CampusCloud
Project Charter®

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Document history

Version	Date	Author	Comment / Change
0.1	21.09.25	Himanshu	Draft
0.5	24.09.25	Iknoor	Draft
1.0	30.09.25	Mykhailo	Released
1.5	01.10.25	Jastan	Final

Contents

Background/Project purpose or justification

With the growing demand for digital learning and academic record-keeping, managing large volumes of student and course-related data has become increasingly complex. Universities and colleges face multiple challenges, such as handling course enrollments, tracking grades, managing professor schedules, and maintaining secure access to academic records. Additionally, both students and professors need timely access to accurate information, including class schedules, course materials, assignments, grades, and communication records. Without a centralized system, this data often becomes scattered, outdated, or difficult to manage efficiently.

Many academic institutions still rely on outdated or fragmented systems to manage their information. These systems are often slow, lack integration, and limit real-time data sharing between students and professors. The result is inefficiency, delays in communication, and difficulties in tracking academic performance. A modern, well-structured database can significantly improve these operations by centralizing academic data and ensuring consistency across all users.

Another pressing issue is the lack of reliable backup systems in many academic record-keeping solutions. Power outages, technical failures, or system crashes can cause data loss, putting student records, grades, and faculty information at risk. By implementing cloud integration and automated fail-safe backups, CampusCloud ensures faster recovery, higher data reliability, and continuous access for both professors and students.

Security is another critical concern in academic systems. Sensitive information such as student personal data, grades, and faculty details must be protected from unauthorized access. Current systems often fall short in providing strong security measures. CampusCloud addresses this by incorporating encryption, access control, and role-based authentication, ensuring data confidentiality and compliance with academic integrity standards.

CampusCloud aims to provide a unified, cloud-based academic database system that bridges the gap between students and professors. By supporting real-time updates, secure data storage, and efficient information retrieval, it will improve the academic experience for all users, reduce delays, and strengthen communication across the institution.

2   Goals

2.1   Goals

Goal	Description
Data Integrity & Consistent Academic Records	A database structure that minimizes redundancy and maintains accuracy in student details, course data, and grading records through proper validation, normalization, and real-time updates.
User-Friendly and Accessible Interface	A responsive interface that ensures user satisfaction in usability testing, making CampusCloud accessible to both students and professors on desktop and mobile devices.
Enhanced Communication and Collaboration	Integrated messaging and notification features that allow professors to share updates, assignments, and announcements instantly, ensuring that students receive and acknowledge important communications in real time.
Role-Based Customization	Provide personalized dashboards for students and professors, ensuring that each user type can access only tools and data relevant to their academic role.
Backups and Disaster Recovery	Establish automated cloud-based backup procedures to prevent data loss, ensuring that the system can be restored in case of accidental deletion, corruption, or unexpected system failure.
Data Scalability and Growth Handling	The database to efficiently handle years of academic data, including thousands of student records, courses, and grades, without significant performance degradation.

2.2   Milestones

Schedule	Description
Oct 23	Project Charter draft
Nov 13	E-R diagram draft
December 4	Video Project description
December 4	Final report delivery

3 Project product description

Introduction

CampusCloud is an academic database system designed to simplify the way students, professors, and administrators manage and access academic information. With the growing volume of courses, grades, assignments, and communication on campus, it has become essential to adopt a centralized system that is both reliable and user-friendly. CampusCloud aims to create a digital space where academic records are secure, information is easily accessible, and communication is seamless.

Product Scope Description

The CampusCloud Academic Database System will serve as a comprehensive solution to address the challenges of managing academic records and communication between students and professors. It will incorporate a robust database infrastructure that securely stores and processes key academic data. The system's primary focus is on two core aspects: data management and functional capabilities.

1. Data Management

- Students: Personal details, enrollment history, assignments, grades, and attendance.
- Professors: Faculty information, teaching schedules, courses assigned, and grading records.
- Courses: Course details, schedules, enrolled students, and associated professors.
- Academic Records: Grades, assignments, exam scores, and performance analytics.

2. Functional Capabilities

- **Course Enrollment & Access:** Students can view available courses, enroll, and track progress.
- **Grade and Assignment Managemen**t: Professors can record, update, and share grades and assignments securely.
- **User Profile Management:** Students and professors can maintain academic and personal profiles.
- **Administrative Control:** Professors and administrators can generate reports, update class schedules, and monitor analytics.
- **Secure Communication:** Notifications and announcements can be shared between professors and students in real time.

Business Need and Justification

Managing academic records manually or through fragmented systems often leads to inefficiencies, delays, and errors. CampusCloud addresses these issues by offering a centralized and reliable platform. For students, it provides better visibility in their performance and academic journey. For professors, it streamlines grading, scheduling, and communication. For administrators, it ensures data accuracy, simplifies report generation, and supports informed decision-making. The system directly supports the institution's goal of improving the overall learning experience by making academic processes more transparent, efficient, and accessible.

Conclusion

CampusCloud is an integrated platform that connects students, professors, and administrators in a single academic ecosystem. By improving access to information, reducing administrative workload, and fostering secure communication, CampusCloud strengthens academic experience on campus. Its introduction marks a step toward a more efficient, modern, and student-focused learning environment.

4   Delivery units

4.1   Delivery units/services

Delivery unit	Description/Comment
Project Charter	Final version of the charter approved
Project Report	A concise document that compiles your whole experience with the project
Design document	E-R Diagram describing the conceptual level of the database
DDL documents	All SQL statements used to create the database (Internal level)
Sample Queries	DML commands showing sample Queries used in regular use of the database
Supplements	Additional documents provide background in the chosen topic. (Optional)

5   Project success criteria

Project success criteria
The project report addresses reasoning used to generate the design of the database. Data needed and information generated.
Internal and conceptual level definitions are free of errors and complete.
The queries created retrieve useful information for the business.
The project presentation conveys a concise summary of the projects experience.
The team shows understanding of the business, conceptual design and MySQL.

6 High-level risks

Risk	Possible impacts on the project
Maintenance Issues	Once deployed, the system may require regular updates and bug fixes, which could be difficult to manage without a dedicated support team.
Compatibility Issues	The system might not work well with existing campus tools, leading to frustration and duplicate work.
Scalability Concerns	If the number of students and professors grows beyond initial estimates, the system may struggle to handle the additional workload.
Data Accuracy Problems	Incorrect data entry or poorly designed validation rules could lead to errors in grades, course schedules, or student information.
Technical Resource Limitations	The project may face delays if there aren't enough skilled developers, testers, or database administrators available.

7 Key stakeholders

Name	Role
Cesar Lopez Castellanos	Instructor
Himanshu Sandhu	Project Manager
Iknoordeep Kaur	Project Designer
Mykhailo Halushko	Communications Officer and Lead Project Analyst
Jastan Singh Hehar	Project Analyst

8 Project startup

The project is deemed started with the following signatures:

	Instructor	**Communications Officer**	**Project manager**
Signature		*Jastansinghehar*	*HimanshuSandhu*
Name	Cesar Lopez Castellanos	Jastan Singh Hehar	Himanshu Sandhu
Date		Oct 1,2025	Oct 1, 2025

9 Project end

Planned project end:

27 November, 2025

9.1 Signatures for release

The project manager is released with the signatures provided here following the project closing phase:

	Instructor	**Communications Officer**	**Project manager**
Signature		*Jastansinghhehar*	*HimanshuSandhu*
Name	Cesar Lopez Castellanos	Jastan Singh Hehar	Himanshu Sandhu
Date		Oct 1,2025	Oct 1, 2025