



FACULTY: Faculty of Information Computing Information Management (FOCIM).

COURSE: Bachelor in Science Information Security and Forensics (BISF)

FINAL-DOCUMENTATION

UNIT CODE: BISF 2208

UNIT NAME: Security and Forensics Project

PROJECT: CFF Church Management System.

NAME: Muthama Mumo

REG NO:

SUPERVISOR NAME: Merab Omondi

Table of Contents

1. PROPOSAL	1
2.. SYSTEM REQUIREMENT SPECIFICATION	18
3.. SYSTEM DESIGN SPECIFICATION	49
4.. IMPLIMENTATION STATEGY.....	62
5..SYSTEM TESTING.....	66
6.. USER MANUAL	72

1. PROPOSAL

1.1 Background

Christian Foundation Fellowship church (CFF) traces its roots back to 1997 when it was established in the city of Nairobi, situated along Bunyala Road. Founded as a ministry by Harrison Nganga, CFF has grown into a thriving religious institution over the years. With a membership count that exceeds three thousand individuals, the church has experienced remarkable growth, attributed in large by commitment to evangelism and soul-winning efforts.

CFF is full of diverse range of activities and services on a daily basis. The church maintains its central headquarters at Bunyala, serving as the epicentre of its spiritual and administrative activities. Additionally, CFF has established a rented hall within the urban landscape of Nairobi, located at the Jamii Business Center premises, (PR8H+476, Sheikh Karume Rd, Nairobi), for conducting morning glory and lunch hour services.

Throughout the week, CFF hosts a multitude of services, including Morning Glory sessions lunch-hour service and Evening Services, at both of its premises. These gatherings draw hundreds of faithful members each day, for mentorship.

However, despite its remarkable growth and vibrant activities, CFF, like many other organizations, faces several significant challenges in effectively communicating information and efficiently managing its extensive membership base. Currently, the church relies predominantly on traditional methods of communication, such as paper-based records and verbal interactions, in its day-to-day operations. These outdated practices not only consume valuable time but also introduce a host of disadvantages, including the risk of errors, data loss, and a general lack of efficiency.

As a result, leaders within CFF have expressed a growing need for a more advanced and integrated digital communication and record-keeping system. This desire stems from the recognition that modernizing their systems will not only optimize their daily operations but also enhance their overall effectiveness in fulfilling their spiritual mission.

In response to these challenges and the expressed needs of the church, this study aims to develop and implement a comprehensive management system tailored specifically to the unique requirements of CFF

2. Problem statement

The Christian Foundation Fellowship (CFF) Church, has grown into a vibrant congregation with a membership exceeding three thousand faithful individuals. Over the years, this church has experienced exponential growth, attributed in large part to its zealous commitment to evangelism and soul-winning endeavours.

However, despite its remarkable expansion and the thriving spiritual community, CFF Church currently confronts several pressing challenges in the operation of its management system, which encompasses registering members, viewing member details, handling offerings, celebrating birthdays, managing teen and Sunday school activities, overseeing visitors, and orchestrating church events.

2.1 Existing Church Management System Operation:

1. Registering Members

The current church management system relies on manual processes for member registration, involving handwritten records and paper-based forms. This antiquated approach is not only time-consuming but also prone to errors, leading to discrepancies and inefficiencies in maintaining an accurate membership database.

2. Viewing Member Details

Accessing member information is hindered by the lack of an integrated digital system. Information retrieval often involves flipping through physical records or relying on verbal communication, leading to delays and inaccuracies in member management.

3. Handling Offerings records

It is difficult to access how much has been given as offering since one has to go through envelopes counting the money given to get the total that can help in financial management of the church

4. Celebrating Birthdays

Acknowledging and celebrating member birthdays is a vital part of church community-building. However, the current system does not provide an efficient means to keep track of birthdays

5. Managing Teen and Sunday School

Coordinating and managing activities related to teen and Sunday school classes involve a plethora of manual processes. This includes attendance tracking, communication with parents, and resource management, all of which are susceptible to errors and inefficiencies.

6. Overseeing Visitors

Greeting and managing visitors effectively is essential for creating a welcoming atmosphere in the church. However, the existing system lacks a structured approach to visitor management, often resulting in missed opportunities for follow-up and engagement.

7. Orchestrating Church Events

Planning and executing church events, including services and meetings, require extensive effort and coordination. The absence of a centralized system for event management results in challenges such as double-booked facilities and communication gaps.

3. Proposed Solution

CFF Management System

3.1 Introduction to the CFF Management System

In response to the pressing challenges outlined in the previous section, the proposed solution involves the development and implementation of Church Management System customized specifically for the Christian Foundation Fellowship (CFF) Church. This innovative system, referred to as the CFF Management System, represents a transformative step towards modernizing and optimizing the church's administrative and operational processes. The CFF Management System aims to harness the power of technology to address the challenges currently faced by the church and to enhance its overall effectiveness in fulfilling its spiritual mission.

3.2 Discussion of the Introduced System

The CFF Management System offers a comprehensive solution that will revolutionize the way CFF Church manages its day-to-day operations and engages with its congregation.

3.2.1 Key aspects of the introduced system

1. Membership Management:

The CFF Management System will provide a centralized and digitized platform for member registration, storing essential member details securely. This will streamline the process of adding new members and updating existing member records in database.

2. Member Information Access:

Members will have access to their personal profiles, enabling them to view and update their information. This self-service feature will empower members to maintain accurate records and stay engaged with the church community.

3 Financial Management:

The transition to digital offering records will expedite total offering calculations, enabling faster decision-making on financial budgets. This automation streamlines processes, reduces errors, and enhances data accessibility, ultimately leading to more efficient financial management.

4 Birthday Celebrations:

The CFF Management System will automate birthday reminders, ensuring that members receive heartfelt messages and well-wishes on their special day. This will foster a sense of belonging and connection within the church.

5 Teen and Sunday School Management:

Coordinating teen and Sunday school activities will become more efficient with tools for attendance tracking, communication with parents, and resource management. This will enhance the spiritual growth of young members.

6. Visitor Engagement:

The system will facilitate the seamless management of visitors, capturing their contact information and visit details. This will enable the church to extend warm welcomes, follow up effectively, and integrate visitors into the church community.

7 Event Coordination:

Events communication will be digitalised. This will keep members updated on events and will enhance the overall planning and execution of church events.

4. Objectives

4.1 Introduction to the System Objectives

Main objective

The new CFF Management System is designed with a clear set of objectives aimed at enhancing the overall efficiency, communication, and management of Christian Foundation Fellowship (CFF) Church's operations. These objectives are aligned with the system's scope and functionality, ensuring that they are realistic and attainable within the system's capabilities.

4.2 System Objectives

4.2.1 Member Information Management

To provide a user-friendly platform for church administrators to view and update the details of the existing members, ensuring accurate and up-to-date member profiles within the system.

4.2.2: Member Registration

To enable church administrators to effortlessly add new members to the system, streamlining the registration process and facilitating the integration of newcomers into the church community.

4.2.3: Financial Transparency

To record and track member contributions and offerings with transaction IDs, promoting financial transparency, accuracy, and accountability within the church.

4.2.4: Birthday Celebration Facilitation

To automatically identify and display upcoming member birthdays, facilitating the timely acknowledgment and celebration of these special occasions, thereby fostering a sense of belonging and connection within the church.

4.2.5: Financial Reporting

To generate comprehensive financial reports summarizing total giving, making it easier for church leadership to assess financial health, plan budgets, and make informed decisions.

4.2.6: Teen and Sunday School Management

To provide tools for church administrators to manage and organize teen and Sunday school activities effectively, including the addition of participant details to the system, ensuring the spiritual growth and engagement of young members.

4.2.7: Event Coordination

To simplify the management of church events by offering features for scheduling, resource allocation, and communication, thereby improving overall event planning and execution.

- By achieving these objectives, the system aims to bring tangible improvements to the church's operations, member engagement, financial transparency, and event management

5. Literature review

In the realm of church management systems, several solutions have emerged to facilitate the administrative and organizational needs of religious institutions. In this literature review, we explore two prominent church management systems, Church Teams Management System and Smart Church Management System, to evaluate their scope, users, strengths and weaknesses. We emphasize the distinctive features of the proposed CFF Management System.

5.1 Church Teams Management System

Church Teams Management System is a well-established software solution utilized by numerous religious organizations.

5.1.1 Methodology

The literature does not provide specific details about the methodology used in developing Church Teams Management System. It may have been developed through a combination of software engineering practices and industry-specific consultations.

5.1.2 Scope

Church Teams Management System primarily focuses on membership management, Groups, financial transparency, volunteers, event registration and communication. It encompasses features for tracking member attendance, maintaining detailed profiles, managing financial transactions, generating reports, capturing information for paid events and facilitating communication through email, texting.

5.1.3 Users

The system caters to a wide range of users within the church, including administrators, clerical staff, finance teams, event organizers, and even members. Its user base includes individuals with varying levels of technical proficiency.

5.1.4 Strengths:

1. Membership Management

Church Teams Management System excels in maintaining comprehensive member profiles, tracking attendance, recording financial transactions and recording participation in church activities. Its user-friendly interface facilitates efficient member data management.

2. Financial Transparency

It offers robust financial management tools, enabling precise tracking of contributions, generating comprehensive financial reports, and ensuring accountability in financial transactions.

3. Event Coordination

Church Teams Management System effectively manages church events, from scheduling and resource allocation to communication and coordination. It streamlines event planning and execution, promoting smooth operations.

5.1.5 Weaknesses:

1. Complexity

Its extensive features and functionalities can be complex for smaller or medium-sized churches, potentially necessitating extensive training for users to fully leverage the system's capabilities.

2. Limited Customization

While feature-rich, customization options may be limited, making it less adaptable to the unique requirements of individual churches.

3. Integration Challenges

The system may face difficulties when integrating with other existing software or databases within the church. This can lead to data silos and inefficiencies in data sharing and synchronization between different church systems.

4. Scalability Issues

As the size and complexity of a church grow, the system might struggle to scale effectively. This could result in performance bottlenecks and increased demands on hardware and IT resources, making it less suitable for large or rapidly expanding religious organizations.

5.2 Smart Church Management System

Smart Church Management System, in contrast, is known for its user-friendly interface and accessibility. Its strengths primarily revolve around ease of use and accessibility:

5.2.1 Methodology

Similar to Church Teams Management System, specific details about the development methodology are not available in the literature, it is likely that the Church Teams Management System was crafted through a blend of software engineering practices and consultations with experts in the religious organization management industry. This incorporation of knowledge and expertise has contributed to the system's effectiveness.

5.2.2 Scope

Smart Church Management System distinguishes itself through its user-friendly interface and online accessibility. Its primary scope includes member management, event scheduling, and financial recording. However, it may have limitations in terms of advanced features and scalability.

5.2.3 Users

The system is designed to accommodate users with varying technical backgrounds. It targets church staff, volunteers, and administrators who require a straightforward and accessible platform for managing church-related tasks. Its cloud-based nature allows for remote access, making it suitable for users working from different locations.

5.2.4 Strengths:

1. Ease of Use

This system prides itself on its intuitive interface, which simplifies member management, event scheduling, and financial recording. It accommodates users with varying levels of technical expertise.

2. Online Accessibility

Often cloud-based, Smart Church Management System allows users to access data and system features remotely, promoting collaboration among church staff and volunteers, particularly when working from different locations.

3. Data Security and Privacy

The Smart Church Management System prioritizes data security and privacy, implementing robust encryption and access controls to safeguard sensitive member and financial data.

4. Event Planning and Coordination

The system excels in planning and coordinating church events, from scheduling and resource allocation to online registration and communication, making event management more efficient and member-friendly.

5.2.5 Weaknesses:

1. Limited Features

While user-friendly, it may lack certain advanced features, such as robust financial reporting or highly customized event management, which could be essential for larger or more complex churches.

2. Scalability

Smart Church Management System may face limitations when attempting to scale up for larger churches with more intricate and diverse needs.

3. Costly Implementation

The initial setup and customization of the system can be expensive, posing a financial barrier to smaller churches with limited budgets.

5.3 Proposed CFF Management System

The CFF Management System distinguishes itself from the aforementioned systems in several significant ways:

5.3. 1 Distinctive Features:

1. Integration of all key functionalities

Unlike Church Teams Management System and Smart Church Management System, the CFF Management System integrates a wide array of functionalities into a unified platform. It seamlessly combines member management, financial transparency, event coordination, birthday celebration facilitation, teen and Sunday school management, and visitor engagement, offering a comprehensive solution tailored to the unique needs of CFF Church.

2. Customizability

The system provides a high degree of customization, allowing CFF Church to tailor the platform to its specific requirements. Whether it's a small local assembly or a rapidly growing mega-church, the CFF Management System adapts to accommodate evolving needs.

3. Scalability

Designed with scalability in mind, the CFF Management System can expand alongside the church, ensuring it remains an effective solution as the congregation continues to grow.

4. Enhanced Engagement

The system prioritizes member engagement and community-building. Features such as automated birthday celebrations and visitor management aim to foster a sense of belonging and connection within the church.

5. Comprehensive Financial Management

The system boasts robust financial tools for detailed transaction tracking and reporting, ensuring financial transparency, accuracy, and accountability.

6. Project Scope

6.1 What the CFF Management System Will Do

1. Membership Management:

The CFF Management System will provide a comprehensive platform for managing member profiles, including registration, updating member details, and tracking attendance.

2. Financial Transparency:

The system will enable the recording and tracking of financial transactions, including offerings and donations, providing transparency and accountability in financial management.

3. Event Coordination:

It will facilitate the scheduling and coordination of church events, including services, meetings, and special gatherings. The system will allocate resources, manage event logistics, and send event notifications.

4. Birthday Celebration Facilitation:

The system will automate the identification of upcoming member birthdays and facilitate the timely acknowledgment and celebration of these occasions, fostering a sense of community within the church.

5. Teen and Sunday School Management:

It will include tools for managing and organizing teen and Sunday school activities, allowing for the addition of participant details to the system. This will enhance the spiritual growth and engagement of young members.

7. Visitor Engagement:

The system will capture visitor contact information and visit details, facilitating warm welcomes, effective follow-ups, and integration of visitors into the church community.

8. Comprehensive Financial Reporting:

The system will generate detailed financial reports summarizing total giving and financial health, supporting budget planning and informed decision-making.

6.2 Project Constraints

6.2.1 What the CFF Management System Will Not Do

- No Direct Spiritual Guidance:

The CFF Management System is a tool for administrative and organizational purposes. It will not replace or provide direct spiritual guidance, counseling, or pastoral services to members.

- No Theological Content Management:

The system will not manage or deliver theological content, sermons, or religious teachings. It is not a platform for theological discussions or doctrinal debates.

- No Physical Event Execution:

While the system aids in event planning and coordination, it will not physically execute events or provide event-related services, such as catering or venue setup.

- No Financial Transactions Processing:

The CFF Management System will record and track financial transactions but will not process actual financial transactions, such as handling money or online payments. It serves as a record-keeping and reporting tool.

- No Personal Counselling or Confession:

The system will not facilitate personal counseling sessions or confessions. Sensitive personal matters and counseling sessions should be conducted separately and in person.

- No Theology Interpretation:

The system will not interpret religious texts, doctrines, or theology. Interpretations of religious texts should be done by qualified religious authorities.

7.Project Limitations and mitigation

- **Resource Constraints**

Limited financial resources and technical expertise may hinder the development and deployment of the CFF Management System.

Mitigation

Seek partnerships with technology experts or consider outsourcing certain development tasks to reduce resource constraints. Explore cost-effective software development tools and platforms.

- **Time Constraints**

Due to the comprehensiveness of CFF church management system it can be time-consuming, potentially impacting the project timeline.

Mitigation

Develop a detailed project schedule with milestones and allocate sufficient time for each phase.

- **Data Privacy and Security**

Ensuring the security and privacy of member data is critical, and any data breaches or privacy concerns could have legal and reputational consequences.

Mitigation

Implement robust data encryption and access controls. Comply with data protection regulations and regularly conduct security audits and assessments.

- **User Adoption**

Resistance to change among church members and staff may impact the successful adoption of the new system.

Mitigation

Conduct thorough user training and provide ongoing support. Involve key stakeholders in the system design and development to address their needs and concerns.

- **Scalability**

As the church continues to grow, the system may face scalability challenges.

Mitigation

Choose a flexible and scalable architecture for the system. Regularly assess and optimize system performance to accommodate growth.

8.Research Methodology:

8.1 Data Collection Methods:

- Observation we will observe the church's current management processes and workflows to identify areas that need improvement or automation.
- Interviews

In-depth interviews will be conducted with key stakeholders within CFF Church, including church administrators, finance team members, youth and Sunday school leaders, and regular members. These interviews will provide qualitative insights into the existing challenges and expectations.

- Surveys

Survey will be conducted among members and some teens to know their feel about the current system and what they suggest can be done to implove

- Document Review

Existing church documents, including membership records, financial reports, event schedules, and communication protocols, will be reviewed to gain a comprehensive understanding of current processes and documentation.

8.2 Data Analysis Methods

- Thematic Analysis:

Thematic analysis will be applied to data gathered from in-depth interviews. It involves identifying recurring themes, patterns, and trends in the qualitative responses of key stakeholders. This method will help uncover insights into existing challenges and expectations within CFF Church.

- Quantitative Analysis:

Quantitative analysis will be used for data collected through surveys. This method includes statistical techniques to summarize and interpret numerical survey responses. It will enable you to assess member and teen sentiments quantitatively, such as satisfaction levels and improvement suggestions.

- Process Mapping:

Process mapping is particularly relevant for the data obtained through observation of current management processes. It involves creating visual representations of workflows, highlighting

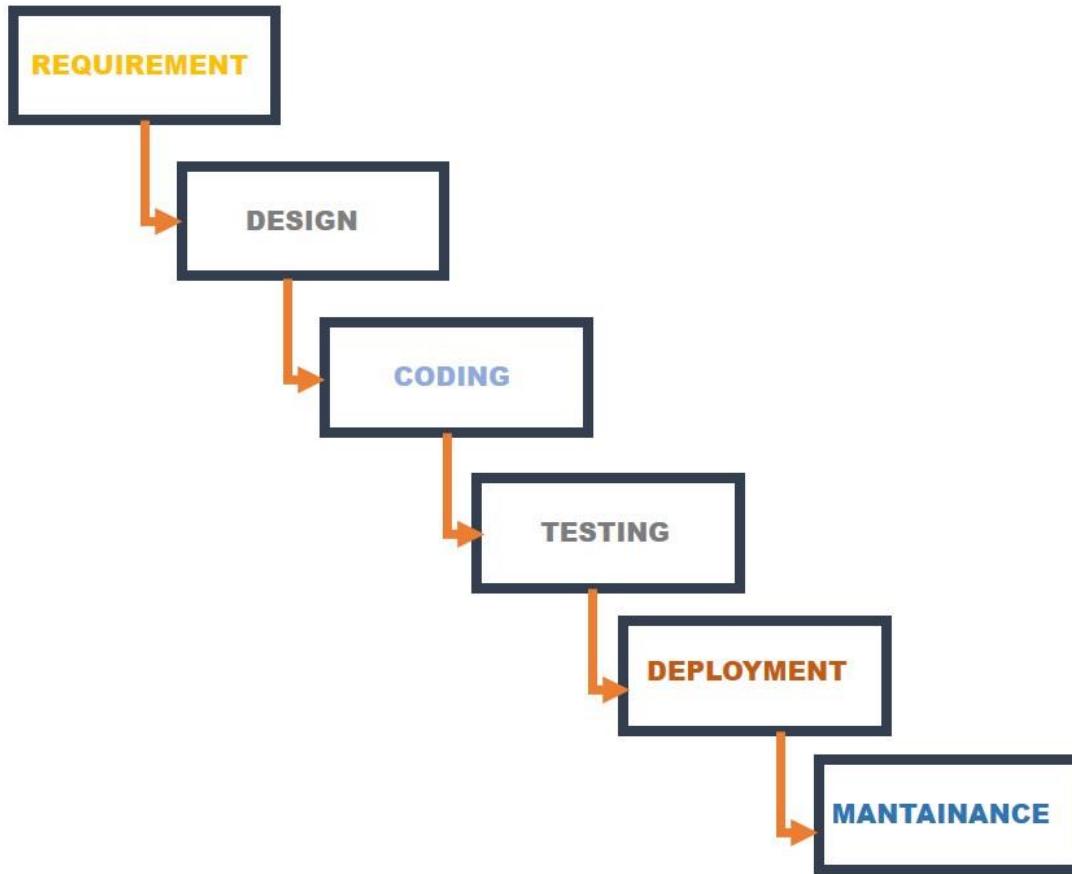
bottlenecks, inefficiencies, and areas needing improvement or automation. This method will provide a clear picture of the existing processes.

- Content Analysis:

Content analysis will be applied to data collected through document review. It will involve systematically examining existing church documents, such as membership records and financial reports, to extract relevant information. This method will help identify trends, discrepancies, and opportunities for improvement within the church's documentation processes.

8.3 System Development Methodology

The system development for the CFF Management System will Waterfall methodologies



- Requirements Gathering:

In this initial phase, a detailed analysis of the church's requirements will be conducted. This involves engaging with church administrators, key stakeholders, and potential system users to identify and document specific needs and expectations for the CFF Management System.

- System Design:

Once requirements are well-defined, the system design phase will commence. Designers and architects will create comprehensive system specifications, including user interface designs, system architecture, and data models. This phase will focus on defining how the system will meet the identified requirements.

- Implementation (Coding):

With the system design in place, the actual coding and development of the CFF Management System will begin. Programmers and developers will write the code to create the system's modules and functionalities based on the design specifications.

- Testing:

Following development, the system will undergo rigorous testing to ensure that it functions correctly and meets the defined requirements. This phase includes unit testing, integration testing, and system testing to identify and rectify any defects or issues.

- Deployment:

Once the CFF Management System receives approval from stakeholders, it will be deployed within the CFF Church community. This involves the installation of the system on relevant servers and ensuring that it is accessible to authorized users.

- Maintenance and Support:

After deployment, the system will enter a maintenance phase. This phase includes providing ongoing support to address any issues, applying updates or patches, and making necessary refinements. A support mechanism will be established for users to report problems or request assistance.

- Documentation:

Throughout the Waterfall methodology process, thorough documentation will be maintained. This includes documenting requirements, design specifications, coding guidelines, and user manuals to ensure clarity and transparency in system development and usage.

9. PROJECT BUDGET AND RESOURCES

9.1 BUDGET

S/N	Item	Quantity	availability	Estimated cost	Total cost
1	internet	8Mps	none	4,500	4,000
2	Desktop computer	1	available	50,000	50,000

3	Security firewalls	1	none	40,000	30,000
4	Back up media	2 TB Hard disk	500 gb HDD	15,000	15,000
5	server	1	70,000	70,000	70,000
	total			179,500	169,000

9.2 PROJECT SCHEDULE

TASK NO.	TASK	DURATION (weeks)	Start Date	End Date	Deliverables
1	Idea generation	2 days	10/09/2023	120/09/2023	System idea in place
2	Proposal writting	2 days	21/09/2023	23/09/2023	Proposal ready
3	Proposal presentation	1 day	25/09/2023	25/09/2023	Presentation
4	System requirement	3 days	27/09/2023	30/09/2023	System requirements
5	System design and programming	4 weeks	1/10/2023	31/10/2023	Systems requirement
6	Testing and debugging	4 days	11/10/2023	4/11/2023	Testing
7	System implementation	1 week	6/10/2023	13/11/2023	implantation
8	Final presentation	1 day	19/10/2023	19/11/2023	Final document
	Total	7 weeks			

9.3 SYSTEM RESOURCES

Resource	specifications	usage
firewalls	Powerful firewall	To secure the server against malicious attracts
Windows operating system	Windows 10 pro	Operating the machine
Server software	High performance servers	To host the database and web application
Database management system	Mysql	For storing church data safely

Development tools	Visual studio code	For coding and debugging
Support team	Security graduate	Providing technical support and maintenance

10 references

1. Church Growth Institute."25 Church Growth Strategies." Retrieved from <https://pushpay.com/blog/25-church-growth-strategies/>
2. Smith, J. (2020). "Challenges in Modern Church Management." Journal of Religious Administration, 6(2), 45-58.
3. Robertson, M. E. (2019). "Implementing a Church Management System: A Case Study." International Journal of Information Management, 39, 96-103.
4. ChurchTech Today. (2021). "5 Objectives of a Church Management System." Retrieved from <https://www.churchtechtoday.com/2019/02/01/5-objectives-of-a-church-management-system/>
5. Thompson, R. (2018). "Emerging Trends in Church Management Software." Church Executive, 37(7), 22-27.
6. Chuch team <https://go.churchteams.com/>
7. Smart church <https://smartchurch.co.ke/>
6. Jones, S. P. (2017). "Scope Management in IT Projects: A Case Study." International Journal of Project Management, 35(6), 1164-1176.
7. Project Management Institute. (2017). "A Guide to the Project Management Body of Knowledge (PMBOK® Guide)." PMI Publications.
8. Saunders, M., Lewis, P., & Thornhill, A. (2019). "Research Methods for Business Students." Pearson.
9. Sommerville, I. (2019). "Software Engineering." Pearson.
9. Boehm, B. W. (1988). "A Spiral Model of Software Development and Enhancement." ACM SIGSOFT Software Engineering Notes, 11(4), 14-24.

2.. SYSTEM REQUIREMENT SPECIFICATION

introduction section

1.0. Purpose of the SRS

The purpose of the SRS for the CFF Management System is to provide a comprehensive and detailed document that serves as the primary reference for the design, development, and testing of the system. It aims to

1. Clearly define the system's functionalities, features, and behavior, ensuring that all project stakeholders have a shared understanding of what the system will deliver.
2. Specify the system's scope, constraints it will operate under, and the limitations it may have.
3. Serve as a foundation for the design and development phases by outlining the system's requirements, including functional, non-functional, and performance requirements.
4. Provide a basis for conducting testing and validation, enabling quality assurance and compliance with project goals and objectives.
5. Facilitate effective project management by serving as a reference for project planning, monitoring, and tracking of progress.
6. Serve as a communication tool for all project stakeholders, ensuring that everyone involved in the project, including developers, designers, project managers, and other team members, shares a common understanding of the system's objectives and functionality.

1.2 Intended Audience for the SRS

The SRS for the CFF Management System is primarily intended for the following audience:

1. **Application Designers and Developers**

Application designers and developers will rely on the SRS to understand the functional and technical requirements of the system. It will guide them in creating the system's architecture, design, and code to ensure that it aligns with the documented specifications. They will use it as a reference throughout the development process to build a system that meets the defined criteria. **2.**

2. Project Managers:

Project managers will use the SRS as a key document for project planning, scheduling, and monitoring. It will help them ensure that the project stays on track, meets its objectives, and adheres to specified requirements. The SRS will also assist in resource allocation and risk management.

3. Quality Assurance and Testing Teams:

QA and testing teams will rely on the SRS to develop test plans and test cases that verify the system's compliance with stated requirements. It will serve as a benchmark for conducting testing, verification, and validation activities, ensuring the system functions as intended.

4. Business Stakeholders and End Users:

Business stakeholders and end users may also reference the SRS to gain an understanding of the system's expected functionality and behavior since the document may contain technical details, it can be used to communicate high-level expectations and benefits to these stakeholders.

1.3 Scope

System to be Produced

The CFF Management System is a comprehensive digital solution tailored specifically for the Christian Foundation Fellowship (CFF) Church. It is designed to enhance and modernize the church's administrative and operational processes, promoting efficiency, transparency, and community engagement.

1.3.1 What the system will do

The CFF Management System will have the following key functions:

1. Membership Management:

- Facilitate member registration, enabling the addition of new members, deleting existing members and updates to existing member records.
- Securely store member details, ensuring accuracy and up-to-date profiles within the system.
- Provide self-service features that allow members to access and update their personal information, fostering engagement within the church community.

2. Financial Transparency:

- Accurately record financial transactions, including offerings and tithes with transaction IDs.
- Printing of the financial transactions if needed
- Expedite the generation of comprehensive financial reports to assess financial health and plan budgets.

3. Event Coordination:

- Streamline the scheduling and coordination of church events, ensuring that events are accurately communicated including the venues
- Display the event outcomes to the members

4. Birthday Celebration Facilitation:

- Automatically identify and display upcoming member birthdays, facilitating timely acknowledgment and celebration.
- Foster a sense of belonging and connection within the church community.

5. Teen and Sunday School Management:

- Facilitate teen and Sunday-school registration, updating the information, deleting, searching and printing the information.

6. Visitor Engagement:

- Capture visitor contact information and visit details for effective follow-up and integration into the church community.

1.3.2 What the System Will Not Do

The CFF Management System will not:

- Process actual financial transactions, such as handling money or online payments.
- Provide direct spiritual guidance, counseling, or pastoral services to members.
- Allow visitors direct engagement with system
- Allow teens to engage directly with system
- Manage or deliver theological content, sermons, or religious teachings.
- Physically execute events or provide event-related services, such as catering or venue setup.
- Facilitate personal counseling sessions or confessionals.
- Interpret religious texts, doctrines, or theology.

1.4 System Benefits and Objectives

Main objective

The new CFF Management System is designed with a clear set of objectives aimed at enhancing the overall efficiency, communication, and management of Christian Foundation Fellowship (CFF) Church's operations. These objectives are aligned with the system's scope and functionality, ensuring that they are realistic and attainable within the system's capabilities.

Other primary benefits and objectives of the CFF Management System are:

- To optimize the administrative and operational processes of the CFF Church, making them more efficient and accurate.
- To promote transparency and accountability in financial management.
- To foster a sense of community and belonging among church members through features like automated birthday celebrations.
- To streamline the management of church events, enhancing planning and execution.
- To capture details of church for proper record keeping
- To provide church leadership with comprehensive financial reports to make informed decisions and plan budgets.
- To ensure that all members have easy access to their personal information and can actively participate in church activities.

1.5 Definitions, Acronyms, and Abbreviations

Terms:

1. **CFF Management System-** Refers to the Christian Foundation Fellowship Management System, the digital solution developed for the CFF Church.
2. **SRS (Software Requirements Specification) -** A document that outlines the detailed requirements and scope of the CFF Management System.
3. **Church Management System -** A software application designed to assist religious institutions in managing their administrative and operational processes efficiently.
4. **Scope -** the extent of features and functionalities that the CFF Management System will encompass.
5. **Stakeholder -** Individuals or groups with an interest in the CFF Management System, including church administrators, members, developers, and project managers.

1.5.1 Acronyms and Abbreviations:

- **CFF** - Christian Foundation Fellowship
- **SRS** - Software Requirements Specification
- **QA** - Quality Assurance

- **IT** - Information Technology
- **API** - Application Programming Interface
- **GUI** - Graphical User Interface
- **CPU** - Central Processing Unit
- **DNS** - Domain Name System
- **HTTPS** - Hypertext Transfer Protocol Secure
- **SQL** - Structured Query Language
- **UI** - User Interface
- **UX** - User Experience

1.6.Overview of the SRS Document:

The Software Requirements Specification (SRS) document outlines the comprehensive scope and specifications for the Christian Foundation Fellowship (CFF) Management System. It serves as a detailed reference document for the design, development, and testing of the system. The SRS provides a clear and shared understanding of the system's objectives, functionality, and constraints.

1.6.1 Organization of the SRS

The SRS is structured into several key chapters, each addressing specific aspects of the CFF Management System:

1.6.1.1 Chapter 1 - Introduction:

- Defines the purpose and intended audience of the SRS.
- Outlines the scope, defining what the system will do and what it will not do.
- Describes the system benefits and objectives.
- Gives meaning of acronyms and abbreviation that appear in SRS

1.6.1.2 Chapter 2 –general description

- State if system is stand alone or distributed
- Describes function of each component and interphases
- Gives overview of external interphases of system and equipment to be used
- Block diagram showing components of system
- Describes functions of the system
- Outlines system users and characteristics of them
- Gives specific user requirements
- Gives regulation policies and safety and security considerations of the system
- Outline of assumptions made about the system

1.6.1.3 Chapter 3 - System Requirements:

- Lists and describes the functional and non-functional requirements of the system.
- Describes processing of input data and methods used to transform input to outputs
- Identifies the user interphase requirements and other requirements

1.6.1.4 Chapter 4 - Appendices:

- Contains supplementary information such as additional supporting documentation and results from research

2. General Description

2.1 System Perspective:

The CFF Management System is primarily a self-contained system, designed to operate as a standalone application tailored specifically for the Christian Foundation Fellowship (CFF) Church. While it does not function as part of a larger system, it integrates various modules to streamline church operations efficiently.

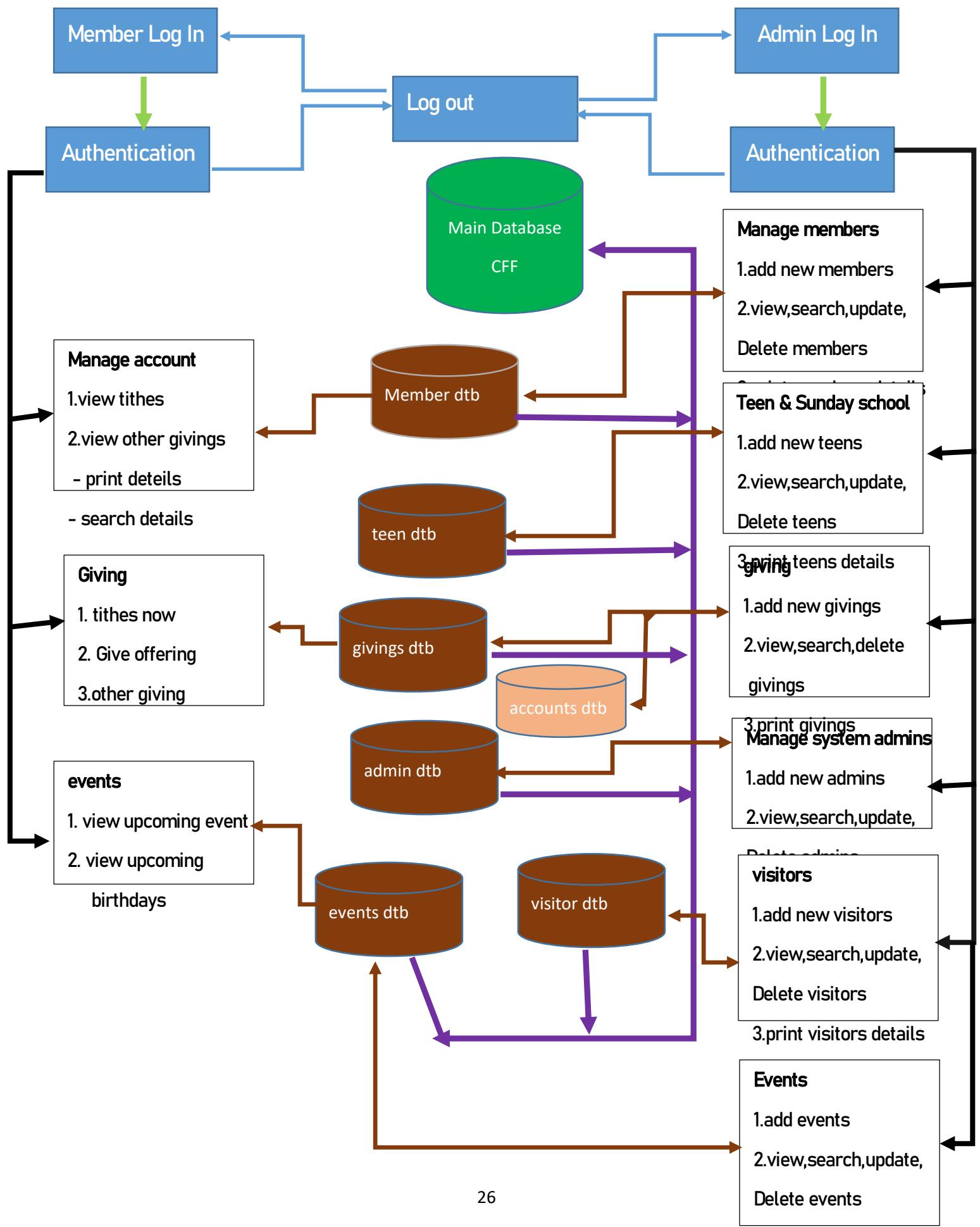
2.1.1 Principal External Interfaces

- **User Interfaces (UI):** The system will feature user interfaces accessible by church administrators, and members. These interfaces will be web-based for easy access and interaction.
- **Database Interface:** The system will interface with a database to store and manage member details, financial records, and other relevant information securely.
- **Communication Interfaces:** The system will display events

2.1.2 Hardware and Peripheral Equipment

- **Servers:** The system will require a server infrastructure to host the application and database securely. These servers may be cloud-based or on-premises.
- **Client Devices:** Users will access the system through various client devices, including desktop computers, laptops, tablets, and smartphones.
- **Internet Connection:** A reliable internet connection is essential for the system to ensure seamless data exchange and communication.
- **Peripheral Devices:** While not directly integrated into the system, peripheral devices like printers and barcode scanners may be used in conjunction with the system for specific tasks, such as generating reports and tracking attendance.

2.1.3 Block Diagram:



2.2 System Functionality

The CFF Management System is designed to perform a wide range of functions to streamline and enhance the operations of the Christian Foundation Fellowship (CFF) Church. The system's functionality is described in detail as follows:

2.2.1.User login

- The system should allow users to login to their account
- Sequence of operation : User must type in Username and Password in the Corresponding text fields
- User must click on the Login button
- Valid checks : User must login with the correct Username and Password
- Output : If “LOGIN” is selected, then verify and continue to the users menu
- Error handling : If user id and/or password are incorrect, then display an Error message.

2.2.2.Member Management:

- Registering Members: The system allows church administrators to register new members by entering their personal details, including name, contact information, and other relevant information.
- Updating Member Details: Administrators can update, **view, search, delete, and edit** member profiles as needed, ensuring accurate and up-to-date records
- The system can print member details

2.2.3.Member Information Access:

After correct login members can

- Change their password, profile picture, and logout
- Members can access their giving details, view near events and upcoming events, view upcoming birthdays, print their giving details and search for specific details concerning giving .

- They can also update their member details
- They can also log out of the system
- In any operation the system will display an alert confirmation message to confirm the operation to be done

2.2.4.Financial Management:

- Recording Offerings: The system provides a secure platform for members to record their offerings and donations. Transaction IDs are assigned to offerings, tithes or other giving
- Financial Reporting: The system generates comprehensive financial reports, summarizing total giving and financial health.

2.2.5.Birthday Celebration Facilitation:

- The system automates the identification of upcoming member birthdays. It displays to other members event of birthday of another member

2.2.6.Teen and Sunday School Management:

- Church administrators can effectively manage and organize activities related to teen and Sunday school classes by adding their details to the system and updating them if need be and they can also print their records incase a copy is needed
- If specific search is needed in the details the system also offers search logarithms

2.2.7.Visitor Engagement:

- The system facilitates the seamless management of visitors by capturing their contact information and visit details.
- Administrators can also perform operations like delete, update, search and print on data

2.2.8.Event Coordination:

- Church administrators can efficiently plan events adding the name of event, date and description of the event

2.2.9.The system may allow the administrator to edit/erase user records.

- The system may allow the administrator to edit/erase user records
- The administrator clicks on the edit/delete user records button
- The system brings up the edit/erase user records screen

2.2.10.User Support:

- The system provides user support in the form of guides, assisting members, administrators in making enjoyable user experience.
- It will show the suggested inputs to put in each field and will include autofill functionalities

2.3 User Characteristics

The CFF Management System, each user category has unique characteristics, expectations, and requirements. Here is an outline of the system users, their general characteristics, and specific user requirements:

2.3.1 Church Administrators:

- *General Characteristics:*
 - Typically experienced and long-standing members of the church.
 - Familiar with church operations, policies, and processes.
 - May have basic to intermediate technical proficiency.
- *Specific User Requirements:*
 - Require comprehensive access to all system functionalities for managing member information, financial records, events, and communications.
 - Need the ability to generate reports and analytics for decision-making and planning.
 - Seek tools for efficient event coordination and visitor management.
 - Value data security and access controls to protect sensitive church information.

2.3.2 Church Members:

- *General Characteristics:*

- Diverse educational and technical backgrounds.
- May vary in their familiarity with technology.
- Range from long-standing members to newcomers.
- *Specific User Requirements:*
 - Expect user-friendly interfaces for updating their personal information and accessing event schedules.
 - Need automated birthday reminders and acknowledgment features.
 - Value the ability to record their offerings and view financial statements.
 - Seek access to event notifications and member communication tools.

2.4 General Constraints

The development and operation of the CFF Management System are subject to various constraints, including regulatory policies, hardware limitations, and safety and security considerations. Here are the general constraints that must be considered:

2.4.1.Regulatory Policies:

- *Access Control Policies:* The system must adhere to access control policies defined by the church to regulate who can access, modify, or delete data within the system. This includes setting user roles, permissions, and authentication procedures.
- *Data Privacy Regulations:* The system must comply with data privacy regulations and safeguard sensitive member and financial information. This includes ensuring data encryption and secure storage practices.

2.4.2.Hardware Limitations:

- *System Resource Requirements:* The system's hardware requirements, including server capacity and storage, must be carefully evaluated and provisioned to accommodate the anticipated data volume and usage patterns.
- *Compatibility Constraints:* The system must be compatible with the church's existing hardware and peripheral equipment, ensuring seamless integration with devices such as computers, printers, and mobile devices.

- *Scalability Considerations:* As the church grows, the system must be able to scale to meet increased demand without compromising performance or data integrity.

2.4.2. Safety and Security Considerations

- *Data Security:* The system must prioritize data security, implementing encryption protocols and access controls to protect sensitive member and financial data from unauthorized access or breaches.
- *Disaster Recovery:* A robust disaster recovery plan must be in place to safeguard data in the event of system failures, natural disasters, or other unforeseen circumstances.
- *User Training and Awareness:* Users, particularly administrators, must undergo training on system security best practices to prevent data breaches and maintain the system's integrity.
- *Physical Security:* The physical servers hosting the system must be located in a secure and controlled environment to prevent unauthorized access or physical damage.

2.5 Assumptions and Dependencies

In the development of the CFF Management System, certain assumptions and dependencies are made based on background information about the organization, its users, and the general environment. Here are the key assumptions and dependencies:

2.5.1. Assumptions:

1. **User Technical Proficiency:** It is assumed that users, including church administrators and members, have at least basic technical proficiency to interact with the system. Training and user support will be provided, but an initial level of digital literacy is expected.
2. **Data Accuracy:** The system assumes that data entered and edited by users, such as financial transactions, their details is accurate and valid. While the system includes data validation mechanisms, it relies on users to provide correct information.
3. **Stable Internet Connectivity:** The system assumes that users have stable internet connectivity when accessing the system, whether from their own devices or church-

provided resources. System responsiveness may be affected by the quality of the internet connection.

4. **User Training:** It is assumed that user training will be provided to familiarize administrators, members with the system's features and functionality. This training is essential for effective system adoption.
5. **Regulatory Compliance:** The system assumes that the church has policies and procedures in place to comply with regulatory requirements, such as data privacy and financial reporting standards. The system will align with these policies.
6. it also assumes that all users have access to technological gadgets such as phone or tablet or any other related .

2.5.2.Dependencies

1. **Hardware and Infrastructure:** The system is dependent on the availability and proper functioning of the required hardware and infrastructure, including servers, storage devices, and network equipment.
2. **Data Backup and Recovery:** Effective data backup and recovery solutions are essential dependencies. The system relies on these mechanisms to ensure data integrity and availability in the event of system failures or data loss.
3. **User Adoption:** The successful adoption of the system depends on users' willingness to engage with and utilize the platform. User acceptance and engagement are critical to the system's effectiveness.
4. **Regulatory Compliance:** The system is dependent on the church's commitment to maintaining compliance with relevant regulations and policies, including data privacy and financial standards. Any changes in regulations may impact system functionality.
5. **Timely System Maintenance:** Regular system maintenance and updates are necessary for ensuring system performance, security, and functionality. The system is dependent on timely maintenance efforts.

3.0 Specific Requirements

3.1 Functional Requirements

3.1.1.Authentication

For the users who are using the system they will require to be authenticated and the system will have a robust authentication to maintain the integrity of the system.

3.1.2.Authorization level

The different users of the system will require different level of privileges the system will enable.

3.1.3.Web browser

A web browser will help facilitate the operation between the system and the database to which it is attached

3.1.4.Network services

On the server end the system will require to ensure that the network is always up so that the systems can be available at all times when the users need it

3.2 Inputs and Outputs:

3.2.1.Member Registration (Input):

- *Source:* Church administrators and members.
- *Destination:* Member database.
- *Quantity:* One member record at a time.
- *Units of Measure:* N/A.
- *Range of Valid Inputs:* All required member information, including name, residence, birthday dates, contact details.

3.2.2.Financial Contributions (Input):

- *Source:* Church members and administrators.
- *Destination:* accounts database.
- *Quantity:* Variable.
- *Units of Measure:* Currency.
- *Range of Valid Inputs:* Positive numerical values for tithes, offering giving and any other type of contributions.

3.2.3.Event Scheduling (Input):

- *Source:* Church administrators.
- *Destination:* Event database
- *Quantity:* Variable.
- *Units of Measure:* N/A.
- *Range of Valid Inputs:* Event name, details and date.

3.2.4.Member Data Updates (Input):

- *Source:* Church members.
- *Destination:* Member database.
- *Quantity:* One member record at a time.
- *Units of Measure:* N/A.
- *Range of Valid Inputs:* Member data updates, including changing password, changing picture and update their details.

3.2.5.Financial Reports (Output):

- *Source:* Financial records.
- *Destination:* Church administrators.
- *Quantity:* As requested.
- *Units of Measure:* Currency.
- *Range of Valid Outputs:* printing financial statements and reports.

3.2.6.Member details(output)

- *Source:* member records.
- *Destination:* Church administrators.
- *Quantity:* As requested.
- *Units of Measure:* N/A.
- *Range of Valid Outputs:* printing member information .

3.3.Processing

1. Validation of Input Data

- The system should validate input data to ensure that required fields are filled, data formats are correct, and that it adheres to predefined rules and constraints

2. Exact Sequence of Operations:

- The exact sequence of operations will vary based on the specific functionality, such as member registration, financial contributions, or event scheduling. Detailed flowchart diagrams will be created to illustrate these sequences.

Responses to Abnormal Situations:

1. Validation Errors:

- In case of validation errors during data input, the system will display alert messages indicating the nature of the error and how to rectify it.
- If the admin or member is to delete anything the system displays a confirmation message alert.

2. Data Integrity Issues:

- If data integrity issues are detected (e.g., duplicate member records), the system will provide notifications and guidance on resolving the issues and correction

3.4.non-functional requirements

There are a number of attributes of software that can serve as requirements. Below are quite good number of them and measures that have been put in place to ensure that they are well mitigated. By handling them and since they have been put into consideration the performance of the system will be greatly improved.

3.4.1 Reliability

To ensure that the system is reliable a number measures will be put in place.

- a) Use of a language that has minimal failure rate.
- b) Perform unit integration testing.
- c) Perform entire integration testing.
- d) Perform a performance testing.

3.4.2 Availability

System availability is the probability a system is functioning when needed to, under normal operating conditions.

There are several factors that will ensure that availability of a system is maintained.

The following are the three qualifications will be met for the system to be available at all times:

1. **Functioning equipment**

the maintenance team will ensure that they maintain the system in good time so that there is no time the system is of service for repairs or inspections

2. **under normal conditions**

for this purpose will be to ensure that the system operates in an ideal setting at the expected rate

3. **Functioning when needed**

at all time the operation of the system will be up and operating in the scheduled production scheduled.

3.4.3 Security

To ensure that the system is protected from those that would mean to harm it by either accidental or malicious access, use, modification, destruction, or disclosure. Specific requirements to be set in place in this area will include:

- Establishment of Identity Upfront
- Keeping specific log or history data sets
- Assigning certain functions to different modules

- Restricting communications between some areas of the program
- Checking data integrity for critical variables
- Protecting the Database From SQL Injection

3.4.4 Maintainability

To ensure that the system is easily maintainable the development team will ensure that the following factors are kept in the development process.

- a. Keep unit interfaces small.
- b. Separate concerns in modules.
- c. Couple architecture components loosely-Top-level components of a system that are more loosely coupled are easier to modify and lead to a more modular system.
- d. Development team will focus on Writing a clean code will make the system easily maintainable

3.4.5 Portability

To make this system portable, several measures have been involved. These include:

- All the code used in this software will be inbuilt and well protected thus easily portable.
- Development will be done within PHP programming language.
- This system will be developed using windows OS.

The following is the rating of these requirements for the system. They are rated in the scale of 1-12 where 12 is the best and 1 is the least.

H- Stands for high

M- Stands for medium

L- Stands for low

Below being the performance rate.

ID	Characteristic	H/M/L	1	2	3	4	5	6	7	8	9	10	11	12
1	Correctness	H										■		
2	Efficiency	M									■			

3	Flexibility	M											
4	Integrity/Security	H											
5	Interoperability	M											
6	Maintainability	H											
7	Portability	H											
8	Reliability	H											
9	Reusability	L											
10	Testability	M											
11	Usability	H											
12	Availability	L											

3.5 User Interface Requirements

User interface design is a crucial aspect of the CFF Management System. It includes forms, reports, web pages, and hardware and software interfaces that enable users to interact with the system. Here are the specific user interface requirements:

3.5.1 User Interface Design:

3.5.1.1 Login Interface

In this interface, there will be 2 text fields which are namely username and password and a login button. The user must be a registered member of the church. If user doesn't have an account, he/she will not be able to access site until his records are captured by the admin and this will require him to physically attend the church until enough basis for his membership are established.

3.5.1.2 Main Interface

In this interface, there will be a section which contains all the information related to the user and events of the church. This is where the user can view his details including recording his giving

3.5.1.1 User Profile Interface

Profile interface is a sub-interface which can be reached from main interface. User will use this interface to edit his/her profile information and logout.

3.5.2.Forms

These will be used to capture details

3.5.2.1.Member Registration Form:

The form consists of the following fields:
First Name
Surname
Last name
Select Gender (dropdown menu)
dd----YYYY (date input field)
Residence
place of birth
Select ministry (dropdown menu)
mobile number
Email
password

Admin will input

- 1.member first, surname, last name
- 2.select gender
- 3.birthday date
- 4.residence
5. mobile number
6. email and
- 7.login password

3.5.2.2.Financial Contribution Form:

The form consists of the following fields:
Amount
Transaction Code
+ Save

User will enter

1. Amount
 2. Transaction code
- The system will autofill date

3.5.2.3.Event Scheduling Form:

The screenshot shows a form titled "ADD EVENT". It contains fields for "Title", "dd----yyyy" (date), "Description", and a "SAVE" button.

Administrators will enter
Title of event
date of event
description of the event

3.5.2.4.Teen data form

The screenshot shows a form titled "Register New Teenager". It contains fields for "First Name", "Surname", "Last name", "Select Gender", "dd----yyyy", "Residence", "place of birth", "Parents Name", "mobile number", and a "Save" button.

Admin will input
1.teens first, surname, last name
2.select gender
3.birthday date
4.residence
5. parents mobile number
6. parents name

3.5.3.Hardware Interfaces:

- The CFF Management System will be designed to operate on standard PC hardware, including:
 - Minimum RAM: 4GB
 - Processor Speed: 2.0 GHz or higher
 - Free Disk Space: 20GB or more

3.5.4. Software Interfaces:

- The system will run on a Windows-based operating system (e.g., Windows 10) and be developed using web technologies (HTML, CSS, JavaScript, PHP) for cross-platform compatibility. It will use a back-end database system, such as phpmyadmin SQL Server or to store and manage data.

3.5.5. Other Requirements:

- **Frequency of Use:** The system will be used daily for member management, financial tracking, and event scheduling. Some functionalities, such as financial reporting, may be used on a weekly or monthly basis.
- **Accessing Capabilities:** Users will access the system via web browsers on their devices, including desktop computers, laptops, tablets, and smartphones.
- **Static and Dynamic Organization:** The user interface will have a static structure for forms and reports, while the database and data organization will be dynamic, allowing for updates and changes in member information, financial records, and event details.
- **Retention Requirements for Data:** Member data, financial records, and event details will be retained for historical purposes. Data retention policies will be established in compliance with relevant regulations.

4. Appendices

The appendices contain supporting materials to provide readers with additional context, data, and information related to the CFF Management System. These materials are intended to enhance the understanding of the system and its requirements. The appendices will include:

4.1. Survey Results:

During the research phase, surveys were conducted to understand the expectations and preferences of CFF Church members, including both regular members and teens. In narrative form these were the conclusions

User Satisfaction: A significant portion of respondents expressed satisfaction with the church's services but noted room for improvement in administrative processes.

Communication Preferences: The majority of respondents indicated a preference for more digital communication methods, such as email or a church app, to receive updates, event notifications, and announcements.

Ease of Member Registration: A common concern raised was the time-consuming and error-prone member registration process. Respondents emphasized the need for a simplified and digital registration method.

Financial Transparency: Users highlighted the importance of transparent financial reporting. They expressed the desire for an efficient system that accurately tracks contributions and generates financial reports.

Event Planning: Members and teens showed interest in an event management system that allows for online event registration, easy access to event details, and notification alerts.

Teen and Sunday School: Parents and guardians shared their interest in a system that provides better tracking of teen and Sunday school attendance and more streamlined communication with instructors.

4.2.Sample Data:

4.2.1.Sample Data for Document Review

Membership Records

Member Name: John Doe

Membership ID: CFF1001

Contact Information: john.doe@email.com, +1-123-456-7890

Membership Type: Regular

Joining Date: 2020-05-15

Financial Reports:

Report Title: Annual Financial Statement - 2022

Report Date: 2022-12-31

Total Offerings: \$50,000

Total Donations: \$15,000

Total Expenses: \$35,000

Net Income: \$30,000

Event Schedules:

Event Name: Sunday Service

Date: 2023-01-08

Time: 10:00 AM

Location: CFF Church, Bunyala Road

Speaker: Pastor Smith

Communication Protocols

Protocol Name: Visitor Welcome

Description: When a new visitor arrives, a welcome team member should greet them at the entrance, offer information about the church, and guide them to the registration desk for contact details.

Responsible Team: Ushers and Greeters

Membership Records:

Member Name: Mary Johnson

Membership ID: CFF1002

Contact Information: mary.johnson@email.com, +1-987-654-3210

Membership Type: Regular

Joining Date: 2021-03-20

4.2.2.Sample Survey Questions

1. User Experience with Current System:

On a scale from 1 to 5, how would you rate your overall experience with the current church management system, where 1 is very unsatisfactory and 5 is very satisfactory?

- 1
- 2
- 3
- 4

5

2. Usability and Accessibility:

How easy is it for you to navigate and use the current system?

- Very Difficult
- Somewhat Difficult
- Neutral
- Somewhat Easy
- Very Easy

3. Most Valuable Features:

Which features of the current system do you find most valuable? (Select all that apply)

- Member Registration
- Financial Contribution Management
- Event Scheduling
- Member Communication
- Others (please specify): _____

4. Areas Needing Improvement:

What aspects of the current system do you believe need improvement? (Open-ended)

[All the areas in the system]

5. Suggested Enhancements:

If you could add or change one feature in the system, what would it be? (Open-ended)

[change the member registration]

6. System Accessibility for Teens:

Teenagers, how easy is it for you to use the system? (Rate from 1 to 5, where 1 is very difficult and 5 is very easy)

1

2

3

4

5

7. Additional Comments:

Do you have any additional comments or suggestions regarding the current system's usage and functionality? (Open-ended)

[the system makes users a lot dissatisfied]

4.2.3. Sample Interview Questions:

1. Background and Role:

Can you briefly describe your role and responsibilities within CFF Church?

How long have you been associated with the church, and in what capacity?

2. Current System Usage:

What are the primary tasks or processes you use the current church management system for?

Are there any specific challenges or difficulties you encounter when using the system for these tasks?

3. System Strengths:

In your opinion, what are the strengths or positive aspects of the current system that you've observed?

Can you share any success stories or examples where the system has been particularly beneficial?

4. Areas Needing Improvement:

What aspects of the current system do you believe need improvement or modification?

Are there specific pain points or issues that hinder your tasks or responsibilities?

5. Expectations and Desires:

What are your expectations for the new CFF Management System?

Are there any specific features or functionalities you would like to see in the new system?

6. Impact on Member Engagement:

How do you envision the new system positively impacting member engagement and communication within the church?

Can you provide examples of how improved systems could enhance member experience?

7. Challenges and Barriers:

Are there any challenges or barriers you anticipate in transitioning from the old system to the new one?

What steps do you believe should be taken to overcome these challenges?

8. User Training and Support:

Do you have any preferences or recommendations for user training and ongoing support for the new system?

How can the church ensure that all members and stakeholders are well-equipped to use the system effectively?

9. Integration with Existing Processes:

How do you see the new system integrating with or complementing existing church processes and workflows?

Are there any concerns about disrupting established routines during the transition?

10. Additional Comments:

Is there anything else you would like to share about your experiences and expectations regarding the new system?

Do you have any specific insights or suggestions that haven't been covered in these questions?

4.2.4.Observation Record

1: Member Registration Process

Observation Date: 2023-03-15

Process Description: Member registration

Findings:

Registration is entirely paper-based.

Member information is handwritten on physical forms.

Data entry is time-consuming and prone to errors.

2: Financial Contribution Management

Observation Date: 2023-03-16

Process Description: Financial contribution management

Findings:

Financial contributions are tracked using spreadsheets.

Data entry takes considerable time.

Difficulty in generating accurate financial reports.

3: Event Scheduling and Coordination

Observation Date: 2023-03-17

Process Description: Event scheduling and coordination

Findings:

Events are scheduled using a paper calendar.

Limited communication channels for event updates.

Instances of double-booked events.

4: Member Communication

Observation Date: 2023-03-18

Process Description: Member communication

Findings:

Communication primarily through printed bulletins.

Limited use of digital communication channels.

Potential for more efficient digital communication.

5: Teen and Sunday School Management

Observation Date: 2023-03-19

Process Description: Teen and Sunday school management

Findings:

Attendance tracking is manual, involving paper lists.

Limited communication with parents.

Opportunity to automate attendance tracking.

Map



3.. SYSTEM DESIGN SPECIFICATION

1.0. Business Rules

1.1. What happens in the church

Member Registration - The church maintains a database of its members, tracking their personal information and participation in church activities. This data helps in maintaining an accurate membership record.

Financial Management - Managing church finances is crucial for budgeting, planning, and ensuring transparency. This involves tracking offerings and donations.

Birthday Celebrations - Recognizing and celebrating member birthdays is an integral part of building a sense of community. This includes sending birthday wishes and messages.

Teen and Sunday School - CFF maintains a database of the teens and Sunday school children in the church. Coordinating their classes requires attendance tracking, communication with parents, and resource management.

Event Coordination - The church organizes various events, including special services, meetings, and gatherings. This involves scheduling, resource allocation, and communication with members.

Visitor Engagement - Welcoming and managing church visitors is essential for fostering a welcoming atmosphere. It includes capturing visitor contact information and details of their visits to facilitate follow-up and integration into the church community.

1.2. Operations of church

- Membership Management - The system will handle the registration of new church members and maintain a database of existing members. This includes capturing personal

details, contact information, and membership status. It will also enable administrators to update member records as needed.

- Member Information Access: The system will provide members with the ability to access and update their personal profiles. This self-service feature empowers members to maintain accurate records, such as contact details
- Financial Management: The system will facilitate the recording and tracking of financial contributions, including offerings and donations, with detailed transaction records. It will expedite financial calculations and reporting for transparent financial management.
- Birthday Celebrations: The CFF Management System will automate the identification of upcoming member birthdays. It will ensure that birthday wishes and messages are sent in a timely manner, fostering a sense of belonging and connection within the church community.
- Teen and Sunday School Management: The system will include tools for church administrators to efficiently manage and organize activities related to teen and Sunday school classes. This involves tracking attendance, communicating with parents, and managing resources to support the spiritual growth of young members.
- Event Coordination: The system will streamline the management of church events, including scheduling, resource allocation, and communication with members. It will provide a digital platform for event planning and execution.
- Visitor Engagement: The system will facilitate the management of church visitors by capturing their contact information and visit details.

1.3. System boundaries

The system boundary of the CFF Management System encompasses the entire digital infrastructure and processes that support the management of Christian Foundation Fellowship (CFF) church's operations. The core users are the church administrators, who will actively interact with the system to perform tasks related to membership management, financial tracking, event coordination, and visitor engagement.

The system will also serve as a self-service platform for all CFF members, allowing them to access and update their personal information. This interaction, while pivotal, is largely limited to

data input and retrieval. The system boundary extends to cover the hardware and software components required for its operation, as well as the interfaces needed to facilitate data exchange and communication.

The system interfaces with the broader church community, including church members who interact with it to access and update their personal profiles. While this interaction is essential, the primary actors within the system are the church administrators. The system's primary goal is to optimize and streamline the administrative processes of the church, making it more efficient and effective in fulfilling its spiritual mission.

2.0. Process Modelling

all the processes

you will need to conduct a thorough analysis of the system and its operations. Start by breaking down the system's functions and activities into individual processes or tasks. These processes should cover all the activities relevant to the system being developed. Here is a high-level example of identified processes for a church management system:

Member Registration

Member Information Update

Financial Transactions Management

Birthday Celebrations

Teen and Sunday School Management

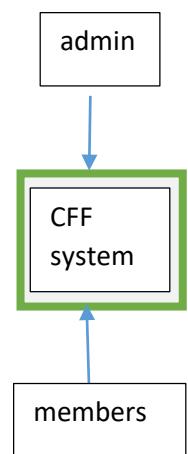
Visitor Management

Event Coordination

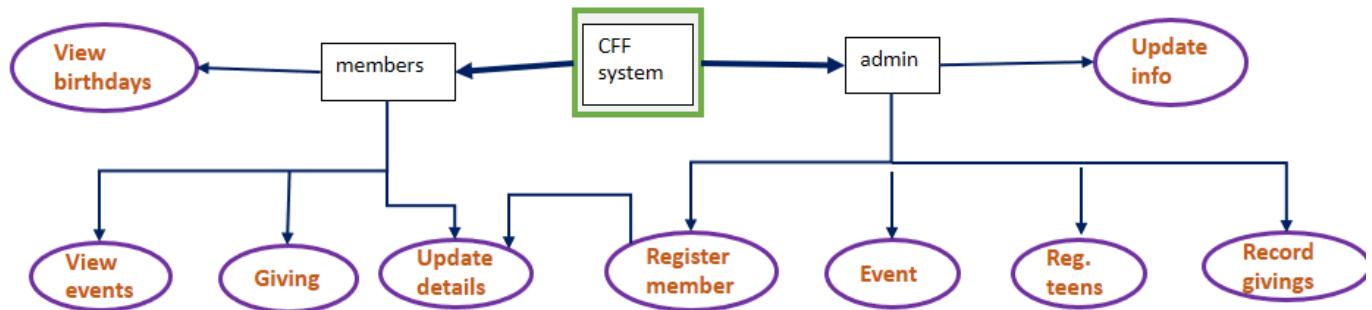
Reporting and Analysis

DFD diagram

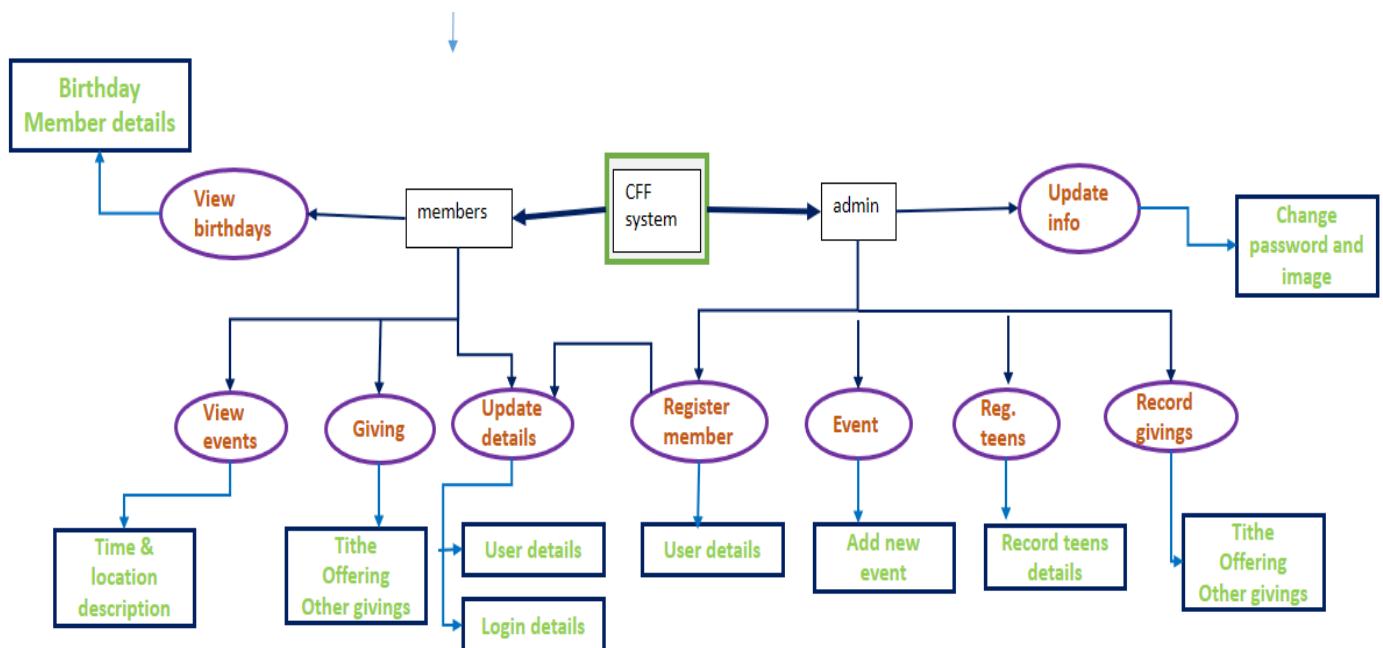
Level 0



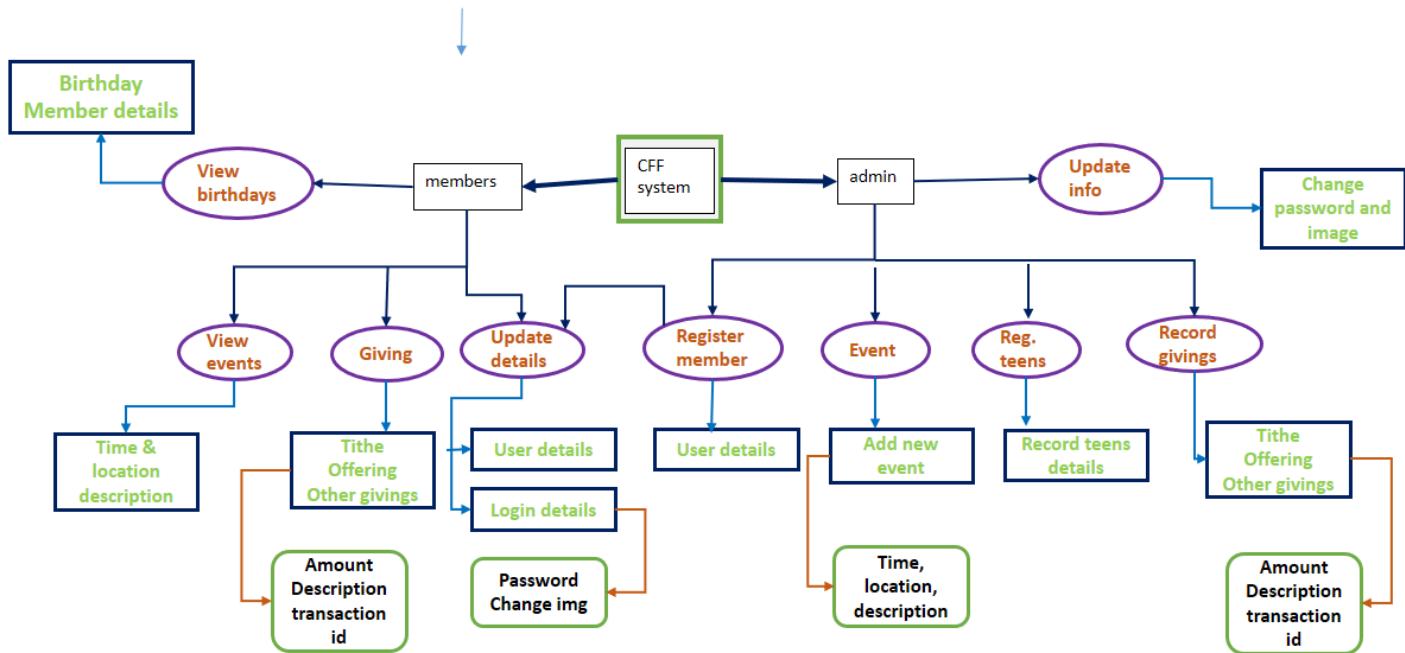
Level 1



Level 2



level 3



3.0. data modelling

3.1 major entities and attributes

3.1.1. Entities:

1. Members
2. Events
3. Birthdays
4. User Accounts (for administrators)
5. Contributions (such as Tithes, Offerings, and Other Givings)

3.1.2. Attributes for Major Entities:

Members

- First Name
- username

- Last Name
- Mobile Number
- Residence
- Place of birth
- Ministry
- Date of Birth
- Gender
- Email Address

Events

- Event ID
- Event Name
- Event Date
- Event Description
- Event Location

Birthdays:

- Birthday ID
- Member's ID (linked to Members)
- Birthdate

User Accounts (for administrators):

- User ID
- Username
- Password

Contributions (Tithes, Offerings, and Other Givings):

- Contribution ID
- Member's ID (linked to Members)
- Contribution Type (e.g., Tithes, Offerings, Other Givings)
- Amount

- Contribution Date

3.2. Normalise to third normal form

Let's start by normalizing the tables:

Normalization Steps:

Step 1: Create Member and Contribution Tables

Table 1: Members

- MemberID (Primary Key)
- FirstName
- LastName
- MobileNumber
- Residence
- DateOfBirth
- Gender
- EmailAddress
- Status

Table 2: Contributions

- ContributionID (Primary Key)
- MemberID (Foreign Key, references Members' MemberID)
- ContributionType (e.g., Tithes, Offerings, Other Givings)
- Amount

Remove Transitive Dependencies

Table 1: Members

- MemberID (Primary Key)
- MemberNameID (Foreign Key, references MemberNames' MemberNameID)

- MobileNumber
- Residence
- DateOfBirth
- Gender
- EmailAddress

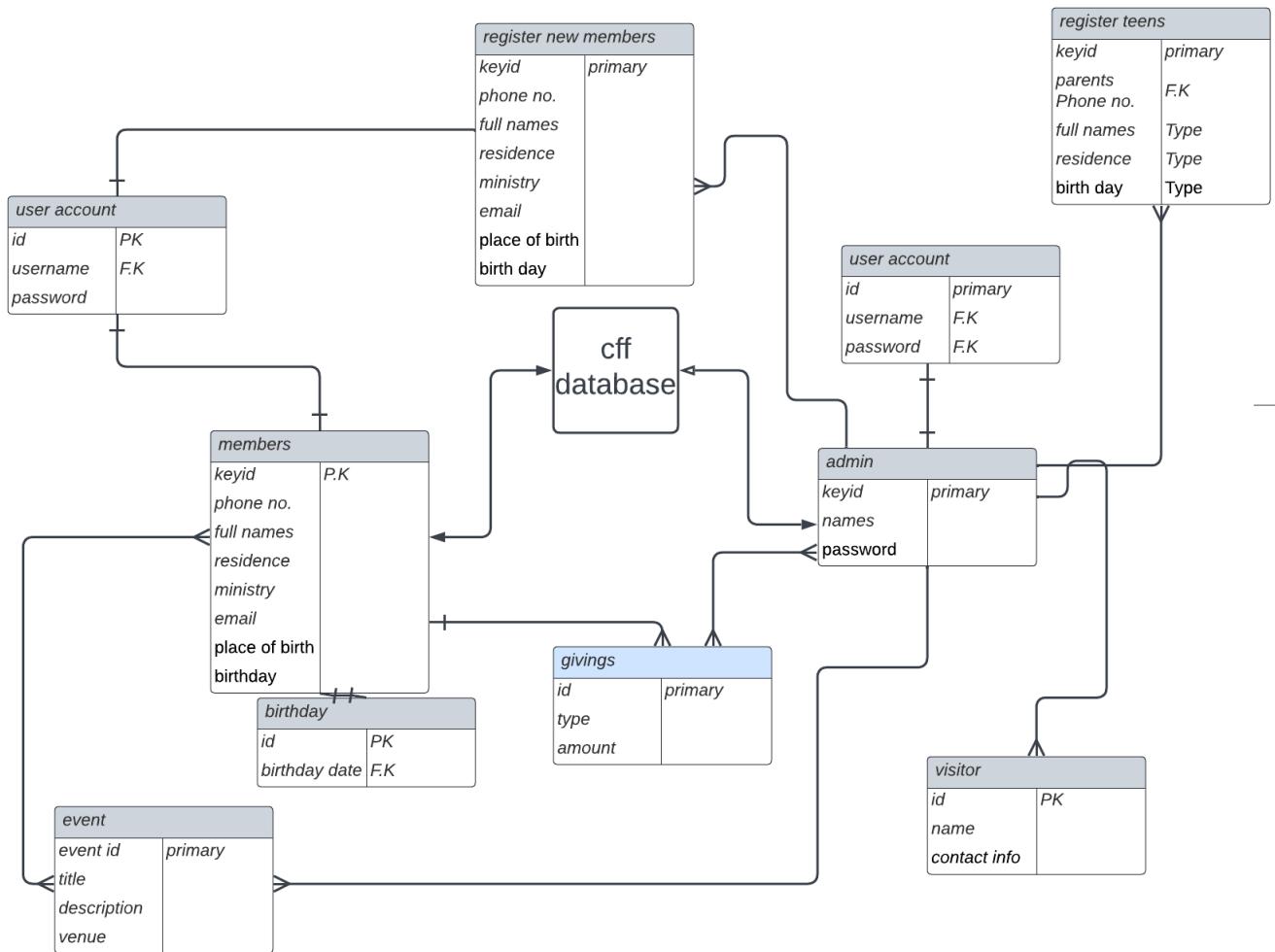
Table 2: MemberNames

- MemberNameID (Primary Key)
- FirstName
- LastName

Table 3: Contributions

- ContributionID (Primary Key)
- MemberID (Foreign Key, references Members' MemberID)
- ContributionType
- Amount

3.3. ERD DIAGRAM



3.4. Data dictionary

Table: Members

ID (Primary Key): A unique identifier for each member.

First Name: The first name of the member.

Last Name: The last name of the member.

Username: The username of the member for login.

Mobile Number: The mobile number of the member.

Residence: The residential address of the member.

Place of Birth: The place of birth of the member.

Ministry: The ministry or group the member is associated with.

Date of Birth: The date of birth of the member.

Gender: The gender of the member (e.g., Male, Female).

Email Address: The email address of the member.

Table: Events

Event ID (Primary Key): A unique identifier for each event.

Event Name: The name of the event.

Event Date: The date when the event is scheduled.

Event Description: A description of the event.

Event Location: The location or venue of the event.

Table: Birthdays

Birthday ID (Primary Key): A unique identifier for each birthday record.

Member's ID (Foreign Key): A reference to the member associated with the birthday.

Birthdate: The date of the member's birthday.

Table: User Accounts

User ID (Primary Key): A unique identifier for each user account.

Username: The username of the administrator.

Password: The password for the administrator's account.

Table: Contributions

Contribution ID (Primary Key): A unique identifier for each contribution.

Member's ID (Foreign Key): A reference to the member who made the contribution.

Contribution Type: The type of contribution (e.g., Tithes, Offerings, Other Givings).

Amount: The amount of the contribution.

Contribution Date: The date when the contribution was made.

3.5. flow chart

3.5.1 Symbols used

Rectangle: The rectangle is used to represent a process or activity.

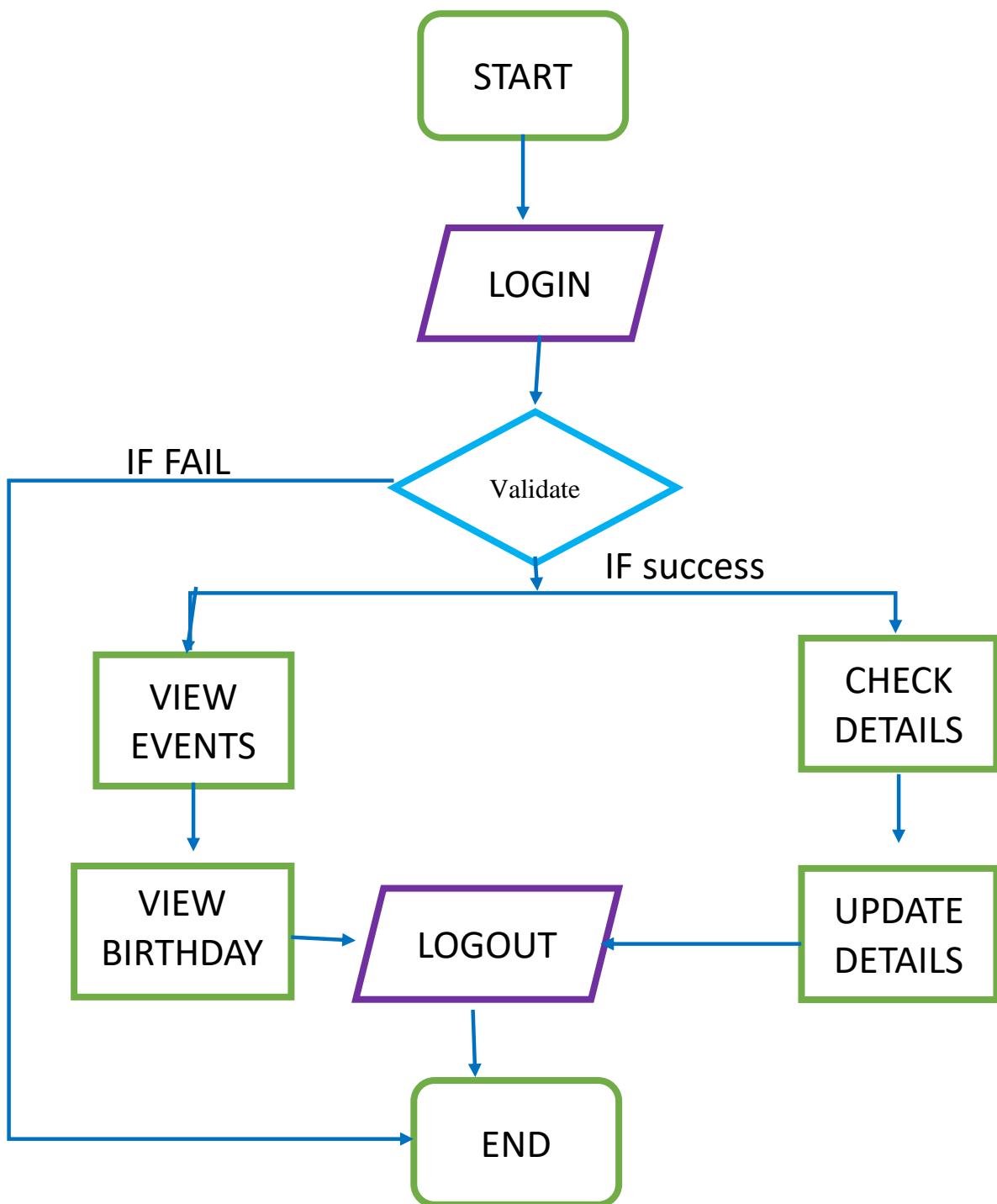
Arrow: Arrows or flowlines indicate the flow of control or data between processes. They illustrate the sequence in which activities occur.

Diamond: Diamonds represent decision points.

Oval: Ovals are used to denote the start or end of a process. The beginning of a process is represented by an oval labeled "Start," and the end is represented by an oval labeled "End."

Parallelogram: Parallelograms are used to represent input or output.

3.5.2. chart



4.. IMPLEMENTATION STATEGY

1. Introduction

This document serves as a comprehensive guide for the implementation phase of the Christian Foundation Fellowship (CFF) project. It outlines the processes, requirements, activities, training, and roles involved in deploying the CFF Management System. The implementation follows the successful testing phase discussed in the Test Plan, ensuring that the application is fully functional and meets the specified requirements.

1.1 Purpose

The purpose of this document is to provide detailed guidance to the development team and CFF management on the steps to be taken before, during, and after the actual deployment of the CFF Management System. It serves as a reference for the entire implementation process, emphasizing the requirements and standards necessary for a successful deployment.

1.2 Objectives

This document aims to achieve the following objectives:

- i. Identify a changeover strategy suitable for a web application.
- ii. Serve as a reference point during the CFF Management System implementation.
- iii. Guide the entire implementation process.
- iv. Direct post-implementation activities for the application.

2. Changeover Strategy

2.1 Replacement Changeover

In transitioning from the old system to the CFF Management System, the Replacement Changeover strategy will be employed. This strategy involves replacing the existing system entirely with the new system. To facilitate a smooth transition, certain measures will be implemented during the changeover period.

2.2 Features of Replacement Changeover

i. Phased Decommissioning

The old system will be gradually decommissioned in phases to allow for a phased adoption of the CFF Management System. This phased approach ensures a controlled and manageable transition.

ii. User Training and Support

Extensive training programs will be conducted to familiarize users with the new system. Additionally, a robust support system will be in place to assist users during the transition and address any challenges they may encounter.

iii. Data Migration

A meticulous data migration plan will be executed to seamlessly transfer existing data from the old system to the CFF Management System. This process will ensure the integrity and continuity of historical data.

2.3 Justification

Advantages of Replacement Changeover

i. Complete System Upgrade

By fully replacing the old system, the CFF Management System can leverage modern technologies and features, providing enhanced functionality.

ii. Minimal Operational Complexity

Unlike parallel changeover, the replacement strategy reduces operational complexity by eliminating the need for concurrent operation of two systems.

iii. Immediate Benefits:

Users will immediately experience the benefits of the new system without the need to navigate between two systems.

Disadvantages of Replacement Changeover

i. Potential Learning Curve

Users may experience a learning curve during the initial phases of adopting the new system. However, comprehensive training programs will mitigate this challenge.

ii. Temporary Disruption

There may be a brief disruption during the transition period as the old system is phased out. This will be carefully managed to minimize any adverse effects.

2.4 Mitigation Strategies

To address the potential challenges associated with the Replacement Changeover strategy, the following mitigation strategies will be implemented:

i. Comprehensive Training Programs:

Extensive training sessions will be conducted well in advance to ensure users are proficient with the new system.

ii. Transition Support Team

A dedicated support team will be available to assist users during the transition period, addressing queries and providing real-time assistance.

iii. Incremental Rollout:

The phased decommissioning of the old system will be incremental, allowing users to adapt gradually and minimizing any disruptions.

3. Tasks Involved in Implementation

3.1 System Setup

The initial step involves setting up the necessary infrastructure, controls, and components for a successful web application deployment. Tasks include:

- a) Preparing the application for release.
- b) Updating application resources for release.
- c) Preparation of an End User License Agreement (EULA) document.
- d) Activation of remote servers and facilities.

3.2 Deployment

The deployment process focuses on releasing the application to users through various channels, ensuring widespread access:

- 1. Google web browser

3.3 Training

Training activities aim to familiarize users with the CFF Management System. Training aids include:

- I. User tutorials and guides on first login.
- II. Accessible user manual within the application.

3.4 Review

The review process ensures the application functions correctly and adheres to established configurations. It includes a software maintenance plan, allowing continuous tracking and improvement of the application.

3.5 Software Maintenance Plan

Activities in Software Maintenance

1. Correcting coding and design errors.
2. Updating documentation/test data.
3. Upgrading user support.
4. Enhancements to add functionality.

Reasons for Software Maintenance

- i. Adapting to changing user needs and operational environments.
- ii. Modifying code for enhancements.
- iii. Ensuring bug-free code.
- iv. Achieving a reliable system with faster response times.

This implementation plan aims to ensure a seamless deployment of the CFF Management System, fostering efficiency and effectiveness in managing church operations.

5..SYSTEM TESTING

1.0 Introduction

1.1 Goals and Objectives

Goal

The goal of the testing process is to ensure the CFF Management System operates flawlessly and meets user requirements.

Objectives:

- Identify and correct defects in the system.
- Validate that the system meets user needs.
- Ensure data security and integrity.
- Confirm the system's performance under varying conditions.
- Verify compliance with accessibility standards.

2.0 Test Plan

1. Unit Testing

Purpose

To validate the correctness of individual components, functions, and classes within the CFF Management System.

Method

Developers will write test cases for each unit (functions, methods) to assess their behavior and correctness.

Reason

Unit testing ensures that specific program units function as intended and are free from logical errors, contributing to code quality and reliability.

2. Integration Testing:

Purpose

To verify the seamless interaction and data flow between integrated modules, ensuring they work cohesively.

Method

Developers and testers will progressively combine modules and assess their interactions, data exchanges, and compatibility.

Reason

Integration testing helps identify any interface issues, data inconsistencies, or communication problems between system components.

3. System Testing:

Purpose

To assess the overall performance, functionality, and behavior of the entire CFF Management System.

Method

Dedicated testers will execute predefined test cases and scenarios that cover all aspects of system functionality.

Reason

System testing evaluates whether the system meets its functional requirements, detects potential bottlenecks, and ensures comprehensive coverage of the system.

4. User Acceptance Testing (UAT):

Purpose

To determine if the CFF Management System meets user expectations, aligns with requirements, and is user-friendly.

Method

CFF administrators and potential users will interact with the system, providing feedback on usability, feature satisfaction, and overall experience.

Reason

UAT validates that the system fulfills its intended purpose and is ready for deployment, incorporating user input.

5. Performance Testing:

Purpose

To evaluate the system's responsiveness, speed, and stability under various loads and conditions.

Method

Load testing (simulating expected loads), stress testing (pushing system limits), and scalability testing for assessing capacity expansion will be done

Reason

Performance testing ensures the system can handle user loads, maintains responsiveness, and identifies performance bottlenecks or weaknesses.

6. Security Testing:

Purpose

To uncover vulnerabilities and security flaws in the system, focusing on data protection and privacy.

Method

Security experts will perform penetration testing, vulnerability scanning, and code review to identify and rectify security gaps.

Reason

Security testing safeguards sensitive member data and maintains the system's integrity, crucial for data privacy and regulatory compliance.

7. Regression Testing:

Purpose

To confirm that new system changes or updates have not introduced defects or negatively affected existing functionality.

Method

Re-running previously executed test cases and verifying that previously working features remain stable.

Reason

Regression testing preserves the integrity and reliability of the system by preventing the introduction of new defects or issues.

8. Usability Testing:

Purpose

To evaluate the system's user-friendliness and overall user experience.

Method

Real users will perform specific tasks while evaluators observe and collect feedback on usability, efficiency, and satisfaction.

Reason

-Usability testing ensures that the system is intuitive, user-friendly, and meets the expectations of its users.

9. Data Migration Testing:

Purpose

To validate the accuracy and integrity of data migration from the old system to the new CFF Management System.

Method

Testing the extraction, transformation, and loading (ETL) processes to ensure data consistency during migration.

Reason

Data migration testing minimizes the risk of data loss or corruption during the transition.

10. Accessibility Testing:

Purpose

To ensure that the system is accessible to users with disabilities, meeting accessibility standards—

Method

Testing with assistive technologies, screen readers, keyboard navigation, and evaluating compliance with accessibility guidelines.

Reason

Accessibility testing promotes inclusivity and ensures compliance with legal and ethical standards, enhancing the user experience for all individuals.

11. Mobile Device Testing:

Purpose

To assess the functionality and usability of the CFF Management System on various mobile devices (smartphones and tablets).

Method

Testing on different devices with various operating systems and screen sizes to identify and address mobile-specific issues.

Reason

Mobile device testing ensures that mobile users have a seamless and responsive experience with the system.

12. Browser Compatibility Testing:

Purpose

To verify that the system operates correctly and consistently on different web browsers available.

Method

Testing on popular browsers (Chrome, Firefox, Safari, Edge) to detect and address any browser-specific issues.

Reason

Browser compatibility testing ensures a uniform user experience across various web browsers, promoting system accessibility.

3.0 Testing Staffing

Staffing

Here we will define the roles and responsibilities within the testing team:

- **Test Manager**

they oversee the entire testing process. Responsibilities include test strategy development, resource allocation, and coordination with the development team.

- **Test Engineers**

They are responsible for executing test cases and ensuring that the system meets quality standards. They will conduct various types of testing, including unit, integration, system, and more.

- **User Representatives**

A group of CFF administrators and potential end-users will participate in User Acceptance Testing (UAT). Their role is to evaluate the system's usability, functionality, and readiness. They will provide feedback and validate the system's compliance with user requirements.

- **Information Technology Group**

The ITG will provide support and assistance in configuring the testing environment, including setting up the necessary hardware, software, and network configurations.

Test Work Products

Work Products

specifies the essential work products generated during the testing process:

- **Test Cases:** Detailed test cases will be created for each type of testing (unit, integration, system, performance, security, etc.). Test cases will include step-by-step procedures, expected outcomes, and data inputs.
- **Test Scenarios:** High-level test scenarios will be defined to cover broader functionality and usage scenarios. These scenarios guide the creation of detailed test cases.
- **Test Data:** Specific test data, including valid and invalid inputs, will be prepared for executing test cases. Test data will simulate real-world scenarios and conditions.
- **Test Reports:** Comprehensive test reports will be generated for each testing phase. These reports will include details of test execution, identified defects, and overall test results.

Test Log

A test log will be maintained to record all tests and results:

- **Chronological Record:** The test log will include entries for each test conducted, indicating test type, date, objectives, executed steps, and outcomes (pass/fail).
- **Defect Logging:** Any identified defects will be logged in the test log, including descriptions, severity, status, and assignment for resolution.
- **Documentation:** The test log serves as a historical record of all testing activities and is essential for traceability and accountability.

6.. USER MANUAL

1.. Introduction

This user manual is designed to provide comprehensive guidance to users of the Christian Foundation Fellowship (CFF) Management System. The manual aims to enhance users' understanding of the application, enabling them to operate it efficiently with minimal effort. It serves as a valuable resource for troubleshooting and provides insights into the system's functionality during installation and everyday use. In our case we have two users the Administrators and the Church members.

1.1 Software and Hardware Requirements

The CFF Management System is compatible with IOS, Windows, and Android environments. To ensure optimal performance, users are advised to meet the following hardware specifications:

- **Minimum 4 GB ROM**
- **Single-core processor or higher**
- **1 GB RAM or more**

Meeting these requirements will guarantee a smooth and responsive experience while using the application.

2.. MEMBERS USE QUIDE

2.1 Installation

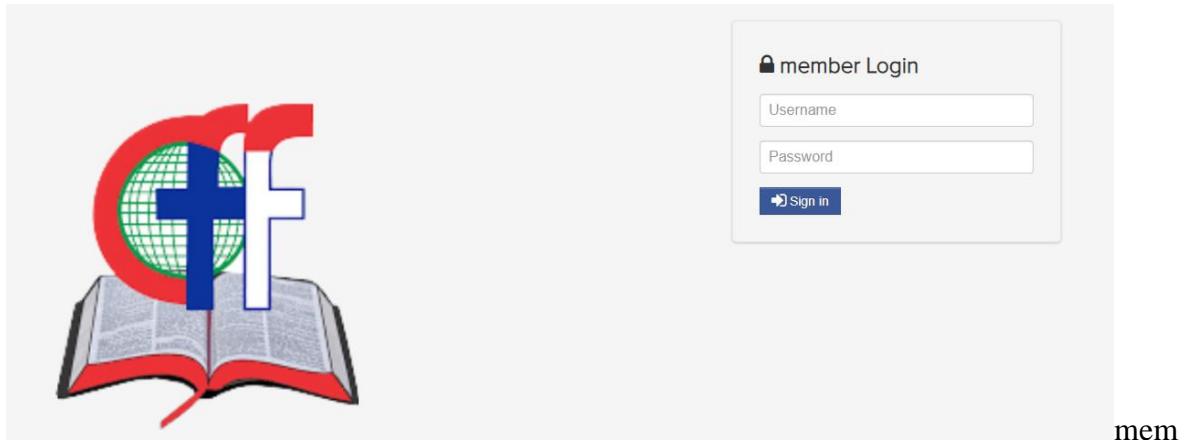
For the members they will access the system via web browsers like Google chrome, apple safari, edge hence won't be required to install the system direct in their machines.

2.2 Getting started

Upon typing the correct domain the users will be directed to a log in page. For user who already have an account will be required to log in. For the ones that have no account wont be allowed to sign up as there is need to be verified if they are members and therefore have to do it physical in church meetings where admins will be present to verify that

2.2.1 login details

To start the application, the users will be required to type the user name and password. And this will launch the home page



mem

2.2.3. On Successful Log on as user

When the registered users are successfully logged on they access the home area shown below.

From this page they are able to access and select the areas that are available and suitable to graze on.

The screenshot shows the CFF church website's home screen after logging in. The top navigation bar includes links for HOME, MY DETAILS, EVENTS, GIVINGS, BIRTHDAYS, and MORE. A sidebar on the left provides a dashboard with links to Go Home, manage Account, Givings/Tithes, and Events & Birthdays. The main content area features a large banner for the "2023 SHABACK" event, showing a group of people in a celebratory pose. Below the banner is a "Weekly Schedule" table:

Day	Activity	Time
mon - friday	morning devotions	5AM - 7PM
wednesday	evening service	5PM - 7PM
friday	night Vigil	10PM - 4AM
saturday	practice	11AM - 2PM
sunday	service	6AM - 2PM

On the right side, there are sections for "Our Mission" and "VISION". The "Our Mission" section states: "our Mission is to build godly families through discipleship, raise and grow leaders in the community with passion for christ". The "VISION" section states: "the vision of CFF church is to raise a church that :". It lists three goals: 1. worships God in truth, 2. understand the bible and apply it in the daily life, 3. teach the bible in truth.

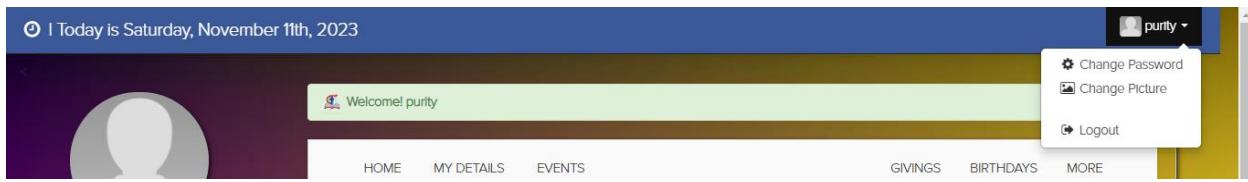
2.3 Actions once on homes screen

A) change profile

→there are three actions that the user can perform

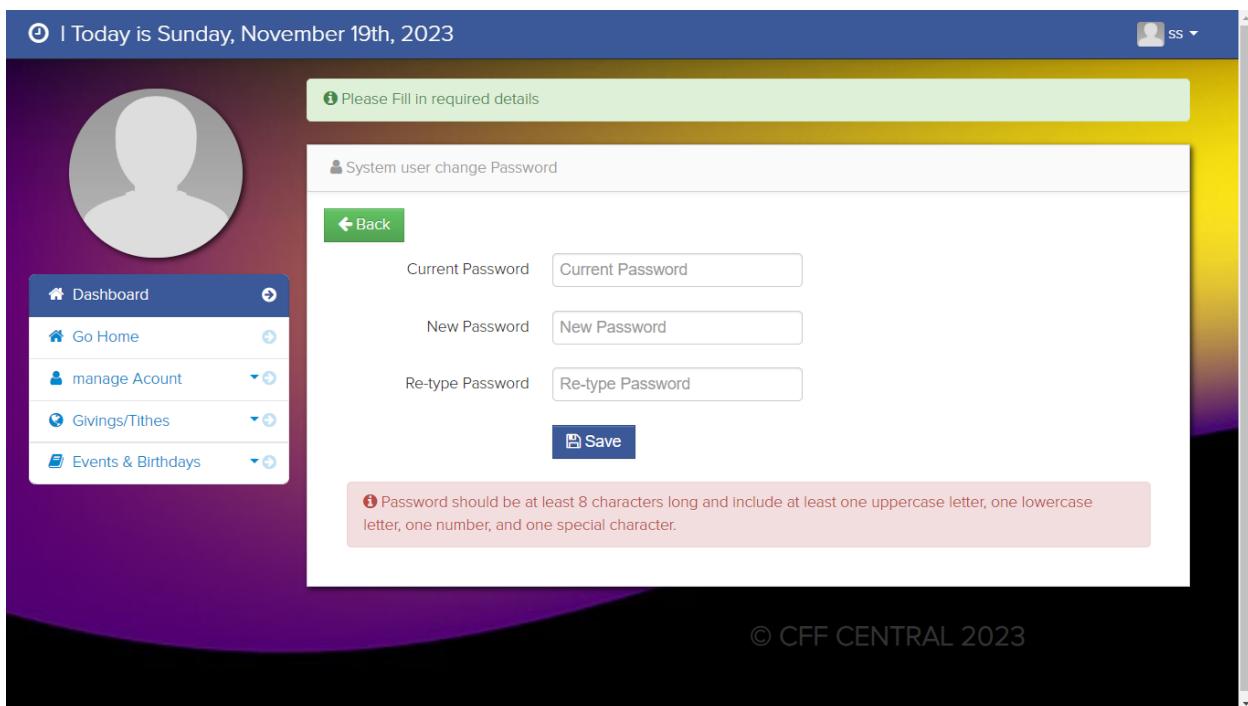
1. change password

2. change profile picture
3. log out



1. Change password

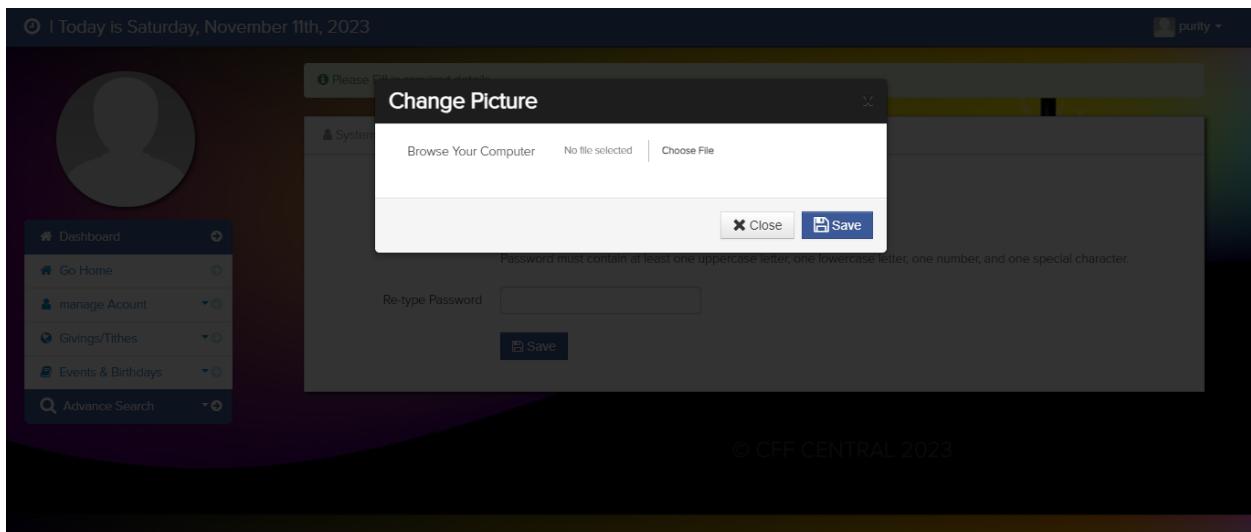
In changing password, he will be required to type the current password and put a new password which must contain atleast one uppercase letter, one lowercase letter, one number and one special character.



→The back button returns to the home screen

2. Change profile picture

Change his profile picture by selecting from this files in his device



Then choose image from files and save and the image will be visible

Welcome! purity

HOME MY DETAILS EVENTS GIVINGS BIRTHDAYS MORE

CFF church

2023 SHABACK

Our Mission

MISSION

our Mission is to build godly families through discipleship, raise and grow leaders in the community with passion for christ

VISION

the vision of CFF church is to raise a church that :

1. worships God in truth
2. understand the bible and apply it in

3. Log out

Will direct him back to the log in page

B) Navigations in home screen

1. My Details

Upon clicking my details, a new window will appear where they can see their details

The screenshot shows the application's home screen with a purple gradient background. On the left is a sidebar with a user profile picture and a dashboard menu. The main area has a header with tabs: HOME, MY DETAILS, EVENTS, GIVINGS, BIRTHDAYS, and MORE. A sub-menu titled 'Church member List' is open under 'MY DETAILS'. It displays personal information for a member named 'purity muthama':
Name: purity muthama
Gender: Female
Date of Birth: 1998-12-20
Residence:
ministry: Praise and Worship
Mobile: 0713565056
Email: purity@gmail.com
Residence:
A green 'Edit Info' button is at the bottom. At the very bottom of the main content area, it says 'Showing 1 to 9 of 9 entries'.

- edit info

Users will be allowed to edit their details

The screenshot shows the application's home screen with a purple gradient background. On the left is a sidebar with a user profile picture and a dashboard menu. The main area has a header with tabs: HOME, MY DETAILS, EVENTS, GIVINGS, BIRTHDAYS, and MORE. A sub-menu titled 'members(s) List' is open under 'MY DETAILS'. It displays a single entry for the member 'purity':
NAME: purity
MOBILE: 0713565056
RESIDENCE: Mango
Below this is a 'Back' button. To the left, a modal window titled 'Edit member Info.' shows the member's current details:
Name: purity
Last name: muthama
Gender: Female
Date of birth: 20-Dec-1998
Residence: Mango
Place of birth:
ministry: Praise and Worship
Mobile: 0713565056
Email: purity@gmail.com
A blue 'Update' button is at the bottom of the modal.

- Print details

They can print their details if needed

The screenshot shows a "Church members" page from "Powered by Church Manager 2023". At the top is a logo of a cross above an open book. Below it says "Church members" and "Powered by Church Manager 2023". A table lists "All members" with one row for Gladys Mwende, female, born 2000-11-11, residing in Kiambuu, with ministry Ushering. Buttons for "Print List" and "Back" are at the top right. Below the table are fields for "Prepared by:", "Received by:", and "Check by:" with dropdown menus for "System Administrator", "Associate Pastor", and "Senior Pastor".

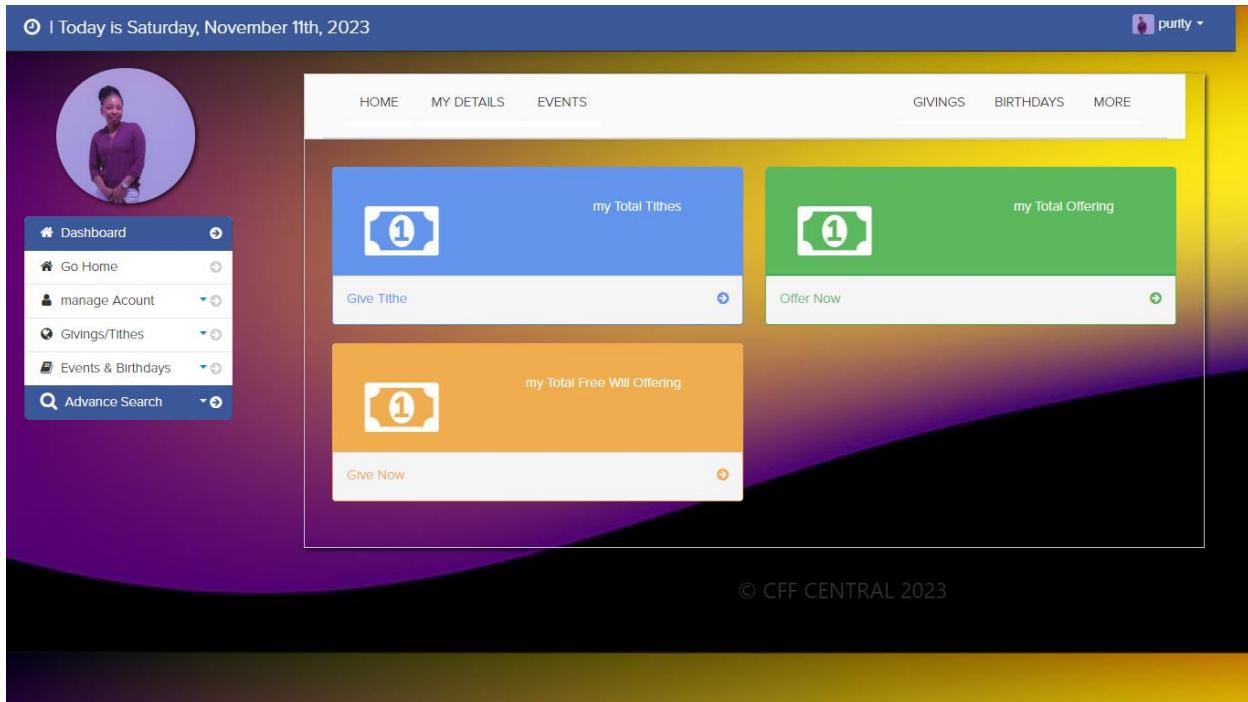
2. events

The user will view the coming events

The screenshot shows the CFF CENTRAL 2023 website. At the top, a banner displays "Today is Saturday, November 11th, 2023" and a profile picture of a woman. The main navigation menu includes HOME, MY DETAILS, EVENTS, GIVINGS, BIRTHDAYS, and MORE. On the left, a sidebar titled "Dashboard" lists "Go Home", "manage Account", "Givings/Tithes", and "Events & Birthdays". The central content area is titled "Upcoming Events" and shows a single event: "conference" on "2023-11-15" with the description "the conference will be held at cff ground from 8 am to 4pm". It includes a search bar, a "see poster" button, and navigation links for "Previous", "1", and "Next". The background features a colorful gradient with a cross icon.

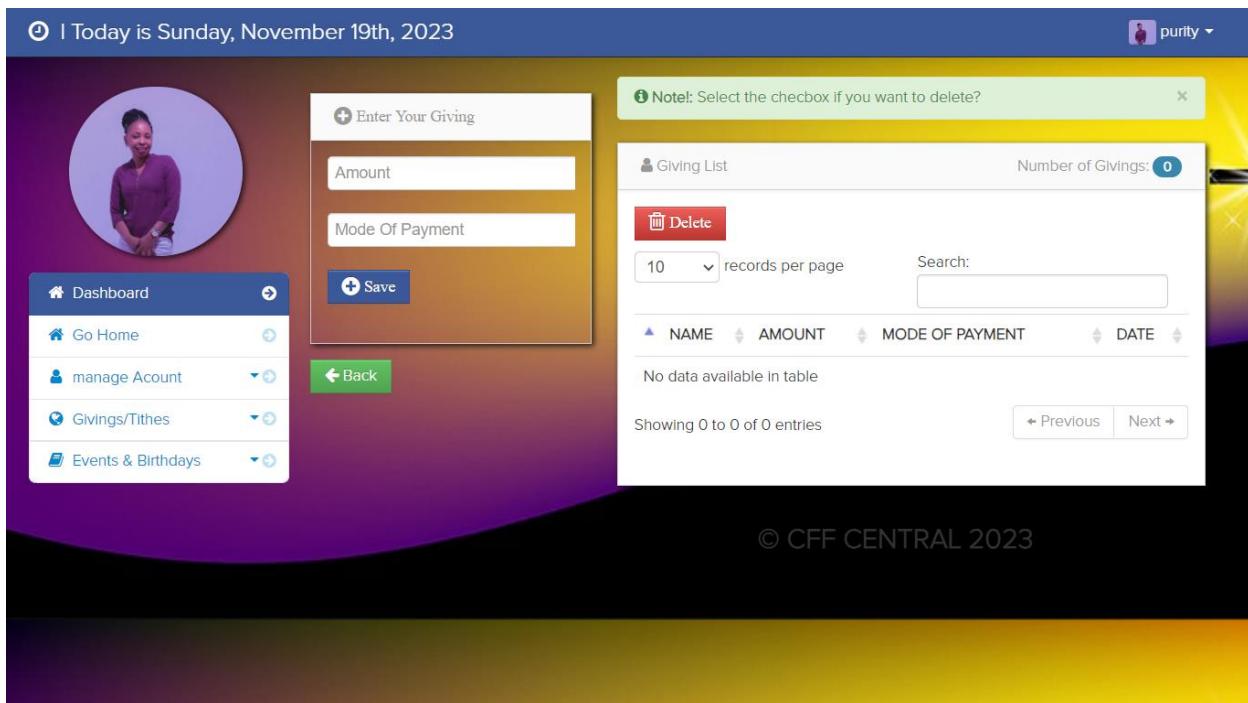
3. Giving's

A window will appear with interphases to allow the user to make giving's



Give tithe

Member can record their tithe giving



give offering

Member can record their offering giving

The screenshot shows the purity app interface. On the left, there's a circular profile picture of a woman. The main menu on the left includes 'Dashboard', 'Go Home', 'manage Account', 'Givings/Tithes' (which is currently selected), and 'Events & Birthdays'. In the center, there's a 'Enter Your Giving' form with fields for 'Amount' and 'mode of payment', and a 'Save' button. To the right, a 'Giving List' table shows one entry: 'purity' with an amount of '100' paid via 'cash' on '2023-11-11 12:39:15'. The table has columns for NAME, AMOUNT, MODE OF PAYMENT, and DATE.

other givings

Member can record other givings which they make

This screenshot is similar to the previous one but shows a new entry being added. The 'Givings/Tithes' section is still selected in the sidebar. The 'Enter Your Giving' form now includes a 'Giving Towards' field. A green banner at the top right says 'Note: Select the checkbox if you want to delete?'. The 'Giving List' table on the right shows a single entry: 'purity' with an amount of '2000' paid via 'bank' on '0713565056'. The table has columns for NAME, AMOUNT, MODE OF PAYMENT, and DATE.

4. birthdays

Members can view upcoming birthdays of the members a week before

The screenshot shows the Purity app's user interface. At the top, there is a blue header bar with the text "Today is Saturday, November 11th, 2023" and a profile icon. Below the header is a navigation bar with links for HOME, MY DETAILS, EVENTS, GIVINGS, BIRTHDAYS, and MORE. A large, stylized cross graphic is visible in the background. On the left, a sidebar titled "Dashboard" contains links for Go Home, manage Account, Givings/Tithes, and Events & Birthdays. The main content area is titled "Upcoming Birthdays" and displays a table with one entry:

NAME	GENDER	RESIDENCE	PLACE OF BIRTH	BIRTHDAY	MINISTRY	MOBILE NO.
Gladys Mwende	female	Kiambuu	Kiambuu	2000-11-11	Ushering	0000000034

Below the table, it says "Showing 1 to 1 of 1 entries". At the bottom right of the content area, there are buttons for "Previous", "1", and "Next". The footer of the app includes the text "© CFF CENTRAL 2023".

3.. ADMINISTRATORS USE QUIDE

3.1 Installation

The installation process is straightforward for this computer application:

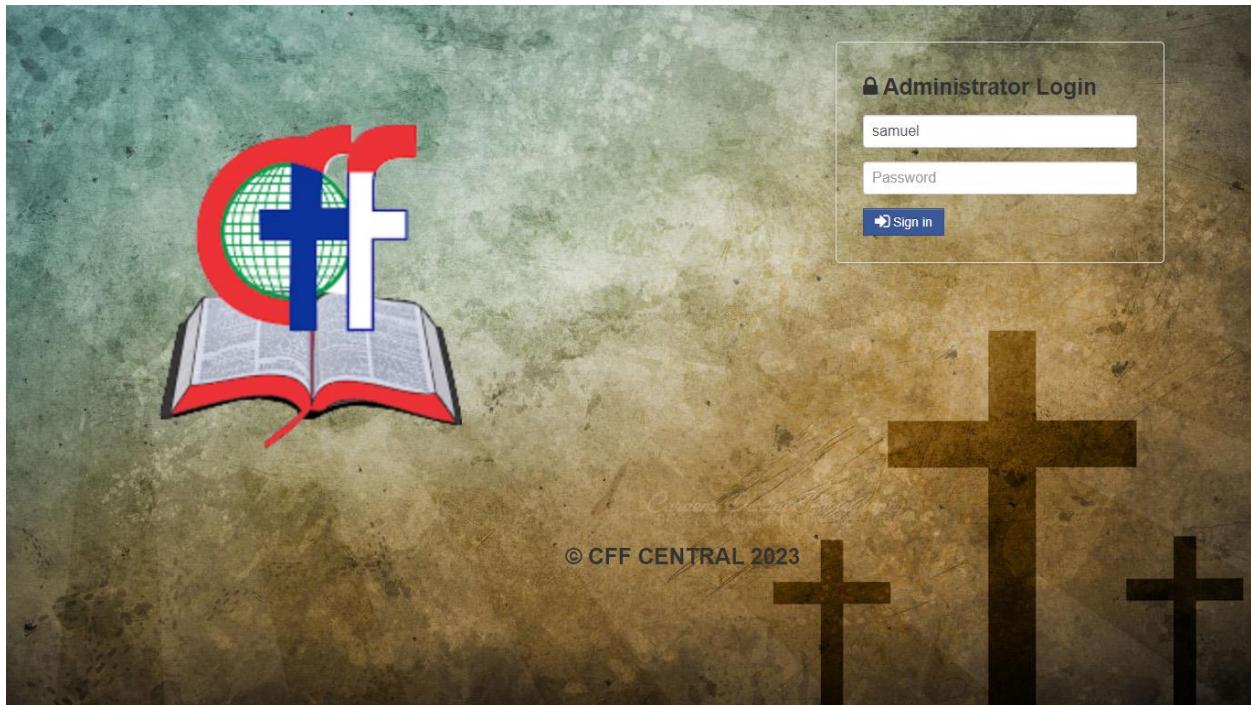
- 1. Download Application Setup:** admin can download the application setup from the designated platform.
- 2. Allow Installation from Unknown Sources:** Adjust device settings to permit installations from unknown sources.
- 3. Click Install:** Initiate the installation process by clicking on the application setup file.
- 4. Complete Installation:** Follow on-screen prompts to complete the install

3.3 2.2 Getting started

Upon typing the correct domain the users will be directed to a log in page.

2.2.1 login details

To start the application, the users will be required to type the user name and password. And this will launch the home page



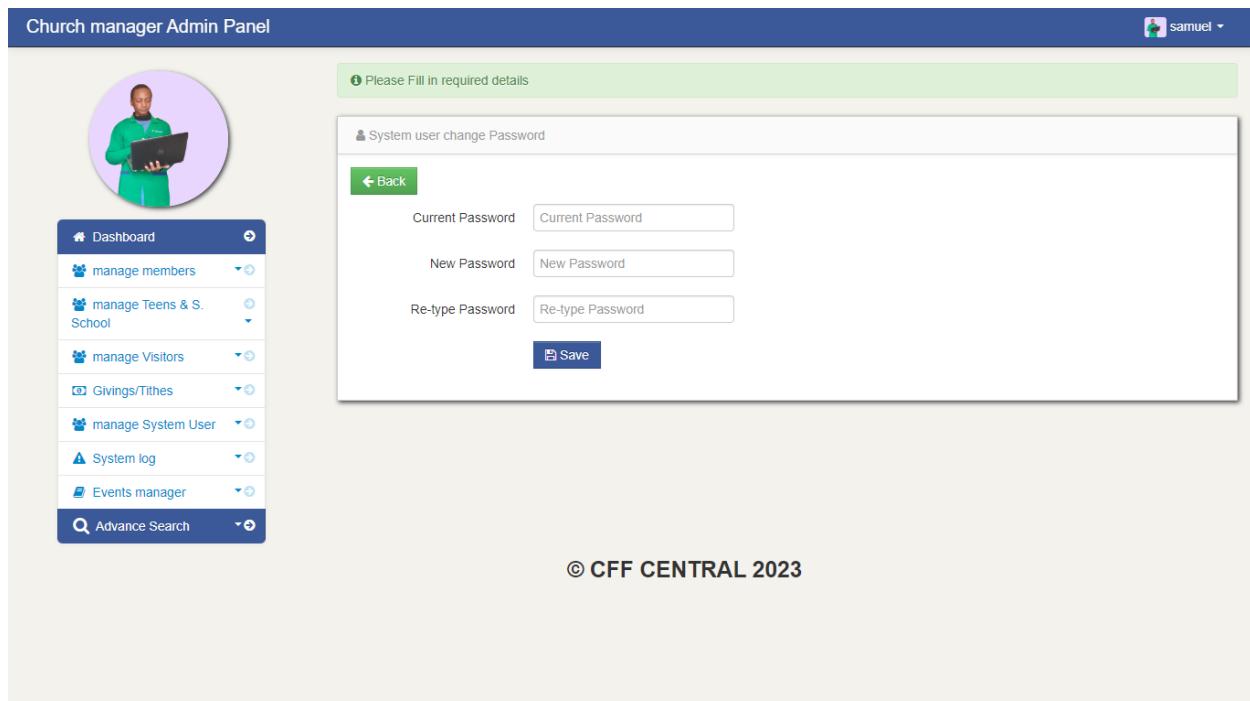
A) change profile

→ there are three actions that the user can perform

- change password
- change profile picture
- log out

- Change password

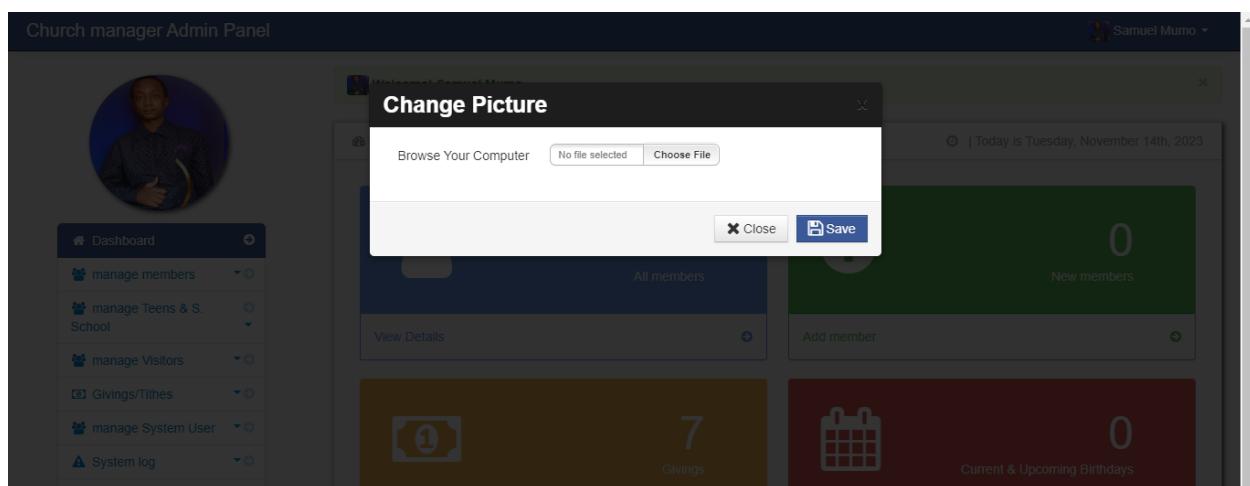
In changing password he will be required to type the current password and put a new password which must contain atleast one uppercase letter, one lowercase letter, one number and one special character.



The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with various management options: Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main area has a purple circular profile picture placeholder. A green banner at the top says 'Please Fill in required details'. Below it is a form titled 'System user change Password' with fields for 'Current Password', 'New Password', and 'Re-type Password', each with an 'input' placeholder. A 'Save' button is at the bottom right. In the top right corner, there's a user icon labeled 'samuel'.

- Change profile picture

Change his profile picture by selecting from this files in his device



The screenshot shows the 'Church manager Admin Panel' interface. The sidebar includes: Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, View Details, Add member, Givings (7), and Current & Upcoming Birthdays (0). A dark overlay covers the main content area. A modal dialog box titled 'Change Picture' is open, containing a 'Browse Your Computer' button, a 'Choose File' button, a 'Close' button, and a 'Save' button. The background shows a purple circular profile picture placeholder.

Then choose image from files and save and the image will be visible

- Log out

Will direct him back to the log in page

The screenshot shows the Church manager Admin Panel interface. At the top, there's a blue header bar with the text "Church manager Admin Panel". Below it is a navigation bar with a user icon and the text "Welcome! samuel". On the right side of the header, there's a dropdown menu with options: "Change Password", "Change Picture", and "Logout". The main content area shows a dashboard with a purple circular profile picture of a person holding a laptop, a green button labeled "Dashboard", and a status message "Today is Monday".

2.3 Actions once on homes screen

On the home screen the admin can select and perform following actions

2.3.1. manage members

2.3.1.1 member details

View members details

The screenshot shows the "Church members" list page. The left sidebar has a "Dashboard" button and a list of other management modules: "manage members", "manage Teens & S. School", "manage Visitors", "Givings/Tithes", "manage System User", "System log", "Events manager", and "Advance Search". The main content area has a note "Select the checkbox if you want to delete?". It shows a table with columns: CHECK, NAME, GENDER, RESIDENCE, PLACE OF BIRTH, BIRTHDAY, MINISTRY, and MOBILE NO. The table contains five entries:

CHECK	NAME	GENDER	RESIDENCE	PLACE OF BIRTH	BIRTHDAY	MINISTRY	MOBILE NO.
<input type="checkbox"/>	samuel	Female	nairobi		1999-11-27	Hostessing	0603348983
<input type="checkbox"/>	gladys	Female	Nairobi		1995-10-29	None	8379021081
<input type="checkbox"/>	mia	Male			2003-11-03	Praise and Worship	2890634771
<input type="checkbox"/>	purity	Female	Wetaa		1990-11-25	Hostessing	0713565056
<input type="checkbox"/>	moses	Male	Kiambu		2001-01-01	None	0702209820

At the bottom, it says "Showing 1 to 5 of 5 entries" and has buttons for "Previous", "1", and "Next". The footer says "© CFF CENTRAL 2023".

2.3.1.2 add members

Admin can add new members to the system

Church manager Admin Panel

The screenshot shows the 'Church manager Admin Panel'. On the left is a sidebar with a user icon and a list of navigation items: Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main area has two sections: 'Register New member' on the left with fields for First Name, Surname, Last name, Select Gender, dd----yyyy, Residence, place of birth, Select ministry, mobile number, Email, and password, and a 'Save' button; and 'Church members (s) List' on the right showing a table of 5 entries with columns NAME, MOBILE, RESIDENCE, and Edit member buttons. A note at the top says 'Note!: Select the checkbox if you want to delete?'.

→ He can also edit individual member details

2.3.1.3 birthdays

Admin can check on the upcoming birthdays of the members

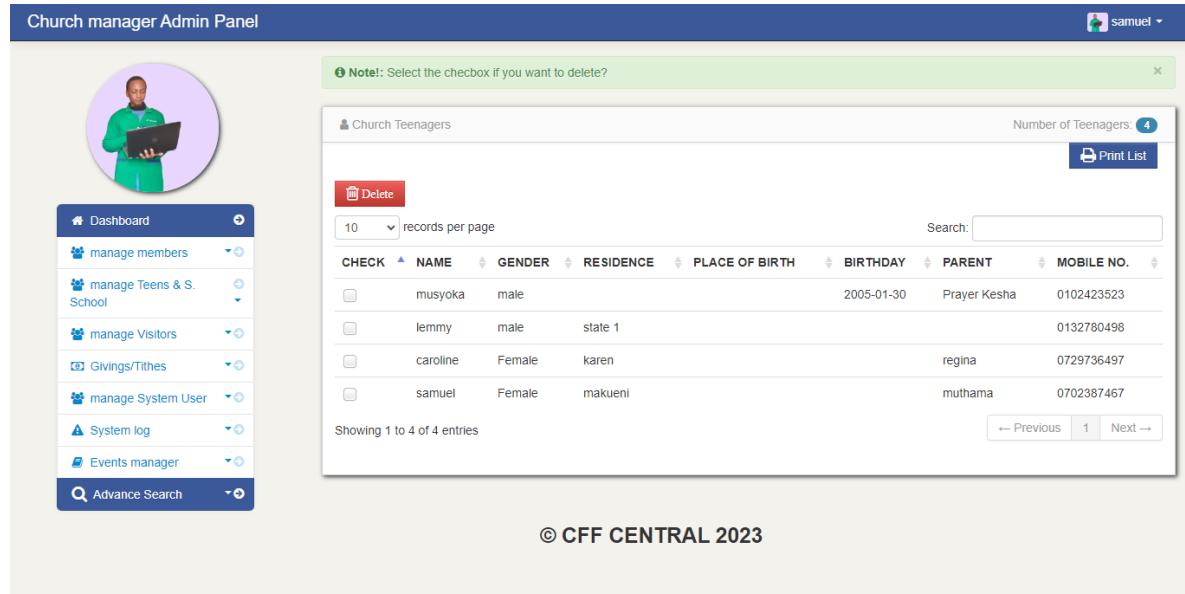
Church manager Admin Panel

The screenshot shows the 'Church manager Admin Panel'. The sidebar is identical to the previous one. The main area displays a table titled 'Upcoming Birthdays' with 2 entries. The columns are NAME, GENDER, RESIDENCE, PLACE OF BIRTH, BIRTHDAY, MINISTRY, and MOBILE NO. The entries are purity (Female, Wetaa, 1990-11-25, Hostessing, 0713565056) and samuel (Female, Nairobi, 1999-11-27, Hostessing, 0603348983). A 'Print List' button is visible at the top right of the table.

2.3.2. teen & sundayschool

2.3.2.1 teen details

The admin can view the teen details



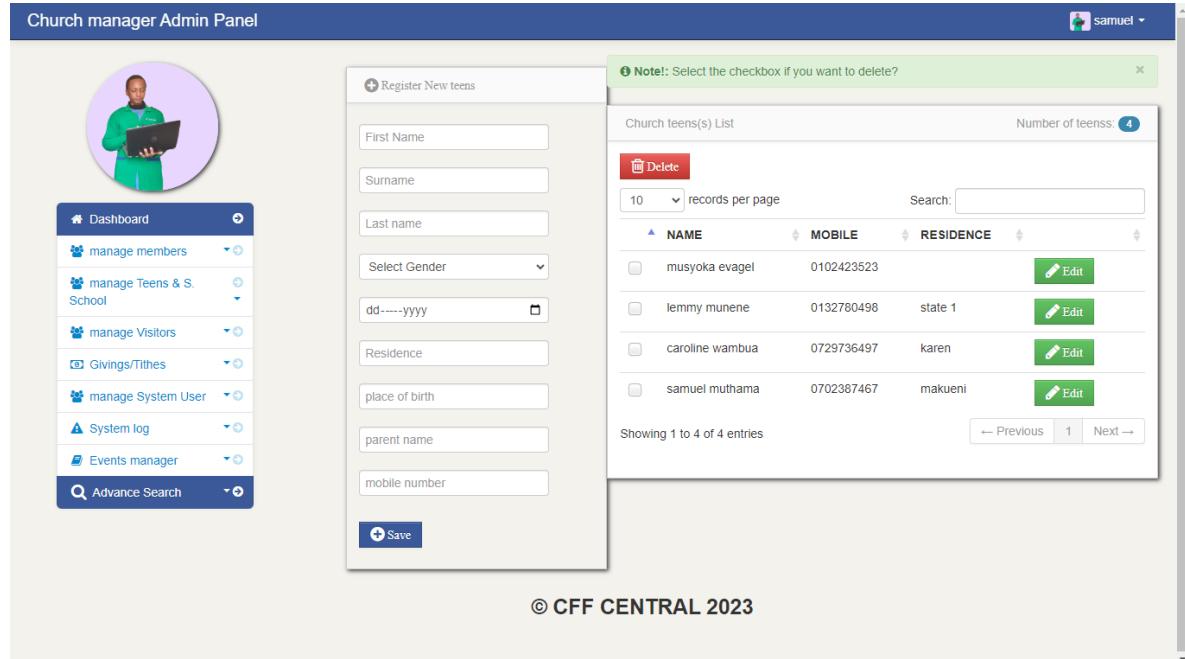
The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with a user profile picture and a navigation menu. The main area displays a table titled 'Church Teenagers' with columns for Name, Gender, Residence, Place of Birth, Birthday, Parent, and Mobile No. There are 4 entries listed. A note at the top says 'Select the checkbox if you want to delete?'. Buttons for 'Delete' and 'Print List' are visible.

CHECK	NAME	GENDER	RESIDENCE	PLACE OF BIRTH	BIRTHDAY	PARENT	MOBILE NO.
<input type="checkbox"/>	musyoka	male			2005-01-30	Prayer Kesha	0102423523
<input type="checkbox"/>	lemmy	male	state 1				0132780498
<input type="checkbox"/>	caroline	Female	karen			regina	0729736497
<input type="checkbox"/>	samuel	Female	makueni			muthama	0702387467

© CFF CENTRAL 2023

2.3.2.2 add teenager

Allows addition of new teens in the system



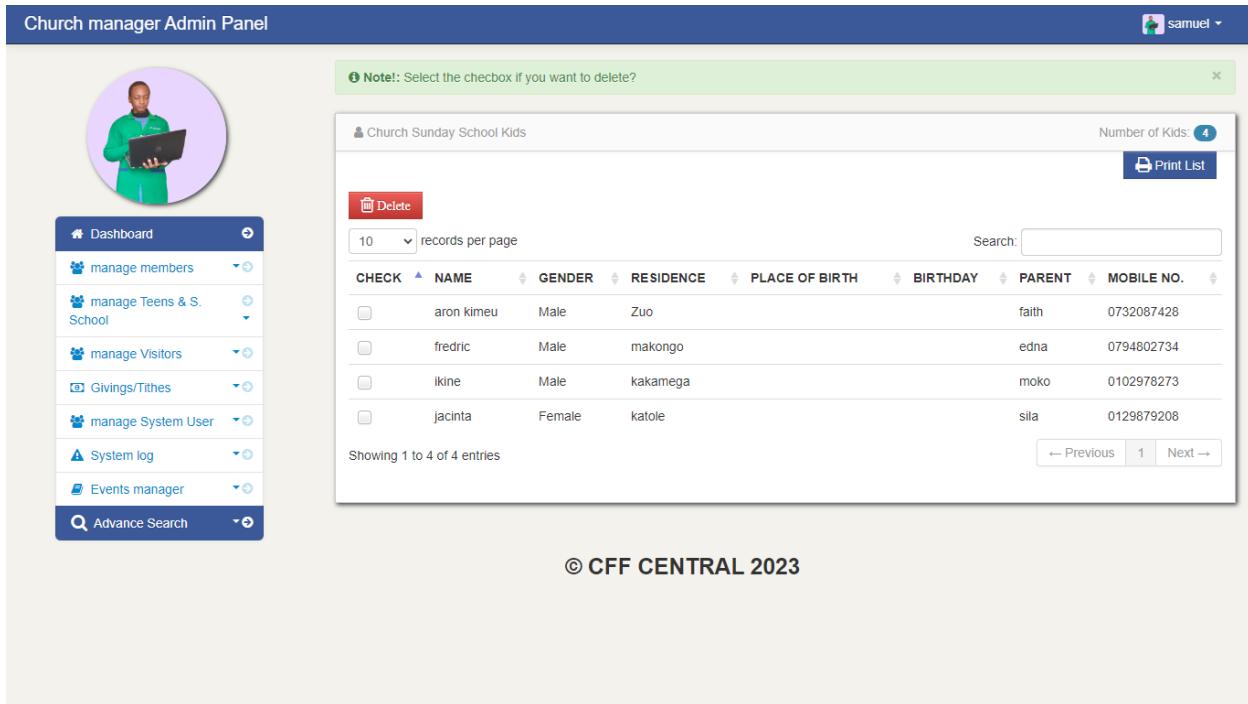
The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with a user profile picture and a navigation menu. The main area has two sections: a form on the left for 'Register New teens' and a list on the right for 'Church teens(s) List'. The form fields include First Name, Surname, Last name, Select Gender, dd----yyyy, Residence, place of birth, parent name, and mobile number. A 'Save' button is at the bottom. The list on the right shows 4 entries with 'Edit' buttons next to each row. A note at the top says 'Select the checkbox if you want to delete?'. Buttons for 'Delete' and 'Print List' are visible.

NAME	MOBILE	RESIDENCE	Edit
musyoka evagel	0102423523		
lemmy munene	0132780498	state 1	
caroline wambua	0729736497	karen	
samuel muthama	0702387467	makueni	

© CFF CENTRAL 2023

2.3.2.3 Sunday school details

Admin can see the Sundays school details



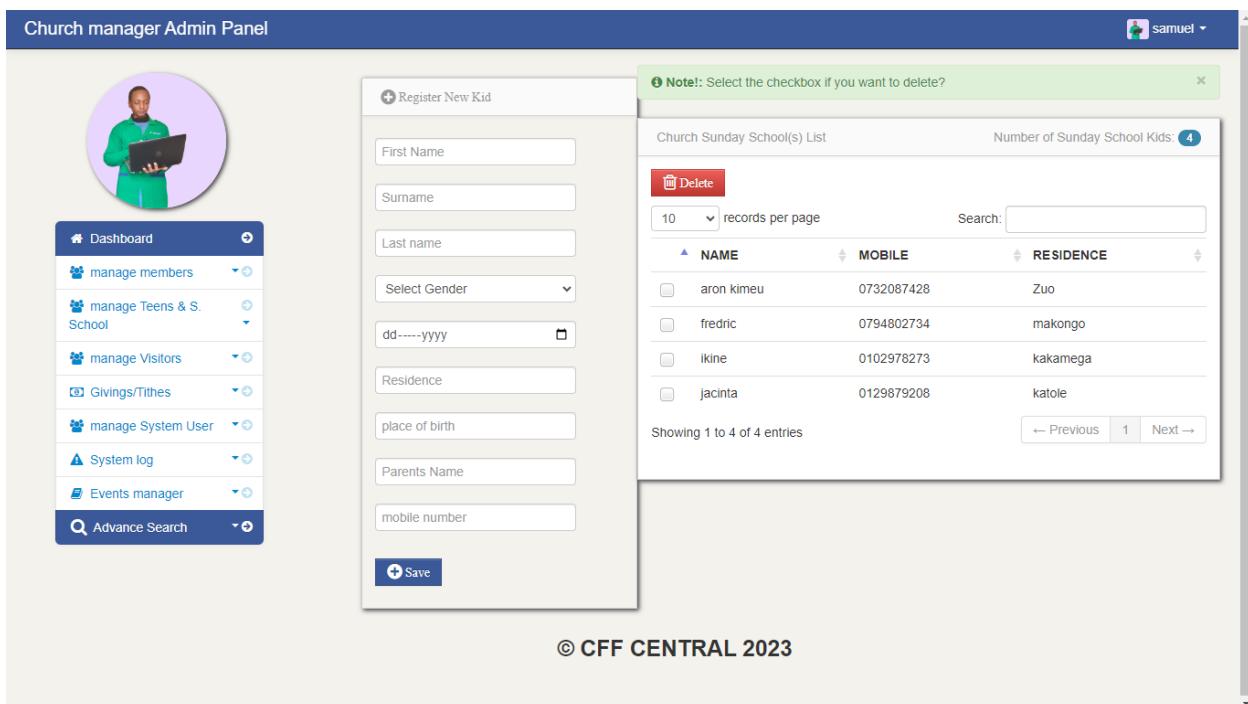
The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with a user profile icon and links for Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main content area displays a table titled 'Church Sunday School Kids' with 4 entries. The table columns are: CHECK, NAME, GENDER, RESIDENCE, PLACE OF BIRTH, BIRTHDAY, PARENT, and MOBILE NO. The entries are:

CHECK	NAME	GENDER	RESIDENCE	PLACE OF BIRTH	BIRTHDAY	PARENT	MOBILE NO.
<input type="checkbox"/>	aron kimeu	Male	Zuo			faith	0732087428
<input type="checkbox"/>	fredric	Male	makongo			edna	0794802734
<input type="checkbox"/>	ikine	Male	kakamega			moko	0102978273
<input type="checkbox"/>	jacinta	Female	katole			sila	0129879208

At the bottom right of the main content area, there is a 'Print List' button. A note at the top of the page says 'Note!: Select the checkbox if you want to delete?'. The footer of the page reads '© CFF CENTRAL 2023'.

2.3.2.2 add Sunday school

Admin can add new teens



The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with a user profile icon and links for Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main content area has two parts: a 'Register New Kid' form on the left and a 'Church Sunday School(s) List' on the right. The 'Register New Kid' form fields include: First Name, Surname, Last name, Select Gender, dd----yyyy, Residence, place of birth, Parents Name, and mobile number. Below the form is a 'Save' button. The 'Church Sunday School(s) List' on the right shows the same data as the previous screenshot, with 4 entries in the table:

CHECK	NAME	MOBILE	RESIDENCE
<input type="checkbox"/>	aron kimeu	0732087428	Zuo
<input type="checkbox"/>	fredric	0794802734	makongo
<input type="checkbox"/>	ikine	0102978273	kakamega
<input type="checkbox"/>	jacinta	0129879208	katole

At the top of the main content area, there is a note 'Note!: Select the checkbox if you want to delete?'. The footer of the page reads '© CFF CENTRAL 2023'.

2.3.4. giving and tithes

2.3.4.1 tithes

Admin can view the tithes given by members

Church manager Admin Panel



Note!: Select the checkbox if you want to delete?

Number of Givings: 10

<input type="checkbox"/>	NAME	AMOUNT	MODE OF PAYMENT	PHONE NO.	DATE
<input type="checkbox"/>	moses moko	230	bank	0702209820	2023-11-20 09:57:47
<input type="checkbox"/>	moses moko	2000	cash	0702209820	2023-11-20 09:57:59
<input type="checkbox"/>	moses moko	4900	mpesa	0702209820	2023-11-20 09:58:20
<input type="checkbox"/>	purity muthama	2000	cash	0713565056	2023-11-20 10:03:13
<input type="checkbox"/>	purity muthama	400	mpesa	0713565056	2023-11-20 10:03:22
<input type="checkbox"/>	purity muthama	100	mpesa	0713565056	2023-11-20 10:03:42

Showing 1 to 6 of 6 entries

← Previous 1 Next →

© CFF CENTRAL 2023

2.3.4.2 offering

Admin can see the offerings done by members

Church manager Admin Panel



Note!: Select the checkbox if you want to delete?

Number of Givings: 11

<input type="checkbox"/>	NAME	AMOUNT	MODE OF PAYMENT	DATE
<input type="checkbox"/>	purity muthama	100	cash	2023-11-11 12:39:15
<input type="checkbox"/>	moses moko	2340	cash	2023-11-20 10:00:43
<input type="checkbox"/>	moses moko	5000	mpesa	2023-11-20 10:01:01
<input type="checkbox"/>	moses moko	600	bank	2023-11-20 10:01:13
<input type="checkbox"/>	purity muthama	300	bank	2023-11-20 10:04:12
<input type="checkbox"/>	purity muthama	200	mpesa	2023-11-20 10:04:22

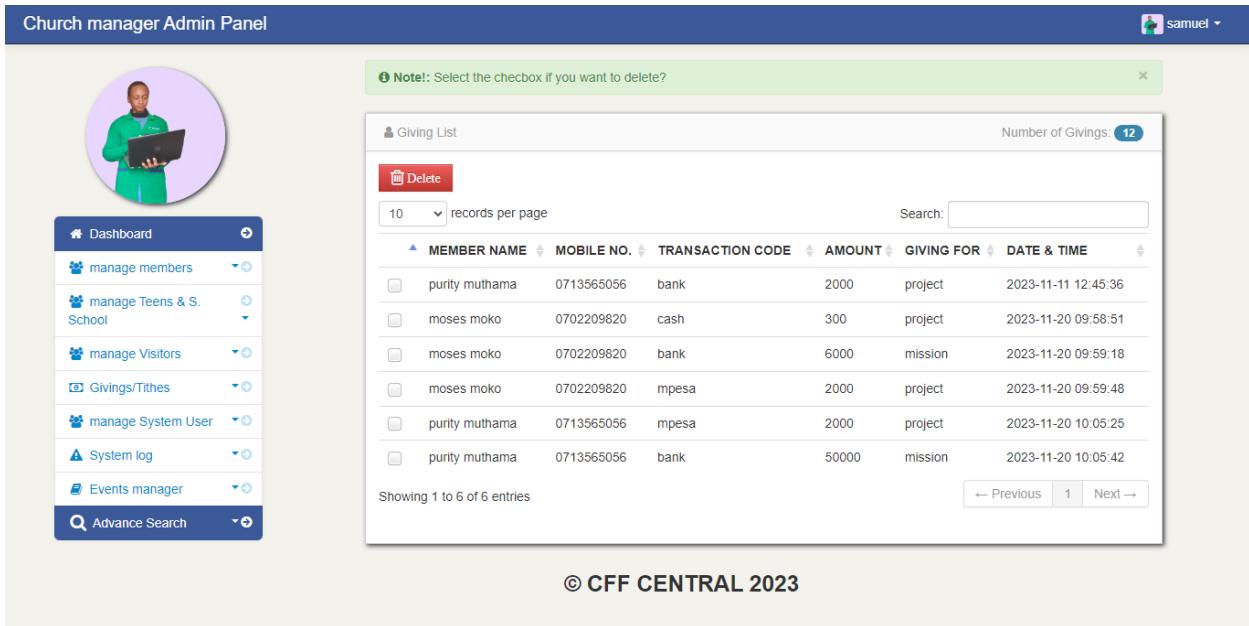
Showing 1 to 6 of 6 entries

← Previous 1 Next →

© CFF CENTRAL 2023

2.3.4.3 other giving

Admin can see other giving's members have done



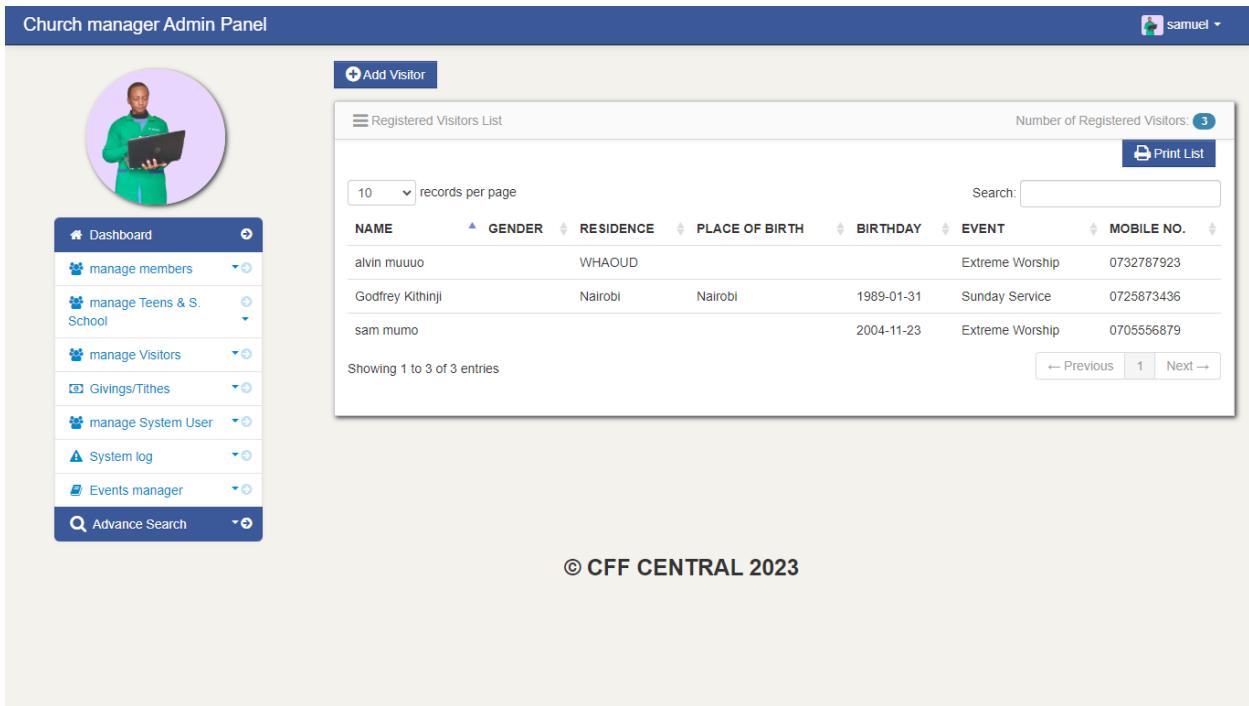
The screenshot shows the 'Giving List' page of the Church manager Admin Panel. At the top, there is a note: 'Note!: Select the checkbox if you want to delete?' Below this is a table with columns: MEMBER NAME, MOBILE NO., TRANSACTION CODE, AMOUNT, GIVING FOR, and DATE & TIME. The table contains 6 entries. At the bottom of the table, it says 'Showing 1 to 6 of 6 entries'. The sidebar on the left includes links for Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search.

MEMBER NAME	MOBILE NO.	TRANSACTION CODE	AMOUNT	GIVING FOR	DATE & TIME
purity muthama	0713565056	bank	2000	project	2023-11-11 12:45:36
moses moko	0702209820	cash	300	project	2023-11-20 09:58:51
moses moko	0702209820	bank	6000	mission	2023-11-20 09:59:18
moses moko	0702209820	mpesa	2000	project	2023-11-20 09:59:48
purity muthama	0713565056	mpesa	2000	project	2023-11-20 10:05:25
purity muthama	0713565056	bank	50000	mission	2023-11-20 10:05:42

2.3.5. manage visitors

2.3.5.1 visitor details

Admin can view visitors details



The screenshot shows the 'Registered Visitors List' page of the Church manager Admin Panel. At the top, there is a button for 'Add Visitor'. Below this is a table with columns: NAME, GENDER, RESIDENCE, PLACE OF BIRTH, BIRTHDAY, EVENT, and MOBILE NO. The table contains 3 entries. At the bottom of the table, it says 'Showing 1 to 3 of 3 entries'. The sidebar on the left includes links for Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search.

NAME	GENDER	RESIDENCE	PLACE OF BIRTH	BIRTHDAY	EVENT	MOBILE NO.
alvin muuuo		WHAOUD			Extreme Worship	0732787923
Godfrey Kithinji		Nairobi	Nairobi	1989-01-31	Sunday Service	0725873436
sam mumo				2004-11-23	Extreme Worship	0705556879

2.3.5.2 add visitor

Allow addition of visitors details, edit and delete these details

The screenshot shows the Church manager Admin Panel. On the left, there is a sidebar with various management options: Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main area has two tabs: 'Register New Visitor' and 'Church Visitor(s) List'. The 'Register New Visitor' tab contains fields for First Name, Surname, Last name, Select Gender, dd----yyyy, Residence, place of birth, Select Event Attended, and mobile number, with a 'Save' button. The 'Church Visitor(s) List' tab shows a table with columns NAME, MOBILE, and RESIDENCE. It lists three entries: Godfrey Kithinji (0725873436, Nairobi), alvin muuuo (0732787923, WHAOUD), and sam mumo (0705556879). Each entry has an 'Edit' button. A note at the top says 'Select the checkbox if you want to delete?'. At the bottom, it says 'Showing 1 to 3 of 3 entries'.

2.3.6. system user

They are the admins allowed to manage the system

2.3.6.1 add system users

For adding, editing, deleting system users

The screenshot shows the Church manager Admin Panel. The sidebar is identical to the previous screenshot. The main area has two tabs: 'Add System User' and 'System User(s) List'. The 'Add System User' tab contains fields for Firstname, Lastname, Username, and Password, with a 'Save' button. The 'System User(s) List' tab shows a table with columns NAME and USERNAME. It lists two entries: samuel (username samuel) and mia (username miamia). Each entry has an 'Edit User' button. A note at the top says 'Select the checkbox if you want to delete?'. At the bottom, it says 'Showing 1 to 2 of 2 entries'.

2.3.7. system log

Records the actions and activity which the system users perform

2.3.7.1 activity log

Records all the actions admin did in the system

CHECK	DATE	SYSTEM USER	ACTION
<input type="checkbox"/>	2023-11-20 09:37:12	samuel	Added member 0794802734
<input type="checkbox"/>	2023-11-20 09:37:58	samuel	Added member 0102978273
<input type="checkbox"/>	2023-11-20 09:38:41	samuel	Added member 0129879208
<input type="checkbox"/>	2023-11-20 09:48:11	samuel	Added member 0132780498
<input type="checkbox"/>	2023-11-20 09:48:59	samuel	Added member 0729736497
<input type="checkbox"/>	2023-11-20 09:49:41	samuel	Added member 0702387467
<input type="checkbox"/>	2023-11-10 14:48:42	Samuel	Added member 0713565056
<input type="checkbox"/>	2023-11-10 14:49:51	Samuel	Added member 0702209820
<input type="checkbox"/>	2023-11-10 14:50:50	Samuel	Added member 0770212632
<input type="checkbox"/>	2023-11-13 11:22:45	Samuel	Added member 0732787923

2.3.8. event manager

2.3.6.1 events bar

admin can add event, edit event and delete event

EVENT NAME	DESCRIPTION	DATE	ACTION
youth confrence	the confrence will be held at cff grounds at 8pm	2023-01-19	<button>Edit</button>
zoom meeting	the topic of discussion is challenges faced by christians. the weeting is strarting at 9 pm	2023-11-25	<button>Edit</button>
snfjsa	jbffbuwoqeijdpwjrul h8jw oeoj fuiowe	2023-11-23	<button>Edit</button>

2.3.6.1 upcoming event

Admin can view list of upcoming events

The screenshot shows the 'Church manager Admin Panel' interface. On the left is a sidebar with a user icon and a list of administrative functions: Dashboard, manage members, manage Teens & S. School, manage Visitors, Givings/Tithes, manage System User, System log, Events manager, and Advance Search. The main area is titled 'Upcoming Events' and displays a table with three entries:

TITLE	DATE	DESCRIPTION
mens	2023-11-23	mens confence will be hosted at the church at 9 am
youth confrence	2023-11-25	the confrence will be held atcff grounds at 8pm
zoom meeting	2023-11-25	the topic of discussion is challenges faced by christians. the weeting is strarting at 9 pm

At the bottom right of the main area, there are buttons for 'Previous', '1', and 'Next →'. The footer of the page reads '© CFF CENTRAL 2023'.

Shortcuts to use

Alt + back arrow → return

Ctrl + N → open new window in the browser

Ctrl + w → close browser tab

Alt + f4 → close browser window