



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
12-B Alcalde Jose St. Pasig, 1600 Metro Manila



PROGRESS REPORT

Courseware Monitoring System

For the purpose of
Final Project in
IT 103, IT 104 and IT 301

By:

Group 3

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BSIT 2D

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COURSEWARE MONITORING

I. INTRODUCTION

The Courseware Monitoring System is a centralized, web-based platform developed to improve the submission, tracking, and management of courseware and syllabi across academic departments. The system aims to replace inefficient manual processes—such as paper-based submissions and spreadsheet tracking—with a streamlined, automated solution that enhances productivity and reduces errors.

Designed for use by faculty members, program heads, and deans, the system offers role-based user access, with each role having a personalized dashboard tailored to their responsibilities. Faculty members can upload, draft, and track courseware submissions, while program heads can monitor progress, approve or reject files, leave remarks, and filter submissions by name, subject, term, or status. The dean has access to aggregated reports and compliance overviews, as well as the ability to create departments and manage user roles.

Additional key features include:

- Automated notifications for submission deadlines, feedback, and status changes.
- In-system messaging to facilitate direct communication between users.
- Real-time tracking of submission progress.
- Search and filtering tools for efficient data management.
- Remarks and feedback system on review pages.

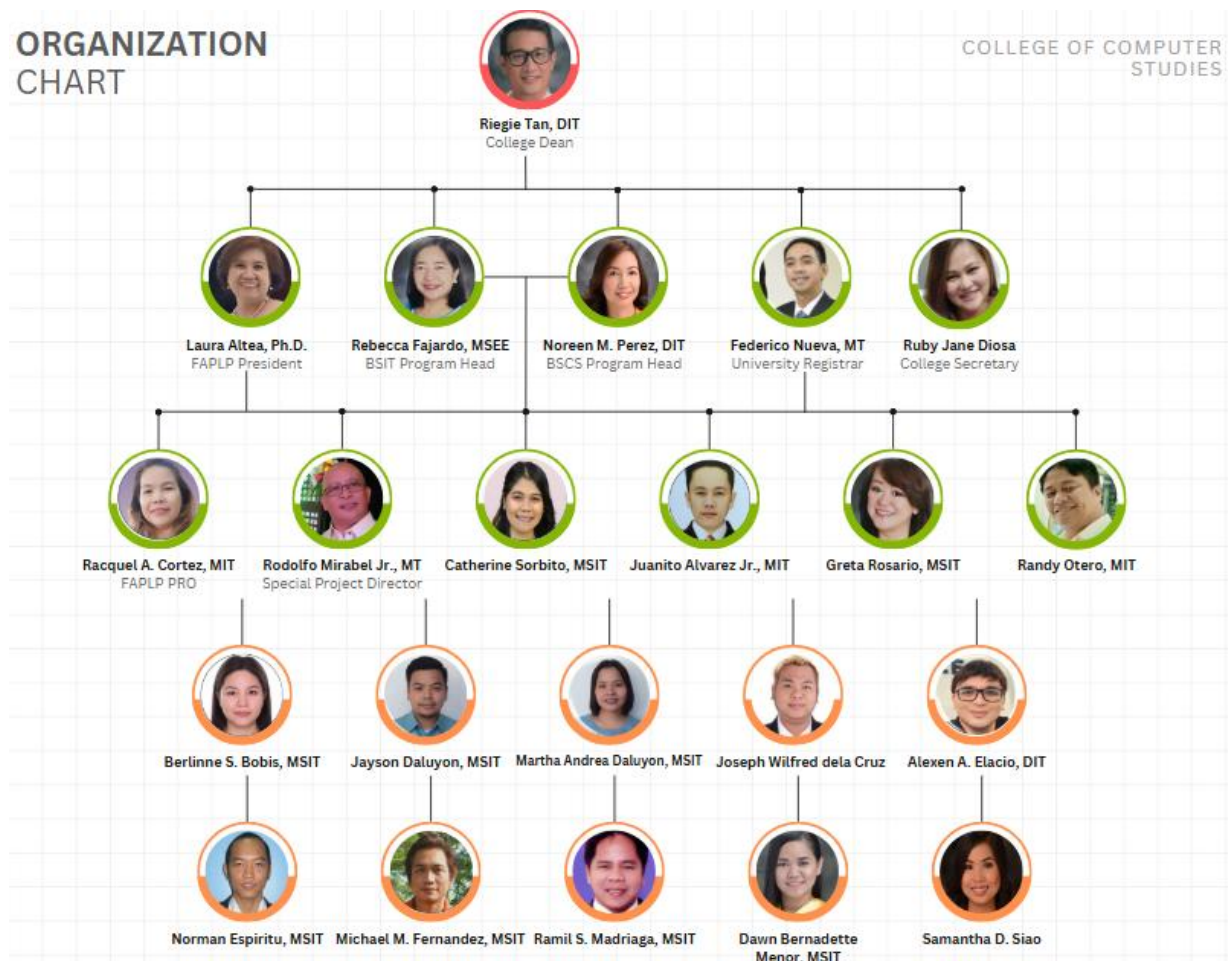


II. PROJECT DESCRIPTION

The system is designed for use by the faculty members, program heads, and the dean, as well as other relevant administrative roles within colleges. The system aligns with the roles outlined in the **organizational chart** of the **CCS Faculty**, which includes the Dean, Program Heads, Faculty Members, and other staff members who contribute to the academic process.

In the organizational structure, faculty members play a pivotal role in uploading courseware and syllabi to the platform, while program heads oversee submission tracking, approval, and status monitoring. The dean, positioned at the highest level of academic management, has access to aggregated reports and compliance data.

ORGANIZATION CHART



CCS FACULTY ORGANIZATIONAL CHART



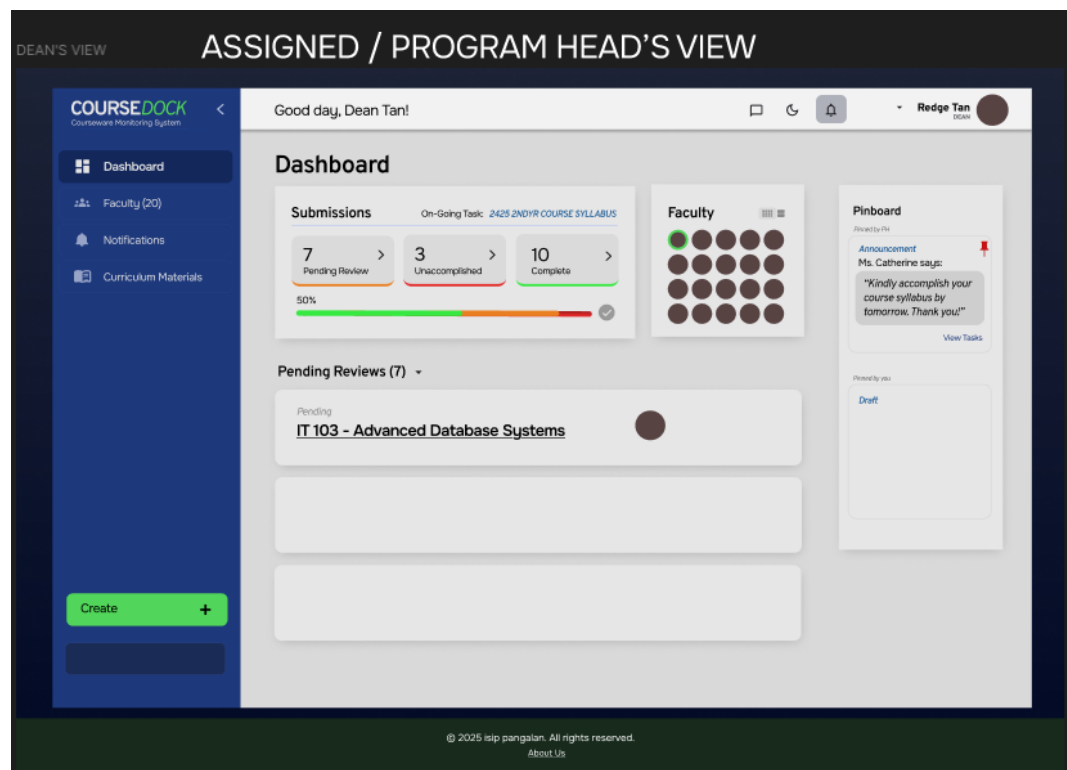
Key Features

- **User Accounts and Roles**

The system will have user accounts for Dean, Program Head, and Faculty Members, each with distinct permissions. The Dean will have the ability to add, create, and delete accounts, as well as manage overall system settings. The Program Head will moderate faculty members, overseeing submissions and progress. Faculty Members will be able to upload course materials, draft submissions, and view feedback.

- **Dashboard**

The system will provide personalized dashboards for each user type. The Dean's dashboard will include an overview of academic progress and compliance across the department. The Program Head's dashboard will display faculty submissions and approval statuses. The Faculty Member's dashboard will allow them to upload, edit, or draft their courseware.





- **Submission System**

Similar to Google Classroom, faculty members can submit syllabi and courseware, while program heads can track and review those submissions in real time.

Tasks > 2425 2NDYR COURSE SYLLABUS

Catherine Sorbito
ASSIGNED PROGRAM HEAD 7:47 AM Deadline: Tomorrow, 6:00

"Kindly accomplish your course syllabus by tomorrow. Thank you!"

Approval Status	Complete:
IT 103 Advanced Database Systems	Pending 1
COMP 105 Information Management	Completed Signed by: Ms. Fajardo

Your files

Submit and Sign

(Designed with Figma)

- **Filtering and Search**

The system will include a filtering system to view submissions based on faculty name, subject, term, and status (e.g., Pending, Approved, Rejected). This allows program heads and deans to easily access and manage courseware submissions.

- **Remarks on Review Page**

Program heads will have the ability to leave remarks on submitted courseware, providing feedback or requesting changes directly on the submission page.

- **Messaging System**

A built-in messaging feature will enable communication between faculty, program heads, and the dean. This ensures smooth and direct interaction regarding courseware submissions, feedback, and system updates.

- **Notification System**

Automated **notifications** will alert users of upcoming deadlines, submission statuses, and



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
12-B Alcalde Jose St. Pasig, 1600 Metro Manila



feedback. Users will receive notifications within the platform and through email (if required).

- **Create Page**

The system will include an admin page for creating departments and managing user roles. The **Dean** will have the ability to create new departments, add faculty members via email, and assign roles to users.

- **Sign-Up Page**

A dedicated **sign-up page** will allow users to register and select their roles (Dean, Program Head, or Faculty Member). The **Dean** and **Program Head** can manage the registration process, ensuring only authorized individuals are added to the system.

System Technologies

- **Frontend:**

- **HTML, CSS, JavaScript**
- **TailwindCSS** for a modern, responsive design
- **Figma** for UI/UX design to create intuitive, user-friendly interfaces and ensure a seamless user experience.

- **Backend:**

- **Node.js** and **PHP** for server-side functionality

- **Database:**

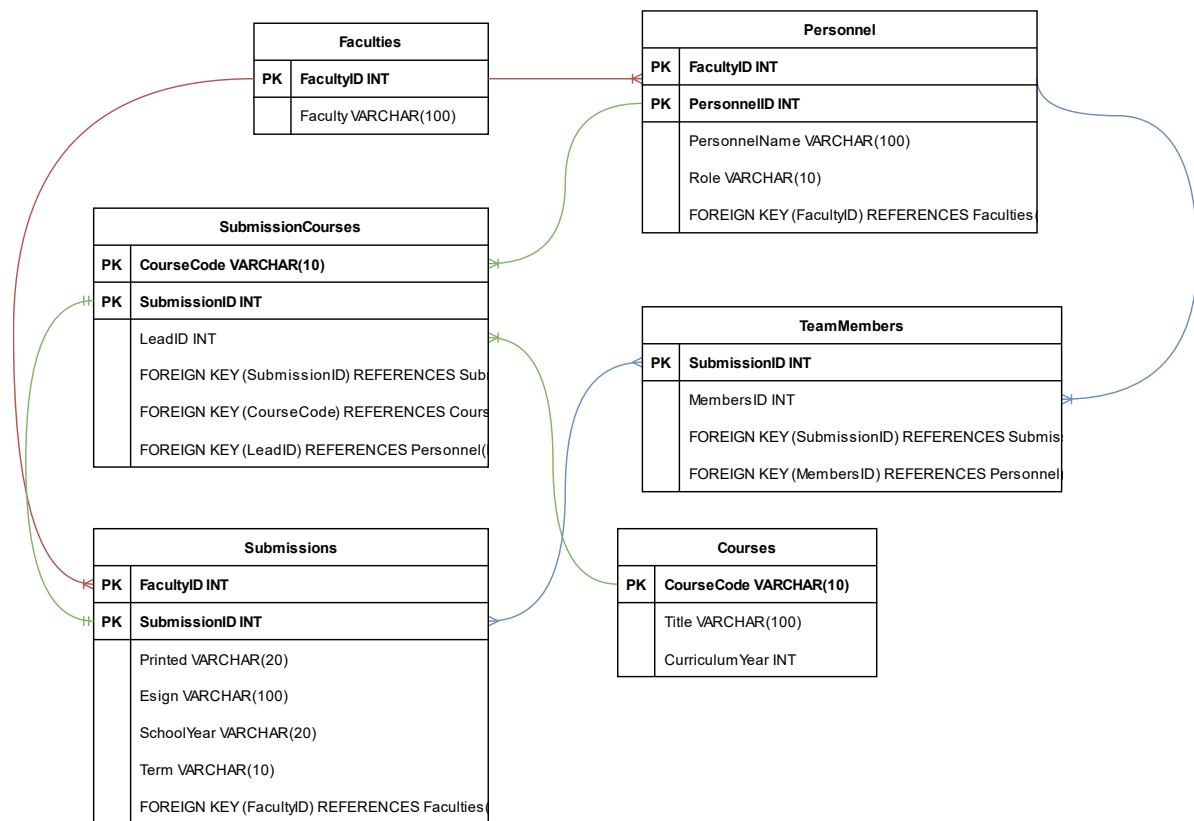
- **MySQL** for storing user accounts, courses, submissions, and other data



III. SYSTEM ARCHITECTURE

Conceptual Model (ERD)

Courseware Management System ERD





Logical Design

SHORTHAND NOTATION SCHEMA / RELATIONAL DEFINITION

PERSONNEL (PersonnelID, PersonnelName, Role, FacultyID)

PRIMARY KEY: PersonnelID

FOREIGN KEY: FacultyID REFERENCES FACULTIES(FacultyID)

FACULTIES(FacultyID, FacultyName)

PRIMARY KEY: FacultyID

COURSES (CourseCode, Title, Curriculum)

PRIMARY KEY: CourseCode

SUBMISSIONS(SubmissionID, FacultyID, Printed, Esign, SchoolYear, Term)

PRIMARY KEY: SubmissionID

FOREIGN KEY: FacultyID REFERENCES FACULTIES(FacultyID)

TEAMMEMBERS(SubmissionID, MemberID)

PRIMARY KEY: (SubmissionID, MemberID)

FOREIGN KEY: SubmissionID REFERENCES SUBMISSIONS(SubmissionID)

FOREIGN KEY: MemberID REFERENCES PERSONNEL(PersonnelID)

SUBMISSIONDETAILS(SubmissionID, CourseCode, LeadID)

PRIMARY KEY: (SubmissionID, CourseCode)

FOREIGN KEY: SubmissionID REFERENCES SUBMISSIONS(SubmissionID)

FOREIGN KEY: CourseCode REFERENCES COURSES(CourseCode)

FOREIGN KEY: LeadID REFERENCES PERSONNEL(PersonnelID)



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
12-B Alcalde Jose St. Pasig, 1600 Metro Manila



Normalization

Third Normalized Form

Submissions					
SubmissionID	FacultyID	Printed	Esign	SchoolYear	Term
1	1	DONE	DONE	2024-2025	FIRST
2	1	DONE	DONE	2024-2025	FIRST
3	1	DONE	DONE	2024-2025	FIRST
4	1	DONE	M' Siao esign	2024-2025	FIRST
TeamMembers					
SubmissionID	MembersID		Faculties		
1	2		FacultyID	Faculty	
1	3		1	ollege of Computer Studies	
2	7				
2	1				
4	8				
4	9				
SubmissionCourses					
SubmissionID	CourseCode	LeadID			
1	COMP 101	1			
2	COMP 102	4			
3	COMP 104	5			
4	COMP 105	6			

Courses			
CourseCode	Title	Curriculum	
COMP 101	Introduction to Computing	2022	
COMP 101	Introduction to Computing	2022	
COMP 102	Fundamentals of Programming (C++)	2022	
COMP 102	Fundamentals of Programming (C++)	2022	
COMP 104	Data Structures and Algorithms	2022	
COMP 105	Information Management	2022	
COMP 105	Information Management	2022	
Faculty			
PersonnelID	Personnel	Role	Faculty
1	Alvarez	FM	1
2	Bautista	FM	1
3	Chu	FM	1
4	Sorbito	PH	1
5	Altea	FM	1
6	Fajardo	PH	1
7	Menor	FM	1
8	Siao	FM	1
9	Espiritu	FM	1

Characteristic Definition of Attribute Domains

SUBMISSIONID

Is a valid submission ID.

Type: numeric

Range: positive integers only

Display format: 9999

Length: 4

FACULTYID

Is a valid faculty identifier.

Type: numeric

Range: 1–99

Display format: 99

Length: 2



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
12-B Alcalde Jose St. Pasig, 1600 Metro Manila



PRINTED

Indicates if submission is printed.

Type: character

Valid entries: DONE

Display format: UPPERCASE

Length: 5

ESIGN

Indicates if submission is electronically signed.

Type: character

Valid entries: DONE

Display format: Title Case

Length: up to 20

SCHOOLYEAR

Is a valid school year.

Type: character

Display format: YYYY-YYYY

Valid entries: 2024-2025, etc.

Length: 9

TERM

Is a valid term.

Type: character

Valid entries: FIRST, SECOND

Display format: UPPERCASE

Length: 6

Faculties Table

FACULTYID

Is a valid faculty identifier.

Type: numeric

Display format: 99

Range: positive integers

Length: 2

FACULTY

Is a valid faculty/college name.

Type: character

Display format: Title Case

Valid entries: College of Computer Studies

Length: up to 50



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
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Personnel Table

PERSONNELID

Is a valid personnel identifier.

Type: numeric

Display format: 99

Range: 1–99

Length: 2

PERSONNEL

Is a valid name.

Type: character

Display format: Title Case

Length: up to 50

ROLE

Is a valid role code.

Type: character

Valid entries: FM, PH

FM = Faculty Member, PH = Program Head

Length: 2

FACULTY

Is a valid faculty identifier.

Type: numeric

Display format: 99

Matches FACULTYID in Faculties

Length: 2

TeamMembers Table

SUBMISSIONID

Is a valid submission ID.

Type: numeric

Display format: 9999

Matches SUBMISSIONID in Submissions

Length: 4

MEMBERSID

Is a valid member ID.

Type: numeric

Display format: 99

Refers to a Personnel ID

Length: 2



Pamantasan ng Lungsod ng Pasig
College of Computer Studies
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SubmissionCourses Table

SUBMISSIONID

Is a valid submission ID.

Type: numeric

Display format: 9999

Matches SUBMISSIONID in Submissions

Length: 4

COURSECODE

Is a valid course code.

Type: character

Display format: AAA ###

Matches COURSECODE in Courses

Length: 8

LEADID

Is a valid lead personnel ID.

Type: numeric

Display format: 99

Matches PERSONNELID in Personnel

Length: 2



Definition of Appropriate Views

For Faculty Member

```
CREATE VIEW vPendingTasks AS
SELECT DISTINCT
    sc.SubmissionID,
    c.CourseCode,
    c.Title,
    c.Curriculum,
    s.SchoolYear,
    s.Term,
    s.Printed,
    s.Esign,
    p.Personnel AS LeadName,
    f.Faculty AS College
FROM SubmissionCourses sc
JOIN Submissions s ON sc.SubmissionID = s.SubmissionID
JOIN Courses c ON sc.CourseCode = c.CourseCode
JOIN Personnel p ON sc.LeadID = p.PersonnelID
JOIN Faculties f ON p.Faculty = f.FacultyID
WHERE (sc.LeadID = CURRENT_USER_ID
    OR sc.SubmissionID IN (
        SELECT tm.SubmissionID
        FROM TeamMembers tm
        WHERE tm.MembersID = CURRENT_USER_ID
    ))
AND (s.Printed <> 'DONE' OR s.Esign <> 'DONE');
```

For Program Heads / Dean

```
CREATE VIEW vFacultyNotSubmitted AS
SELECT p.PersonnelID, p.Personnel, p.Role, f.Faculty
FROM Personnel p
JOIN Faculties f ON p.Faculty = f.FacultyID
WHERE p.Role = 'FM'
AND p.PersonnelID NOT IN (
    SELECT DISTINCT LeadID
    FROM SubmissionCourses
);
```



Physical Design

```
CREATE TABLE Faculties (  
    FacultyID INT PRIMARY KEY,  
    FacultyName VARCHAR(100)  
);  
  
CREATE TABLE Personnel (  
    PersonnelID INT PRIMARY KEY,  
    PersonnelName VARCHAR(100),  
    Role VARCHAR(10),  
    FacultyID INT,  
    FOREIGN KEY (FacultyID) REFERENCES Faculties(FacultyID)  
);  
  
CREATE TABLE Courses (  
    CourseCode VARCHAR(10) PRIMARY KEY,  
    Title VARCHAR(100),  
    CurriculumYear INT  
);  
  
CREATE TABLE Submissions (  
    SubmissionID INT PRIMARY KEY,  
    FacultyID INT,  
    Printed VARCHAR(20),  
    Esign VARCHAR(100),  
    SchoolYear VARCHAR(20),  
    Term VARCHAR(10),  
    FOREIGN KEY (FacultyID) REFERENCES Faculties(FacultyID)  
);  
  
CREATE TABLE SubmissionCourses (  
    SubmissionID INT,  
    CourseCode VARCHAR(10),  
    LeadID INT,  
    PRIMARY KEY (SubmissionID, CourseCode),  
    FOREIGN KEY (SubmissionID) REFERENCES Submissions(SubmissionID),  
    FOREIGN KEY (CourseCode) REFERENCES Courses(CourseCode),  
    FOREIGN KEY (LeadID) REFERENCES Personnel(PersonnelID)  
);  
  
CREATE TABLE TeamMembers (  
    SubmissionID INT,  
    MembersID INT,  
    PRIMARY KEY (SubmissionID, MembersID),  
    FOREIGN KEY (SubmissionID) REFERENCES Submissions(SubmissionID),  
    FOREIGN KEY (MembersID) REFERENCES Personnel(PersonnelID)  
);
```

```
CREATE ROLE Faculty;  
CREATE ROLE Dean;  
CREATE ROLE ProgramHead;  
  
GRANT SELECT ON vPendingTasks TO Faculty;  
GRANT SELECT ON vPendingTasks TO Dean;  
GRANT SELECT ON vPendingTasks TO ProgramHead;  
GRANT SELECT ON vFacultyNotSubmitted TO Dean;  
GRANT SELECT ON vFacultyNotSubmitted TO ProgramHead;
```



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SYSTEM FLOWCHART

