

Project Title

Church Management and Information System (CMIS)

Due: December 2, 2025 (tentative date)

Group Assessment

Scenario

Your church organisation, Church Name, has grown significantly.

They currently manage all membership, attendance, and event records using spreadsheets and paper-based systems.

As a result:

- Data is duplicated or lost.
- Attendance reports are delayed.
- Ministry leaders cannot access relevant information.
- Pastoral staff cannot easily identify member milestones such as birthdays, anniversaries, or special needs.

You are tasked with designing and developing a **web-based Church Management System** that digitises the church's record-keeping, automates reports, and provides role-based access for different ministry users. There are some screenshots to assist you with the credential data and interfaces that must be on your website.

Key Functional Requirements

1 Membership Management

- Register, update, and deactivate members.
- Store contact information, next of kin, and spiritual status (e.g., member, adherent, visitor).
- Upload profile picture and important dates (baptism, membership start, etc.).

2 Attendance Management

- Track attendance:
 - **Sunday School** categories (name, dob, next of kin/parent/guardian, attend):

- Ages 3 and under
- Ages 9–11
- Ages 12 and above
- **Record Ministers Vestry hours detail**
- **Number of attendances at Ministry meetings.**
- **Number of members at church (date, number, type of service)**

3 Event & Milestone Tracking

- Record events such as **Weddings, Anniversaries, Birthdays, Baptisms, death.**

4 Ministry Group Management (add, edit, delete, etc)

- Create and manage ministry groups (e.g., Senior Choir, Ushering, Youth, Women's Fellowship).
- Generate ministry members
- Track meeting number of attendance

5 User Roles and Access Control

- **Administrator:** full system access, manage users, generate all reports.
- **Pastor/Clergy:** view and edit membership, view attendance, generate member reports.
- **Ministry Leaders:** update group attendance, view only their ministry's records, enter the number of attendees at each meeting.
- **Clerk/Secretary:** enter members and event data, generate standard reports.
- **Members (optional):** update limited personal info.

6 Reports

Generate reports such as:

- Membership by age group, gender, or ministry.
- Attendance summary by date, group.
- Members with death, birthdays or anniversaries in a given week.
- Visitors' follow-up report.
- Ministry participation reports.

7 Dashboard

- Display statistics: total members, active ministries, attendance trends, upcoming events.
- Show quick alerts (e.g., “3 birthdays this week,” “Low youth attendance last Sunday”).

Technical Requirements

Category	Specification
Frontend	HTML5, CSS3, JavaScript, Bootstrap 5
Backend	PHP (preferably PHP 8+)
Database	MySQL / MariaDB
Server	XAMPP
Security	User authentication, role-based access, password hashing (PHP password_hash)
Backup	Database export and file backup to Azure Blob storage (optional integration)
Reporting	PHP + MySQL queries with export to PDF or Excel
Version Control	Git (local and cloud repository on GitHub or Azure DevOps)

Higher-Order Critical Thinking Tasks

1. Data Validation and Integrity:

Apply both client-side and server-side validation to prevent invalid or inconsistent records.

2. Automated Event Triggers:

Build a PHP or scheduler to send reminders for birthdays, anniversaries, or ministry meetings.

3. Data Visualization:

Integrate simple charts (e.g., Chart.js) to display attendance trends and membership breakdowns.

4. Report Query Optimisation:

Write SQL queries to aggregate data efficiently (e.g., monthly attendance summaries).

5. Ethical & Privacy Considerations:

Ensure the confidentiality of member data and align with data protection principles (e.g., limiting who can view contact or family details).

Core Database Entities

Table	Sample Fields
Members	mem_id, first_name, middle initials, last_name, dob, gender, Home Address 1, Home Address 2, Town, Parish, contact_info (home, work), email, next_of_kin (name, address, relation, contact number, email) , status (member/adherent/visitor), date_joined, min_id (5 slots), passing date
ministries	id, name, description
ministry_members	id, member_id, ministry_id, role
attendance	id, date, ministry_id, count, recorded_by
Events	id, event_type (wedding, birthday, anniversary, baptism), date, member_id, notes
Users	id, username, password, role, status
Roles	id, role_name, description

Sample Reports - You are not limited to the reports below.

1. Monthly Attendance Summary Report

- Inputs: month, year
- Output: table and/or chart (e.g., Chart.js line graph)

2. Birthday List

- Inputs: month/week
- Output: list of members with upcoming birthdays

3. Membership Growth Report

- Inputs: month/quarter/year
- Output: number of new members

4. Ministry Participation Report

- Inputs: ministry, date range
- Output: attendance, member list

Project Deliverables

1. Fully functioning PHP-based CMIS website with MySQL database.
2. SQL script file to recreate database.
3. Documentation:
 - User Manual
 - Testing & Evaluation Report
 - System Description / ERD (optional visual)
4. Backup script or database export file.
5. Group **Panel Presentation** (live demo + discussion).

Panel Presentation Details

Each group will present their completed system to a panel. The presentation should:

- Last **10–12 minutes** total (including Q&A).
- Include **a live demonstration** of key features (membership, attendance, and reporting).
- Explain **system design choices**, database structure, and implementation challenges.
- Show evidence of **collaboration** (each member must contribute).

Submission Instructions

- Submit all project files in a **zipped folder** (including source code, SQL, documentation).

- Upload or deliver to the designated submission point by **Tuesday, December 2, 2025**.
- Submit **PowerPoint slides** for panel presentation on or before the presentation date.

Mark Scheme (100 Marks Total)

Category	Description	Marks
1. System Design & Functionality	The system meets requirements, handles CRUD operations, and includes working modules for membership, attendance, events, and reports.	25 marks
2. Database Design & Integration	Proper normalisation, foreign keys, relationships, and connection to the PHP system. Queries are efficient and accurate.	15 marks
3. User Interface & Navigation	Clear, consistent, and professional design. Pages link properly; layout is user-friendly.	10 marks
4. Role-Based Access & Security	Implementation of login system, role management, and password hashing.	10 marks
5. Reporting & Data Visualisation	Generation of meaningful reports (e.g., attendance, birthdays, participation) and visualisation (tables, charts, graphs).	10 marks
6. Documentation Quality	Clarity and completeness of the user manual, testing/evaluation, and any diagrams provided.	10 marks
7. Presentation (Panel Assessment)	Clarity of communication, organisation, demonstration of understanding, teamwork, and ability to respond to panel questions.	15 marks
8. Innovation & Higher-Order Thinking	Creative features (e.g., event reminders, dashboards, optimisation, ethical data handling).	5 marks
Total: 100 Marks		

Grading Rubric Summary

Level of Achievement	Description
Excellent	The system is fully functional, meets all requirements, and shows creativity and optimisation. Outstanding documentation and presentation.
Good	The system is functional with minor issues. Demonstrates strong understanding and sound design.
Satisfactory	Meets core requirements but lacks depth, polish, or minor functions are incomplete.
Weak	The system is incomplete, poorly tested, or with major functionality missing. Minimal documentation.
Unsatisfactory	The project is not functional or is missing deliverables. Poor understanding demonstrated.

Evaluation Breakdown

Assessment Component	Weight
Project Documentation & Submission	70%
Panel Presentation & Demonstration	30%
Total	100%

Notes for Students

- Use **version control** to track progress and collaboration.
- Ensure **each team member contributes** to both coding and documentation.
- Maintain **ethical handling of data** and avoid hardcoded credentials.
- Panels will assess **both technical depth and teamwork** during Q&A.

APPENDIX

REGISTER OF MEMBERS

Membership Number	185	Member's Status	Active
Last Name	[REDACTED] (no hyphen)	Marital Status	Married
Name	[REDACTED]	Name of Spouse	Ansel
Home Address	[REDACTED]	Number Dependents	2
Telephone	Home [REDACTED]	Date of Birth	January 23
Telephone	[REDACTED]	Wedding Anniversary	December 18
Employer	[REDACTED]	Date of Baptism	[REDACTED]
Employer Address	[REDACTED]	Date Received	[REDACTED]
Employer Telephone	[REDACTED]	Baptised by	[REDACTED]
Occupation	[REDACTED]	Membership Transferred	No
Other Skills	Secretarial	Transferred From	[REDACTED]

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INFANT BAPTISM/BLESSING

Name of Baby	Jaylah Salea Johnson	Father's Address	[REDACTED]
Date of Birth	January 5, 2010	Father's Telephone	[REDACTED]
Place of Birth	University Hospital	Father's Telephone	[REDACTED]
Birth Entry Number	[REDACTED]	Date of Baptism/Blessing	Blessed April 11, 2010
Mother's Name	[REDACTED]	Received By	[REDACTED]
Mother's Address	[REDACTED]	Date	April 2011
Mother's Telephone	Cell [REDACTED]	Sex	Female
Mother's Telephone	[REDACTED]		
Father's Name	Ronald [REDACTED]		
Father's Occupation	Businessman		

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VESTRY HOUR APPOINTMENT FORM

Visitor's Lastname		
Date	March 8, 2004	
Name	Anna Kay	
Time of visit	6:30 pm	
Nature of Visit		
Telephone	Home	
Telephone	Work	
Minister's Comment		

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WEDDING INFORMATION FORM

Male Lastname	His Father Name
His Name	Her Father Name
Her Name	Address in Jamaica
His Marital Status	Date Time Wedding
Her Marital Status	
His Occupation	
Her Occupation	
His Ages	Add New Record
Her Ages	Find Record
	Delete Record
	Next Record
	Previous Record
	Close Form

View/Edit Infant Baptism and Blessing

View/Edit Vestry Hour Attendees

View/Edit Wedding Information

Return to Main Switchbaord

- Register of Members
- View/Edit Other Forms
- Preview Reports
- Preview Birthday Reports
- Preview Anniversary Reports
- Change Switchboard Items
- Exit The Database
- Married couples PUC