

AIE493: Field Training 2

Student Name	Mohammed Ali Mohammed Attia
Student ID	20100211
Name Project	Graduation Project Management System
Mentor Name	Dr. Islam Elgedawy

Abstract

The Graduation Project Management System is a web-based platform designed to streamline the process of managing and evaluating graduation projects in academic institutions. The system provides a centralized hub where students can upload their projects, coordinators can review and evaluate them, and users can access information about past projects.

- **User Management:** The system allows users to register, log in, and manage their profiles. Users are categorized into two roles: students and coordinators.
- **Project Upload:** Students can upload their graduation projects to the system. They provide detailed information about their projects, including titles, descriptions, screenshots, video demos, and project files.
- **Project Review:** Coordinators have the ability to review and evaluate the uploaded projects. They can access project details, provide feedback, and approve or reject projects based on predefined criteria.
- **Project Archive:** The system maintains an archive of past graduation projects, allowing users to browse and search for projects based on various criteria such as title, category, or rating.
- **Notifications:** The system sends notifications to users to keep them informed about the status of their projects, including notifications for successful project uploads, project approvals, and project rejections.

Introduction

In academic institutions, graduation projects represent a culmination of students' learning experiences, showcasing their skills, knowledge, and creativity in their respective fields of study. However, managing and evaluating these projects can be a daunting task for both students and faculty members. Traditional methods of paper-based submissions and manual evaluations are often inefficient, time-consuming, and prone to errors.

To address these challenges, the Graduation Project Management System offers a modern and efficient solution. This web-based platform provides a centralized hub where students can seamlessly upload their projects, and coordinators can efficiently review and evaluate them. By leveraging the power of technology, the system streamlines the entire process, from project submission to evaluation, ultimately enhancing the overall experience for all stakeholders involved.

In this document, we present an overview of the Graduation Project Management System, detailing its features, functionalities, and benefits. We discuss the motivation behind the development of the system, its objectives, and the key components that make it a valuable asset for academic institutions. Additionally, we explore the potential impact of the system on the management and evaluation of graduation projects, as well as its implications for student learning and academic excellence.

Overall, the Graduation Project Management System represents a significant advancement in the way graduation projects are managed and evaluated in academic institutions. By providing a user-friendly, efficient, and transparent platform, the system aims to revolutionize the process, empowering students to showcase their work effectively and enabling faculty members to make informed decisions about project evaluation.

Problem Statement

In many academic institutions, the management and evaluation of graduation projects pose significant challenges for both students and faculty members. Traditional methods of paper-based submissions and manual evaluations are inefficient, time-consuming, and prone to errors. As a result, there is a pressing need for a modern and efficient solution to streamline the process and enhance the overall experience for all stakeholders involved.

Challenges:

Tedious Submission Process: Students often face difficulties in submitting their graduation projects, including filling out lengthy forms, providing required documentation, and ensuring timely submission.

Ineffective Evaluation Process: Faculty members struggle to efficiently review and evaluate numerous projects, leading to delays in feedback and grading. Additionally, inconsistencies in evaluation criteria and subjective assessments may result in unfair outcomes.

Lack of Transparency: The lack of a centralized platform for project management and evaluation leads to a lack of transparency in the process. Students may be unaware of the status of their projects, and faculty members may struggle to track the progress of evaluations.

Limited Collaboration: The absence of a collaborative platform inhibits communication and collaboration between students and faculty members. Students may have difficulty seeking feedback and guidance, while faculty members may face challenges in coordinating evaluations and providing timely support.

Objectives:

The primary objective of the Graduation Project Management System is to address these challenges and improve the management and evaluation of graduation projects in academic institutions. Specific objectives include:

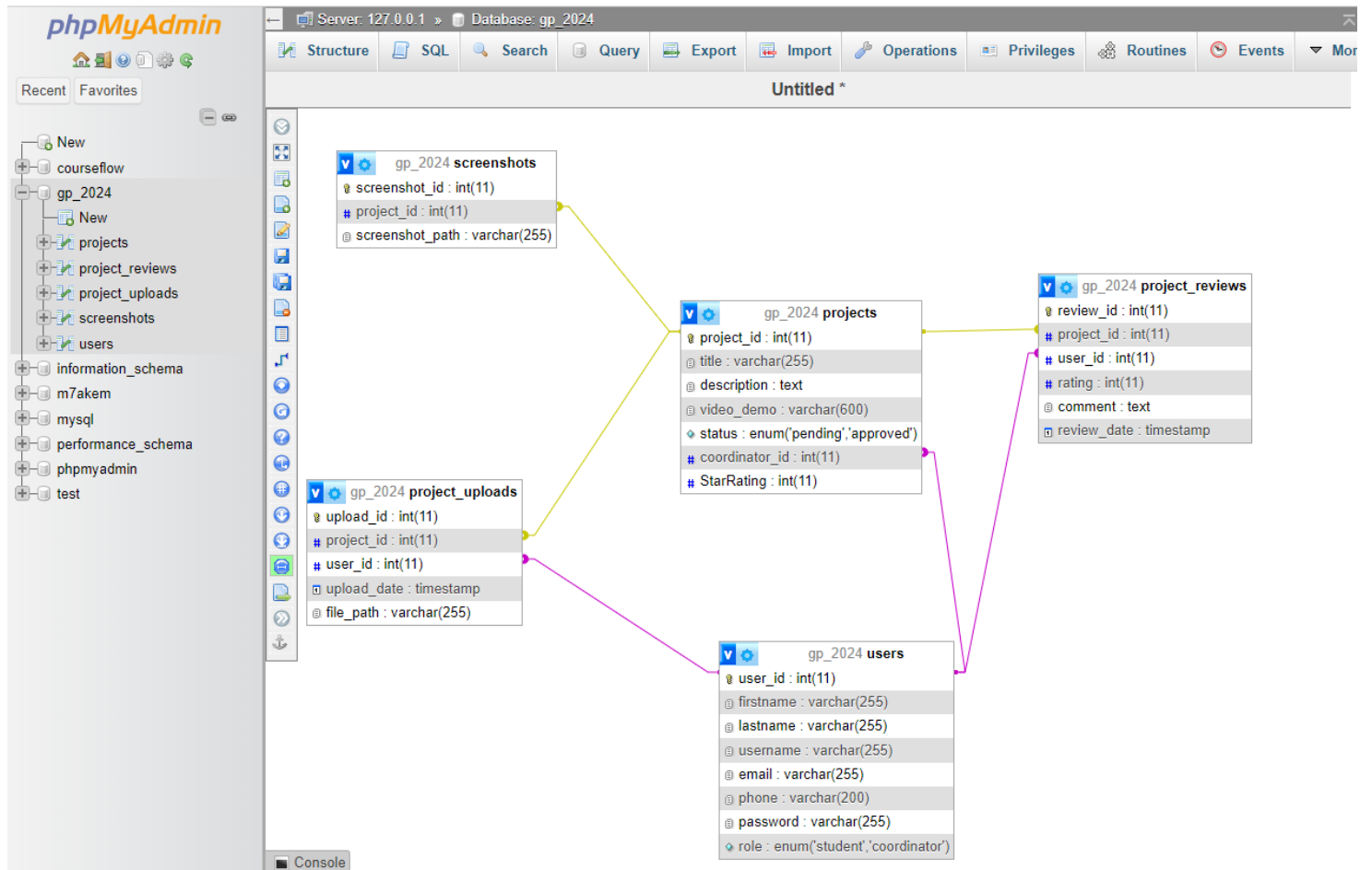
Streamlining Project Submission: Simplify the process of project submission for students, reducing administrative burden and ensuring timely and accurate submissions.

Efficient Evaluation Process: Provide faculty members with tools to efficiently review and evaluate projects, streamline feedback processes, and ensure consistent and fair evaluations.

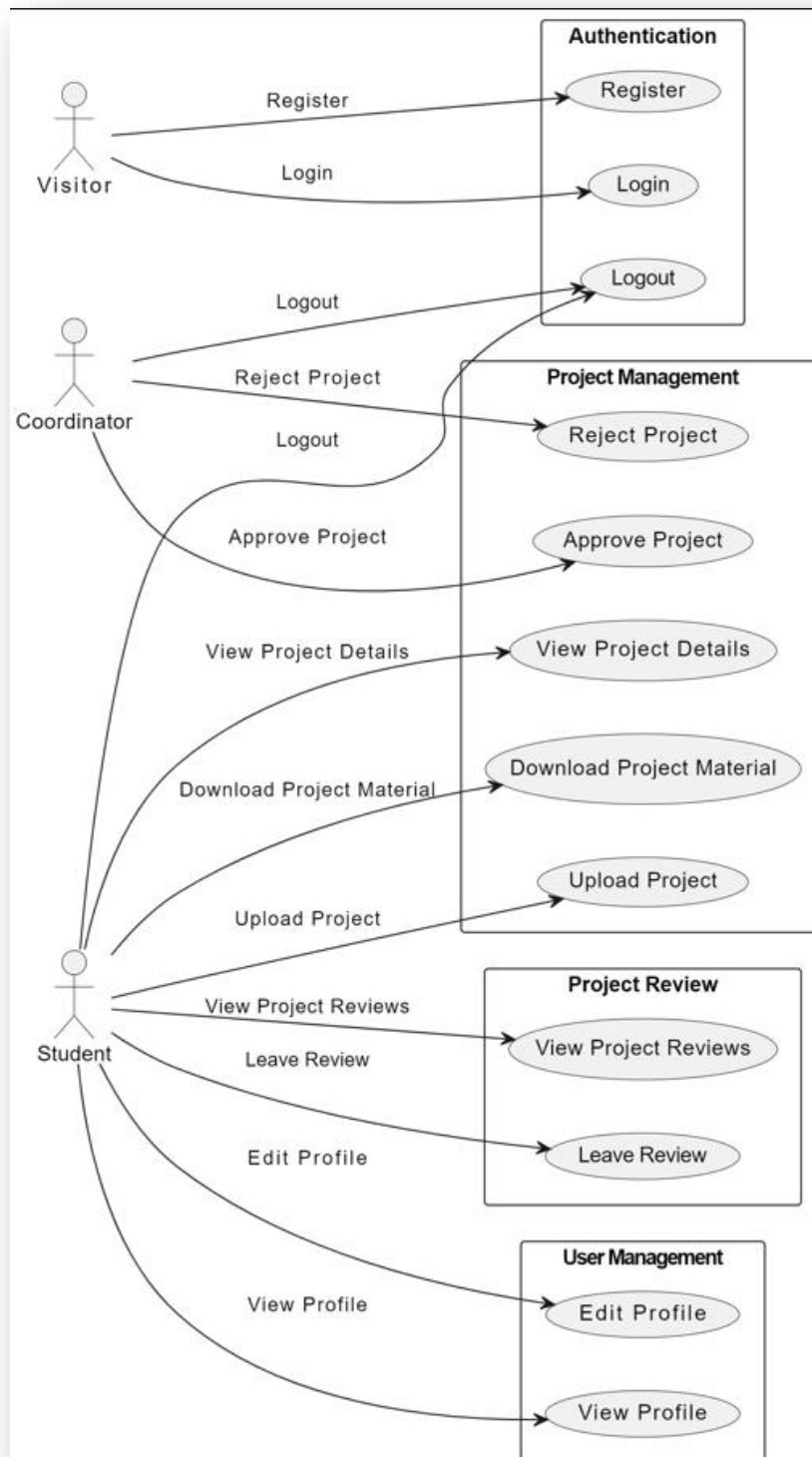
Enhancing Transparency: Create a centralized platform where students and faculty members can track the progress of project submissions and evaluations, promoting transparency and accountability.

Facilitating Collaboration: Foster collaboration and communication between students and faculty members, enabling seamless exchange of feedback, guidance, and support throughout the project lifecycle.

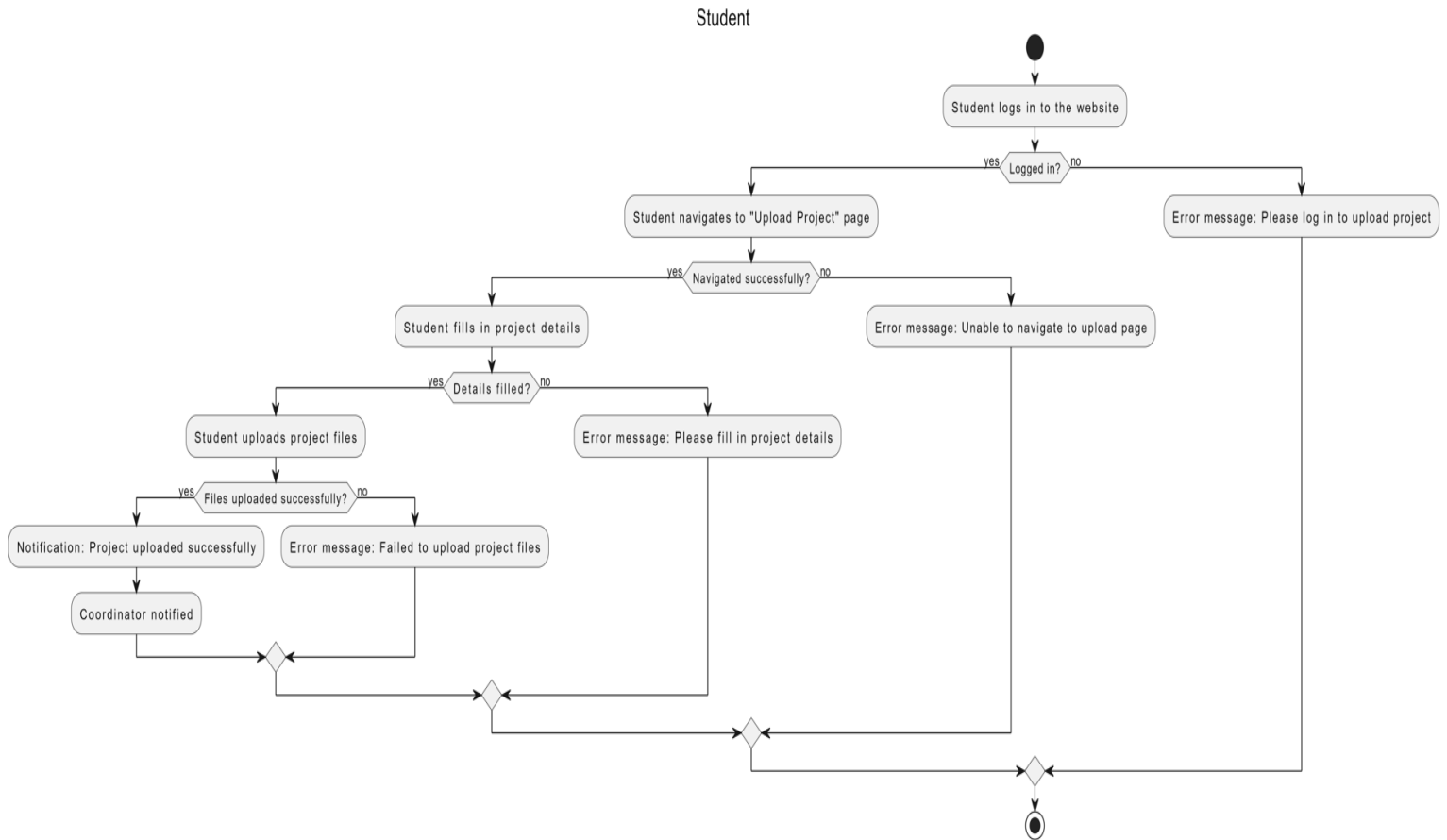
Database Design



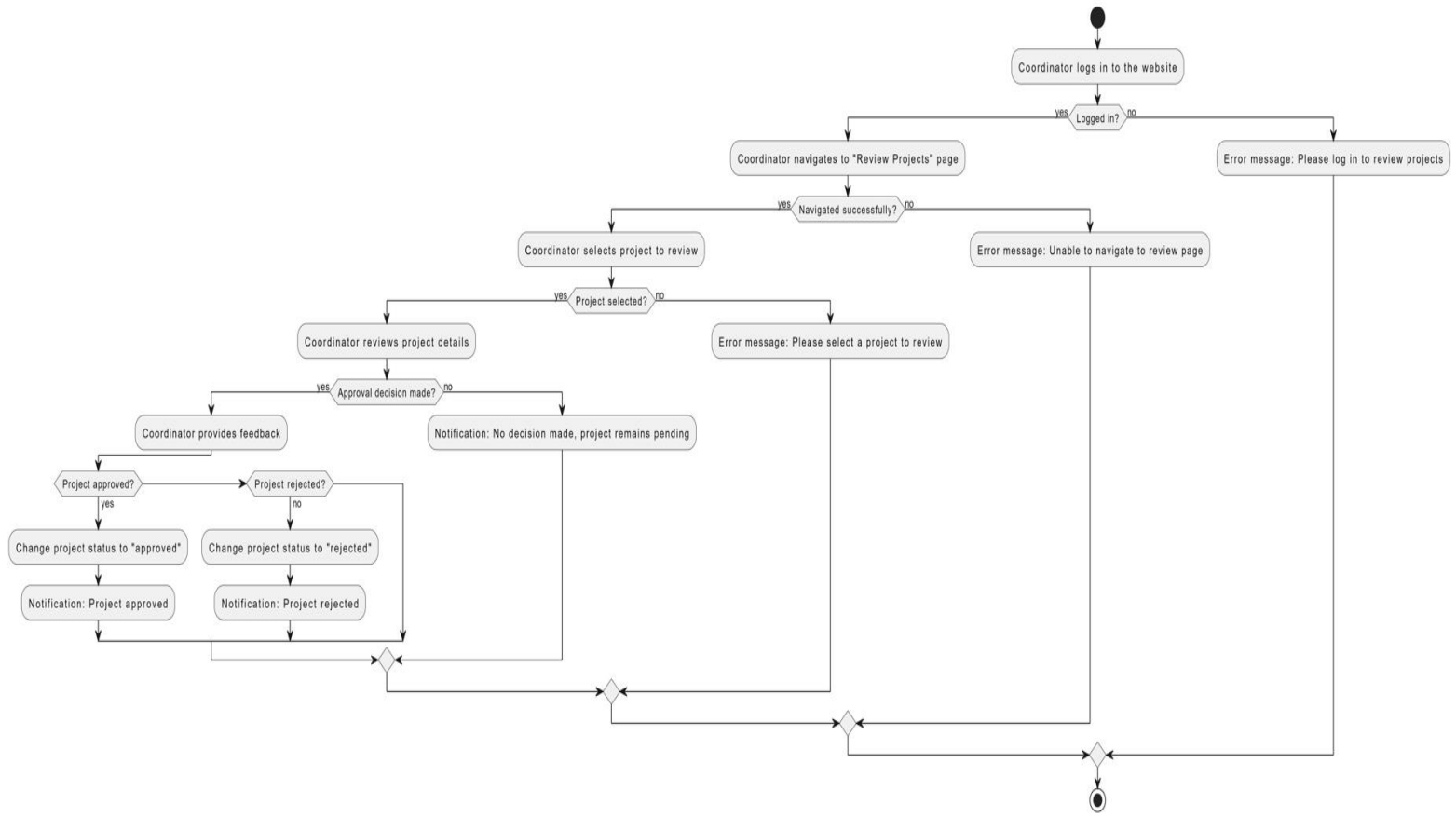
Use Case Diagram



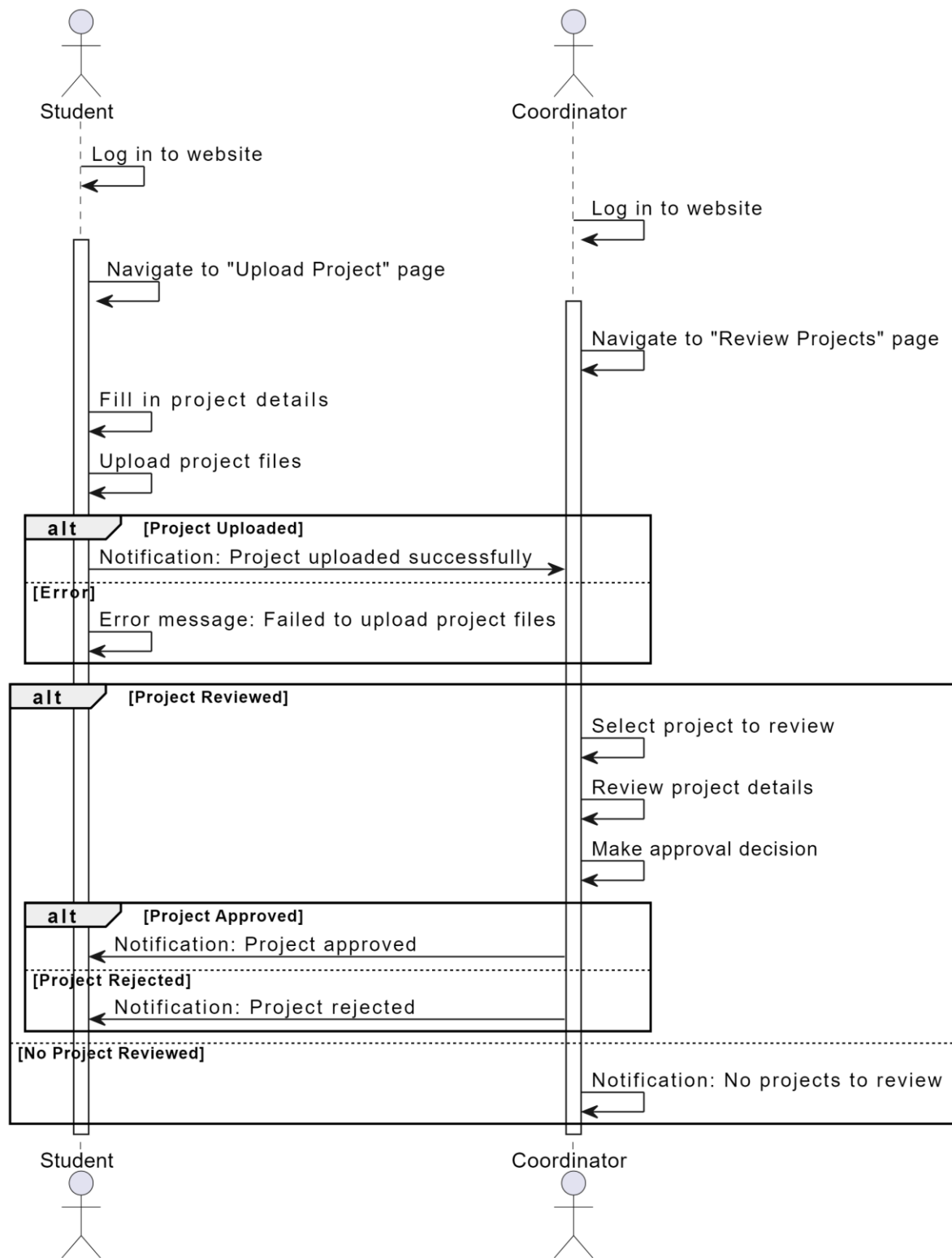
Student Activity Diagram



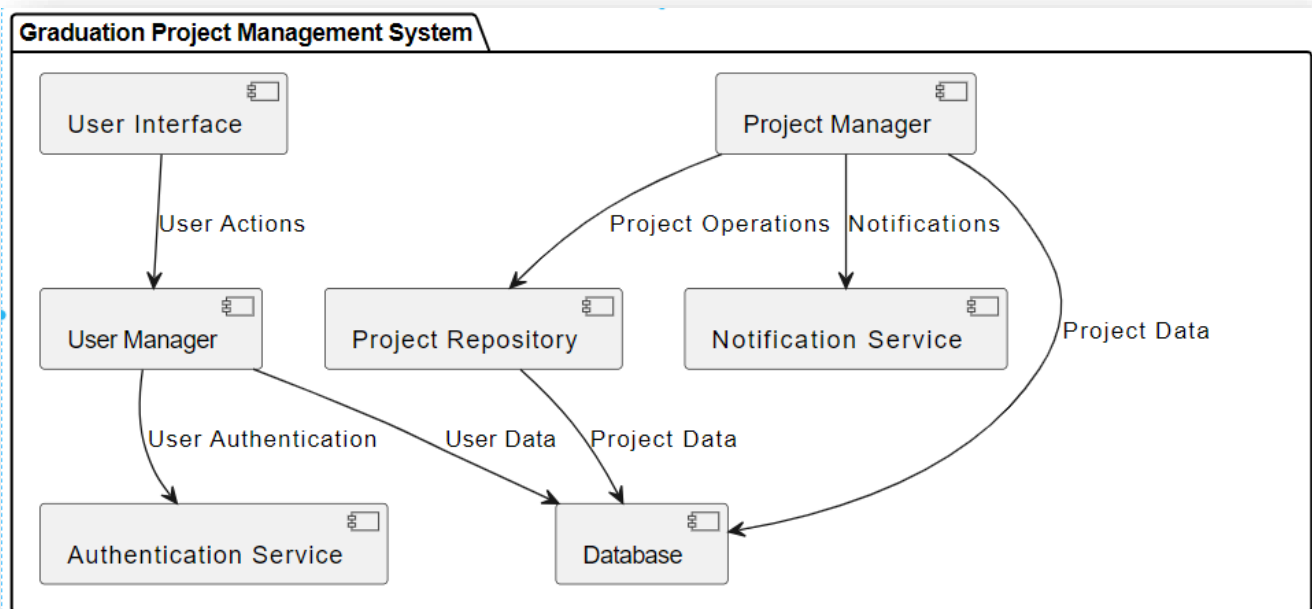
Coordinator Activity Diagram



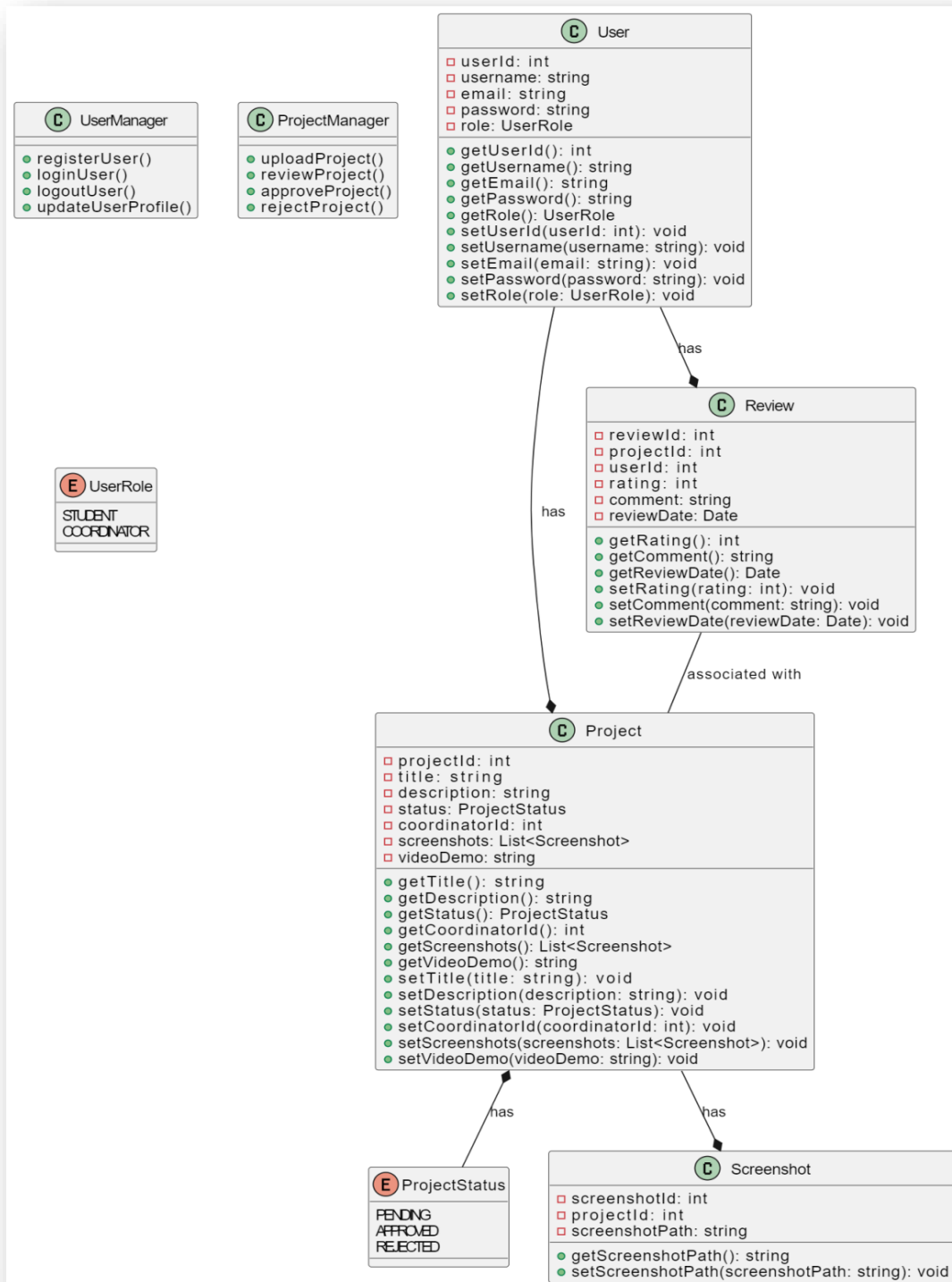
Sequence Diagram



High Level Design



Low Level Design



Solution

The Graduation Project Management System is a web-based platform designed to streamline the process of managing and evaluating graduation projects in academic institutions. The solution consists of several key modules:

- 1. User Management:** This module handles user registration, authentication, and profile management. It allows students and coordinators to create accounts, log in, and update their profile information.
- 2. Project Management:** This module facilitates the upload, review, and evaluation of graduation projects. Students can upload their projects, while coordinators can review and provide feedback. Coordinators have the authority to approve or reject projects based on predefined criteria.
- 3. Project Repository:** This module stores project data, including project details, screenshots, and reviews. It provides methods for accessing and managing project data efficiently.
- 4. Authentication Service:** This module verifies user credentials during the login process and ensures secure access to the system.
- 5. Notification Service:** This module sends notifications to users regarding project status updates, feedback, and other relevant events. It keeps users informed and engaged throughout the project lifecycle.

Key Features

1. **User Registration and Authentication:** Students and coordinators can create accounts, log in, and access system functionalities securely.
2. **Project Submission:** Students can upload their graduation projects, providing detailed information such as title, description, screenshots, and video demos.
3. **Project Review and Evaluation:** Coordinators can review uploaded projects, provide feedback, and make approval or rejection decisions based on predefined criteria.
4. **Project Archive:** The system maintains an archive of past graduation projects, allowing users to browse and search for projects based on various criteria.
5. **Notifications:** The system sends notifications to users to keep them informed about the status of their projects, feedback from coordinators, and other relevant events.

Technology Stack

- Backend: PHP Laravel
- Frontend: HTML, CSS, Angular
- Database: MySQL or PostgreSQL

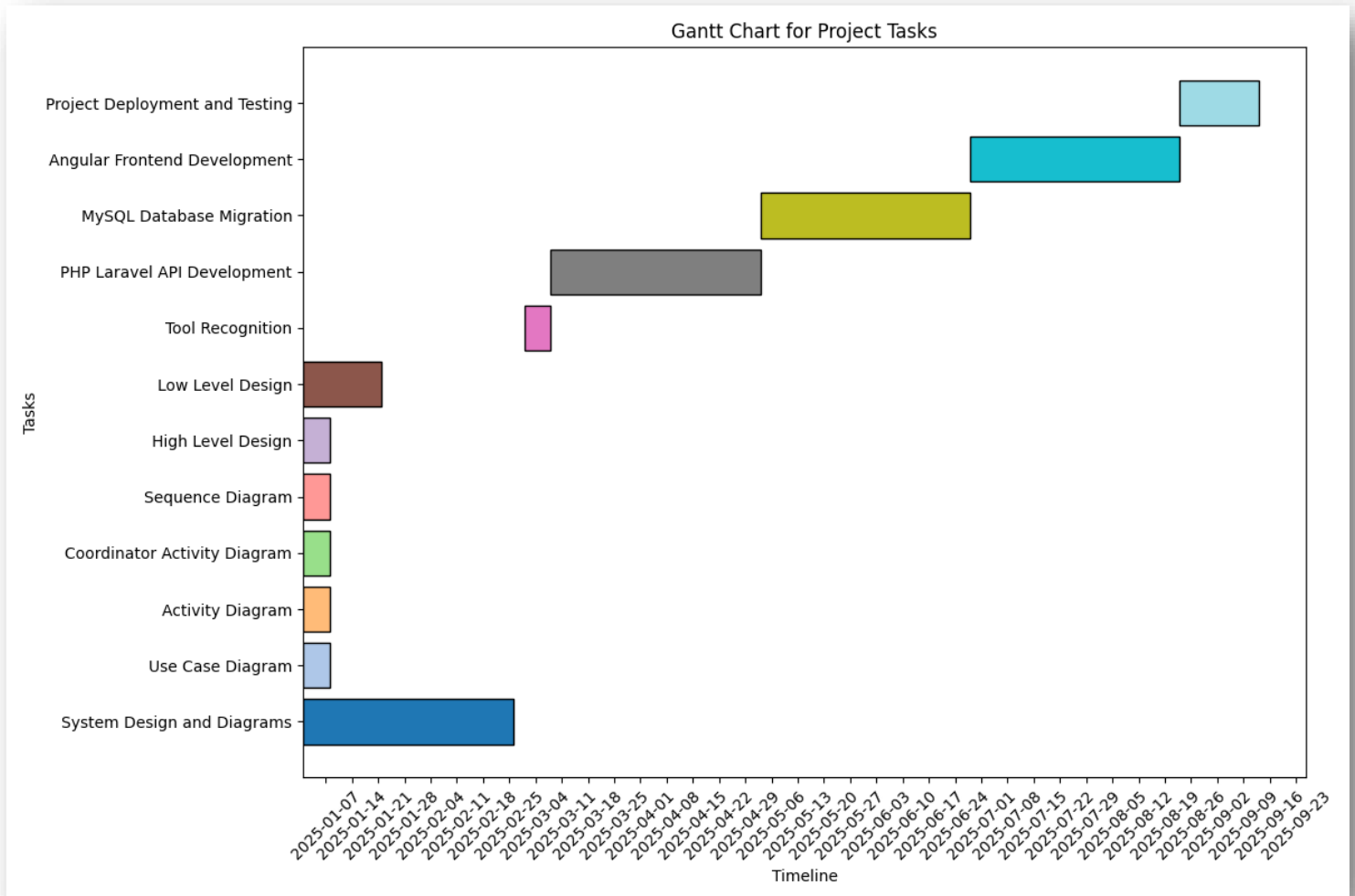
Benefits

1. Efficiency: The system automates manual tasks, streamlining the process of managing and evaluating graduation projects.
2. Transparency: By providing a centralized platform, the system promotes transparency and accountability in project management and evaluation.
3. Collaboration: The system facilitates communication and collaboration between students and coordinators, enabling seamless exchange of feedback and support.
4. Accessibility: The web-based nature of the system ensures accessibility from any device with an internet connection, allowing users to access system functionalities from anywhere, anytime.

Conclusion:

The Graduation Project Management System offers a comprehensive solution for managing and evaluating graduation projects in academic institutions. By leveraging PHP Laravel in the backend and HTML, CSS, and Angular in the frontend, the system aims to enhance the overall experience for students, coordinators, and other stakeholders involved in the graduation project process.

Progress Report



A **progress report** is a document that outlines the current status of a project or task, providing stakeholders with information about what has been accomplished, what is currently being worked on, and what is planned for the future. Progress reports are commonly used in various fields, including business, education, and project management. Here's a detailed overview:

Purpose of a Progress Report

1. Communication:

- To keep stakeholders, team members, or management informed about the status of a project.
- Provides a platform for discussing any challenges faced and solutions implemented.

2. Accountability:

- Holds team members accountable for their tasks and deadlines.

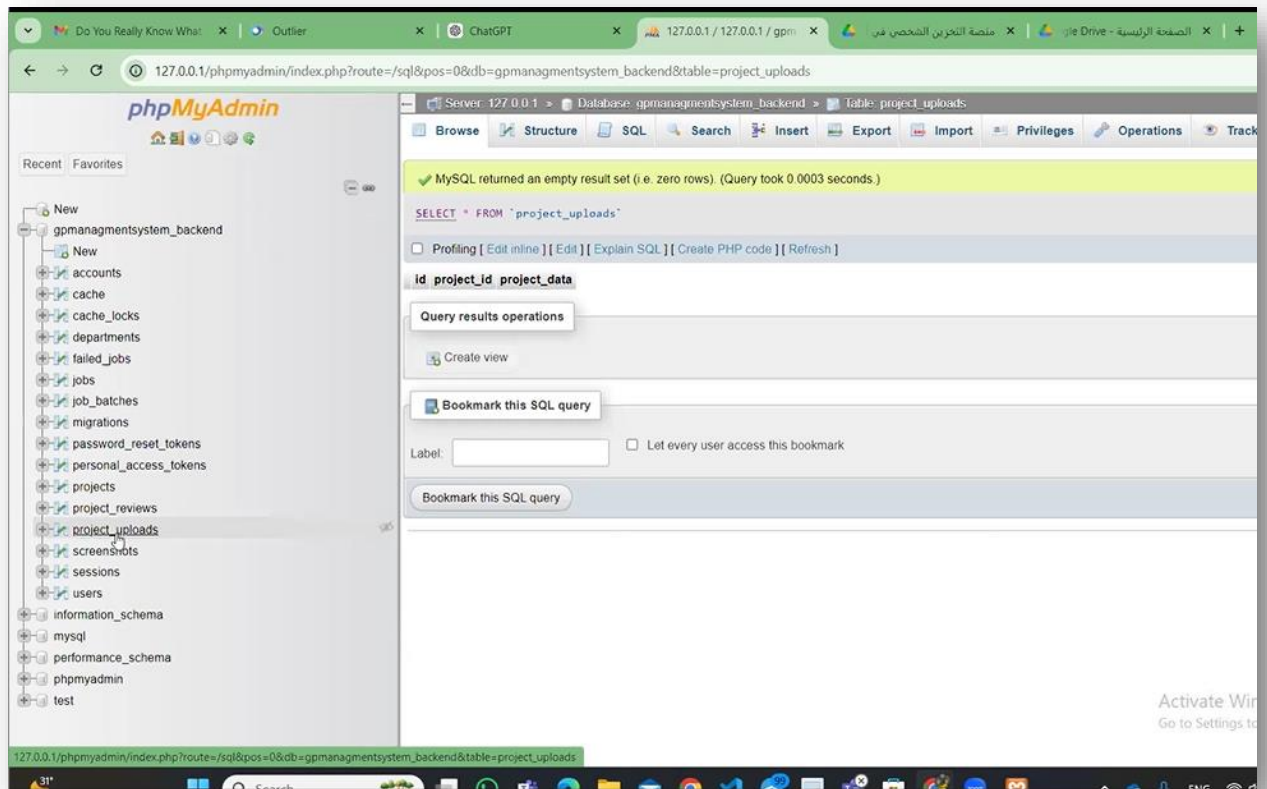
- Ensures that everyone is aware of their responsibilities and contributions to the project.
- 3. **Monitoring:**
 - Helps in tracking progress against goals, timelines, and budgets.
 - Assists in identifying areas that may need additional resources or attention.
- 4. **Decision Making:**
 - Provides valuable data and insights that can inform decision-making processes.
 - Helps in adjusting plans based on current progress and challenges.

Deploying the Project

Database php my admin (mysql)

Database: phpMyAdmin (MySQL)

phpMyAdmin is a web-based tool that provides a user-friendly interface for managing **MySQL** databases. It simplifies many common database administration tasks, allowing users to interact with their MySQL databases through a graphical interface instead of writing raw SQL queries. Below is a detailed description of phpMyAdmin and how it works with MySQL:



What is phpMyAdmin?

phpMyAdmin is an **open-source** tool written in PHP, used for administering **MySQL** and **MariaDB** databases over the web. It supports a wide range of database operations, including managing databases, tables, columns, relations, indexes, users, permissions, and executing SQL commands.

Key Features:

1. Database Management:

- phpMyAdmin allows users to **create**, **modify**, and **delete** databases and tables easily. You can view all the databases in your MySQL server and navigate through them via a graphical user interface (GUI).

2. Table Operations:

- Users can create, edit, and drop tables.
- **Table structure management:** Modify table structure, such as adding new fields (columns), changing data types, renaming columns, or setting primary and foreign keys.
- **Data entry and modification:** Add, edit, and delete records directly using the interface.

3. SQL Query Execution:

- You can write and execute custom **SQL queries** directly from phpMyAdmin. This is helpful for complex database operations that might not be easily managed through the interface alone.
- It also supports saving and running **predefined queries** for routine tasks.

4. Data Export and Import:

- phpMyAdmin supports **importing** and **exporting** data in various formats, including SQL, CSV, XML, and more.
- You can export entire databases or specific tables with different configurations (e.g., for backups or migrating data).
- The import function allows for uploading SQL files or other supported formats to restore databases or add data from external sources.

5. User and Privilege Management:

- phpMyAdmin provides a simple way to manage **MySQL user accounts** and **permissions**. You can create new users, define passwords, and assign specific privileges to control access to particular databases or tables.

6. Indexes and Relations:

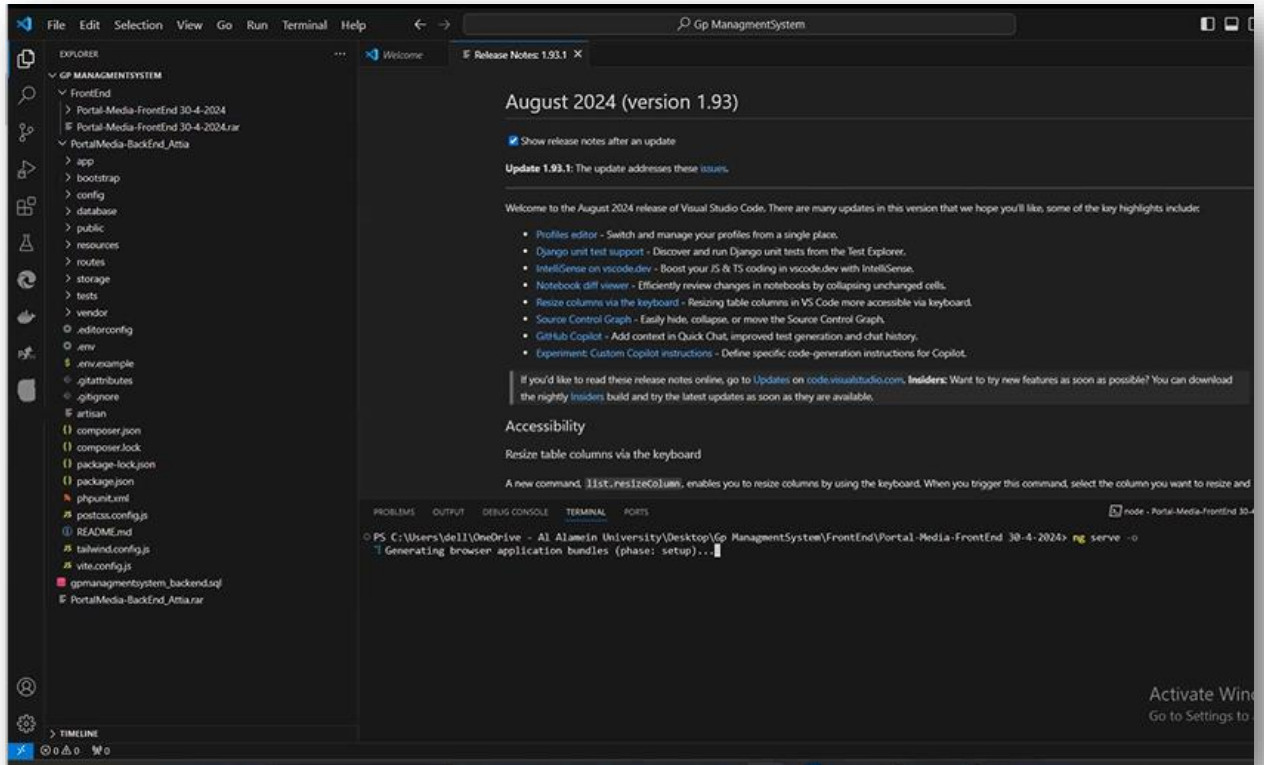
- The tool offers an interface for managing **indexes** (including primary keys, unique keys, and foreign keys), which are essential for optimizing queries and maintaining relationships between tables.
- You can easily manage **relations** between tables, establishing foreign key constraints to ensure database integrity.

7. Database Backup and Recovery:

- phpMyAdmin provides options for **backup** by exporting the database into SQL scripts that can be re-imported to recover data if needed.
- It allows for **partial backups** as well, where only specific tables or data structures are exported.

Frontend Run script :

ng serve -o : to Run the Frontend On Browser



Frontend Run Script: `ng serve -o`

The command `ng serve -o` is a key part of Angular development, used to **compile** and **run** the frontend application in a local development environment. It launches the Angular app in a web browser, allowing developers to interact with and test their app in real-time. Below is a detailed description of the command and its purpose:

Description of `ng serve -o`

1. Command Overview:

- The `ng serve` command is used to **compile** and **run** an Angular project locally. It builds the project from source code, compiles TypeScript into JavaScript, bundles all necessary files, and starts a local development server.
- The `-o` or `--open` flag automatically opens the default browser with the app's local development URL, typically `http://localhost:4200`, after the server starts.

1. Key Functions:

1. **Starts Local Development Server:** The command spins up a local web server, allowing you to view and interact with your Angular application.
2. **Live Reload:** It enables **hot reloading**, meaning that any changes made in the source code are instantly reflected in the browser without needing to manually refresh the page.
3. **Compilation:** The `ng serve` command handles the compilation of all Angular modules, components, services, and other assets.
4. **Auto-Opening Browser:** By including the `-o` option, the command automatically opens the application in your default web browser as soon as it compiles.

2. How It Works:

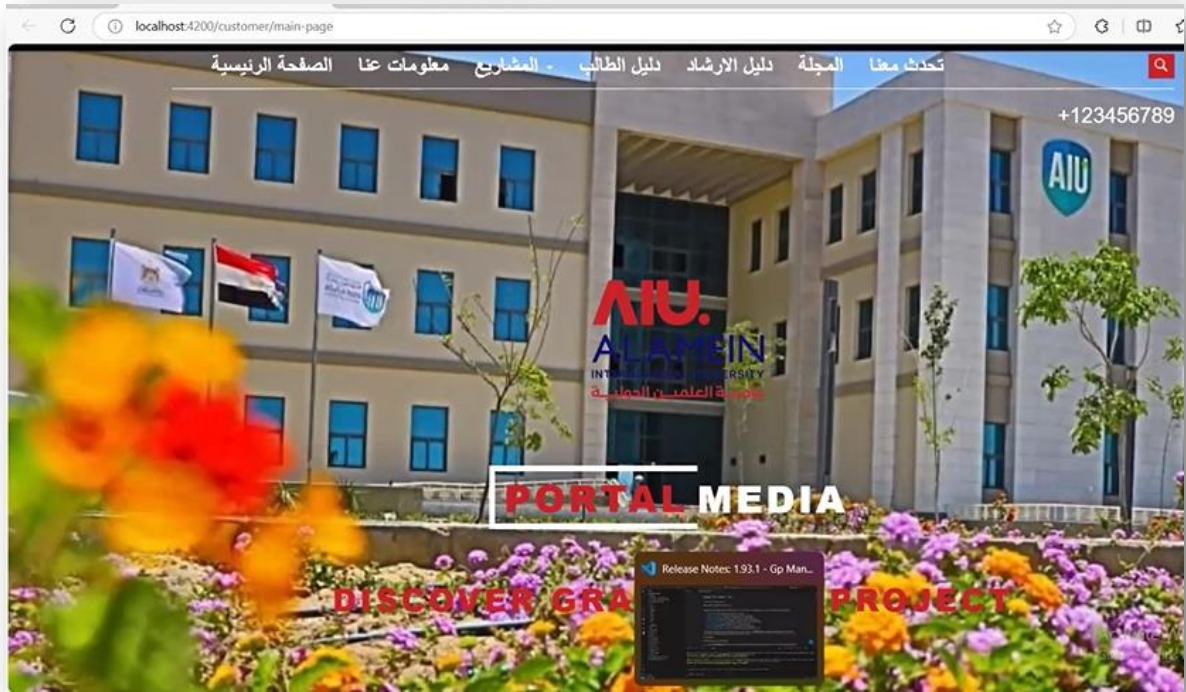
1. When you run `ng serve -o`, the following steps occur:
 1. **Build Process:** Angular CLI reads your project's configuration (`angular.json`) and compiles your source code into optimized bundles.
 2. **Serve Locally:** It sets up a local development server (typically on port 4200), making your app accessible at `http://localhost:4200/`.
 3. **Auto-Open:** The app is automatically opened in your default web browser using the local URL.
 4. **Live Reload:** If you make any changes in the code (e.g., HTML, CSS, or TypeScript), Angular automatically rebuilds the project, and the browser refreshes to display the updated version.

3. Usage in Development:

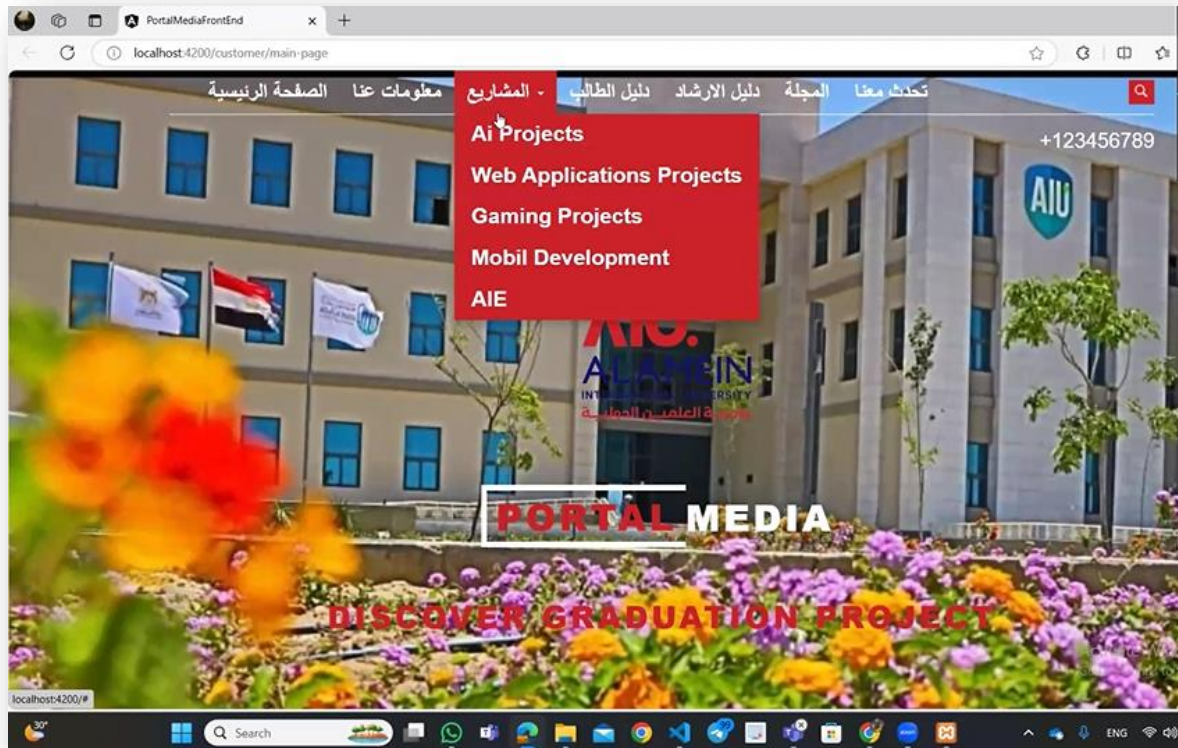
1. This command is essential for **frontend development** as it allows developers to instantly see the effects of changes made to the code.
2. It also simplifies the process of debugging, testing, and refining the application during the development lifecycle.

Frontend ScreenShoots

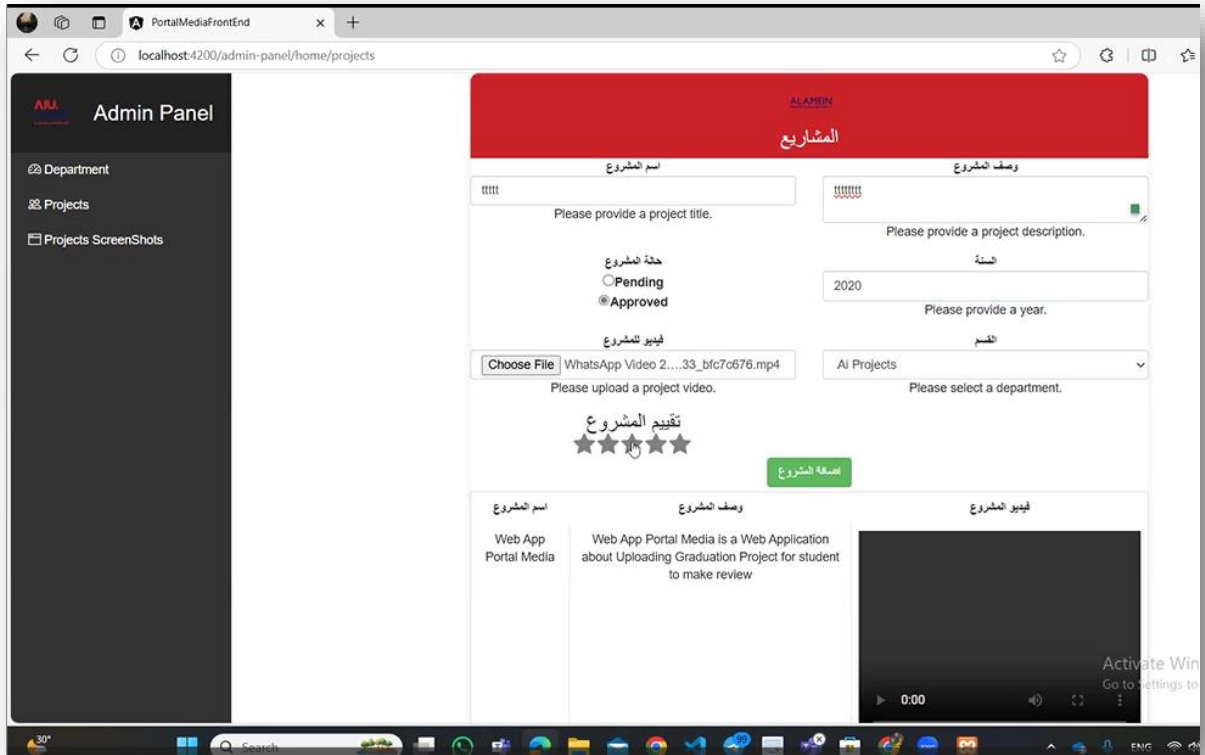
• Home Page :



• Choose Project :



• Dash Board Add Project :



Add Project Section on Dashboard

The **Add Project** section on the dashboard serves as the starting point for creating and managing new projects. This section provides an intuitive interface to input essential project information, ensuring smooth project organization and efficient workflow management. Here's a breakdown of the **Add Project** functionality on the dashboard:

1. Location and Accessibility:

- The **"Add Project"** button is prominently displayed on the dashboard, typically located at the top or within a visible section for easy access.
- It is usually represented with a **plus icon (+)** and the label "Add Project," inviting users to initiate the project creation process.

2. Project Creation Form:

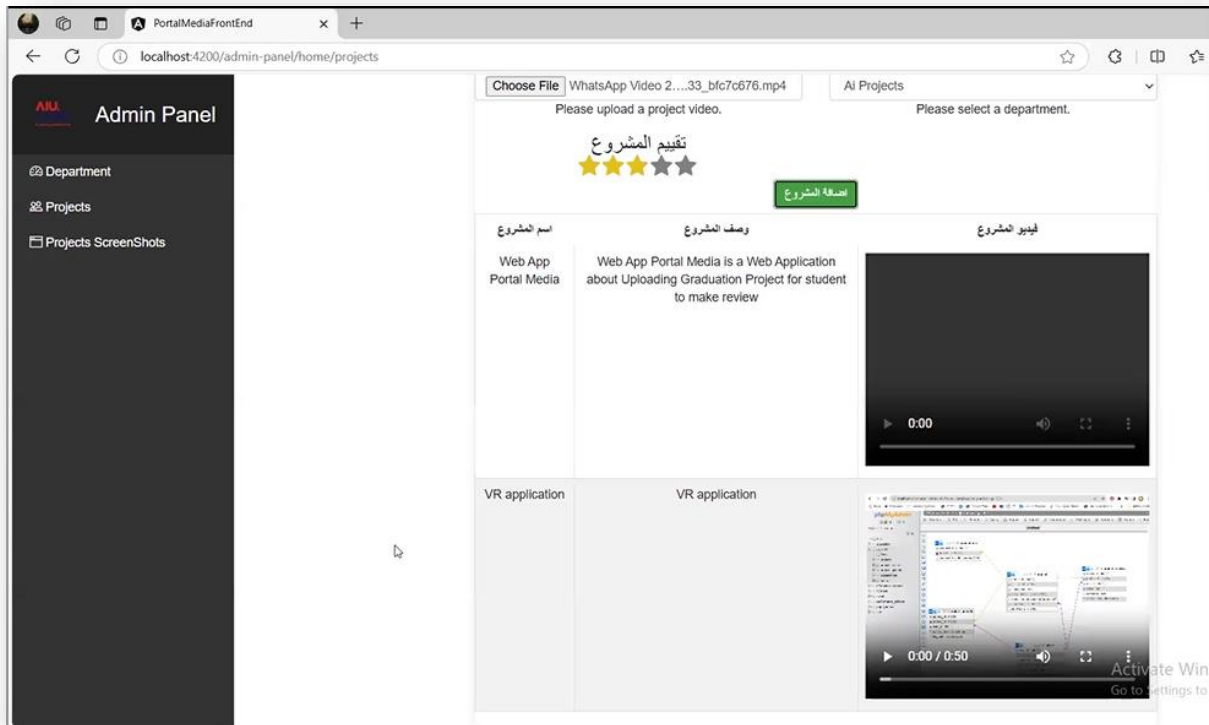
- Clicking on the **Add Project** button opens a form or a modal window where users can input various details to create a new project. The form includes fields such as:
 - **Project Title:** A required field where users specify the name of the project.
 - **Project Description:** A space for providing a brief or detailed summary of the project's goals, objectives, and scope.
 - **Start Date:** The expected start date of the project.
 - **End Date:** The anticipated completion or deadline for the project.
 - **Project Status:** Dropdown or selection for specifying the current status of the project (e.g., Pending, In Progress, Completed).
 - **Assignees:** Option to assign team members or stakeholders responsible for the project.

3. Category/Tag Selection:

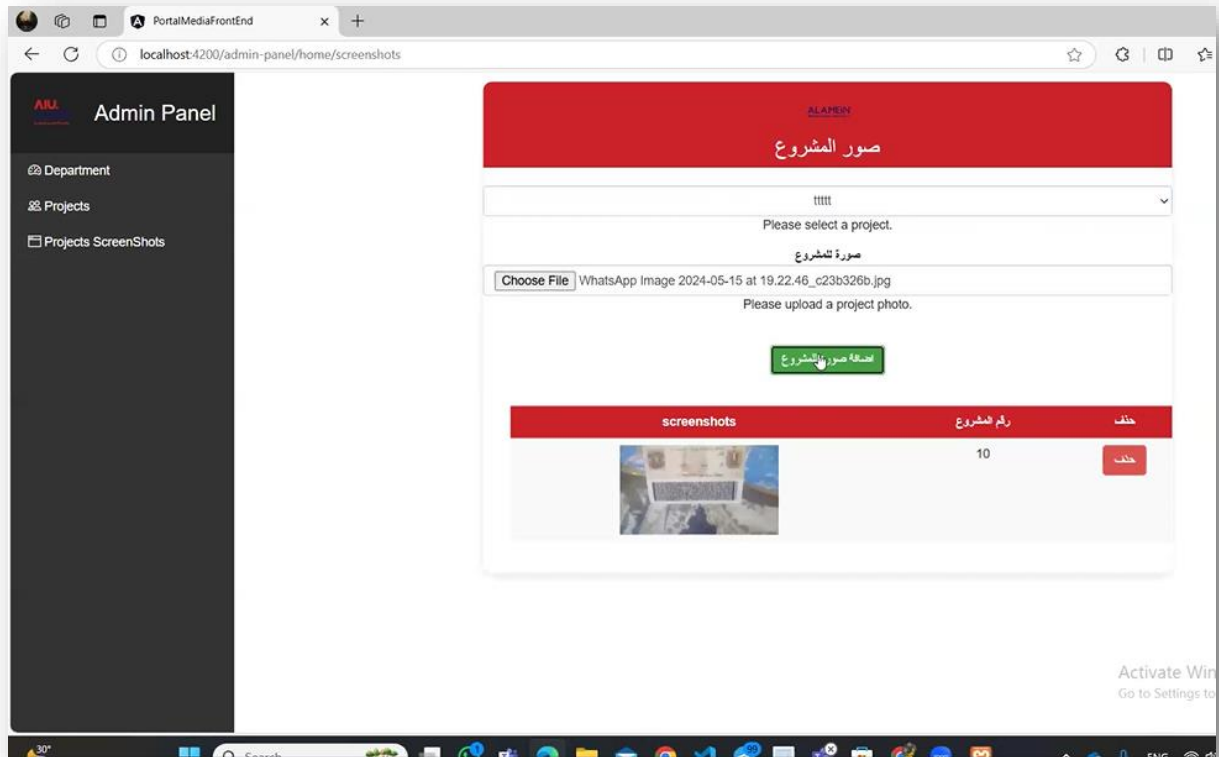
- Users may have the option to categorize the project by selecting **tags** or **categories** (such as Development, Design, Marketing), which helps in organizing projects and filtering them later on the dashboard.

4. Upload Files or Documents:

- The form may allow users to **attach documents** or upload relevant project files (e.g., requirements, wireframes, or other assets) during the project creation process.



● Add Project Screen shoots :



Add Project Screenshot on Dashboard Page

The **Add Project Screenshot** functionality on the **Dashboard Page** is a critical tool for users to visually manage their projects. It allows users to upload and associate screenshots that demonstrate the current progress, design stages, or specific features of a project. Here's a detailed description of the section:

1. Location on the Dashboard:

- This feature is located within the **Project Management section** of the dashboard, typically under or near the project overview panel. Users can easily find the **"Add Screenshot"** button or link next to project details or alongside the current list of screenshots.

2. Upload Button or Icon:

- Users will see a prominent **"Add Screenshot"** button, often represented by an upload icon (such as a camera, image, or plus sign). Clicking this button opens a dialogue box or modal window for uploading screenshots.
- The button is visually highlighted, ensuring easy access and user interaction.

3. Screenshot Upload Modal:

- Upon clicking the "Add Screenshot" button, a **modal window** or popup appears where users can:
 - **Choose a file** from their local device (usually in image formats such as PNG, JPEG).
 - **Drag and drop** images into the designated area for faster uploads.
 - Optionally, add a **caption or description** for the screenshot to provide context or explain what part of the project it represents.

4. Preview Functionality:

- After uploading, the user can see a **preview** of the screenshot in the modal before saving. This allows them to ensure the correct image has been selected.

- If needed, users can delete or replace the screenshot before final submission.

5. Screenshot Gallery Display:

- Once added, the screenshots appear in a **gallery format** on the dashboard under the respective project. Each screenshot is shown in a grid or list view with its associated captions or descriptions.
- Screenshots are displayed as **thumbnails**, which users can click to enlarge for more detailed viewing.

6. Screenshot Management:

- Users have the option to **edit** or **remove** screenshots directly from the dashboard. Next to each uploaded screenshot, there are icons or buttons for deleting the image or editing the description.
- This functionality allows for ongoing management of project documentation, making it easy to update visuals as the project evolves.

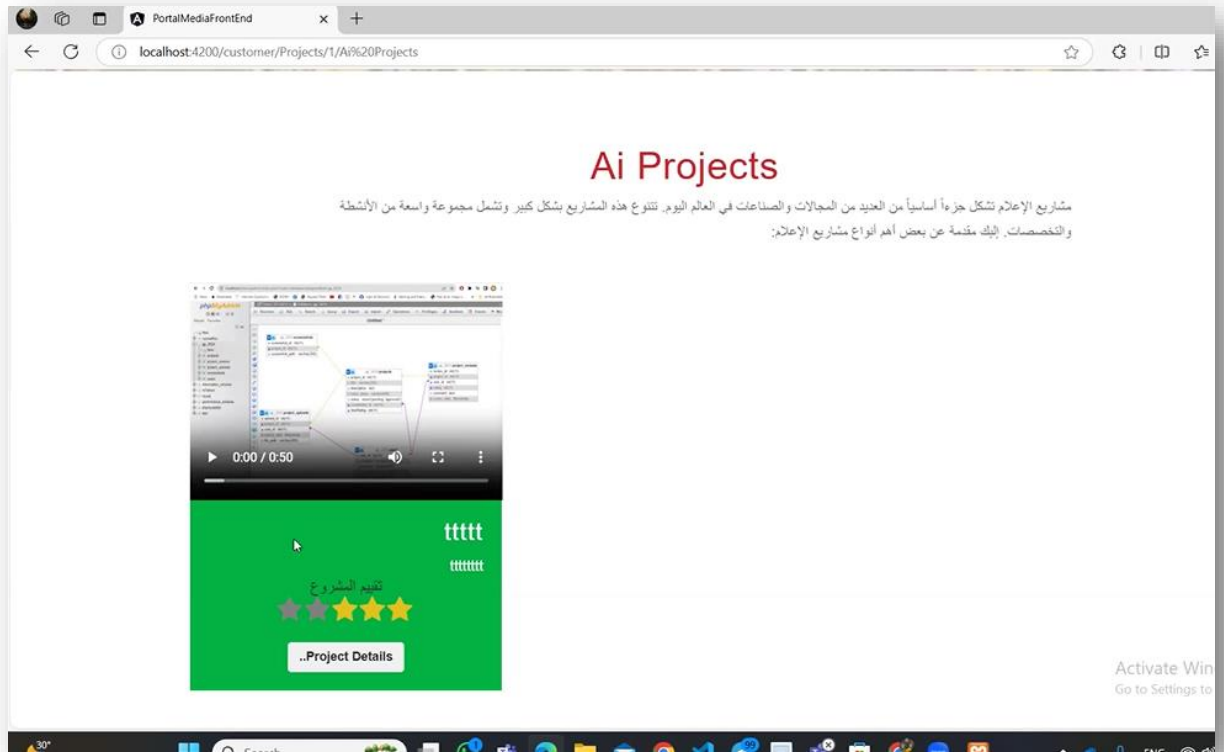
7. Interactive Dashboard Insights:

- The dashboard may also show **statistics** or **notifications** related to screenshots, such as:
 - The number of screenshots uploaded for each project.
 - Recent activity or updates on newly added screenshots.
 - A **filter or sort feature** to organize screenshots by date added, project phase, or importance.

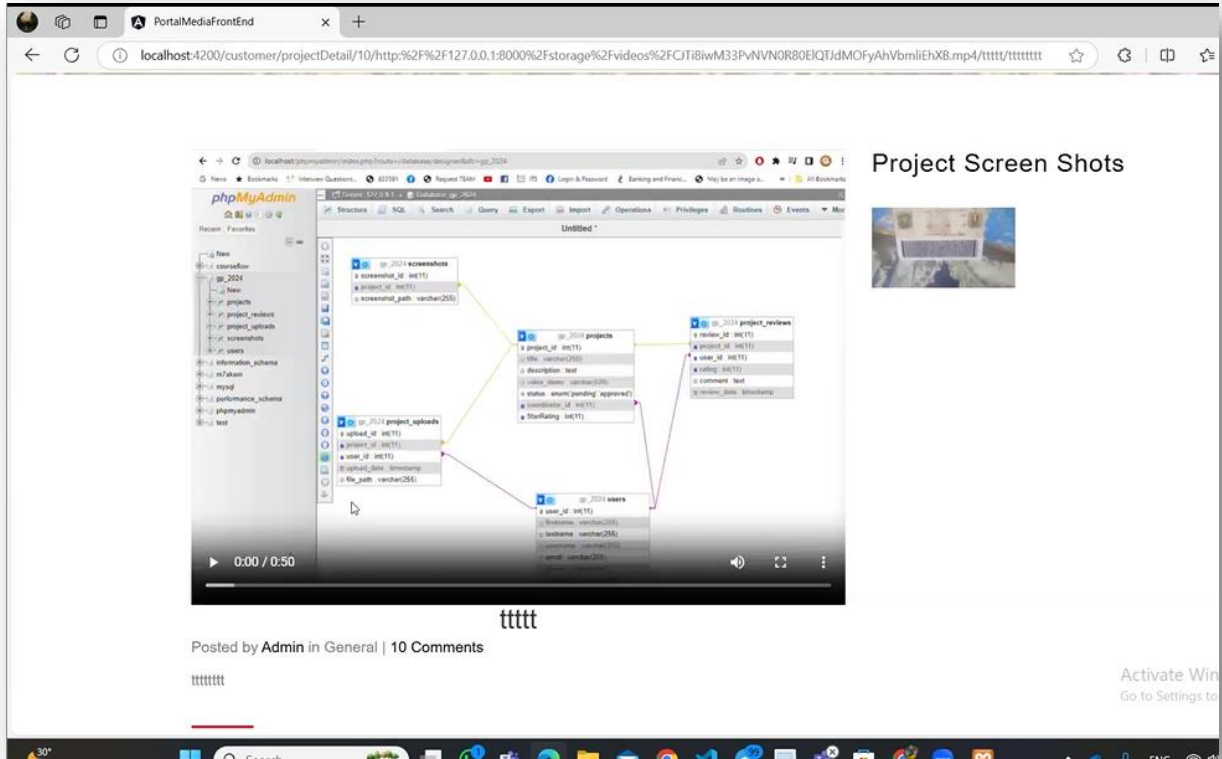
8. Visual Feedback and Confirmation:

- After successfully uploading a screenshot, a small **confirmation message** or alert (e.g., "Screenshot Added Successfully") appears on the dashboard, ensuring that the user knows the upload was successful.

● Review Ai Project :



• Project Details:



Project Screenshot Section

The **Project Screenshot Section** is an essential part of the project detail page, offering a visual representation of key project features, progress, or outcomes. This section provides a clear and practical insight into what has been developed or designed so far, aiding stakeholders in understanding the project's evolution. Below is a breakdown of how the screenshot section is typically presented:

1. Screenshot Display:

- The section prominently displays **one or multiple screenshots** from the project. Each screenshot captures key components or stages of the project development.
- These images help illustrate the design interface, functionality, or any specific progress made within the project.

2. Screenshot Thumbnails:

- If multiple screenshots are provided, there may be **thumbnail images** beneath or beside the main screenshot. Users can click on these thumbnails to view different aspects of the project in greater detail.

3. Zoom or Expand Features:

- To enhance user interaction, the screenshot area may allow for **zooming** into the image or **expanding** the screenshot to full screen. This feature is helpful for closely reviewing details or specific areas of interest within the project.

4. Captions or Descriptions:

- Below or next to each screenshot, there is usually a **caption or brief description** explaining what the screenshot represents. This might include:
 - The specific feature being showcased.
 - The project phase or development milestone reached.
 - Any relevant notes on updates or changes visible in the screenshot.

5. Contextual Relevance:

- The screenshots displayed on the project detail page are highly relevant to the **current status** of the project. They might represent recent design prototypes, implemented features, or testing results.
- For instance, if the project is a mobile app, screenshots may include images of different app screens (e.g., login page, dashboard, user profile, etc.).

6. Actionable Insights:

- If the project involves a **collaborative team** or **stakeholder feedback**, this section might also include buttons or options for:
 - **Adding Comments:** Allowing team members to leave feedback or suggestions on the specific parts of the project shown in the screenshot.
 - **Marking Issues:** A feature to highlight or flag any issues that need attention, based on the screenshots.

Backend Run script :

php artisan serve : to Run the Backend On Browser

Command: php artisan serve

The php artisan serve command is a utility provided by the Laravel framework to quickly launch a development server. This command simplifies the development process by allowing developers to test their application in a local environment without the need to configure a web server like Apache or Nginx.

Purpose:

The command initiates a PHP built-in server, enabling developers to run the application locally and access it through a web browser. This helps in the rapid testing and debugging of the Laravel project.

Detailed Explanation:

Server Execution: The command starts a PHP server on the default address `http://127.0.0.1:8000/`, allowing access to the Laravel application through a browser.

Port Specification: If needed, you can specify a custom port using the following command:

The php artisan serve command is designed for **local development**.

