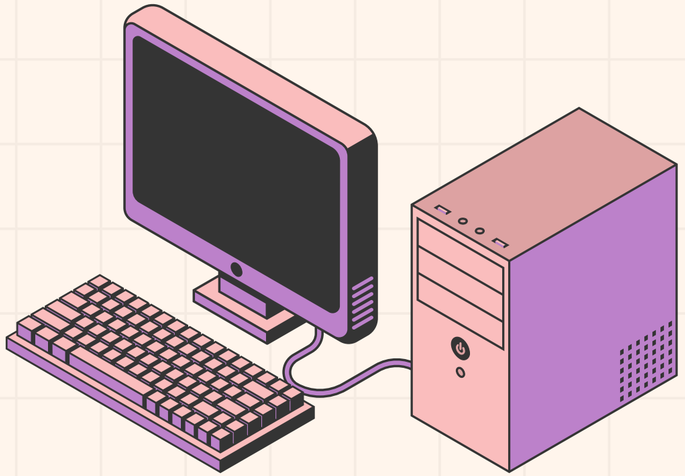
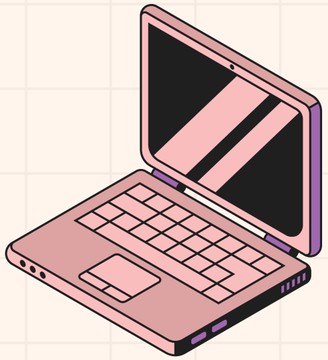
DIU LAB PORTAL



Submitted to :

Foysal Khandakar Joy
Lecturer
Department of Software Engineering
Daffodil International University



MD. NAZMUS SHAKIB KHAN
221-35-998

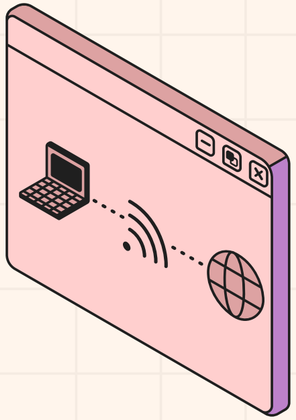
ZIAUL RASHID ILHAM
221-35-815

What is it?

DIU Lab Portal is a web-based platform designed to streamline and simplify the process of reporting and resolving PC-related issues within a university setting. It eliminates the need for students and faculty to call the IT support team, providing a more efficient and organized way to report technical problems.

Purpose:

- The primary purpose of the DIU Lab Portal is to
- :Provide a centralized platform for students and users to report problems in lab PCs.
- Allow administrators to monitor, update, and manage the status of each PC.
- Maintain historical records of problems reported for each PC for future analysis
- .Improve communication between users and administrators.
- Enhance overall lab efficiency and user satisfaction through timely maintenance and transparency.



Technological Breakdown

The system integrates a variety of advanced technologies to ensure robustness, scalability, and efficiency:

Frontend Technologies:

HTML, CSS, and JavaScript: Facilitate a dynamic and interactive user experience. .

Backend Technologies:

PHP : Offers a secure and efficient backend architecture for managing business logic and system operations.

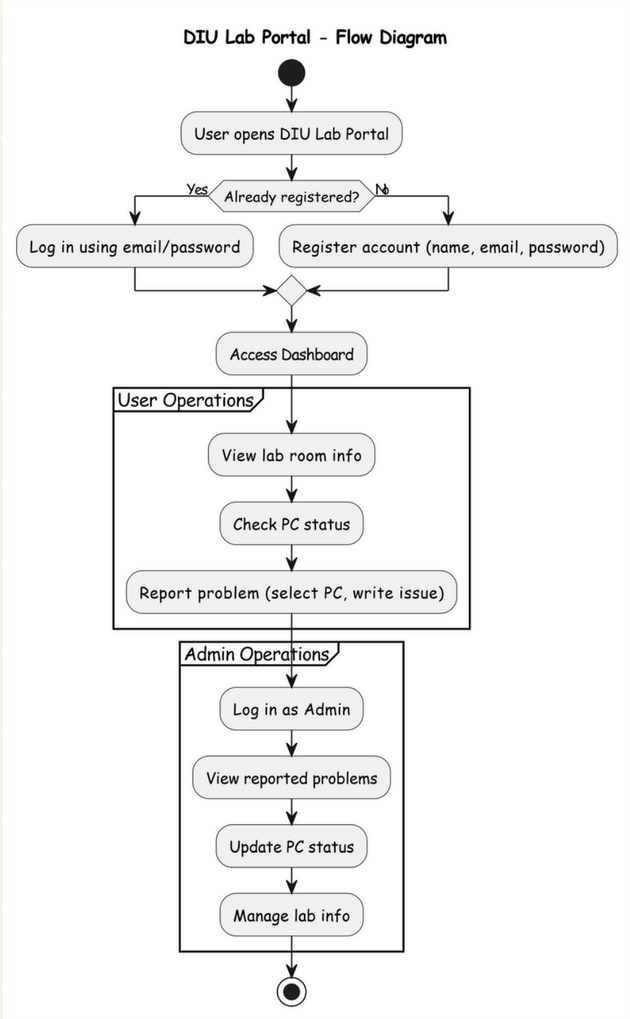
Database Management:

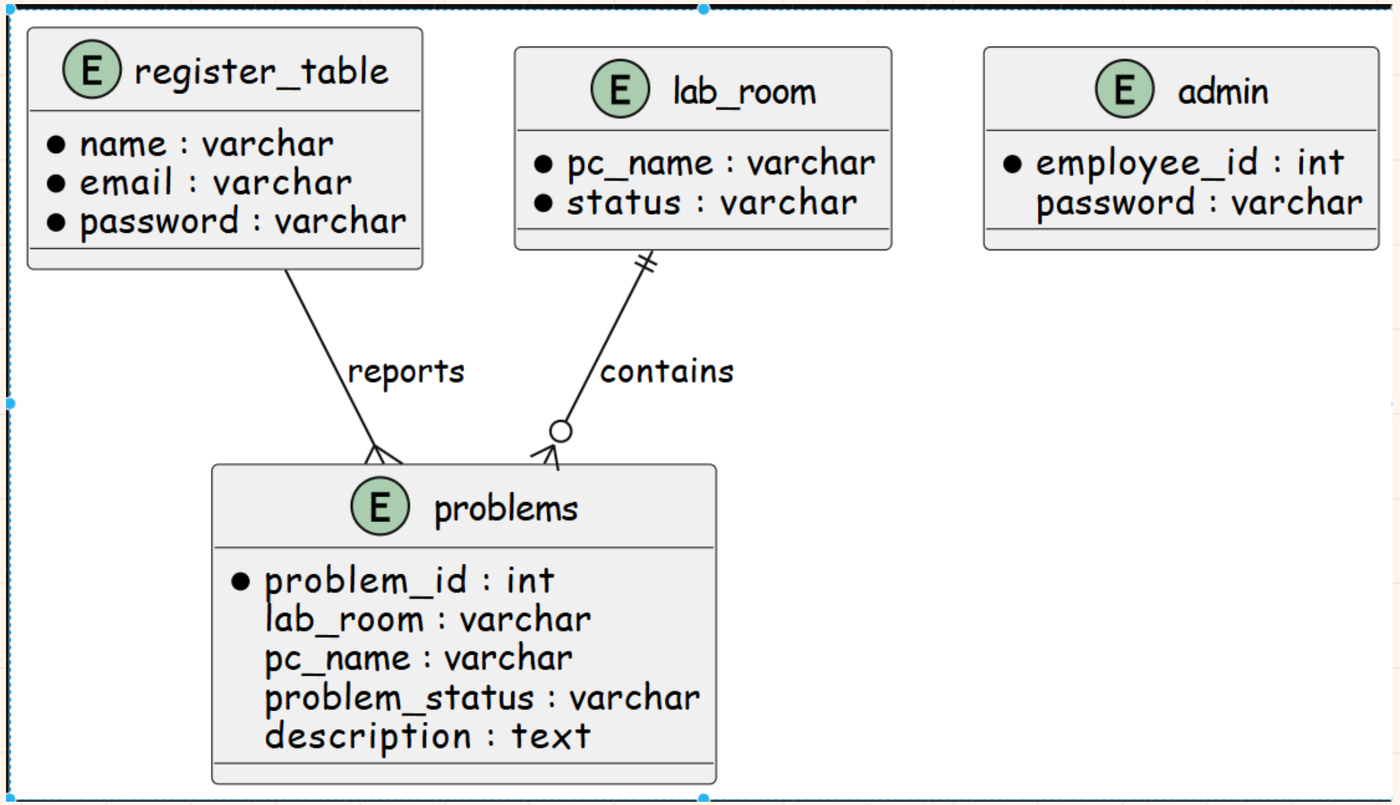
MySQL: A reliable database system for managing patient, appointment, and billing data securely and efficiently.

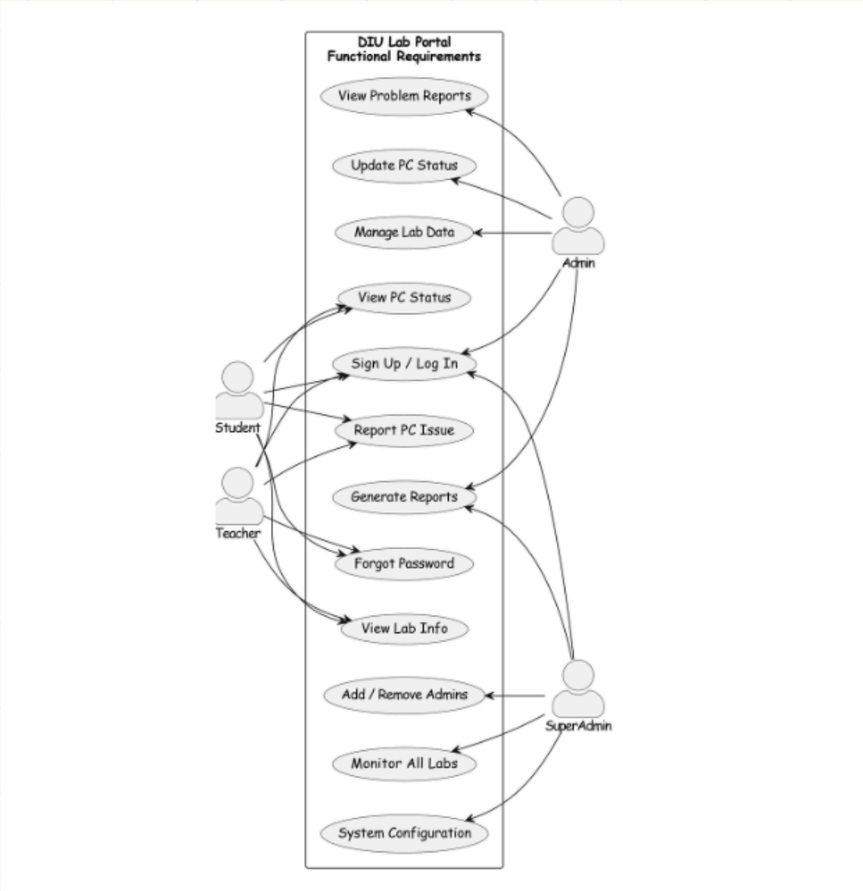
Additional Tools:

Git: Facilitates version control and collaborative development.

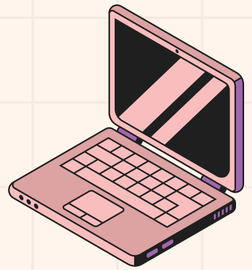
Testing Frameworks: Ensures a bug-free experience through rigorous unit and integration testing.


DIU Lab Portal - Flow Diagram
User opens DIU Lab Portal
Already registered?
Yes
No
Log in using email/password
Register account (name, email, password)
Access Dashboard
User Operations
View lab room info
Check PC status
Report problem (select PC, write issue)
Admin Operations
Log in as Admin
View reported problems
Update PC status
Manage lab info

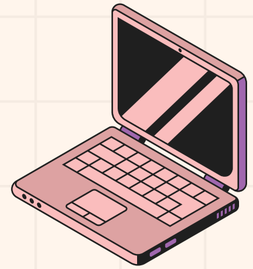

register_table
name : varchar
email : varchar
password : varchar
lab_room
pc_name : varchar
status : varchar
admin
employee_id : int
password : varchar
reports
contains
problems
problem_id : int
lab_room : varchar
pc_name : varchar
problem_status : varchar
description : text

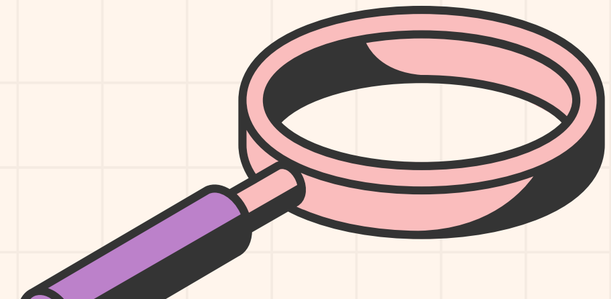

DIU Lab Portal
Functional Requirements
View Problem Reports
Update PC Status
Manage Lab Data
View PC Status
Sign Up / Log In
Report PC Issue
Generate Reports
Forgot Password
View Lab Info
Add / Remove Admins
Monitor All Labs
System Configuration
Admin
Student
Teacher
SuperAdmin

KEY FEATURES



- **User Access**
  - Secure registration and authentication (Students, Teachers, Admins)
  - Password recovery module
- **Lab Monitoring**
  - Report PC issues with descriptions
  - View lab-wise PC health and operational status
  - Track reported problems and resolutions
- **Administrative Operations**
  - Manage lab rooms and assign PCs
  - Update PC and lab statuses
  - View comprehensive report dashboards



- **Feature Expansion**
  - Notification system for reported issues
  - Role-specific dashboards
  - Audit logs and change history

THANK YOU