessment-accreditation
- https://curaj.ac.in
- https://www.youtube.com/watch?v=UcCCbTNPFRs/

THANK YOU