

# Learning Management System

CS 3321 – Kulwant Singh

## PROJECT REPORT

### Team Members:

Haider Qazi

Christian Francois

Daniel Gasperini

David Dinh

Javier Blanco

**Overview:**

The LMS is a software we developed that allows an administrator to manage large number of students by adding/removing/ updating students courses and grades. The LMS also allows students to view their information, courses registered, exam grades, and GPA calculations.

**Software Project Management Plan (SPMP):**

Admin: QUERY, INSERT, DELETE, and UPDATE Courses.

Admin: QUERY, INSERT, DELETE, and UPDATE Students.

Admin: QUERY, ASSIGN, and WITHDRAW Student Courses.

Admin: QUERY, INSERT, DELETE, and UPDATE Student Exam Grades.

Admin: QUERY, INSERT, DELETE, and UPDATE Student Course Grades.

Student: QUERY Class Schedule, Student Information, Registered Courses, Exam Grades, and Course Grades for specific student logged in.

**Project Estimates:**

Estimation Techniques Used: N/A

Historical Data Used: N/A

Cost: \$0

Resource: Apache NetBeans IDE 12.1, MySQL DB, and Workbench 8.0

Project Duration Estimates: 1 Month

Effort: 5 Team Members (Haider Qazi, Christian Francois, Daniel Gasperini, David Dinh, and Javier Blanco)

**Schedule:**

- Work Breakdown Structure:
  - Requirement Gathering / Analysis
  - Design, Implementation / Coding
  - Testing
  - Deployment
- Tasks:
  - Pick Environment, IDE, and Language: NetBeans IDE 12.1
  - Data Storage: MySQL DB and Workbench IDE

- GitHub Integration in NetBeans IDE
- Setup MySQL DB on Linux Server
- Integrate MySQL DB in Application
- Design GUI
- Integrate Features and Functions into Application:
  - Create Login System for Admin and Student accounts.
  - Create Home Page for both accounts.
  - Create Manage Courses, Manage Students, Student Courses, and Assign Exam and Course Grades options for admin account.
  - Create Student Records and Enrollment option for student account.
  - Create Logout Function.

### **Project Resources:**

- Group Structure:
  - 5 Team Members:
    - Haider Qazi, Christian Francois, Daniel Gasperini, David Dinh, and Javier Blanco
  - Software and Hardware:
    - NetBeans IDE 12.1
    - Java SE
    - MySQL Workbench 8.0
    - Linux Server for MySQL DB to store data

### **Staff Organization:**

- Team Structure:
  - Haider Qazi (Project Manager)
  - Christian Francois (Programming Secretary)
  - Daniel Gasperini (Technical Architect)
  - David Dinh (Programmer)
  - Javier Blanco (Programmer)

### **Risk Management Plan:**

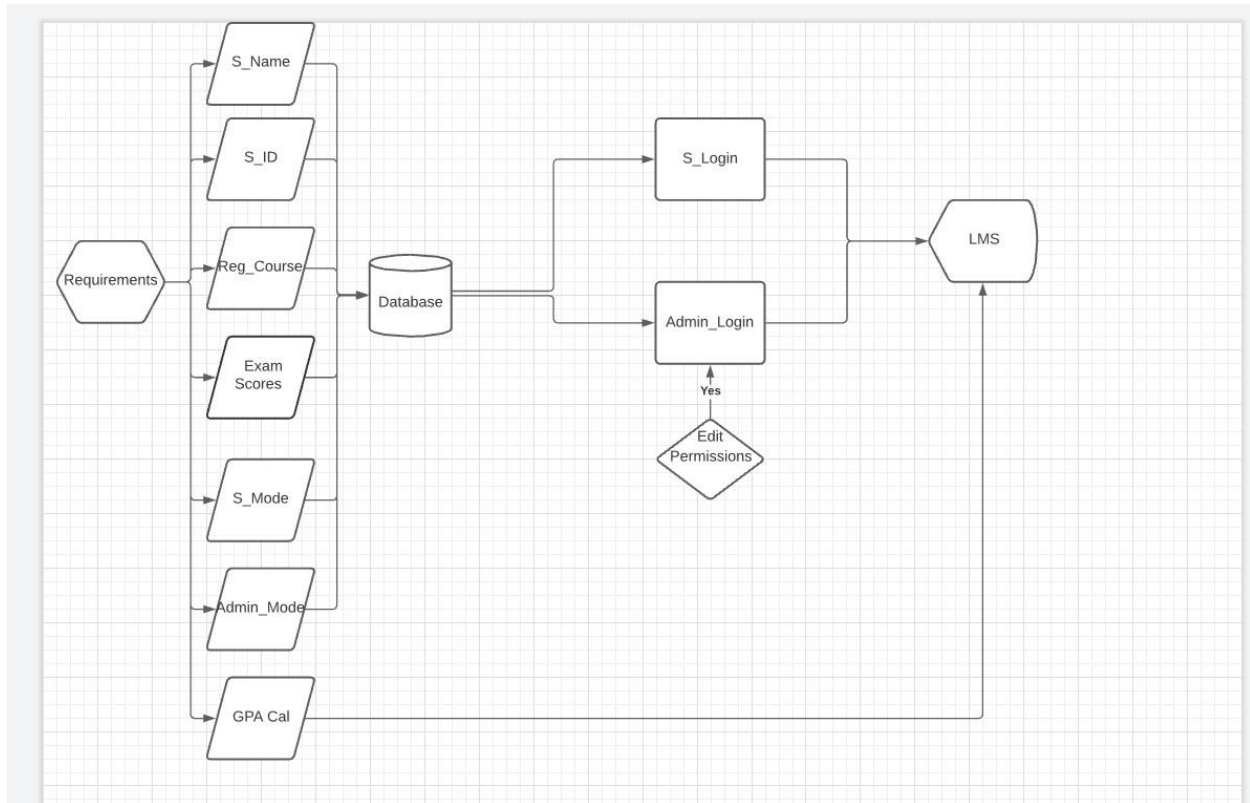
- Risk Analysis
- Risk Identification
- Risk Estimation

### **Project Tracking and Version Control:**

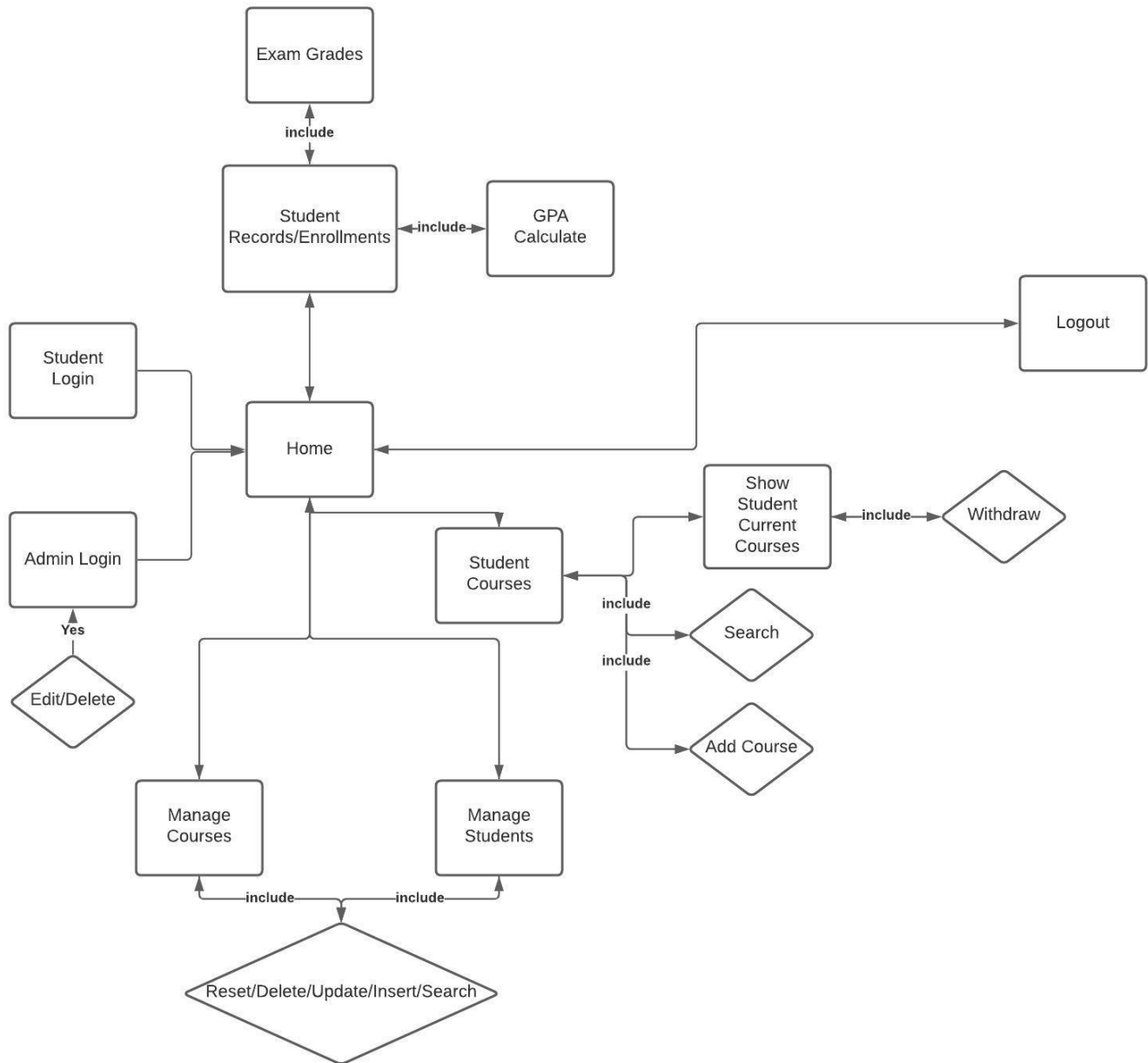
- GitHub Version Control – Support in NetBeans IDE (Commit, Push, Pull, Merge)

## UML Diagrams:

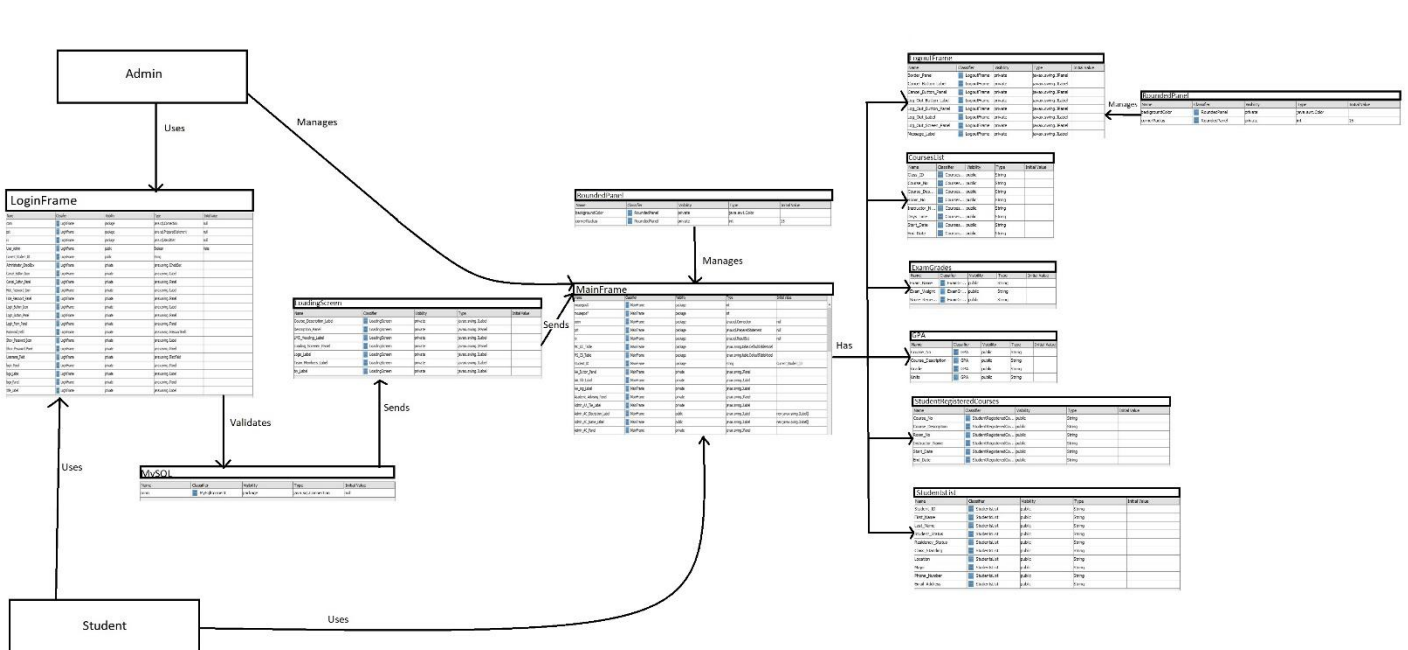
- Requirements for LMS Diagram:



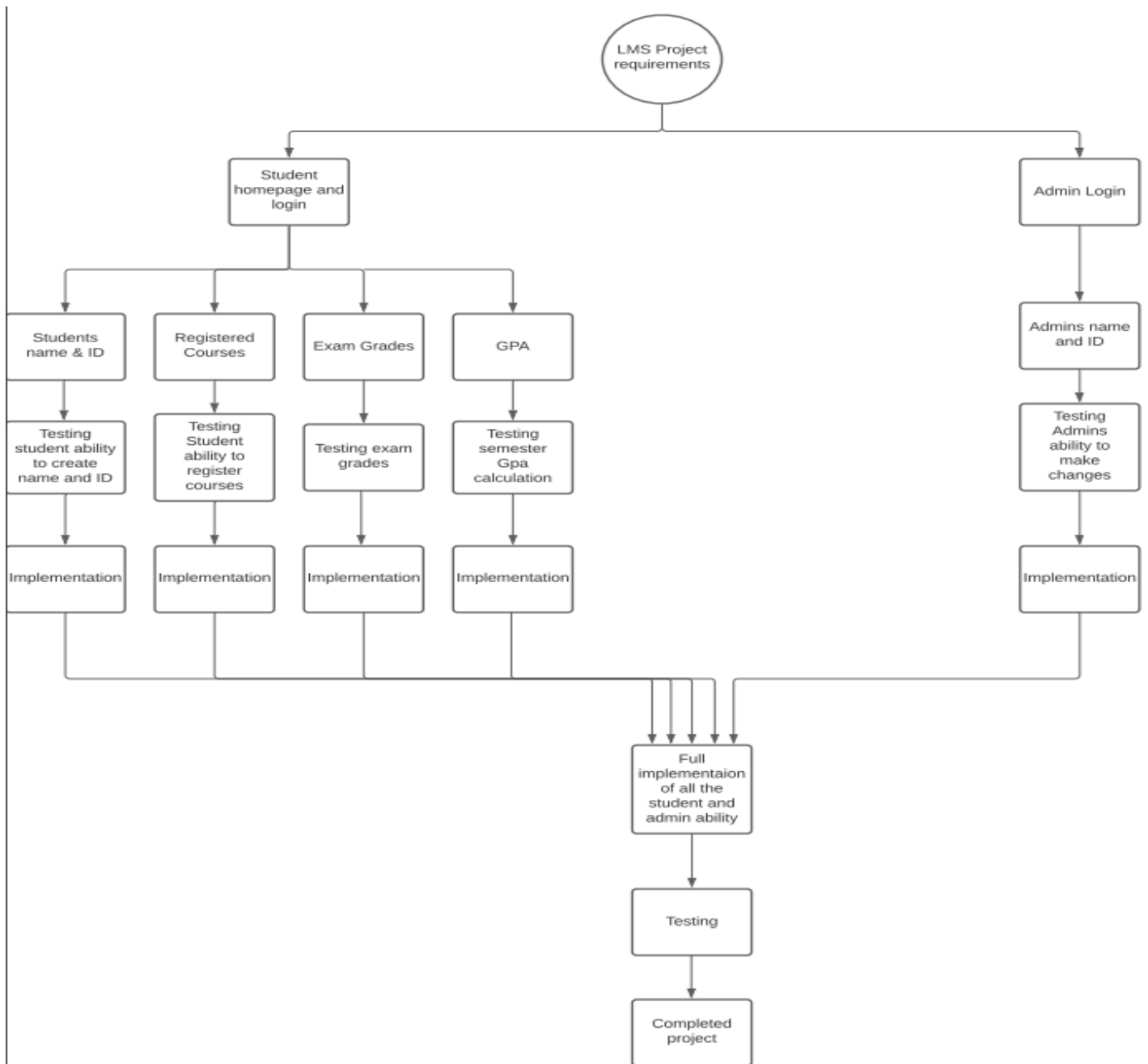
- Use Case Diagram:



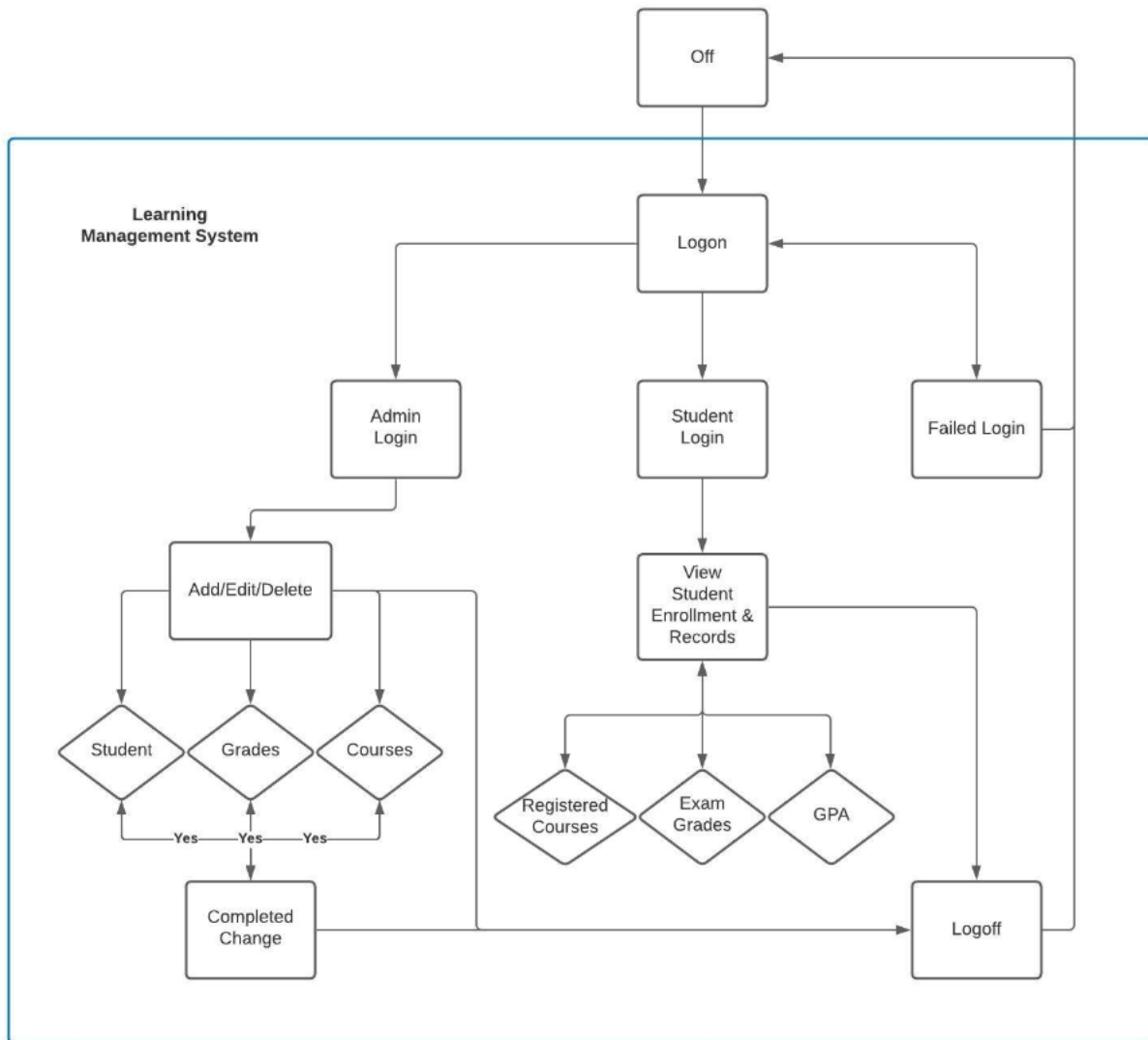
- Class Diagram:



- 2D Model (Incremental):



- State Case Diagram:





## Version Control:

- GitHub: <https://github.com/pakatwood/Software-Engineering-Project>
- Main Branch:

main 4 branches 2 tags

Go to file Add file Code

JavierWhite Add files via upload 28c5663 8 hours ago 19 commits

2d lucid.pdf	Add files via upload	yesterday
2d.docx	Add files via upload	5 days ago
Learning Management System (2).zip	LMS (2.0)	13 days ago
Learning Management System (2.2).zip	Learning Management System (2.2)	7 days ago
Learning Management System Report...	Add files via upload	8 hours ago
Learning Management System.zip	Add files via upload	16 days ago
Learning Management System2.1.zip	Add files via upload	11 days ago
Mainframe UML.png	Add files via upload	5 days ago
README.md	Update README.md	8 hours ago
UML Class Diagram.jpg	Add files via upload	3 days ago
UML Class DiagramSkeleton.jpg	Add files via upload	5 days ago
UML requirements.jpg	Add files via upload	9 days ago
Use Case.jpeg	Add files via upload	3 days ago

README.md

## Software Engineering Project

The following is a Capstone project creating a Learning Management System. The Learning management system showcases two different views, an Admin (Administrator) view and a User view (Student).

The following is a link to a google doc with a summerize presentation: (<https://prezi.com/p/edit/pdrynw3mnhb/>).

There are 2 types of user accounts. One is for ADMIN and the second is for STUDENT. In this version, ADMIN is able to Manage Courses (Insert, Delete, or Update a Course), Manage Students (Insert, Delete, or Update a Student), and Manage Student Courses (Assign Courses to or Withdraw Courses from Student). ADMIN is also able to assign exam and course grades, however, this feature is still under construction in this version. The STUDENT account is accessible by registered students. STUDENT can see their Class Schedule on their Home Page and they only have the "Student Records & Enrollment" option available at the moment. On the "Student Records & Enrollment" page, students can see their information at the top left corner. On the top right side, students can see the registered courses they are taking for the current semester. On the bottom left side, students can select a course for which they want to see their exam grades. On the bottom right side, students can see their course grades if the ADMIN has assigned a letter grade for a course. Students still have to option to enter a letter grade to calculate their projected GPA for the semester.

About

No description, website, or topics provided.

Readme

Releases 2

Learning Management System 2 days ago Latest

+ 1 release

Packages

No packages published  
[Publish your first package](#)

Contributors 5

- Master Branch:

master 4 branches 2 tags

Go to file Add file Code

This branch is 17 commits ahead, 19 commits behind main. Pull request Compare

📁 pakatwood Learning Management System (2.8) c5ee275 13 hours ago 17 commits

📁 nbproject	Learning Management System (2.3)	6 days ago
📁 src/learning/management/system	Learning Management System (2.8)	13 hours ago
📄 build.xml	Learning Management System (2.3)	6 days ago
📄 manifest.mf	Learning Management System (2.3)	6 days ago

Help people interested in this repository understand your project by adding a README. Add a README

AboutNo description, website, or topics provided.

Releases 2

📦 Learning Management System Latest2 days ago

+ 1 release

PackagesNo packages published. Publish your first package

Contributors 5

- Releases:

Latest release

v2.42de3199

Compare

## Learning Management System

Edit

📦 pakatwood released this 2 days ago · 2 commits to master since this release

### In this version (v2.4) release, the following featured have been added/modified:

- Admin is now able to assign exam grades.
- Panel options that are not active at the moment have been highlighted in light gray color.
- Class Schedule (Current Semester) in the Student Home Page has been setup up now. Students will now be able to see the schedule for their registered courses for the current semester.

### Bug Fixes

- Fixed: In Admin -> Student Courses -> Assign Courses Panel :- You were able to "Add Course" without selecting the course. This caused some discrepancies in the database. Now you must select Student and Course first in order to assign a course to the student. You will be prompted with a message if both are not selected prior to assigning the course.
- Everthing else is fine. (We hope.)

Assets 3

📦 Learning.Management.System.v2.4.zip2.66 MB

📄 Source code (zip)

📄 Source code (tar.gz)

v2.33691584

Compare

## Learning Management System

Edit

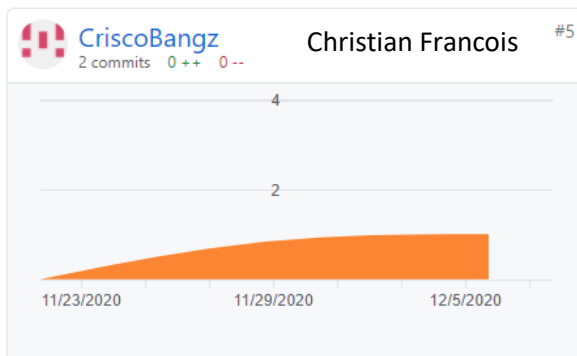
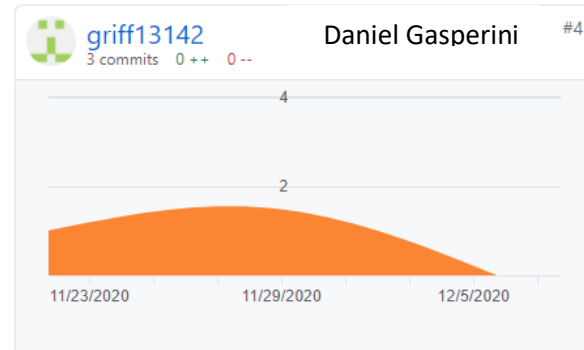
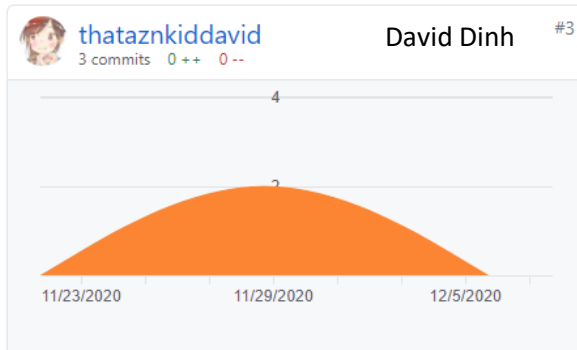
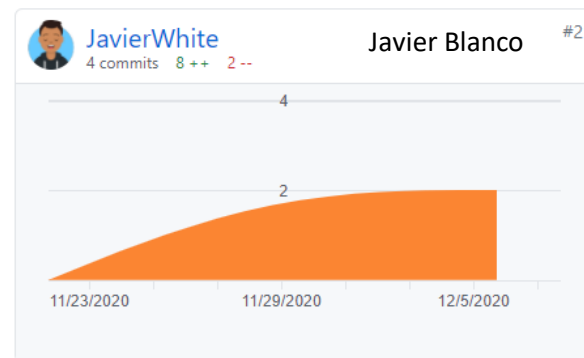
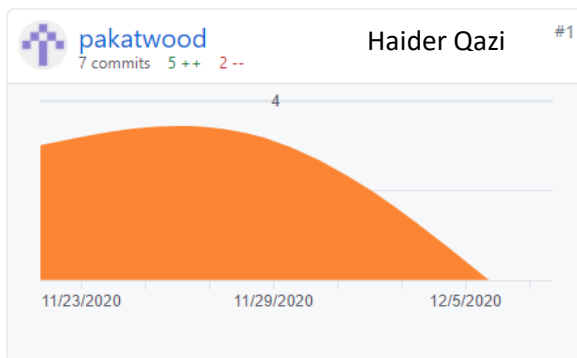
📦 pakatwood released this 5 days ago · 7 commits to master since this release

There are 2 types of user accounts. One is for ADMIN and the second is for STUDENT. In this version, ADMIN is able to Manage Courses (Insert, Delete, or Update a Course), Manage Students (Insert, Delete, or Update a Student), and Manage Student Courses (Assign Courses to or Withdraw Courses from Student). ADMIN is also able to assign exam and course grades, however, this feature is still under construction in this version. The STUDENT account is accessible by registered students. STUDENT can see their Class Schedule on their Home Page and they only have the "Student Records & Enrollment" option available at the moment. On the "Student Records & Enrollment" page, students can see their information at the top left corner. On the top right side, students can see the registered courses they are taking for the current semester. On the bottom left side, students can select a course for which they want to see their exam grades. On the bottom right side, students can see their course grades if the ADMIN has assigned a letter grade for a course. Students still have to option to enter a letter grade to calculate their projected GPA for the semester.

Assets 3

- Contributors:

Contributions to main, excluding merge commits



**Presentation Link:** <https://prezi.com/p/edit/pdraynw3mnhb/>