**TaskTrackr: Student Productivity and Project Management Tool**

**System Overview**

TaskTrackr is a web-based project and productivity management tool designed specifically for students. It helps users organize academic responsibilities, track tasks efficiently, and collaborate seamlessly on group projects. By addressing common challenges such as missed deadlines, poor group coordination, and overwhelming workloads, TaskTrackr offers a structured yet flexible system that enhances productivity.

**Core Features**

TaskTrackr integrates intuitive interfaces, smart notifications, and seamless connectivity to ensure a smooth academic workflow. Its primary features include:

* **My Task:** Mark tasks as Pending, In Progress, Done, or Overdue. Reopen completed tasks if needed.
* **My Project:** Develop academic projects, manage milestones, and delegate tasks to team members.
* **My Groups:** Form study or project groups, invite members via email, and work together effortlessly.
* **Dashboard:** Track task completion rates, upcoming deadlines, and project status at a glance.
* **Customization & Usability**:
  + **Settings:** Enables users to set task reminders, personalize notifications, and switch to dark mode.
  + **Smart Notifications:** Ensures users stay informed of project updates, upcoming deadlines, and changes within team collaborations.
  + **User Bar:** Provides access to profile settings, account management, and security features.
  + **Real-Time Updates:** Ensures changes are synchronized across all team members' accounts instantly.

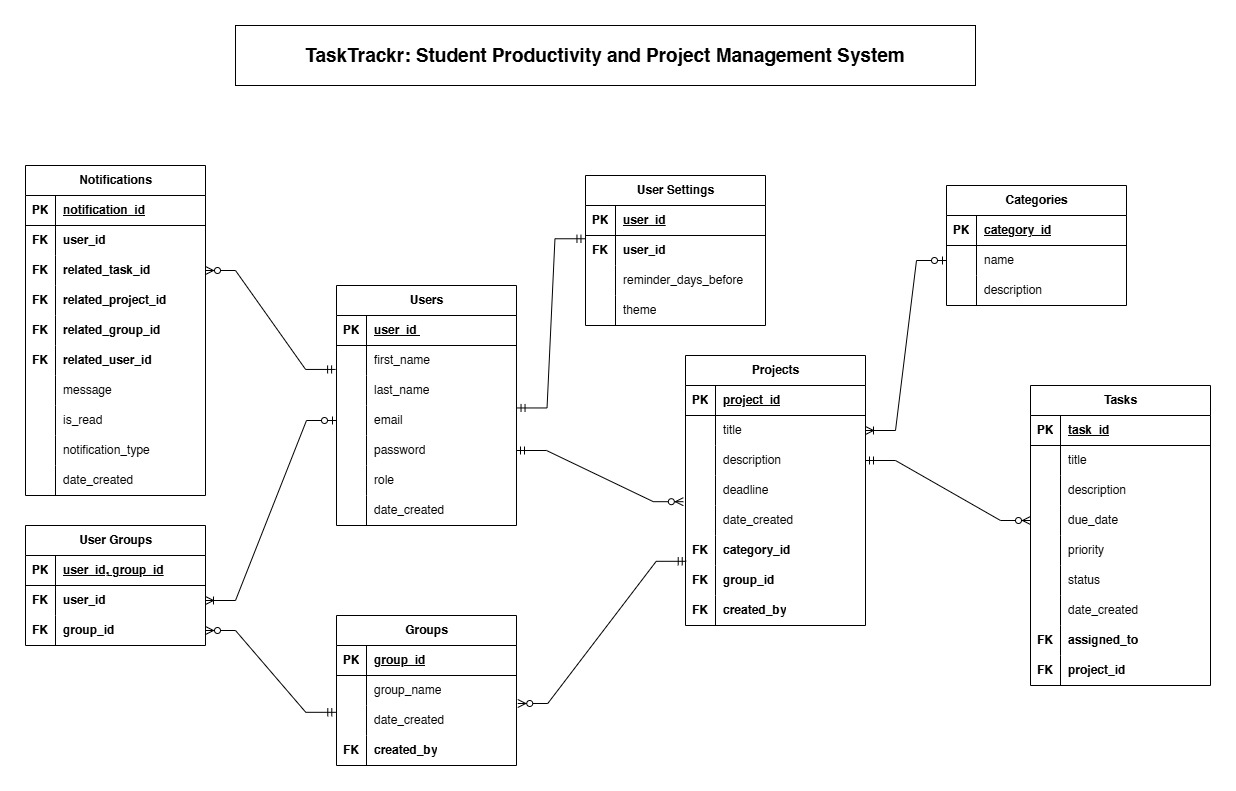
**How TaskTrackr Enhances Academic Productivity**

By offering integrated tools for organization, accountability, and teamwork, TaskTrackr fosters an environment where students can:

* Effectively manage workloads, reducing stress from overlapping assignments.
* Improve time management skills with deadline tracking and prioritization.
* Strengthen collaboration through streamlined communication and task delegation.
* Increase efficiency with real-time updates, ensuring smooth project execution.

With smart integrations and an intuitive interface, TaskTrackr transforms academic project management into a well-structured, adaptable, and efficient experience for students.

**Database Schema**



**Tables Overview**

**Users**

* Stores user accounts (name, email, password)
* Each user can have tasks, projects, and join groups
* Has a role (user or admin)

**User\_Settings**

* Stores user preferences
* Controls reminder timing and theme choice (light/dark)
* One settings record per user

**Categories**

* Classifies projects by type
* Examples: Homework, Research, Presentations
* Contains 10 default categories

**Groups**

* Enables team collaboration
* Created by users
* Members join through User\_Groups table

**Projects**

* Contains multiple related tasks
* Has title, description, and deadline
* Can be assigned to a category and/or group
* Created by a specific user

**Tasks**

* Individual to-do items
* Belongs to a project
* Has status (Pending, In Progress, Done, Overdue)
* Has priority (Low, Medium, High)
* Can be assigned to a specific user

**User\_Groups**

* Links users to groups
* Shows which users belong to which groups
* Simple connection table with just IDs

**Notifications**

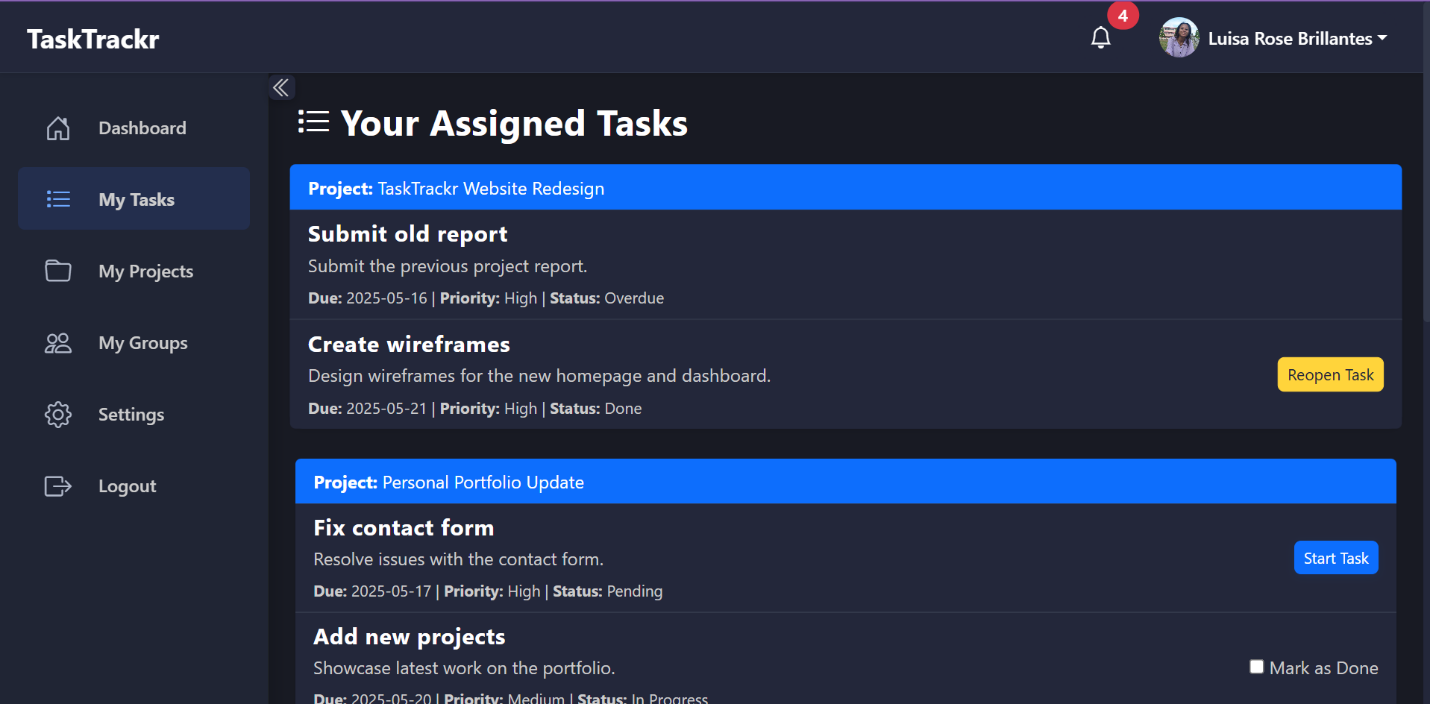
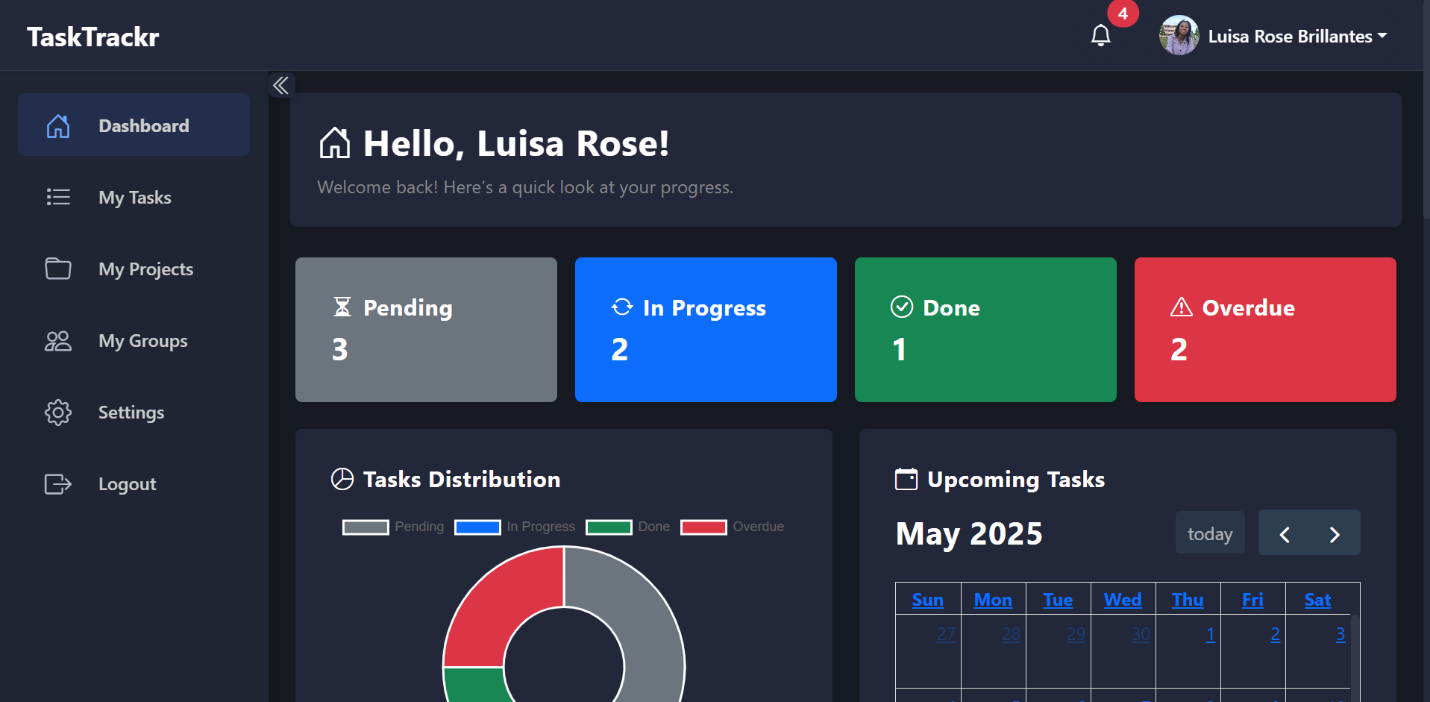
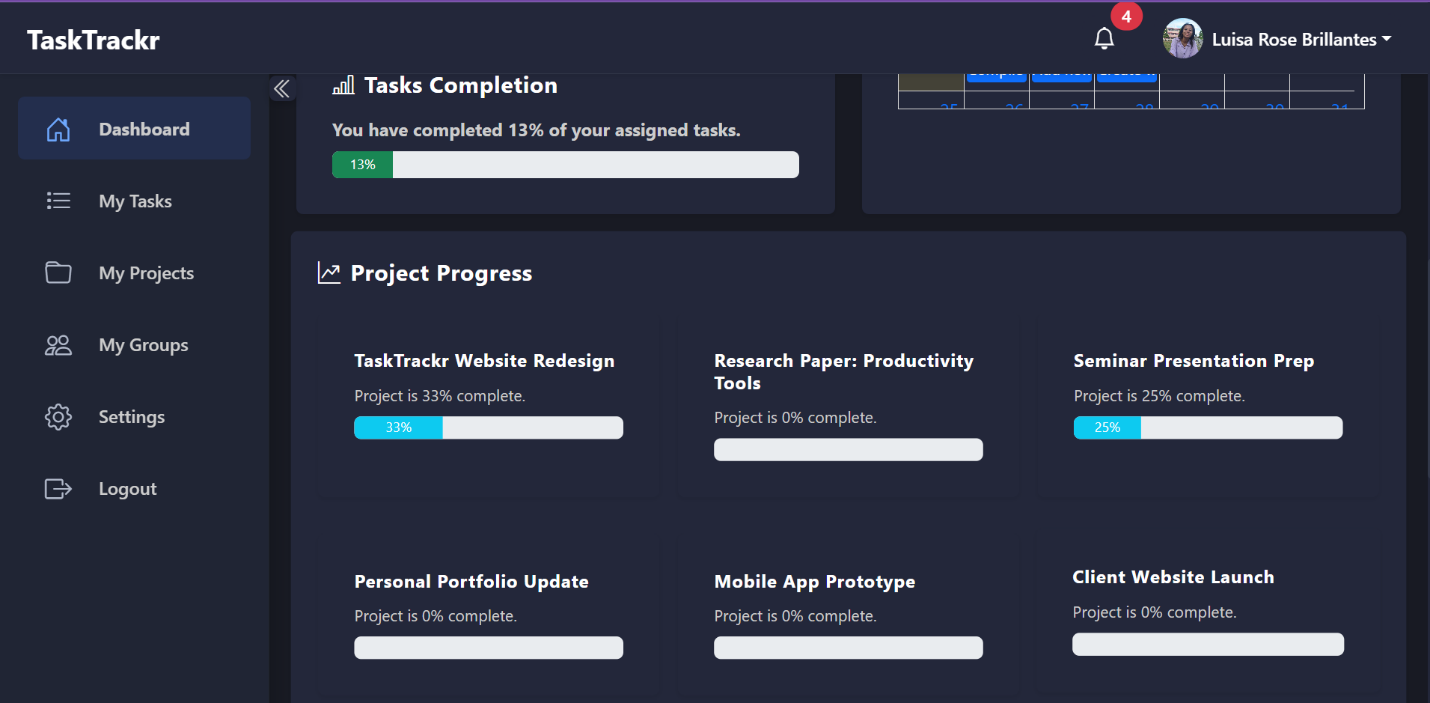
* Alerts users about tasks, projects, etc.
* Shows as read or unread
* Different types: reminders, assignments, updates
* Links to relevant tasks, projects, or groups

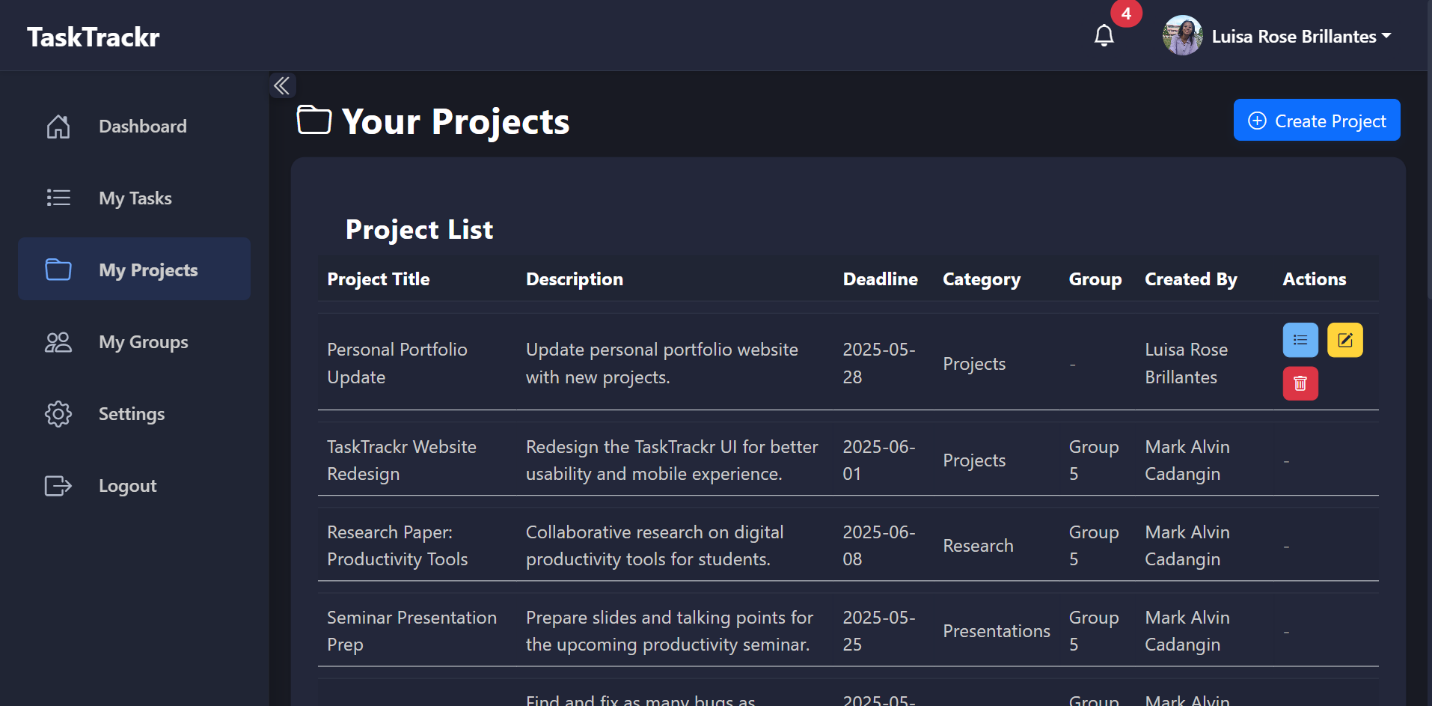
**Key Relationships**

* Users create Projects and Tasks
* Tasks belong to Projects
* Projects can have Categories
* Users join Groups through User\_Groups
* Projects can be assigned to Groups
* Notifications link to relevant items

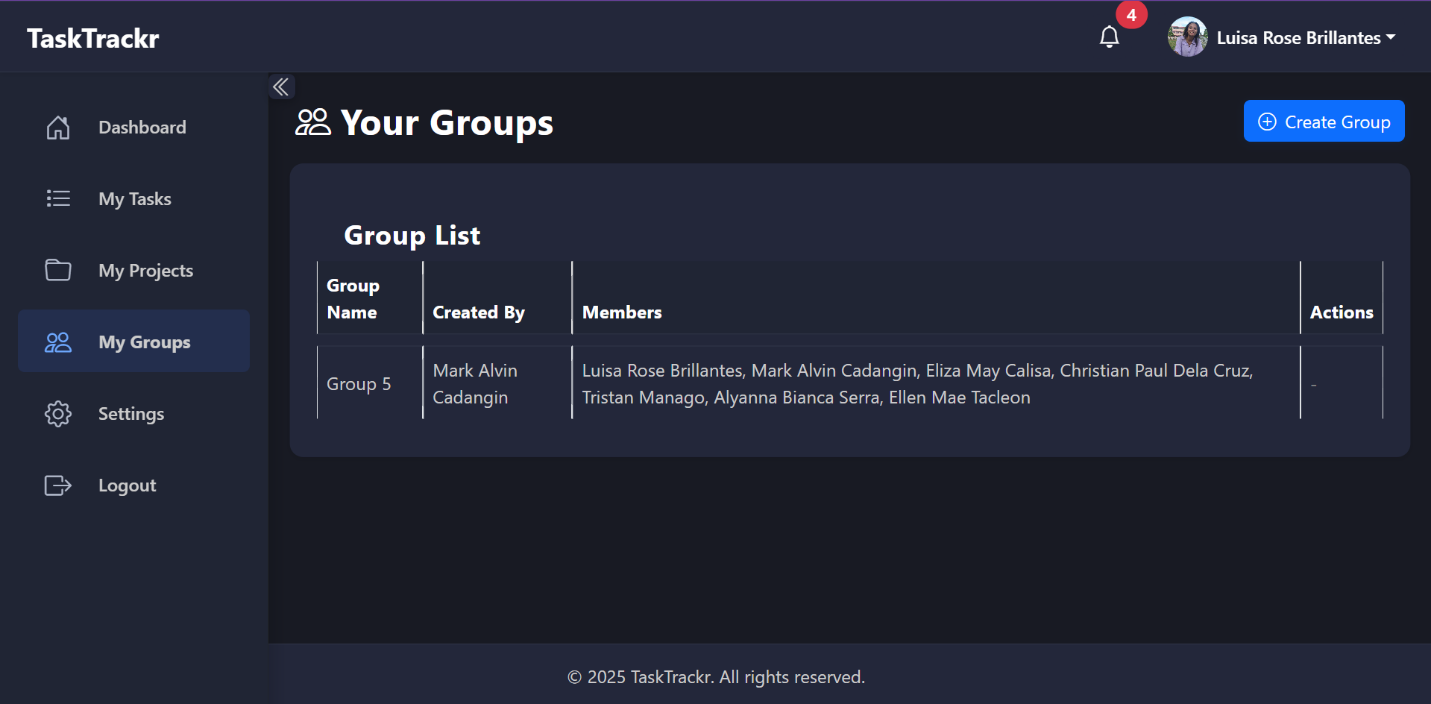
**Screenshot of Each Functionality**

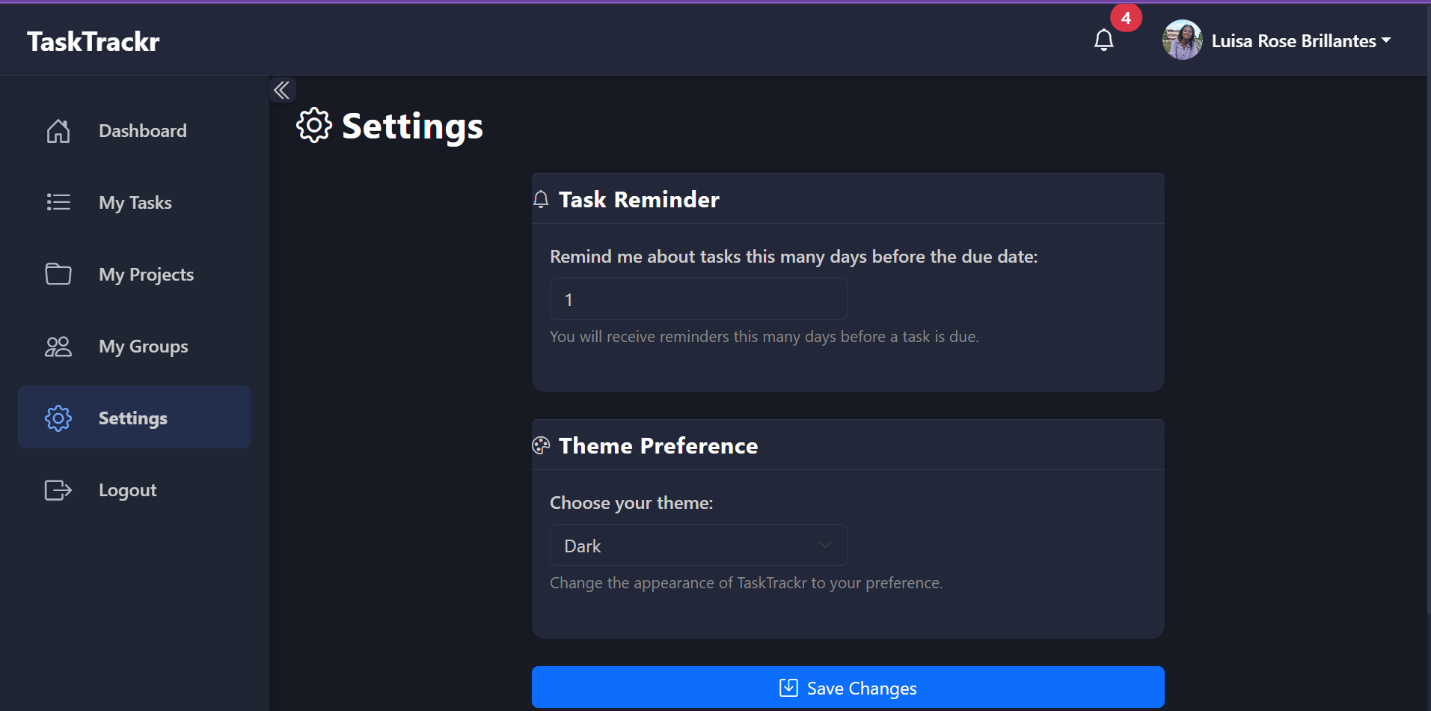
**Dashboard**

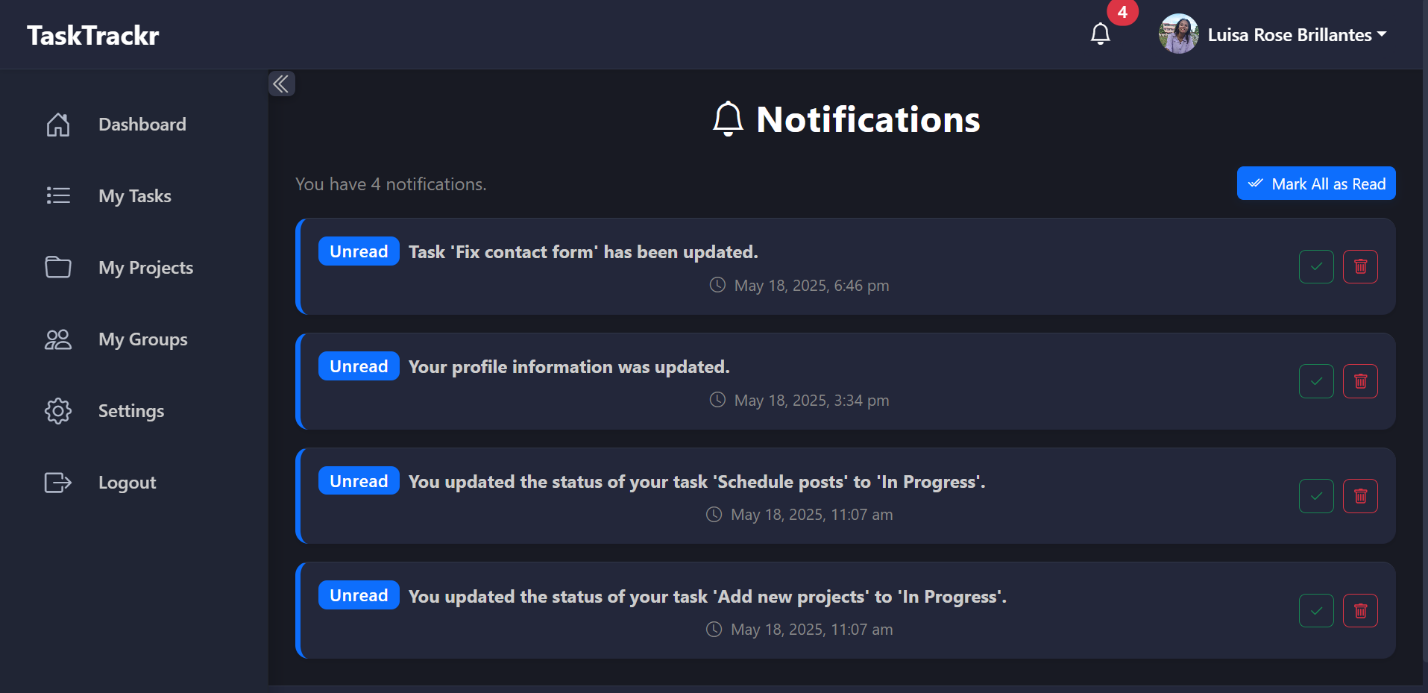
**My Task**

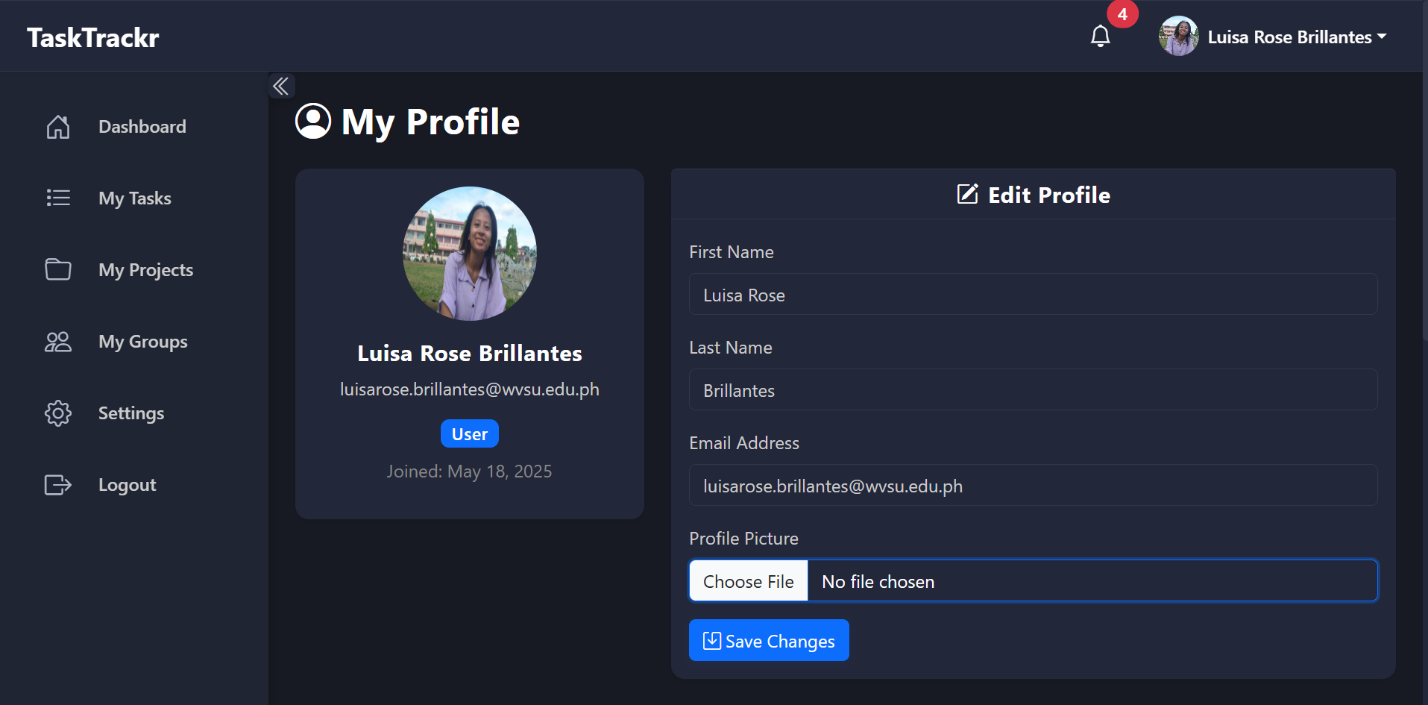
**My Projects**

**My Groups**

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**Settings**

**Notification**

**User Profile**

**Sample SQL Queries Used**

|  |  |
| --- | --- |
| **Task Summary** | SELECT  CASE  WHEN t.status = 'Done' THEN 'Done'  WHEN t.due\_date < CURDATE() THEN 'Overdue'  ELSE t.status  END AS status\_group,  COUNT(\*) AS count  FROM Tasks t LEFT JOIN Projects p  ON t.project\_id = p.project\_id  WHERE t.assigned\_to = ? AND t.project\_id IS NOT NULL  GROUP BY status\_group; |
| **Upcoming and Overdue Tasks** | SELECT  t.title AS task\_title,  t.due\_date,  CASE  WHEN t.due\_date < CURDATE() AND t.status != 'Done' THEN 'Overdue'  ELSE 'Upcoming'  END AS task\_status  FROM Tasks t  LEFT JOIN Projects p ON t.project\_id = p.project\_id  WHERE t.assigned\_to = ? AND t.project\_id IS NOT NULL  ORDER BY t.due\_date ASC; |
| **Project Progress** | SELECT COUNT(\*) AS total, SUM(status = 'Done') AS done FROM Tasks WHERE project\_id = ? |
| **Fetch Group Members** | SELECT u.name  FROM Users u  JOIN User\_Groups ug ON u.user\_id = ug.user\_id  WHERE ug.group\_id = ?; |
| **Fetch User's Projects** | SELECT p.\*, c.name AS category\_name, g.group\_name, u.name AS creator\_name  FROM Projects p  JOIN Categories c ON p.category\_id = c.category\_id  LEFT JOIN `Groups` g ON p.group\_id = g.group\_id  JOIN Users u ON p.created\_by = u.user\_id  WHERE p.created\_by = ?  OR p.group\_id IN (  SELECT group\_id FROM User\_Groups WHERE user\_id = ?); |
| **Insert New Task** | INSERT INTO Tasks (title, description, due\_date, priority, status, project\_id, assigned\_to)  VALUES (?, ?, ?, ?, ?, ?, ?); |
| **Update Task Status** | UPDATE Tasks SET status = ? WHERE task\_id = ? AND assigned\_to = ?; |
| **Delete Task** | DELETE FROM Tasks WHERE task\_id = 10; |

**Setup Instructions**

1. Install XAMPP and start Apache and MySQL.
2. Import tasktrackr.sql using phpMyAdmin.
3. Configure database credentials in db.php.
4. Set up email settings in email\_sender.php.
5. Access the application at http://localhost/TaskTrackr/public/login.php.

**Usage Instructions**

* Register a new account or log in.
* Create or join groups.
* Create projects and assign them to groups or individuals.
* Add tasks to projects, set priorities, and assign users.
* Receive notifications and reminders for upcoming deadlines.
* Change user settings, including theme and reminder preferences.

**Reflection**

By creating TaskTrackr, we were able to incorporate relational modeling, database design, and CRUD activities in a practical context. This project enabled us to apply our theoretical knowledge to a working system by giving us a great deal of practical experience with SQL, backend integration, and web development.

Beyond technical implementation, we prioritized flexibility, user-centered design, and system analysis to make sure TaskTrackr tackles important student issues including missed deadlines, task overload, and inefficient group collaboration. We developed an application that promotes accountability, organization, and teamwork in educational settings by creating an intuitive user experience with features like intelligent notifications, real-time updates, and smooth group administration.

In the end, TaskTrackr is more than simply a productivity tool, it is an example of our capacity to use IT concepts to address actual issues, showcasing both technical expertise and creativity. Our skill set has grown as a result of this project, and we are now more equipped to handle challenges with programming and web development in the future.