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Option: Software Engineering

INTERNSHIP REPORT CARRIED OUT WITHIN MINEVAM KIGOBE

From February 1st, 2022 to April 29th, 2022

**Theme: Analysis, Design and Implementation of a web application for the
management of a church: case of MINEVAM Kigobe**

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Bujumbura, November 2022

STATEMENT

This internship report is my original work and has not been submitted elsewhere for graduation.

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APPROVAL

This internship report has been submitted for presentation with the approval of the Supervisor.

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I would like to thank my parents: Alexis KANYABIGO and Médiatrice NSENGIYUMVA, my brothers and sisters, and friends.

ACRONYMS AND ABBREVIATIONS

BIU	: Bujumbura International University
CEO	: Chief Executive Officer
CPU	: Central Processing Unit
CSS	: Cascading Style Sheets
GB	: Giga Byte
HP	: Hewlett Packard
HTML	: Hypertext Markup Language
MINEVAM	: (Ministère d’Evangélisation en Afrique et dans le Monde): Ministry of Evangelization in Africa and in the World
MySQL	: My Structured Query Language
SQL	: Structured Query Language
UML	: Unified Modeling Language
WAMP	: Windows, Apache, MySQL and PHP

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CHAPTER I: GENERAL INTRODUCTION

I.1. Reference of the training plan and connection with the internship

First day of my internship, I talk with a Pastor of MINEVAM Kigobe Church, and he described me the information system. I explored the existing system: desktop application that they are using. He described all the activities of the church.

I.2. Reason for doing this internship

- Internships are generally thought of to be reserved for university students looking to gain experience in a particular field. However, a wide disposition of people can benefit from Training Internships in order to receive real world experience and develop their skills.
- Some internship is used to allow individuals to perform scientific research while others are specifically designed to allow people to gain first-hand experience working.
- Using internships is a great way to build your summary and develop skills that can be useful for future jobs.

I.3. Nature of the organization where the internship was carried out.

The Church is an organization of religious believers, the new covenant people of God, rooted in the promises to Israel and inaugurated by the Holy Spirit, which refers both to all believers in Jesus Christ, both living and dead, and to individual local gatherings of believers.

I.4. Reason for choosing the specific organization where the internship was carried out.

One day I went in the office of Pastor of MINEVAM Kigobe then I saw many boxes and I thought those are for storing data from papers. After I saw other problem like reporting cell activity for cells department. The idea of digitalization of that church came in my mind and I made the decision to do my internship at MINEVAM Kigobe as software student.

I.5. Main activity of the organization

The main activity of the church is to promote reconciliation through the Great Commission of Jesus Christ: consist of preaching, announcing and testifying, making disciples and bearing witness. That will be done through different departments. Staff talk each other, talk with cells leaders and report how church is growing up: how members continue to grow up spiritually.

I.6. Outline of the internship report

I was given the internship of three months in church called MINEVAM Kigobe. The plan of the activities carried out during the internship is as follows:

- From February 1st, 2022 to February 25th, 2022: It was more about contact, I asked many questions to really understand the management of the church and that helped me to make the analysis of the existing system and make UML diagrams
- From February 28th, 2022 to April 1st, 2022: I started to develop the application trying to resolve the problem
- From April 4th, 2022 to February 29th, 2022: I continued to develop the application and starting test for making sure that I answered to the problem.

CHAPTER II: DESCRIPTION OF MINEVAM KIGOBE

II.1. Organization History

One of the Burundian missionaries named Elias GAHOMERA created the MINEVAM Church in 1989 in the city of Kinshasa in Democratic Republic of Congo. As its name suggests, its vision was to spread the gospel of salvation to all nations. It was in 1992 that he started in Burundi and in 1995 in Rwanda. MINEVAM continues to be implanted in the different countries of Africa even in other continents. Currently they have churches in Tanzania, Uganda and India an exception for other countries in other continents.

The MINEVAM Kigobe Church is one of the parishes forming the community of MINEVAM Churches in Burundi. The MINEVAM Kigobe parish was opened in June 2003 by a group of 14 young people from the so-called Mount of Olives parish in downtown Bujumbura. However, it had opened in 1998 and had to close because of the inaccessibility of the surrounding populations to the place of worship and because of the security situation that prevailed at the time. Since then, she worked under the direct leadership of the mother parish from 2003 until 2006 when Pastor MUGISHA Diamonde was ordained and was finally called to other functions. It was only at the end of 2007 that the parish saw the ordination of a new Pastor in the person of NINGANZA Aimé-Prosper until today Senior Pastor of the Parish. Since September 2018, the Church has had a Council of Church Leaders, including 3 pastors already ordained. The Church has continued to grow from a young majority to half-adult, half-young and its membership numbers about 1,100 peoples. [5]

II.2. Geographical location of the organization

MINEVAM Kigobe parish is located at Kigobe quarter in Bujumbura Burundi.

Mwezi Gisabo Boulevard (In front of Kamenge Campus, Bujumbura)

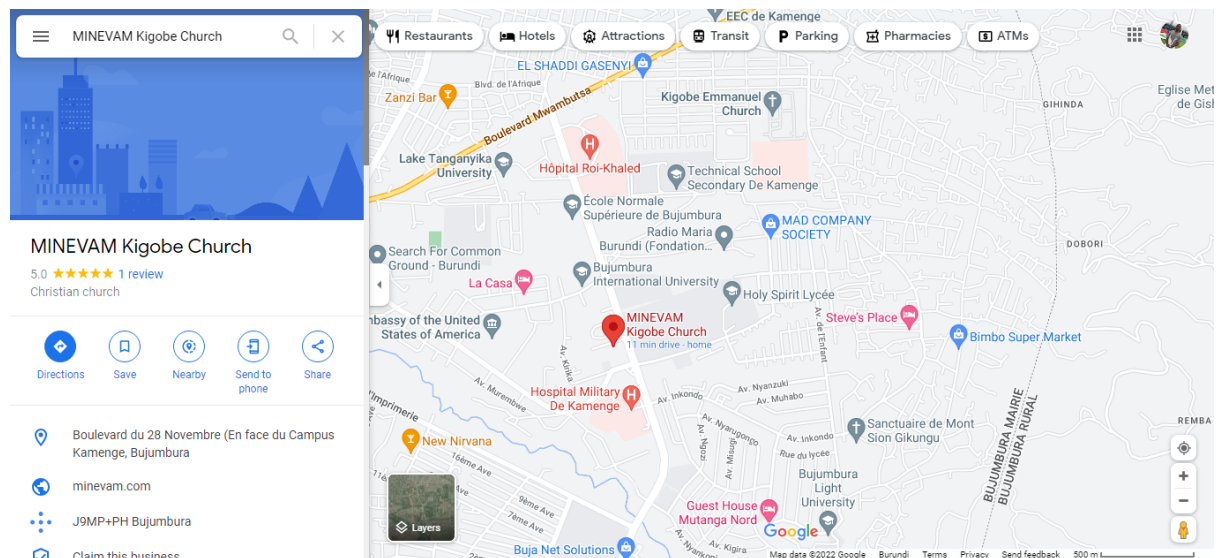


Figure 1: MINEVAM Kigobe Location

II.3. Legal framework of the organization

Organization created under ministerial order of October 10th, 1992 n°205.01/431 with name of (Ministère International d'évangélisation en Afrique et dans le monde: MINEVAM):

International Ministry of evangelisation in Africa and in the world. That order change to another of January 19th, 2015 with name of (Eglise pour les ministères d'évangélisation en Afrique et dans le monde): Church for ministries of evangelisation in Africa and in the world under ministerial order n° 530/099.

II.4. Organizational Vision

The church MINEVAM Kigobe wants to be a family of families united by worshiping God, growing in the likeness of Christ, serving others and reaching the world.

II.5. Organizational Mission

Based on the great commandment and the Great Commission, the MINEVAM Kigobe church aims to bring lost souls back to Jesus Christ as members of his family and his true worshippers, develop their maturity in the likeness of Christ, equip them in life of their ministry in the body of Christ and in their holistic ministries in the world as accomplished serving leaders.

II.6. Organizational Objective

The church MINEVAM Kigobe wants to be a **family** of families united by **worshiping** God, **growing** in the likeness of Christ, **serving** others and **reaching the world** (Family, Worship, Maturity, Ministry, Mission)

II.7. Organizational Values

(DRISAH: Discipline, Redevabilité, Intégrité, Service, Amour, Humilité): Discipline, Accountability, Integrity, Service, Love, Humility

II.8. Future prospects of the organization

Every member will live on mission beginning locally, move members from apathetic to advocate, holistic transformation, and make a community wide movement/network of healthy churches.

II.9. Services offered by the organization

Services offered to the members through departments: Cells, Mission, Sunday school, Women, Men, Youth, Communication, Compassion, Usher, choir and Intercession. [7]

1. **The Department of Cells:** Is a small family of the big family of the Church where the vision of the Church is lived: To be a family of families who worship God,

believe in the likeness of Christ, serve others and reach the world. This requires that there be a time for sharing the word of God, for discovering and exercising spiritual gifts, a time for fellowship and opportunities for mutual help, times for praise and worship, moments of evangelization. It is made up of members of the church and people in the process of integration (being in the process of following the teachings preparing for baptism and reception in the great family of the church). Acts 2: 42-47, Exodus 18:13-26

2. **The mission department:** Its vision is to be people who evangelize the world and to help the whole family of the church to evangelize the world of their surroundings, their professional environment or other relations. This causes the department to help the church know the gospel message and discover missionary bridges for spreading the gospel or activities in which to invite the church to participate (Matthew 28:18-20, Luke 24:44-46, Acts 1:8)
3. **The Sunday School Department:** The church has a framework for supervising children according to the word of God and according to their gifts and aptitudes. This is the department of Sunday School: this requires the commitment of monitors and parents who work closely to help the child grow in an environment where he learns biblical and moral values that will help him have a christian education during the time of growth. All children old and new are welcome in the department (Proverbs 22:6)
4. **The women's department:** This department aims to be an edification framework for women to learn biblical values worthy of sensible women helping men in the home. All women are members by default, both members and non-members of the church. It is also a setting where women learn to serve God according to the gifts and abilities or according to the orientations of God (Genesis 2:18).

5. **The men's department:** This department has this objective: To be a framework for the edification of men to learn biblical values worthy of men who are supposed to be heads in the home. All men are members by default, members and non-members of the church. It is also a framework where men learn to serve God according to the gifts and abilities or according to the orientations of God and to help and members of his family to serve God (1 Corinthians 11:1-3).
6. **The youth department:** The youth department is a framework of supervision according to the word of God and according to the different ages. This makes it possible to develop biblical values in young people and to prepare them to better live their stages of growth and to prepare for different levels of life or different services, in particular the family, the profession, the call to serve God, etc. All young old and new, members and non-members of the church are invited to the department (1 John 2:12,14,1 Timothy 4:12).
7. **The communication department:** This department aims to facilitate the transmission of information from the church, both internally and externally. Put the sermon messages in different storage media and bring it to the attention of the public when needed. Explore the different channels of communication that can help expand the kingdom of God.
8. **The Department of Compassion:** This department allows the church to identify the widow(er) and the orphan(s) in the church in order to take decision on their eligibility to be supported by means of the funds. Church mobilizes during Holy Communion. The department regularly studies the best way to stay with the vulnerable by working closely with the administration and the family units. Members are people who have compassion at heart and who are members of the

church family with a commitment shown to the heads of the department (Acts 6:1-5, Galatians 2:10, James 1:26-27)

9. **The protocol department:** It is in charge of welcoming people during the various meetings. It is in charge of the cleanliness of the place of worship or even the layout of the meeting places. Members are people who have the protocol service at heart and who are members of the family of the church with a commitment shown to the heads of the department.
10. **The choir department:** It is responsible for accompanying the church with songs during the various meetings (cults, meetings, weddings, funerals, missionary activities such as the crusades, etc.). Members are people who have the choir at heart and who are members of the family of the church with a commitment shown to the heads of the department. 1 Chronicles 15: 16, 27, 1 Kings 10: 12
11. **The department of intercession:** To bring the church (to stand in the breach) in prayer according to the different moments that the church can know or cross. Accompany the church especially in moments of worship or periods of prayer such as youth and prayers organized periodically (Ephesians 6:18, Ezekiel 3:17)

Figure below shows chart of MINEVAM Kigobe, Council Pastoral:

- Administration and finance with mission department: managed by Pastor Anaclet SABIYUMVA
- Worship with choir and intercession department: managed by Pastor Pie NGENDAKURIYO
- Family with cell, men, women, youth and Sunday school department: managed by Dr Bonaparte NIJIRAZANA
- Ministry with usher, compassion and communication department: managed by Revering Pastor Aimé Prosper NINGANZA

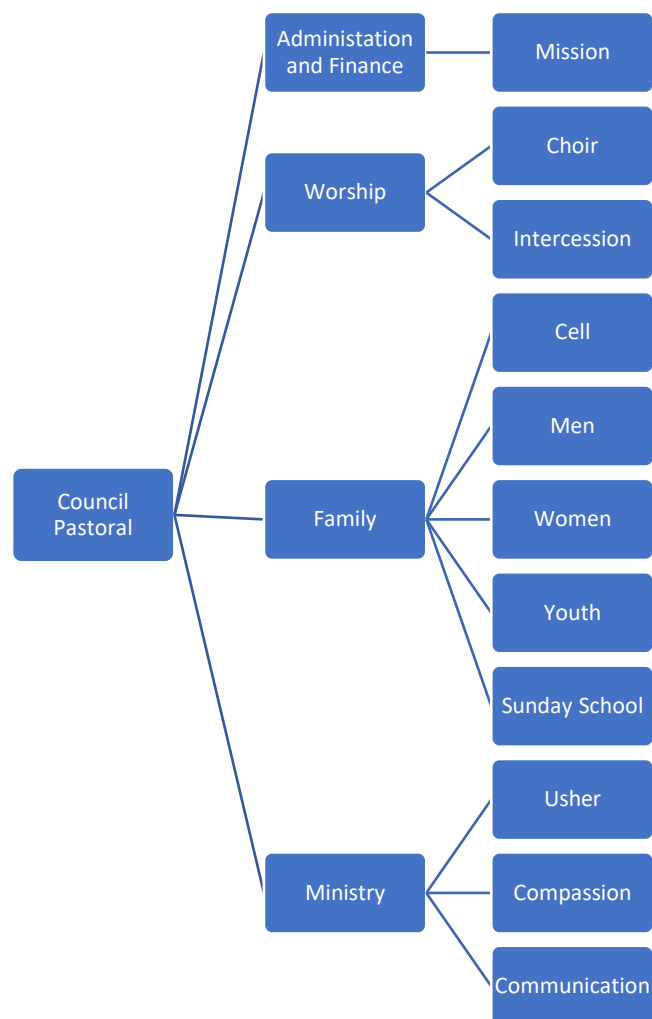


Figure 2 : Organization chart

CHAPTER III: ANALYSIS AND DESCRIPTION OF ACTIVITIES

III.1. Presentation of reception services and planning of activities during the internship period

When member want to talk with staff member comes to the office or makes a call for planning how to meet and talk or talk directly through phone. In my case, they gave me a workplace and I asked them when I have question about information system.

III.2. Description of the activities carried out

Cells department has stuff of reporting how it was (cell activity). In cell department there are subgroups; cell: group of members, family: group of cells, zone: group of families and district: group of zones, where cell belongs to family, family to zone and zone to district. Then cell leader gives report to a family leader, family leader to the zone leader and the zone leader to the district leader. They showed me the forms that they are using and different old reports. The activity of the church is about to make fellowship with members, to be involved in the Great Commission so that each member shall be in mission and my activity was to understand their organization and digitalize the information system.

III.3. Correlation between the reality on the ground and the theoretical lessons learned in class:

- Communication skills: that course helped me how to interact with staff from MINEVAM Kigobe
- MSI: UML object approach; that course helped me to analyse the system of the church
- Data Base Fundamentals: that course helped me to design database of the church
- Advanced Web Programming and Design: that course helped me to implement the system of the church

- Realization Project: that course helped me to collect data and use it for digitalization of the church
- Interface Human Machine: that course helped me to think about user experience and implement what is good for users
- Software engineering workshop: that course helped me to combine different technologies for one project: testing and deployment.

III.4. Description of the problem observed

- The cell leader reports on a form paper, take picture and share to the whatsapp group of a family where there are all cell leaders.
- The family leader writes reports on a form paper, take picture and share to the whatsapp group of zone where there are all family leaders.
- The zone leader reports on a form paper, take picture and share to the district leader and the district leader reports to the church administration.

As a family leader, it is a problem to have cell report in real time from cell leader and have protected data; it is not centered to the church system. The same to the family leader and the zone leader.

III.5. Analysis and criticism of the existing system

MINEVAM Kigobe has computer for storing data of the church, it has Desktop Software that can manage:

- User: create, read, update and delete;
- member: create, read, update and delete;
- department: create, read, update and delete department (Mission, Men, Women, Youth, Sunday school, Usher, Compassion, Communication, Intercession, choir);
- manage finance: income, beneficiary of outcome, outcome type, outcome.

As it is desktop software for using it you have to be in that place and it has not cell report functionality, family report functionality, zone report functionality, district report functionality for manage reports they use papers, take picture and share to the whatsapp group.

III.6. Suggested solutions to this problem.

MINEVAM Kigobe uses system with one computer and works offline.

For suggestion: it will be very good to use web application:

- To have all managements in real time
- All statistics in real time
- It will be easy to make decisions in real time
- and they will no struggle of distance for reaching desktop software
- Cell leader will send report through application
- Family leader will send report through application
- Zone leader will send report through application
- District leader will send report through application
- It will be very easy to manage members department

There is not possibility for managing data in real time (for cell leader, family leader, zone leader, district leader and administration staff) and that affect how they make of decisions.

CHAPTER IV: SYSTEM MODELING AND PRESENTATION OF THE DEVELOPED APPLICATION

IV.1. Explanation of choice of UML

Unified Modeling Language (UML) is a standardized modeling language. It helps software developers visualize, construct, and document new software systems and blueprints. UML is used to create static structure diagrams based on a variety of engineering practices that have proven to be successful in the creation of complex systems. The published standards are almost 800 pages long. Historically, UML has been used to model software systems, but it's not limited to software developers. Today, UML diagrams are used to manage processes and projects.

IV.2. Advantages of UML

Most-Used and Flexible, The Software Architecture Must Be Communicated Effectively, You Need to Know Only a Fraction of the Language to Use It, Abundance of UML Tools. [6]

IV.3. Overview of some UML diagrams

IV.3.1. Use Case diagram

Use case diagram is a behavioral UML diagram type and frequently used to analyze various systems. They enable you to visualize the different types of roles in a system and how those roles interact with the system. [1]

IV.3.2. Class diagram

Class diagrams are the main building block in object-oriented modeling. They are used to show the different objects in a system, their attributes, their operations and the relationships among them. [3]

IV.3.3. Sequence diagram

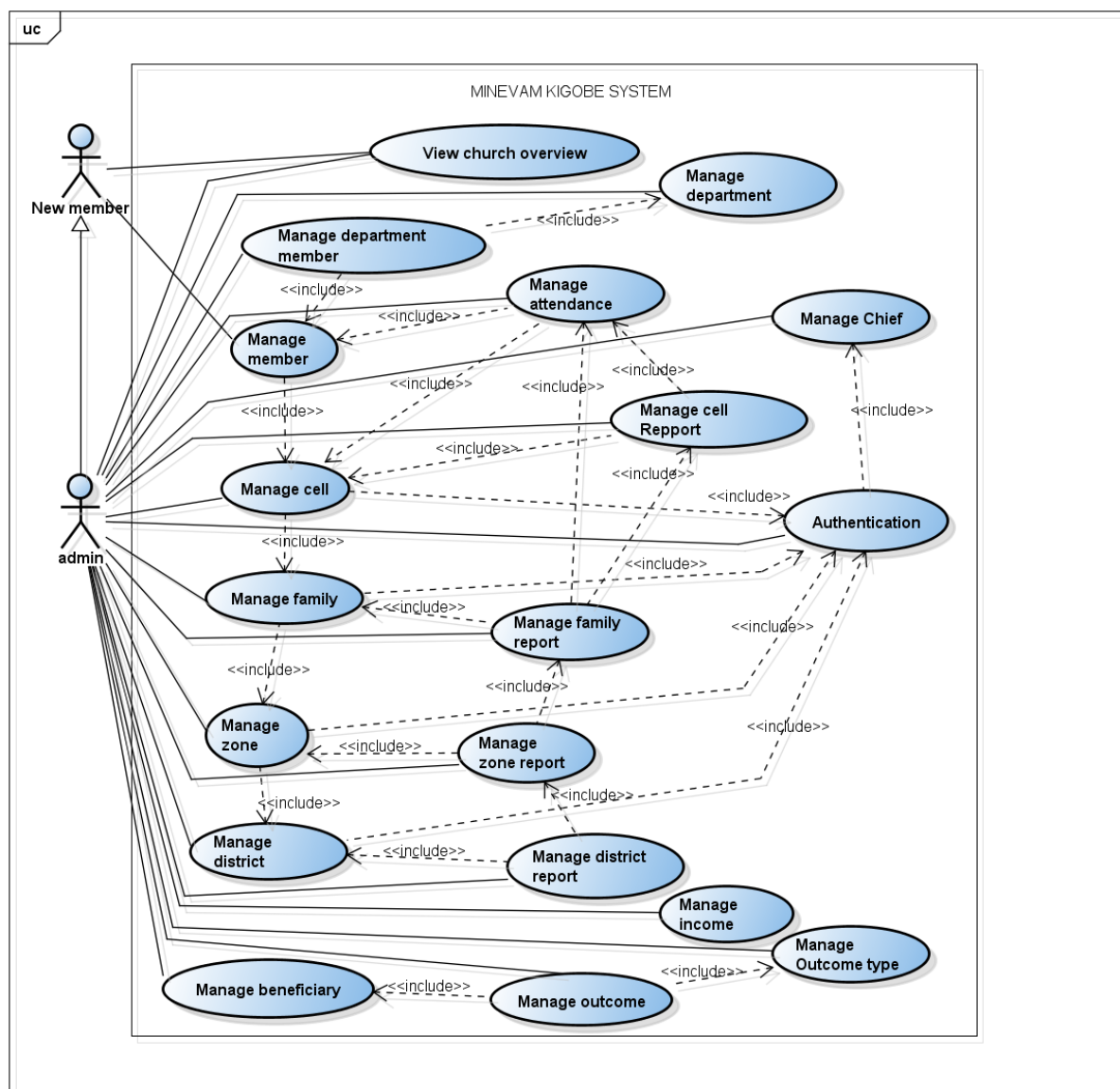
Sequence diagrams, commonly used by developers, model the interactions between objects in a single use case. They illustrate how the different parts of a system interact with each other to carry out a function, and the order in which the interactions occur when a particular use case is executed. In simpler words, a sequence diagram shows different parts of a system work in a 'sequence' to get something done. [2]

IV.3.4. Activity diagram

A UML activity diagram helps to visualize a certain use case at a more detailed level. It is a behavioural diagram that illustrates the flow of activities through a system. UML activity diagrams can also be used to depict a flow of events in a business process. They can be used to examine business processes in order to identify its flow and requirements. [4]

IV.4. Modeling of the proposed system

The figure below explains how MINEVAM Kigobe system will works: new member will have access to the church overview and making registration. Admin will have all permissions (manage member, manage cell, manage department, ...) and can limit permissions for other admins and have some functionality as manage cell report for cell admin, manage family report for family admin, ... For include arrow mains that use case with the start of include arrow will depend of use case with the end of include arrow.



powered by Astah

Figure 3: Use Case diagram

The figure below explains communication between class, generalization association; Admin: mother class and Chief: daughter class. Between class there are simple association with name of action and cardinality (what you can do: 1, *(many), 0 or 1, 0 or many, 1 or many); for example, chief and cell: chief manage 1 cell and cell managed with 1 chief.

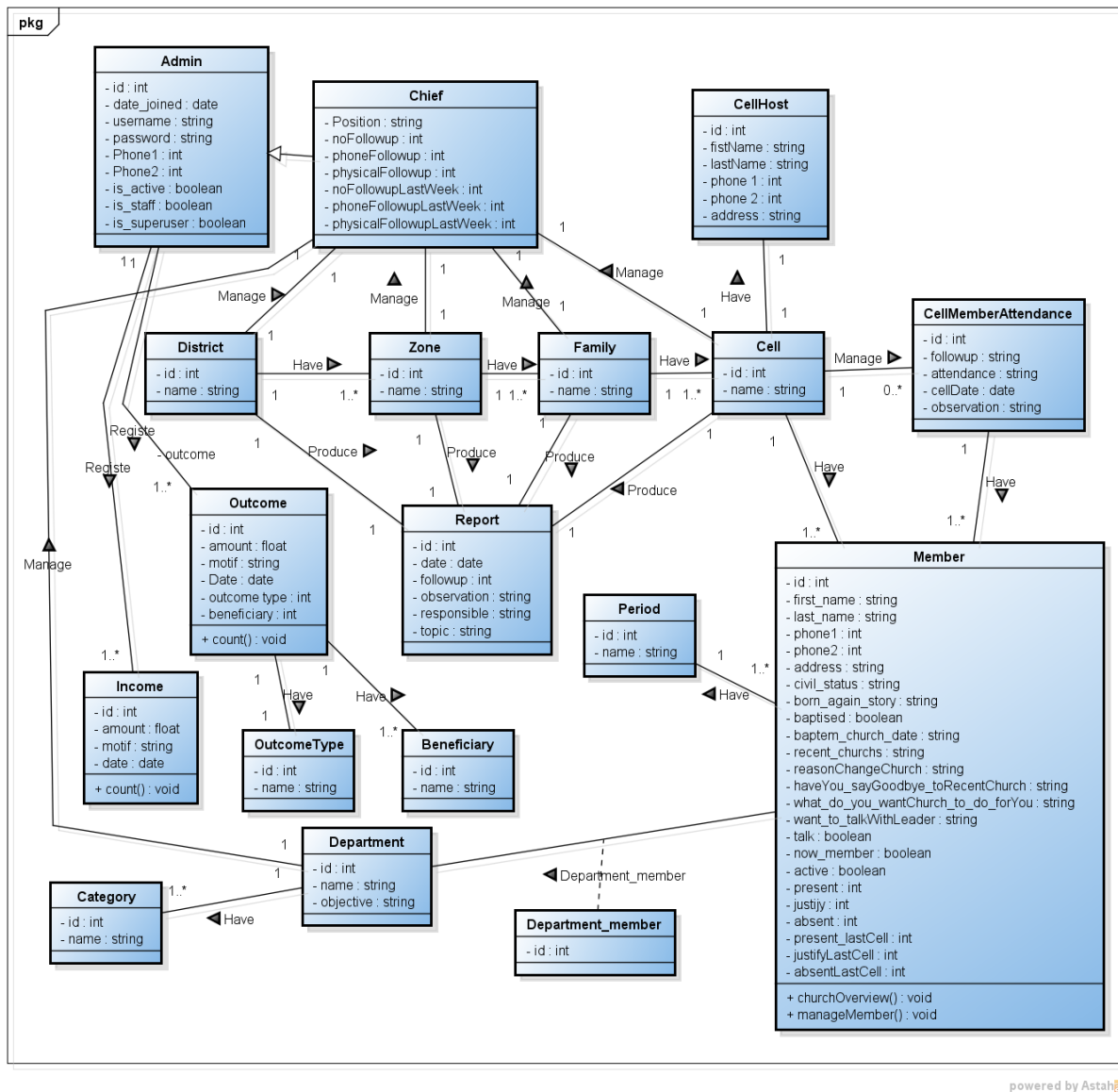


Figure 4: Class diagram

Figure below explains how admin and new member will manage system

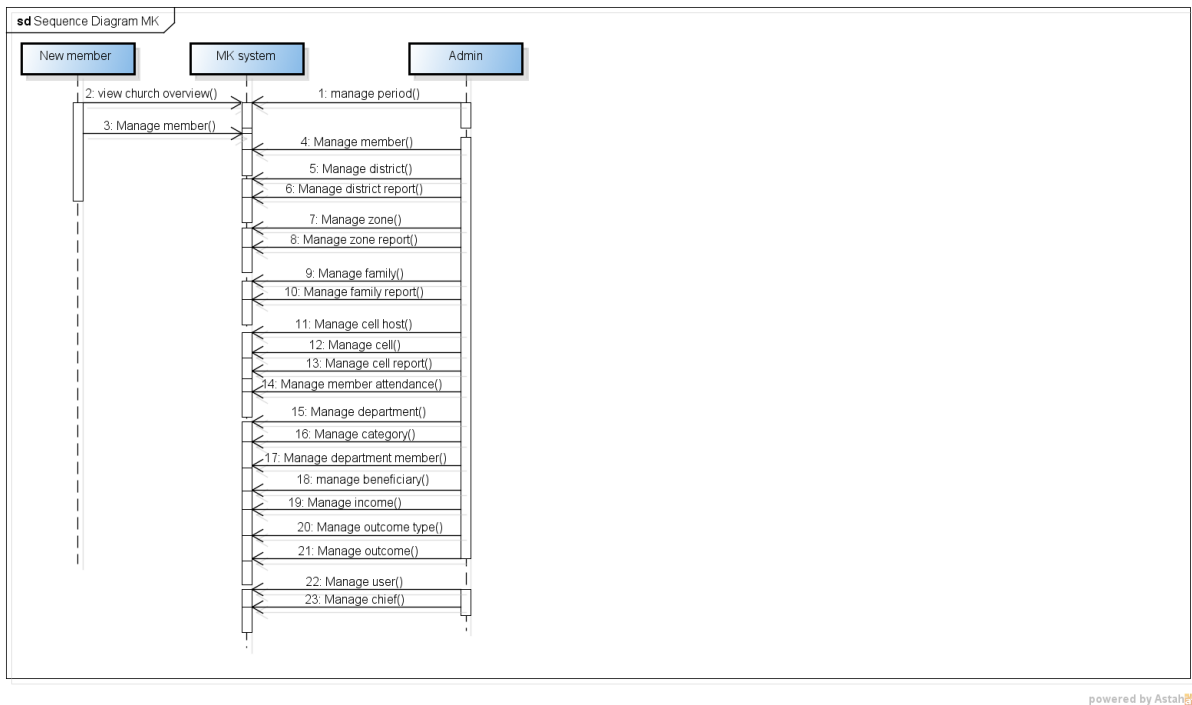


Figure 5: Sequence diagram

Figure below explains all activity of the system from login, management of different functionality of the system to logout.

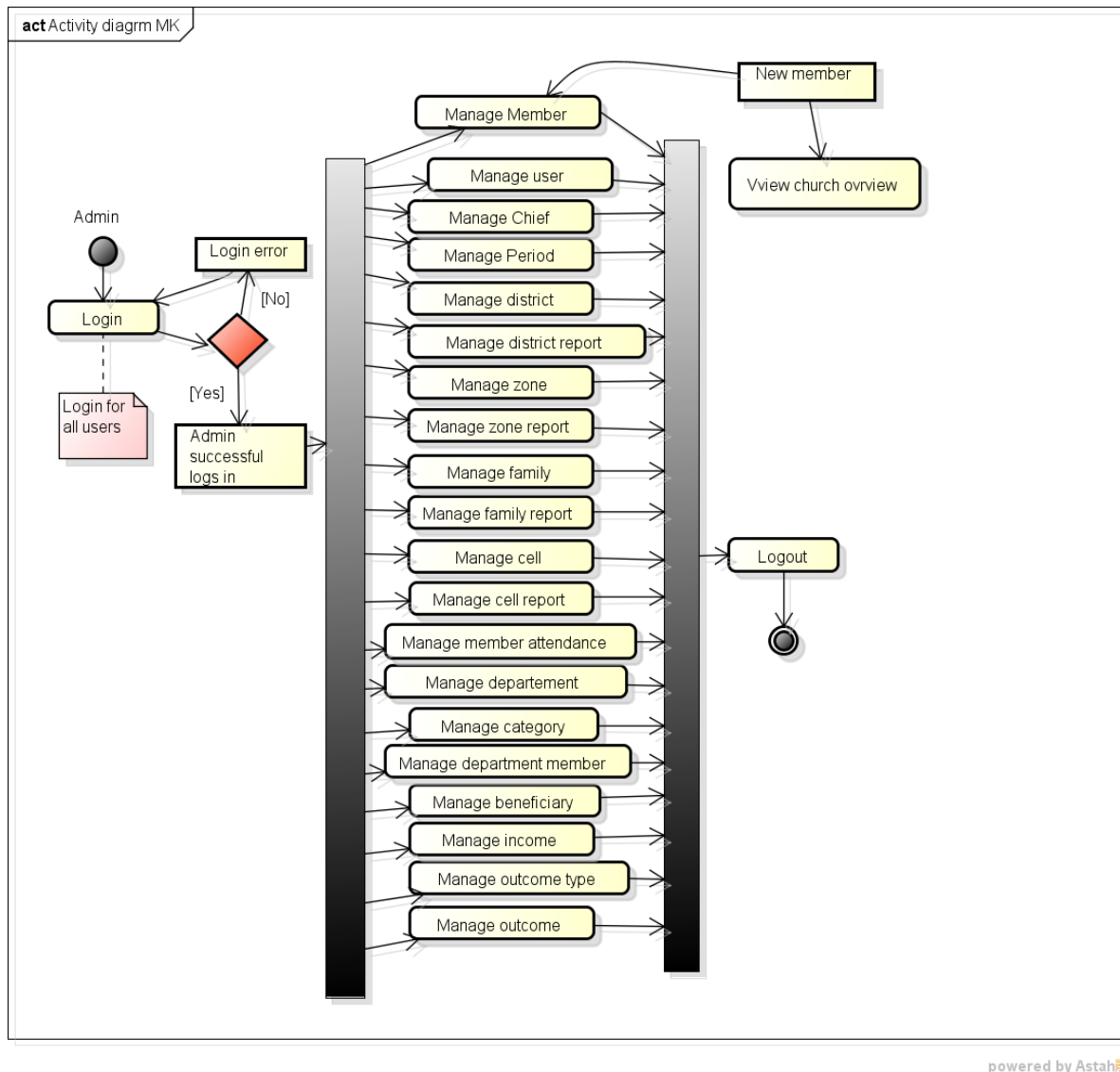


Figure 6: Activity diagram

IV.5. Presentation of application

IV.5.1. Used tools

- Hardware: HP: Intel(R) Core (TM) i3-2367M CPU @ 1.40GHz 1.40 GHz, 4GB of RAM, 500GB hard drive capacity, 64 bits operating system, x64 processor
- Software:
 - Window 10,

- Astah community: Formerly called Jude, Astah is a UML modeling tool created by the Japanese company ChangeVision1. It works with the Java runtime environment. The name comes from the acronym Java and UML developers' environment. Astah is a proprietary software that was distributed for free in a "community" version. The software is now subject to a trial period and then to the obligation to buy a user license),
- Python: high level programming language used in many domains of development as desktop application, mobile application, machine learning, web development, ...
- Django: full stack framework of python,
- HTML: Hypertext markup language designed to represent web pages,
- CSS: Cascading Style Sheets is the language that we use to style a web page. It describes how HTML elements are to be displayed on screen,
- JavaScript: it's a scripting language mainly used in interactive web pages and as such is an essential part of web applications. Along with HTML and CSS, JavaScript is at the heart of the languages used by web developers.
- Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.
- WAMP is an acronym that stands for Windows, Apache, MySQL, and PHP. It's a software stack which means installing WAMP installs Apache, MySQL, and PHP on your operating system (Windows in the case of WAMP). WampServer (formerly WAMP5) is a WAMP-like web development platform, allowing to run locally (without having to connect to an external server) PHP scripts. WampServer is not in itself a software, but an environment including three servers (Apache, MySQL and

MariaDB), a script interpreter (PHP), as well as phpMyAdmin for the Web administration of MySQL databases.

- IP address: Internet protocol, I used 127.0.0.1 localhost
- Port: 8000

I used Bootstrap 5 for frontend, Django for backend and mysql for database. [11]

IV.5.2. User interface description

For access admin side you have to add /mk to the main link (or domain name) and access login form for admin side, it is for security lesson. Admin includes pastors of MINEVAM Kigobe and office staff.

Figure below shows list of different side of cell departments who are going to report cell activity.

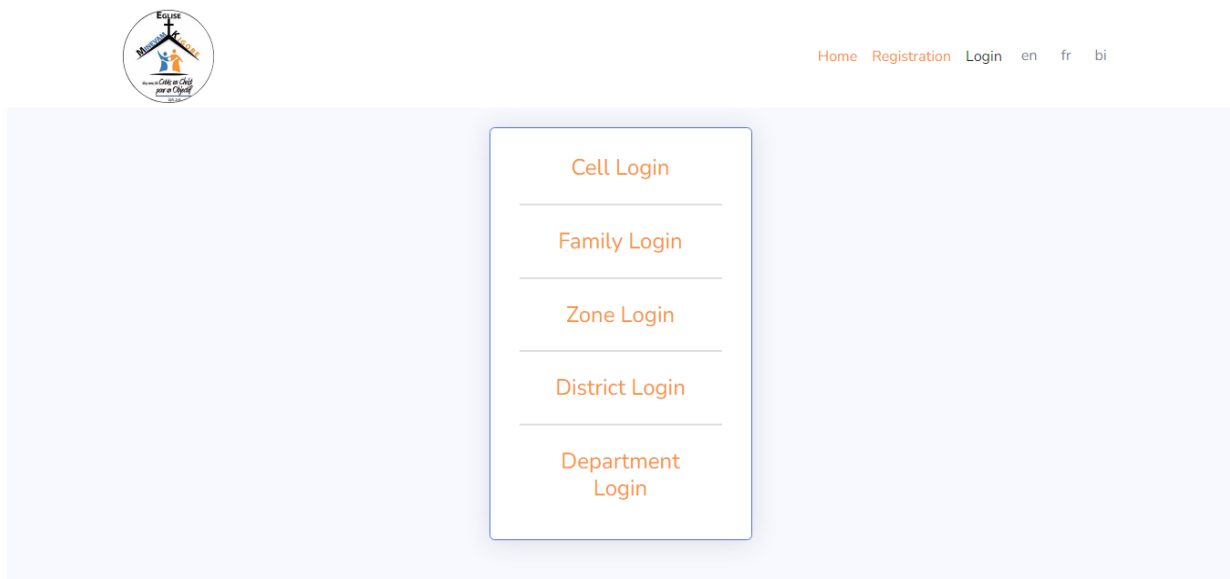


Figure 7: different side for login

Figure below shows login form for accessing the system



The logo is circular with a black border. Inside, the word "EGLISE" is at the top. Below it, a black cross is positioned above a stylized roofline. The roofline is split into two colors: blue on the left and orange on the right. Under the roofline, there are two stylized human figures, one blue and one orange, holding hands. Below the figures, the text "Nous nous sommes Créés en Christ pour un Objectif" is written in a cursive font. At the very bottom, "Eph 2:10" is written in a small font.

MINEVAM KIGORÉ

Username 

Password 

[Log in](#)

Figure 8: Login form

Figure below shows registration form where new members will input data for describe themselves

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:8000/kwiyandikisha/'. The browser's bookmark bar includes links to 'Apps', 'Telegram', 'U', 'ADDA', 'ML', 'djReport', 'Dj Export Ogi', and 'Other bookmarks'. The website's header features a logo on the left and navigation links 'Home', 'Registration', 'Login', 'en', 'fr', and 'bi' on the right. The main content area displays a registration form titled 'Welcome Program Registration Form - Period: April 2021'. The form contains the following fields and options:

- Period: [Text input]
- First Name: [Text input with placeholder 'Type here']
- Last Name: [Text input with placeholder 'Type here']
- Cell: [Text input]
- Your Phone number 1: [Text input with placeholder 'Type here']
- Your Phone number Phone 2: [Text input with placeholder 'Type here']
- Your Address: [Text input with placeholder 'Type here']
- Gender:
 - ☐ Male
 - ☐ Female
- Civil status:
 - ☐ Single
 - ☐ Married
 - ☐ Divorced
 - ☐ Widow
- Photo: [Choose File] No file chosen
- Born Again Short Story _ When/Where: [Text input with placeholder 'Type here']
- Baptised: ☐
- Baptem Church Date: [Text input with placeholder 'Type here']
- Recent Churches: [Text input with placeholder 'Type here']
- Why You Change Church?: [Text input with placeholder 'Type here']
- Have You Say Goodbye To Recent Church?: [Text input with placeholder 'Type here']
- What Do You Want Church To Do For You?: [Text input with placeholder 'Type here']
- Want To Talk With Leader? ☐
- [Send button]

Figure 9: New member registration

Figure below shows form for cell reporting of specific cell: cell will contain own cell members.

Cell Dashboard

127.0.0.1:8000/cell/

MINEVAM KIGOBE

Cell Report

17-05-2022

Name	Attendance	Followup	Observation
Jean CIZA	<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Justify	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Type observation
Ella INGABIRE	<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Justify	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Type observation

Saved visitors:

No saved visitors:

Saved during cell:

Word facilitator:

Moderator:

Comment (Challenges, worship event, ...):

After Tuesday event (special prayer, sport, Agape, Evangelisation, ...):

Suggestion or emergency:

Send

Figure 10: Cell Report

Figure below shows form for family reporting of specific family and analytics of each cell that belong to the family.

The screenshot displays the 'Family Dashboard' for 'MINEVAM KIGOBE'. The dashboard includes a sidebar with navigation options: Dashboard, REPORT (Make Report), STATISTICS, Family, and Logout. The main content area shows three reports:

Last Cells Report

Cell	Cell date	Saved visitors	No saved visitors	Saved during cell	Word facilitator	Moderator	Comment	After Tuesday event
Kigobe 1	April 26, 2022			2	CIZA	BUTOYI	neza 2	
Kigobe 1	April 26, 2022				CIZA	BUTOYI	neza kandi	

NB: Verify cell date for update report!! If cell date is under Tuesday or missing cell. NO Report Yet

Attendance percentages for last Cells

Cell	Total member	Presence	Justify	Absence	Presence Percentage	Justify Percentage	Absence Percentage
Kigobe 1	2	0	1	1	0.0%	50.0%	50.0%
Kigobe 2	1	0	1	0	0.0%	100.0%	0.0%

Family Report

17-05-2022

Cell	Followup	Responsible	Topic	Observation
Kigobe 1	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Responsible	Topic	Observation
Kigobe 2	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Responsible	Topic	Observation

[Send](#)

Figure 11: Family report

Figure below shows form for zone reporting of specific zone and analytics of each family that belong to the zone.

The screenshot displays the MINEVAM KIGOBE Zone Dashboard for Zone2. The interface includes a sidebar with navigation options: Dashboard, REPORT (Make Report), STATISTICS (Zone), and Logout. The main content area is divided into three sections:

Last families Reports

Family	Cell	Date	Followup	Responsible	Topic	Observation
Rukundo	Ngagara Q9	April 27, 2022	phone_Followup	Elie	Kudacererwa	za
Mugwaneza	Kigobe 1	April 27, 2022	phone_Followup	Elie	Kudacererwa	ego
Mugwaneza	Kigobe 2	April 27, 2022	physical_Followup	Arielle	Barasiba	cx

NB: Verify family date for update report!! If date is under Tuesday or missing family and cell, NO Report Yet

Attendance percentages for last Cells of families

Family	Total member	Presence	Justify	Absence	Presence Percentage	Justify Percentage	Absence Percentage
Rukundo	1	0	0	0	0.0%	0.0%	0.0%
Mugwaneza	3	0	2	1	0.0%	66.7%	33.3%

Zone Report

17-05-2022

Family	Followup	Responsible	Topic	Observation
Rukundo	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	<input type="text" value="Responsible"/>	<input type="text" value="Topic"/>	<input type="text" value="Observation"/>
Mugwaneza	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	<input type="text" value="Responsible"/>	<input type="text" value="Topic"/>	<input type="text" value="Observation"/>

Figure 12: Zone report

Figure below shows form for district reporting and analytics of each zone that belong to the district.

The screenshot displays the 'District Dashboard' for 'MINEVAM KIGOBÉ'. The left sidebar contains navigation links: Dashboard, REPORT (Make Report), STATISTICS (District), and Logout. The main content area is titled 'Last Zones Reports' and shows a table with two entries for Zone 2, both dated April 27, 2022. Below this is a note: 'NB: Verify zone date for update report!! If date is under Tuesday or missing zone and family , NO Report Yet'. The next section, 'Attendance percentages for last Cells families of zones of District', shows attendance data for Zone 2 and Zone 1. The final section, 'District Report 17-05-2022', is a form for reporting on Zone 2 and Zone 1, with a 'Send' button at the bottom.

Last Zones Reports

Zone	Family	Date	Followup	Responsible	Topic	Observation
Zone 2	Rukundo	April 27, 2022	phone_Followup	Eloge	Multiplication of cells	ego
Zone 2	Mugwaneza	April 27, 2022	physical_Followup	Amandine	Multiplication of cells	egome

NB: Verify zone date for update report!! If date is under Tuesday or missing zone and family , NO Report Yet

Attendance percentages for last Cells families of zones of District

Zone	Total member	Presence	Justify	Absence	Presence Percentage	Justify Percentage	Absence Percentage
Zone 2	4	0	2	1	0.0%	50.0%	25.0%
Zone 1	1	0	0	0	0.0%	0.0%	0.0%

District Report 17-05-2022

Zone	Followup	Responsible	Topic	Observation
Zone 2	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Responsible	Topic	Observation
Zone 1	<input type="radio"/> Phone Followup <input type="radio"/> Physical Followup <input type="radio"/> No	Responsible	Topic	Observation

[Send](#)

Figure 13: District Report

Figure below shows admin dashboard that contain analytics of the church and different management at the side bar.

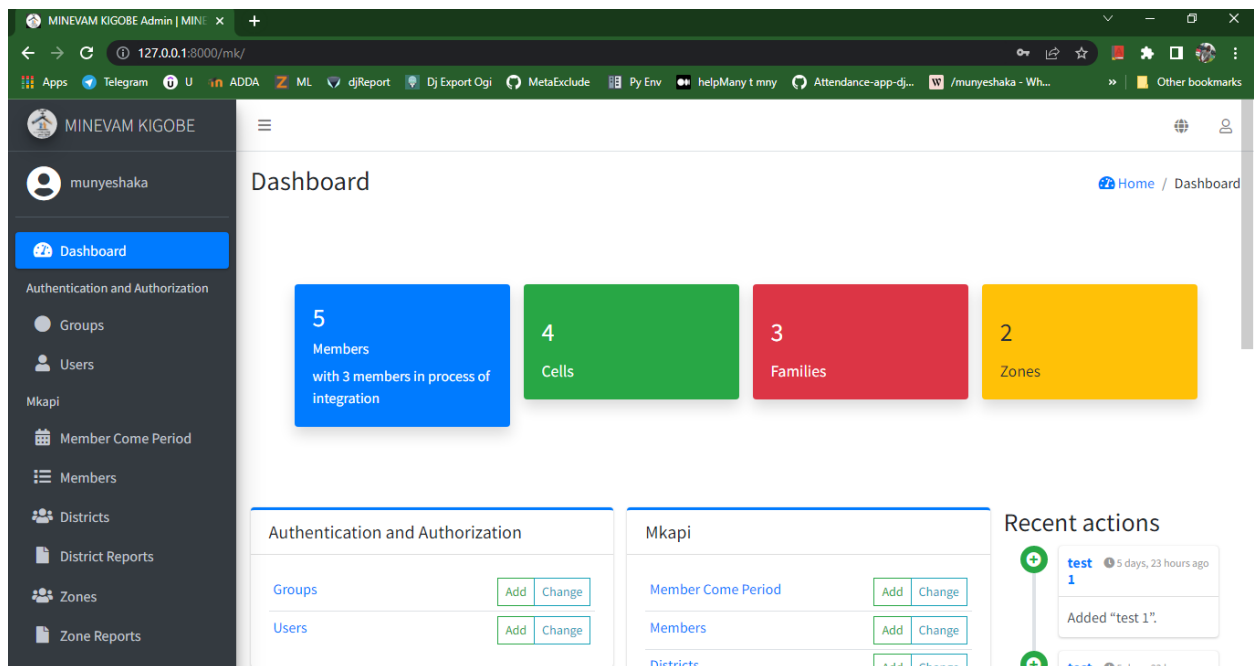


Figure 14: Admin dashboard

Figure below shows list of users with different permissions.

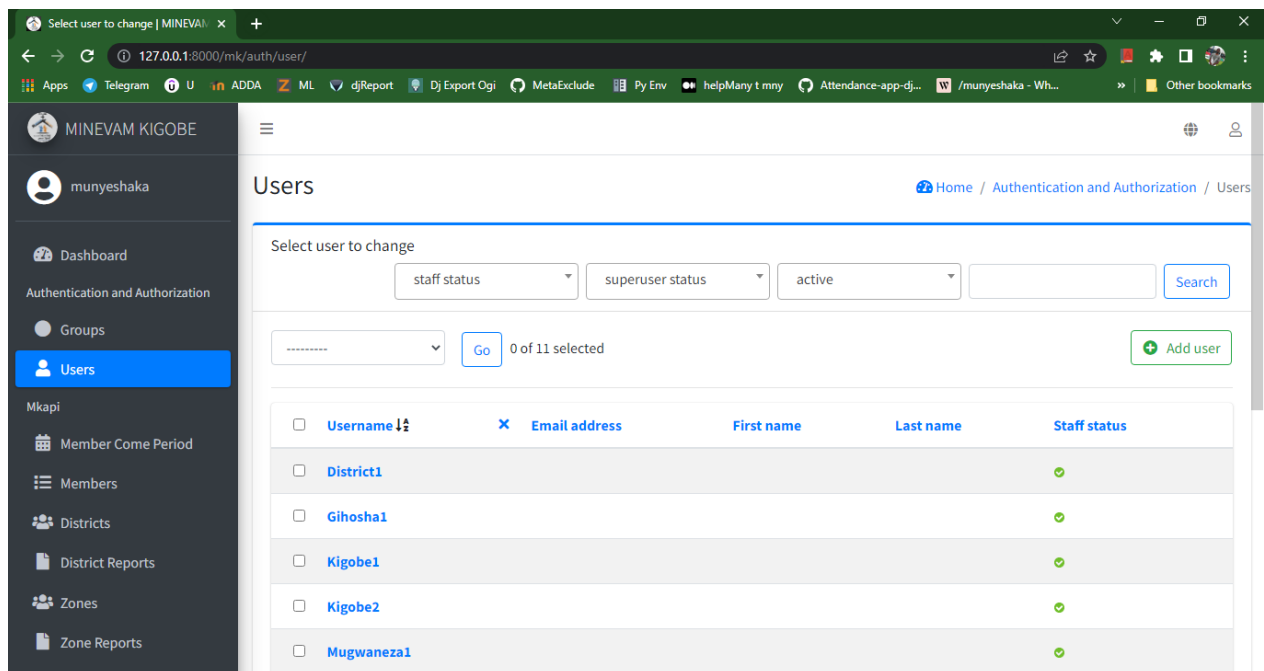


Figure 15: List of users _ admin side

Figure below shows list of periods of new members when they came in the church or (promotion).

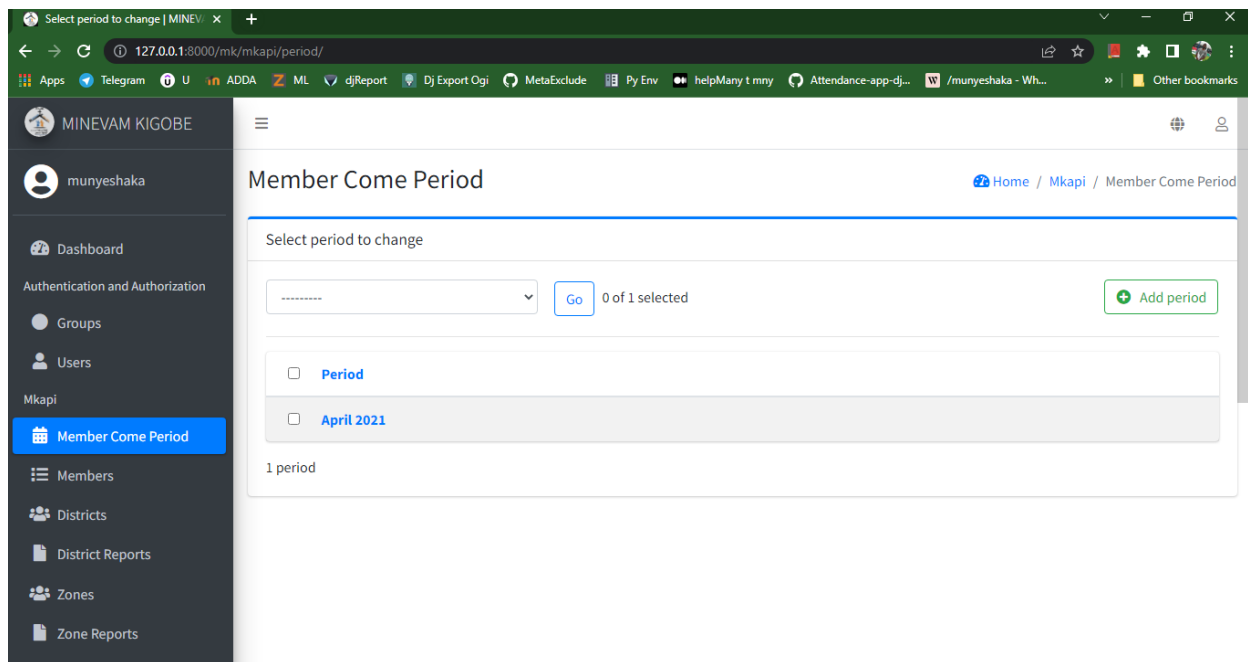


Figure 16: List of come period of new member (promotion)

Figure below shows list of all members, we can filter by period, cell and by family.

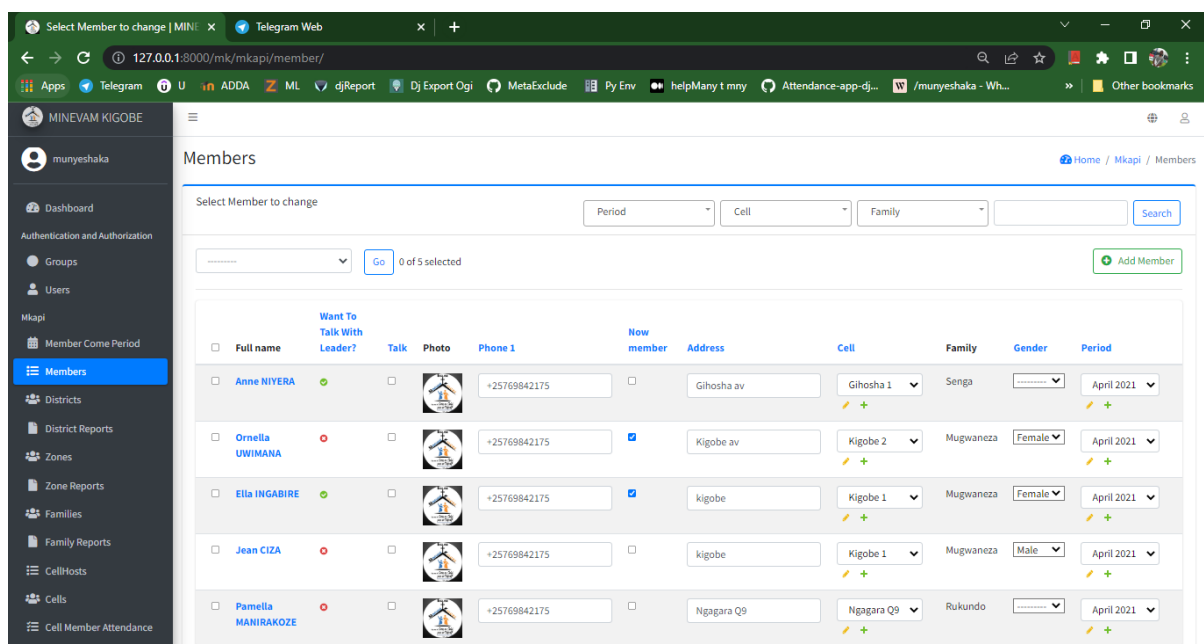


Figure 17: List of members

Figure below shows form of create district.

The screenshot shows the 'Add district' form in the MINEVAM KIGOBÉ application. The form is titled 'Add district' and contains several input fields for district information. The fields are: Name, Chef, Chef Phone1, Chef Phone2, Chef-Vice, Chef-Vice Phone1, Chef-Vice Phone2, Core 1, Phone Core 1, Core 2, and Phone Core 2. There is also a 'User' dropdown menu at the bottom. On the right side of the form, there are three action buttons: 'Save', 'Save and add another', and 'Save and continue editing'. The left sidebar shows the application's navigation menu with options like Dashboard, Authentication and Authorization, Groups, Users, Mkapi, Member Come Period, Members, Districts (highlighted), District Reports, Zones, Zone Reports, Families, Family Reports, CellHosts, Cells, and Cell Member Attendance.

Figure 18: Form of add district

Figure below shows list of districts and different attributes.

The screenshot shows the 'Districts' list view in the MINEVAM KIGOBÉ application. At the top, there is a section titled 'Select district to change' with a dropdown menu and a 'Go' button. Below this, there is a table with the following columns: Name, Chef, Chef Phone1, Chef-Vice, Chef-Vice Phone1, and Core 1. The table contains one row of data: District 1, Dr Neige, +25769842175. Below the table, there is a '1 district' label and a 'Save' button. On the right side of the table, there is an 'Add district' button. The left sidebar shows the application's navigation menu with options like Dashboard, Authentication and Authorization, Groups, Users, Mkapi, Member Come Period, Members, Districts (highlighted), District Reports, Zones, Zone Reports, Families, Family Reports, CellHosts, Cells, and Cell Member Attendance.

Name	Chef	Chef Phone1	Chef-Vice	Chef-Vice Phone1	Core 1
District 1	Dr Neige	+25769842175			

Figure 19: List of districts

Figure below shows form of change district.

The screenshot shows a web browser window with the URL `127.0.0.1:8000/mk/mkapi/district/1/change/`. The page title is "Change district | MINEVAM KIGOBÉ". The left sidebar contains a menu with items: Dashboard, Authentication and Authorization, Groups, Users, Mkapi, Member Come Period, Members, Districts (highlighted), District Reports, Zones, Zone Reports, Families, Family Reports, CellHosts, Cells, and Cell Member Attendance. The main content area is titled "Districts" and contains a form for "Change district". The form fields are: Name (District 1), Chef (Dr Neige), Chef Phone1 (+25769842175), Chef Phone2, Chef-Vice, Chef-Vice Phone1, Chef-Vice Phone2, Core 1, Phone Core 1, Core 2, Phone Core 2, and User (District1). On the right side, there is an "Actions" panel with buttons: Save, Delete, Save and add another, Save and continue editing, and a History link.

Figure 20: Form of change district

Figure below shows delete district page; we can delete district if we are sure

The screenshot shows a web browser window with the URL `127.0.0.1:8000/mk/mkapi/districtreport/4/delete/`. The page title is "Are you sure? | MINEVAM KIGOBÉ". The left sidebar is the same as in Figure 20. The main content area is titled "Delete" and contains a confirmation message: "Delete 2022-05-07". Below the message, it asks: "Are you sure you want to delete the District Report '2022-05-07'? All of the following related items will be deleted:". Under "Objects", it lists: "1. District Report: 2022-05-07". On the right, there is a "Summary" table with one row: "District Reports" with a value of "1". At the bottom right, there are two buttons: "Yes, I'm sure" and "No, take me back".

Figure 21: Delete district

Figure below shows list of district report, we can filter by district, zone and date.

District Reports

Select District Report to change

District Zone date Search

Go 0 of 2 selected Add District Report

<input type="checkbox"/>	District	Zone	Followup	Responsible	Topic	Observation	Date
<input type="checkbox"/>	District 1	Zone 1	Phone Followup		Barasiba		May 7, 2022
<input type="checkbox"/>	District 1	Zone 2	No		Kudacererwa		May 7, 2022

2 District Reports

Figure 22: list of district report

Figure below shows list of zones and different attributes

Zones

Select zone to change

Go 0 of 2 selected Add zone

<input type="checkbox"/>	Name	Chef	Chef Phone1	Chef-Vice	Chef-Vice Phone1
<input type="checkbox"/>	Zone 1	Benigne	+25769842175		
<input type="checkbox"/>	Zone 2	Desire	+25769842175		

2 zones Save

Figure 23: List of zones

Figure below shows list of zone report, we can filter by zone, family and by date.

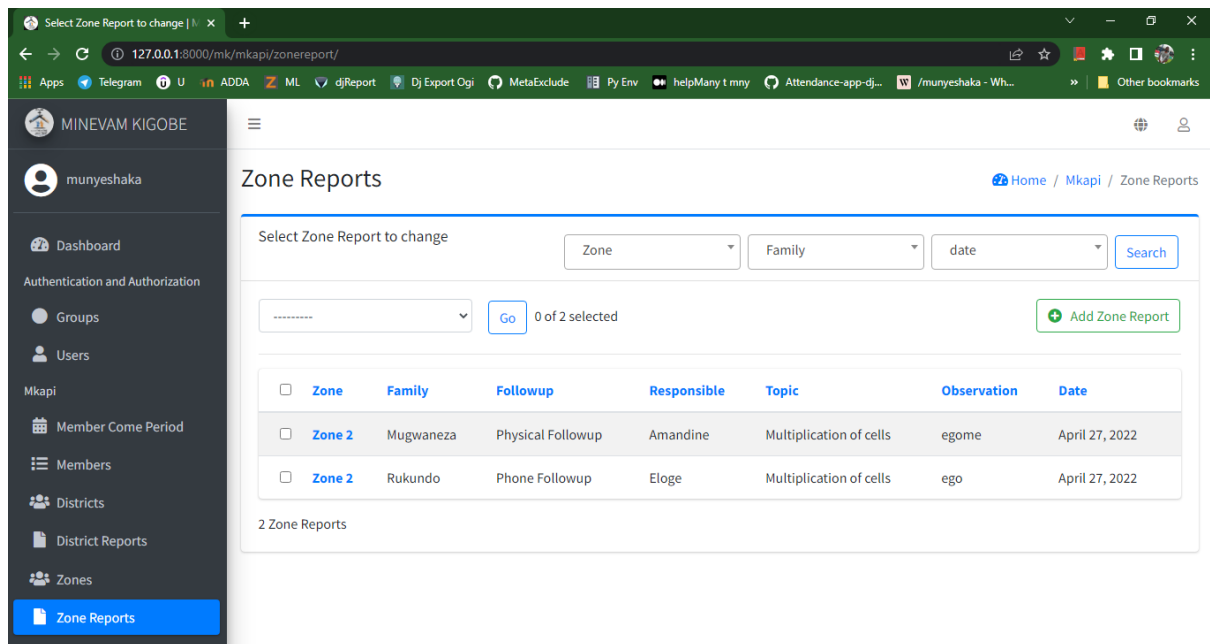


Figure 24: List of zone report

Figure below shows list of families and different attributes

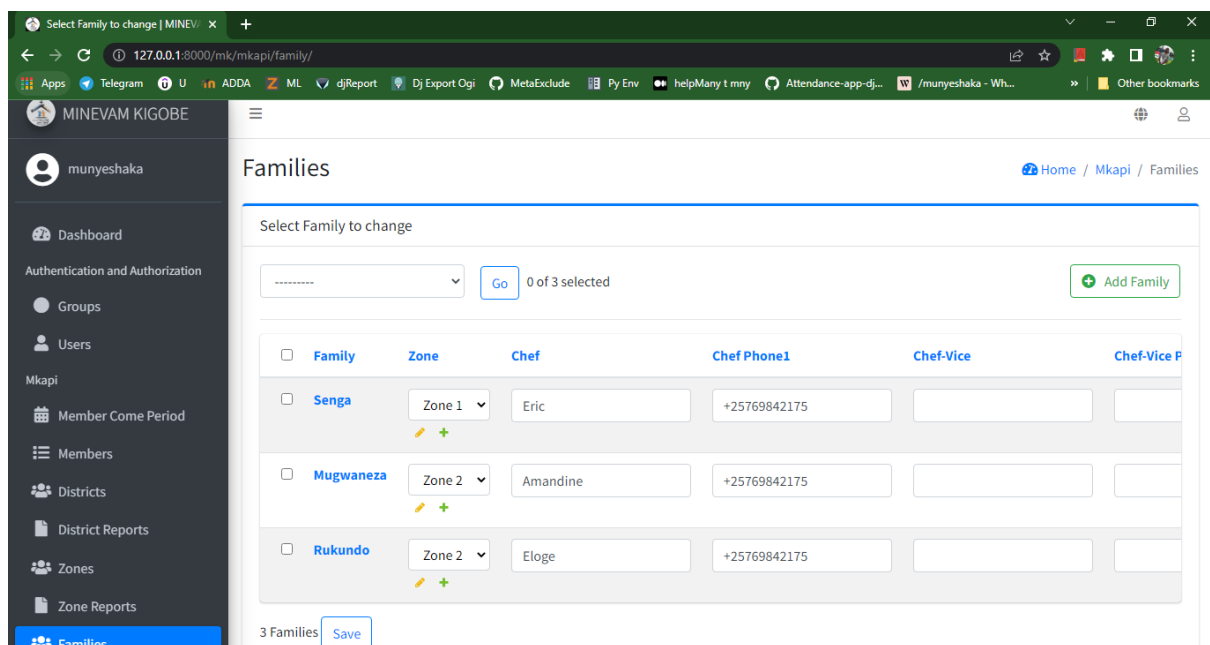


Figure 25: List of families

Figure below shows list of family report, we can filter by family, cell and by date.

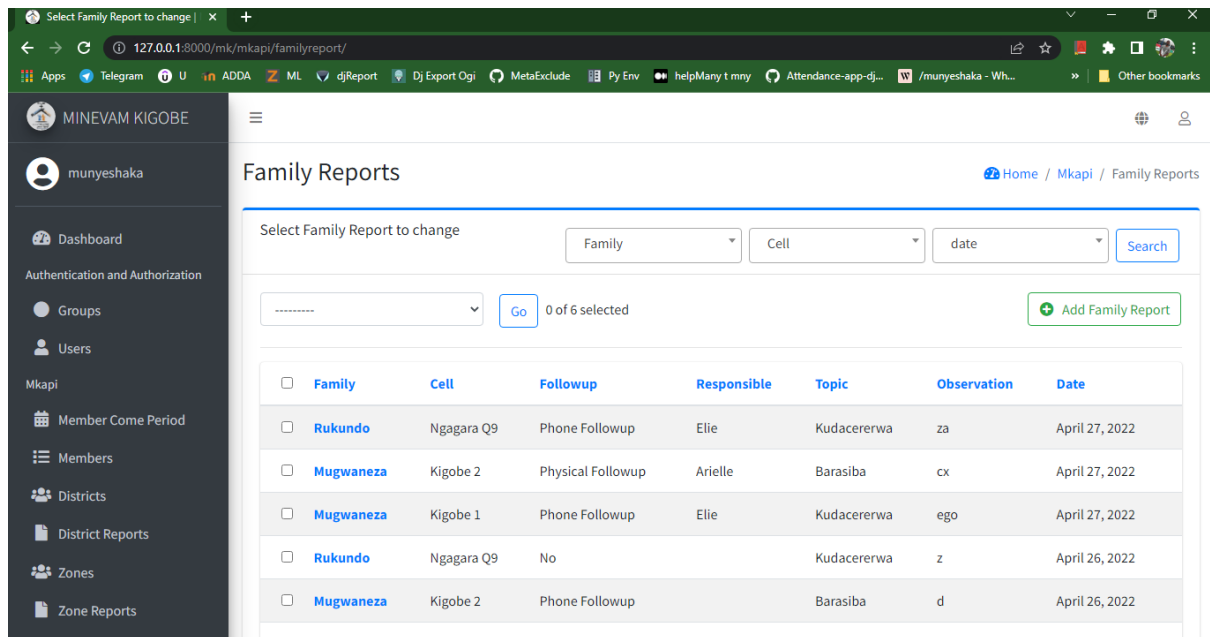


Figure 26: List of family report

Figure below shows list of cell host

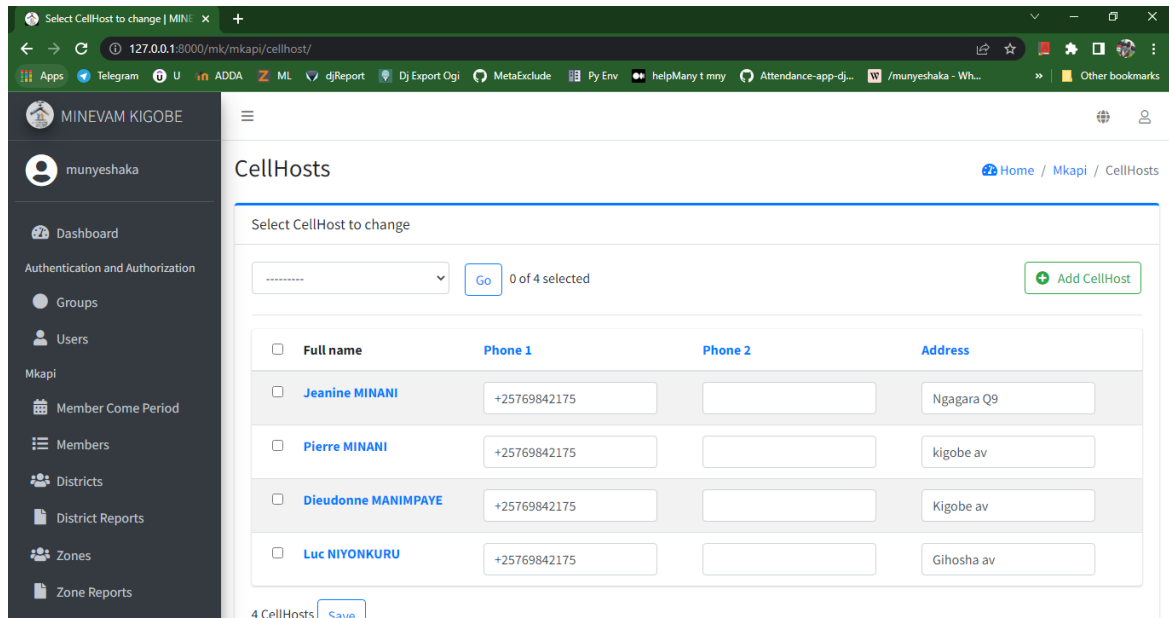


Figure 27: List of cell host

Figure below shows list of cells and different attributes

Cell	Cell Host	Chef	Chef Phone1	Chef-Vice
Gihosha 1	Luc NIYONKURU, Gihosha av	Rose	+25769842175	
Kigobe 2	Dieudonne MANIMPAYE, Kigobe av	Elie	+25769842175	
Kigobe 1	Pierre MINANI, kigobe av	Arielle	+25769842175	
Ngagara	Jeanine MINANI, Ngagara Q9	Bruce	+25769842175	

Figure 28: List of cells

Figure below shows list of cell member attendances for all cell; we can filter by cell, cell date and by family.

Cell	Member	Attendance	Followup	Observation	Cell Date
Kigobe 1	Ella INGABIRE	Justified	No		April 26, 2022
Kigobe 1	Jean CIZA	Absent	Phone Followup		April 26, 2022
Kigobe 1	Ella INGABIRE	Justified	-		April 25, 2022
Kigobe 1	Jean CIZA	Justified	-		April 25, 2022
Kigobe 1	Ella INGABIRE	Present	-		April 22, 2022

Figure 29: List of cell member attendances

Figure below shows list of all cell report; we can filter by family, cell and by cell date.

Select Cell Report to change

Family Cell Cell date Search

Go 0 of 6 selected Add Cell Report

<input type="checkbox"/>	Cell	Cell date	Saved visitors	No saved visitors	Saved during cell	Word facilitator	Moderator	Comment	After cell event	Suggestion or emergency
<input type="checkbox"/>	Kigobe 1	April 26, 2022			2	CIZA	BUTOYI	neza 2		
<input type="checkbox"/>	Kigobe 1	April 26, 2022				CIZA	BUTOYI	neza kandi		
<input type="checkbox"/>	Kigobe 1	April	1	0	0	NYANDWI	CIZA	-	sport	item 2

Figure 30: List of cell report

Figure below shows list of income of the church

Select Income to change

Go 0 of 2 selected Add Income

<input type="checkbox"/>	Motif	Amount	Date
<input type="checkbox"/>	test 1	122.00	May 11, 2022, 11:52 a.m.
<input type="checkbox"/>	test	200.00	May 11, 2022, 11:52 a.m.

2 Incomes

Figure 31: List of income

Figure below shows form add income of the church

The screenshot shows a web browser window with the URL `127.0.0.1:8000/mk/mkapi/income/add/`. The page title is "Add Income | MINEVAM KIGOBÉ". The left sidebar contains a user profile for "munyeshaka" and a navigation menu with items: Dashboard, Authentication and Authorization, Groups, Users, Mkapi, Member Come Period, Members, Districts, District Reports, Zones, and Zone Reports. The main content area is titled "Incomes" and includes a breadcrumb trail: Home / Mkapi / Incomes / Add Income. The "Add Income" form has two fields: "Motif *" (empty) and "Amount *" (empty). To the right of the form is an "Actions" panel with three buttons: "Save", "Save and add another", and "Save and continue editing".

Figure 32: Form of add income

Figure below shows form of change income of the church

The screenshot shows a web browser window with the URL `127.0.0.1:8000/mk/mkapi/income/2/change/`. The page title is "Change Income | MINEVAM KIGOBÉ". The left sidebar is identical to the previous figure. The main content area is titled "Incomes" and includes a breadcrumb trail: Home / Mkapi / Incomes / test 1. The "Change Income" form has two fields: "Motif *" (containing "test 1") and "Amount *" (containing "122.00"). To the right of the form is an "Actions" panel with four buttons: "Save", "Delete", "Save and add another", and "Save and continue editing". Below the "Actions" panel is a "History" button.

Figure 33: Form of change income

Figure below shows delete income page and button of confirmation.

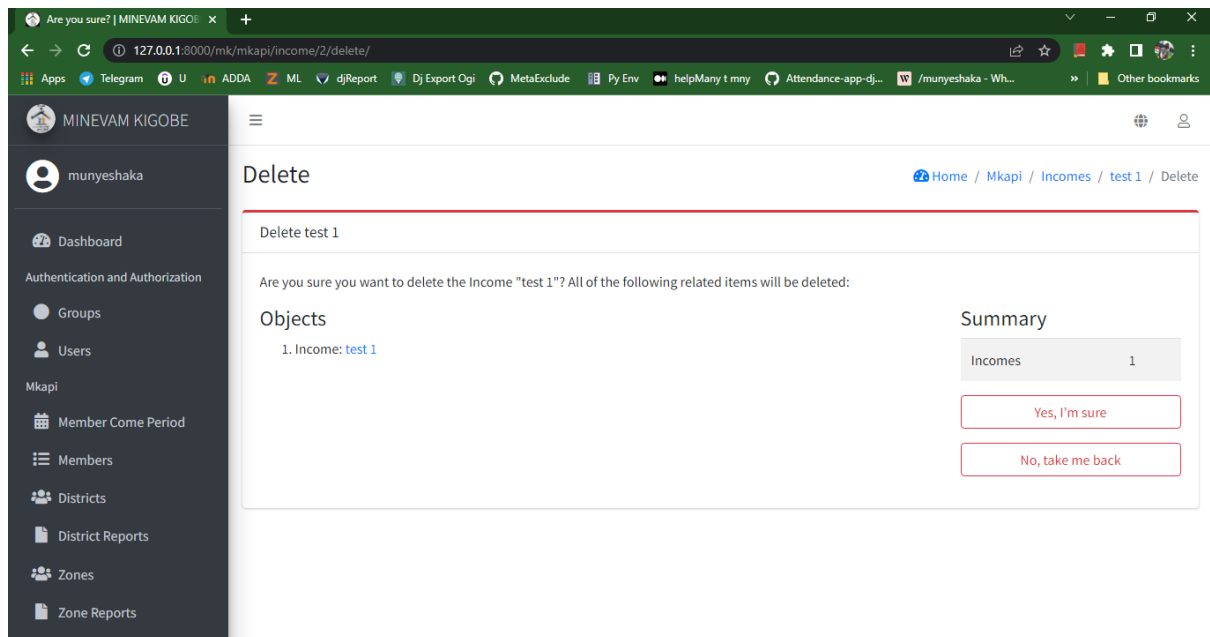


Figure 34: Delete income

Figure below shows list of outcomes of the church.

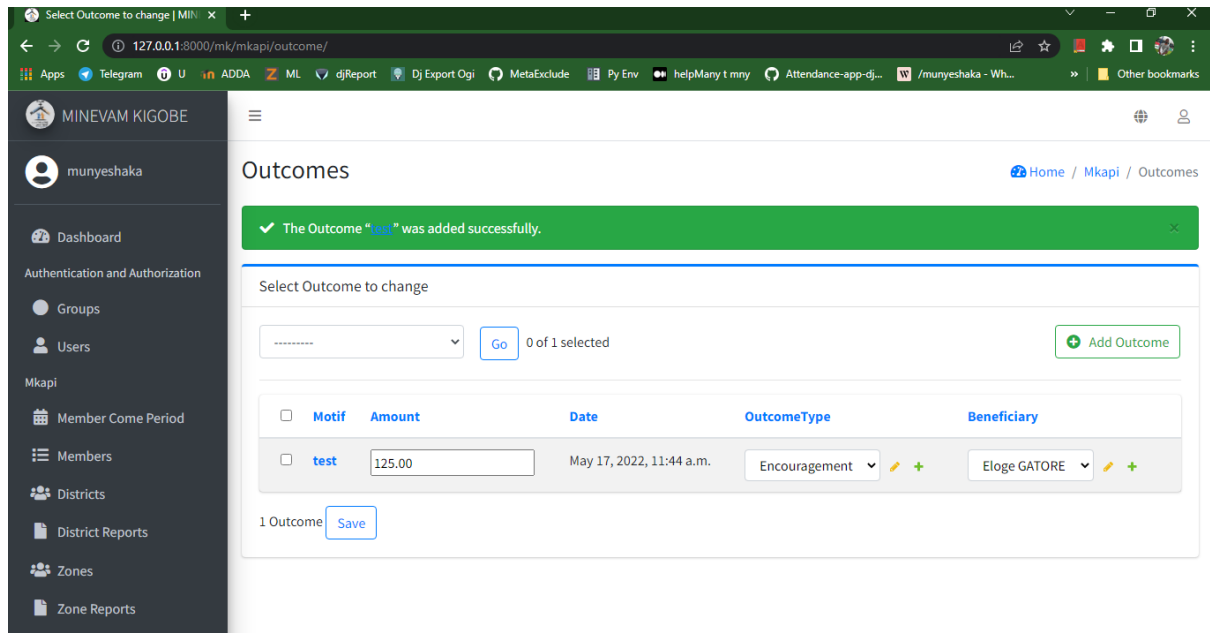


Figure 35: List of outcomes

Figure below shows list of beneficiaries of the outcomes

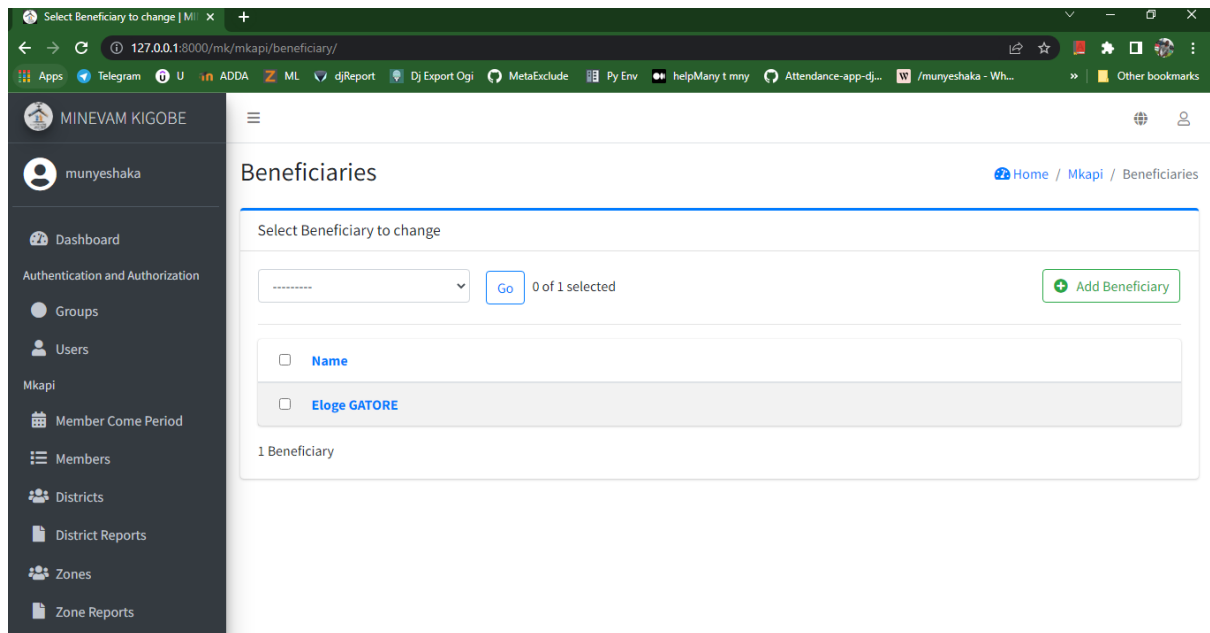


Figure 36: List of beneficiaries

Figure below shows list of outcome type

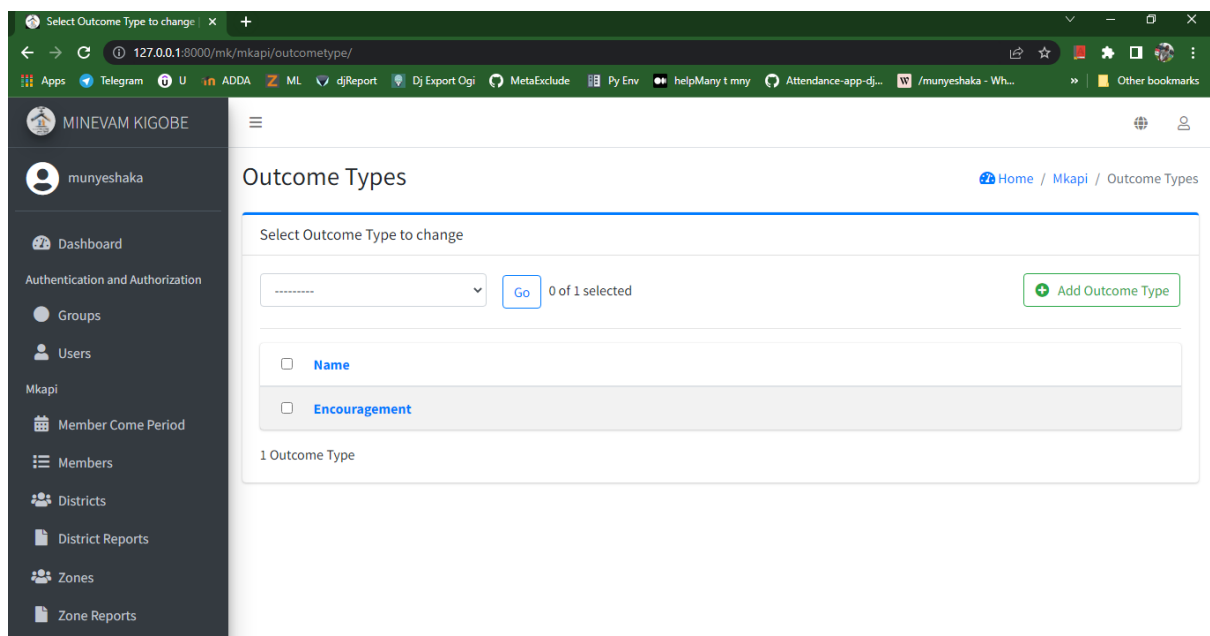


Figure 37: List of outcome type

Figure below shows list of all departments of the church; we can filter by category, objective.

Select Department to change

Category Objective Search

Go 0 of 2 selected Add Department

<input type="checkbox"/>	Name	Category	Objective	Chef	Chef Phone1	Chef-Vice
<input type="checkbox"/>	Mission	Other	MISSION	Eloge	+25779876543	
<input type="checkbox"/>	Youth	24+	FAMILY	Prince	+25779876543	

2 Departments Save

Figure 38: List departments

Figure below shows list of department members; we can filter by department, cell, family and by category.

Select Department Member to change

Department cell Family Category Search

Go 0 of 2 selected Add Department Member

<input type="checkbox"/>	Member	Phone	Cell	Family	Category	Department
<input type="checkbox"/>	Pamella MANIRAKOZE	+25769842175	Ngagara Q9	Rukundo	Other	Mission _ Other
<input type="checkbox"/>	Jean CIZA	+25769842175	Kigobe 1	Mugwaneza	24+	Youth _ 24+

2 Department Members Save

Figure 39: List of department members

Figure below shows list of categories for all small groups of the church

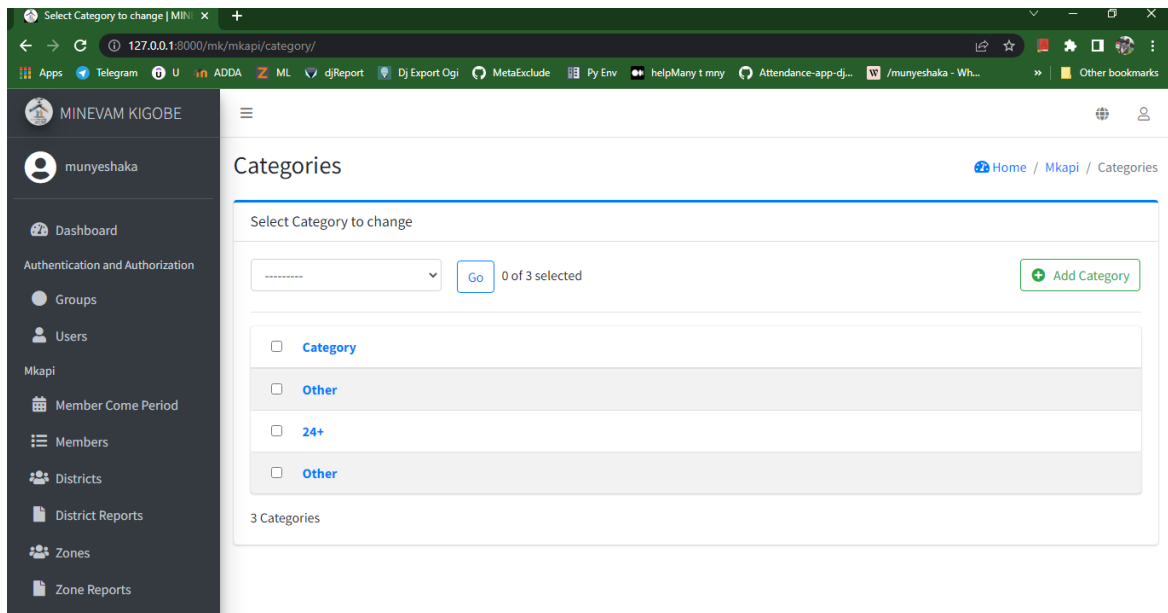


Figure 40: List of categories

IV.5.3 Advantages of application

This application will help the church to know its management in real time and will help to take decisions. This application will help leaders to get data: list of members for different cells, family, zone and district, for different department and will help to get list of leaders: cell, family, zone, district.

Reporting cell activity will be very easy and direct to the system, everywhere, every time.

CHAPITRE V: GENERAL CONCLUSION AND SUGGESTIONS

V.1. General conclusion

V.1.1. Critical assessment of the progress of the internship

My internship in MINEVAM Kigobe church was very wonderful, I do understand the information system easily with existing system. Stack that I had it was about cell reporting member attendance: it was very difficult to manage it from paper to dynamic functionality; another struggle was to manage difference users for difference interfaces (permission between user).

V.1.2. Critical appraisal of the observed problem

I didn't get a problem according analysis of the data collected because it was very clear, they have paper forms it was just digitalize the system, the problem was to get data in real time.

V.2. Suggestions

MINEVAM Kigobe may have web application for church growth in real time and reporting cell activity because cell leaders, family leaders, zone leaders and districts leaders will send report from everywhere and will be stored directly in the system and the church leaders will make very quickly decision.

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