Indahag Parish Event Management System

(Roman Catholic Parish)

Hermosisima, Reggie

Salon, Josue

Dubria, Pamela Floriel

Baragona, Ian Reister

Cabaya, Rigel Ray

In Partial Fulfillment of the Requirements

for the CS214 Fundamentals of Database Management System

Department of Computer Science

College of Information Technology and Computing

University of Science and Technology of Southern Philippines

Cagayan de Oro City, 9000

December 2023

TABLE OF CONTENTS

CHAPTER I

1.1 Organization Background

Three Archangel Parish, located on Lomboy Street in Indahag, Cagayan de Oro,oversees two chapels: Saint Philip and James The Apostles Chapel in Centro Indahag and Saint Joseph The Workers Chapel on Habitat Street, Indahag. Reverend Fr. Harnifer L. Godinez, SSJV, has been the administrator of the Indahag chapels for several years.

After his initial two years as administrator, Father Harnifer took significant steps to enhance the organization of the chapels. He established three clusters for better administration: Cluster Hope (Habitat Phase 1,2), Cluster Love (Poblacion Indahag), and Cluster Faith (Sitio Lomboy). Additionally, he suggested changing the name of the patron saint from Sr. San Miguel (St. Michael Archangel) to The Three Archangels, reflecting the joint feast day celebration of three archangels on September 29.

The proposed name change gained unanimous approval from the parish leaders and parishioners, leading to the adoption of The Three Archangels as the parish's new identity in 2020. As the parish expanded and developed chapels to accommodate a growing population, the challenges of maintaining records and scheduling events became apparent. The reliance on traditional methods without the aid of technology posed obstacles to efficient administration.

This study endeavors to provide a comprehensive solution tailored to the specific needs of the parish, aligning with its commitment to better serve the community and uphold the spirit of The Three Archangels.

1.2 Statement of the Problem

Indahag Parish currently relies on traditional record-keeping methods to manage church affairs, utilizing practices such as manually writing information on a whiteboard. This conventional approach poses a significant risk of data loss and hampers the efficiency of church personnel, not only increasing the likelihood of losing valuable data but also creating challenges in achieving optimal workflow efficiency.

Recognizing the constraints imposed by traditional record-keeping methods and the associated challenges faced by church personnel, the researchers propose the development of an innovative application. This application aims to provide a comprehensive solution specifically targeting the identified issues, ultimately enhancing the efficiency and effectiveness of administrative processes within the church.

1.3 Objective of the Project

The project's objective is to develop a desktop application to improve the efficiency of event scheduling at the Indahag Parish. The primary focus is streamlining scheduling for events in the two chapels and the main parish, replacing the conventional method with a system that allows the user to view, record, edit, and delete events seamlessly.

To achieve these goals, the study aims to:

1. Develop a dedicated scheduling application:

The current practice at the Indahag parish involves traditional methods like using a whiteboard for event scheduling. Developing a personalized scheduling application aims to

simplify and enhance their workflow. The transition to a digital platform prevents data loss, ensures accurate information storage, and contributes to more efficient work execution.

2. Design the application to be user friendly :

Emphasis is on designing an application with an intuitive user interface for easy access. The goal is to make the application user-friendly, ensuring swift and straightforward navigation and data input, without an extensive learning curve.

3. Ensure the precision of scheduled activities:

This study aims to enhance the application's reliability in accurately scheduling events, minimizing errors for a high level of user satisfaction.

The implementation of this application aims to transform traditional record-keeping methods, bringing technology to the parish for enhanced event management.

1.4 Scope and Limitations

Scope and limitation:

While the final version of the app is intended to encompass all expected functionalities and features outlined in the scope, certain limitations may arise due to factors such as varying levels of digital literacy among users and potential constraints in developer expertise for integrating specific features. The following section outlines the app's intended scope and anticipated limitations:

Scope:

- **Calendar View**: Consider different display options like month, week, and agenda views to cater to diverse preferences.
- **Event Management**: You can add information such as name, time, date, location, description, and contact information. Making editing and deletion quick and easy.
- **Account Creation**: By filling out the special form, new users can register and provide information such as name, email address, phone number, username and password.
- **Personal Information**: allows priests to access and change their personal information through their account, including changing their password.

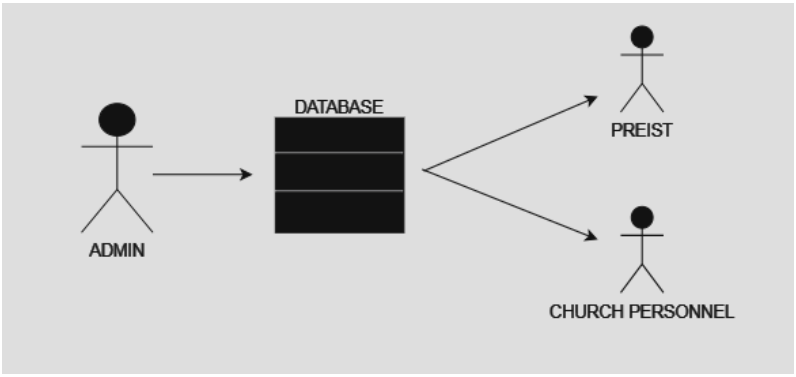
Limitations:

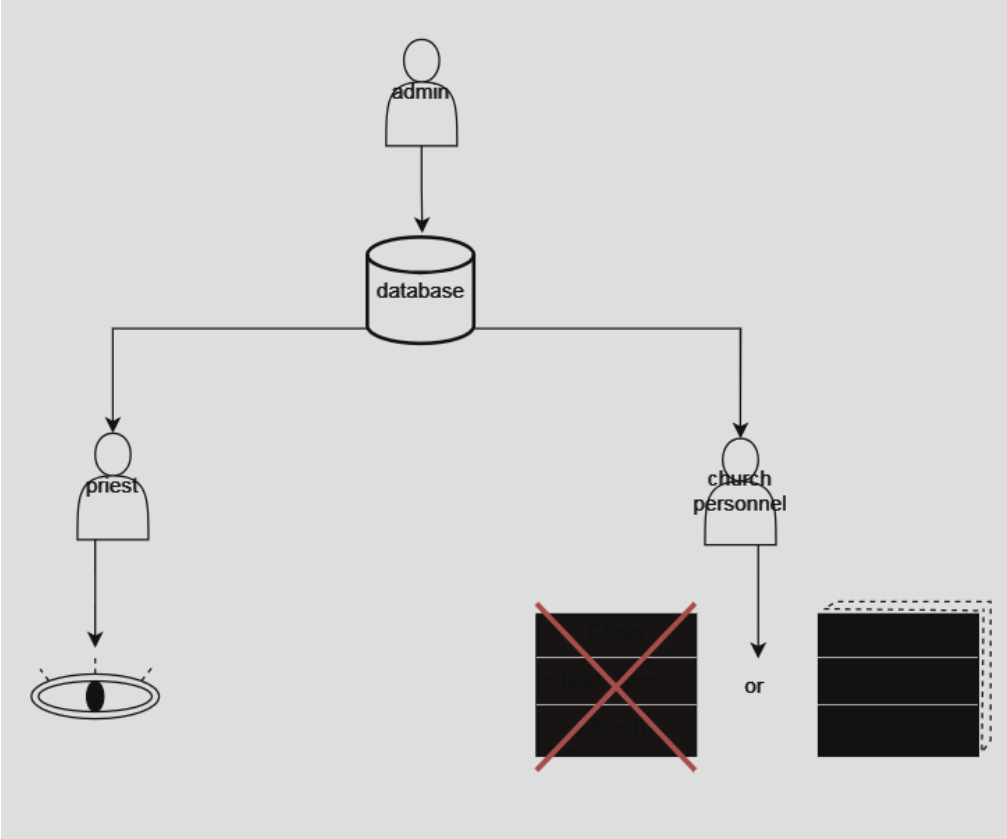
- **Varying Skill Levels**: Priests may have diverse levels of comfort and experience with technology. Some might be less familiar with digital interfaces, creating potential barriers to adoption.
- **Learning Curve**: A certain amount of adjustment and learning may be necessary despite user-friendly interfaces. It takes time for users to become accustomed to the features and navigation.
- **Accessibility**: It's critical to prioritize a variety of user needs, including accessibility, but it's also critical to recognize that developers may not have the necessary skills to integrate sophisticated accessibility features within the original project scope. Future versions can aim to incorporate advanced accessibility features after further research and development.

- **Developer Capabilities**: The current version reflects the capabilities of the existing development team. Looking for more experience may be necessary to implement more complex features.

CHAPTER 2

2.1 Database System Architecture




admin
database
priest
church personnel
or

2.1 Database Modeling

Business Rule

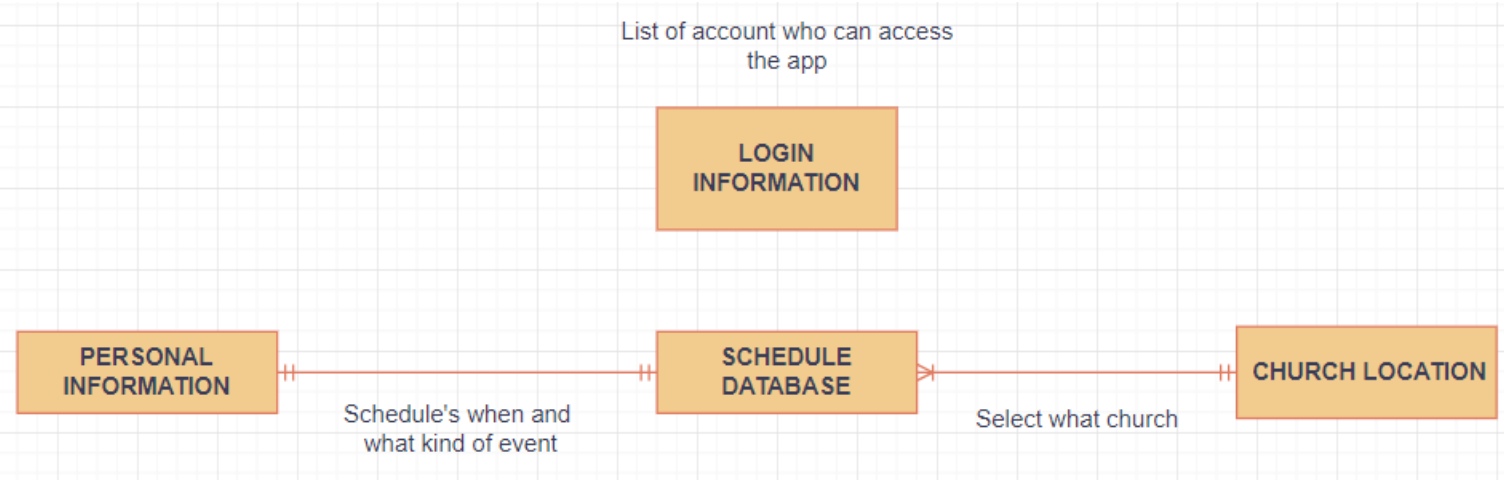
- **Login Information Database:**
  - Each user must have a unique User ID for identification and authentication.
  - User ID, password, email, and contact number,First Name,Last Name are mandatory fields for account creation.
  - Passwords must be secure.
  - Only authorized users can access the system based on their assigned roles.
- **Personal Information Database:**
  - Each individual must have a unique Person ID.
  - Person ID, First Name, Last Name, contact number, age, barangay, city/municipality, and province are mandatory fields.
  - At least one record in the Personal Information Database is required before scheduling an event for that individual.
- **Schedule Database:**
  - Each event must have a unique Schedule ID.
  - Schedule ID, PersonSchedID, ChurchSchedID, Event Date, Church Event, Schedule Time, and Day/Night are mandatory fields.
  - After scheduling an event for an individual a corresponding record must be created in the Schedule Database.
- **Church Location Database:**
  - Each church must have a unique Church ID.

- Church ID, Church Name, Barangay, City/Municipality, Province, and Street are mandatory fields.
- Selecting a church is mandatory when scheduling an event for an individual.

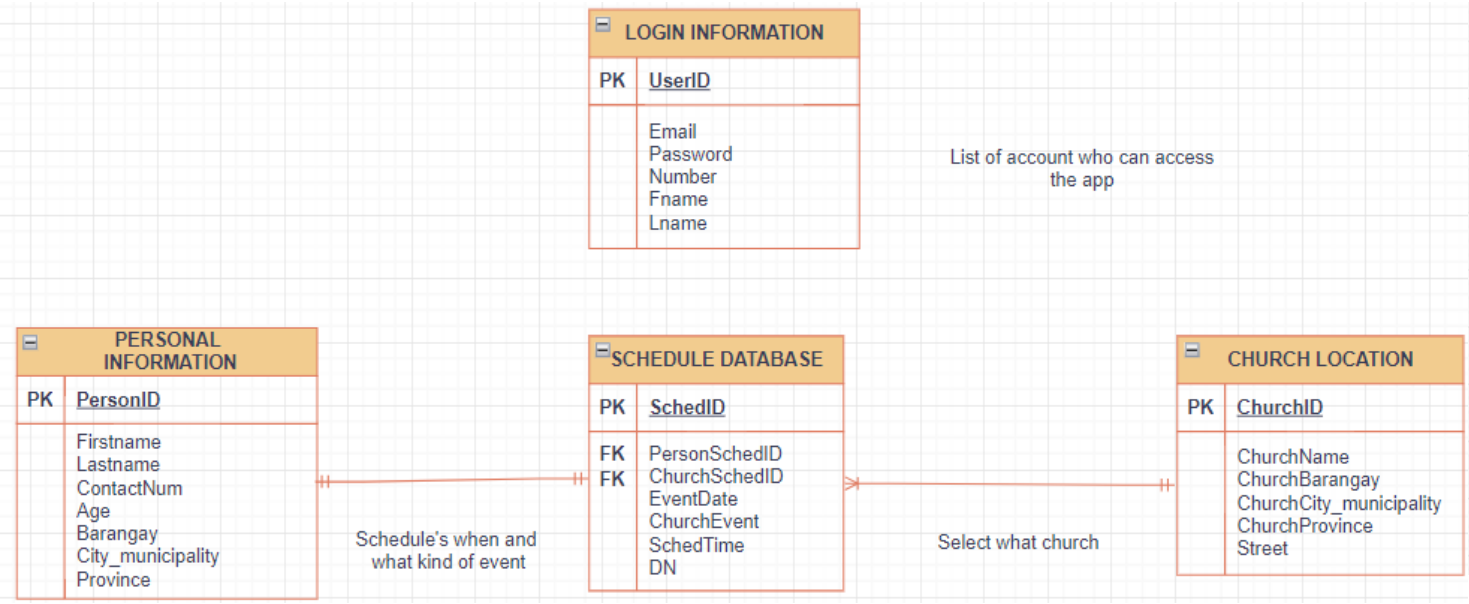
❖ **Integration and Data Flow:**

- The Login Information, Personal Information, Schedule, and Church Databases must operate collaboratively for a seamless user experience.
- Data must be consistent and accurate across all databases.
- Access to data must be controlled based on user roles.
- Information in different databases must be linked using appropriate foreign keys.
- Changes to data in one database must be reflected in related databases to maintain consistency.
- Regular backups of the database must be performed to ensure data recovery in case of system failure.

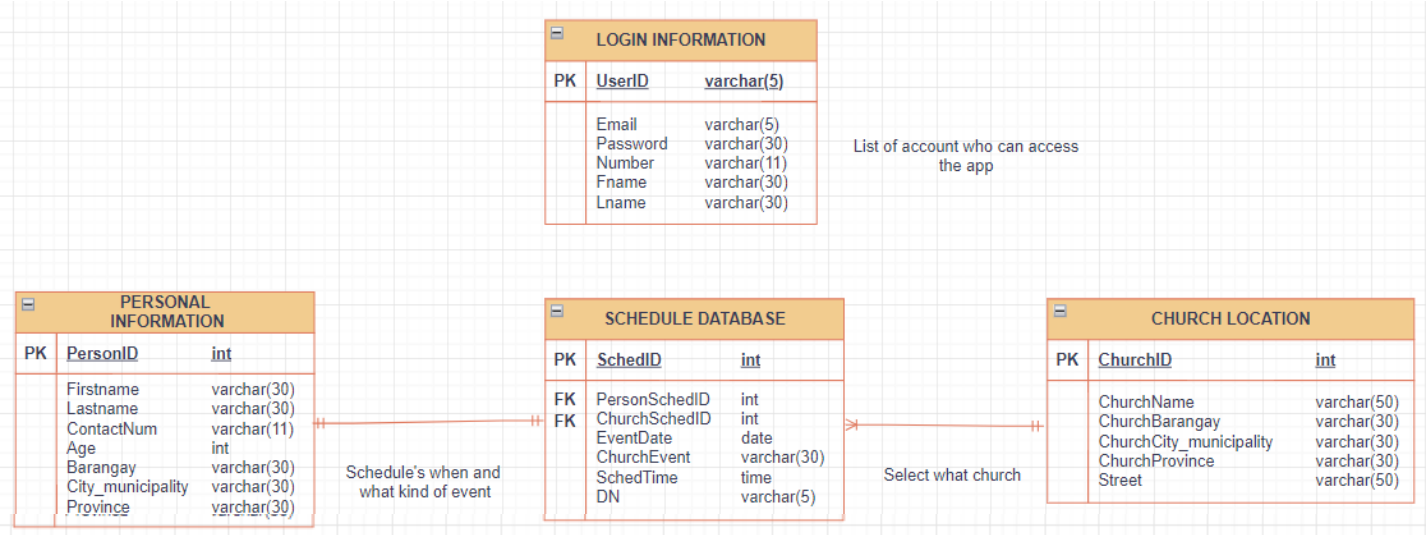
Conceptual Design



Logical Design

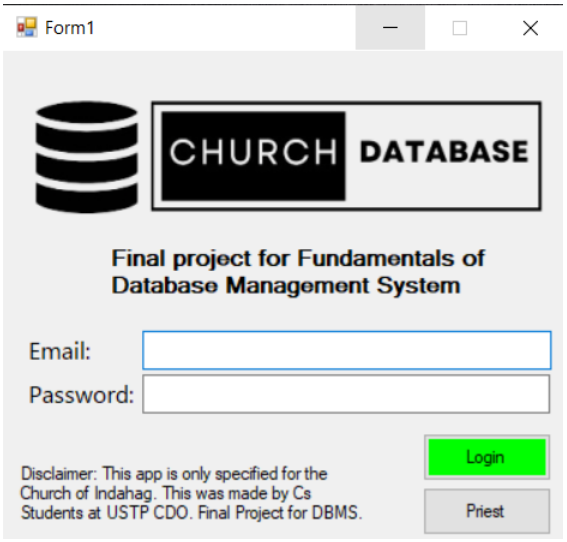


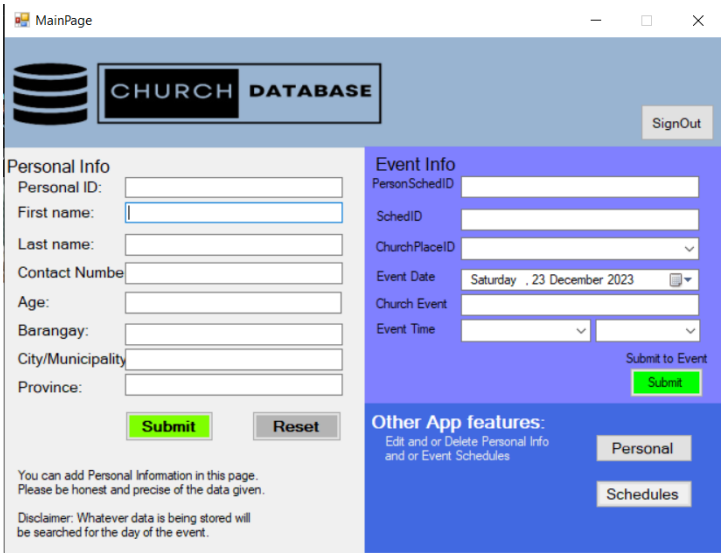
Physical Design

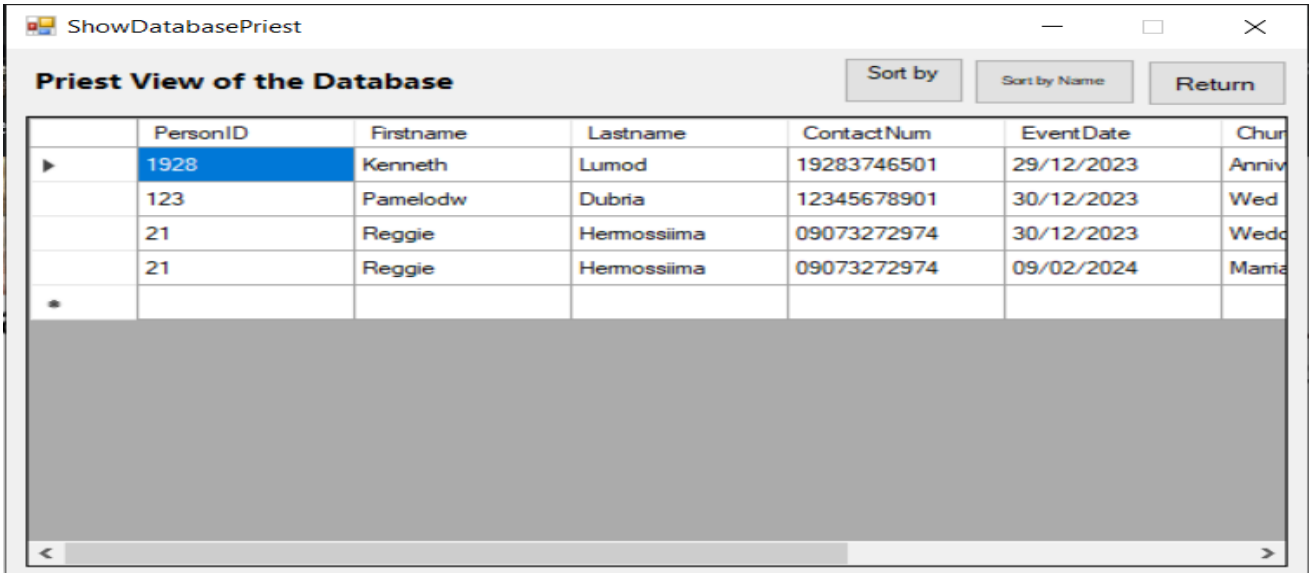


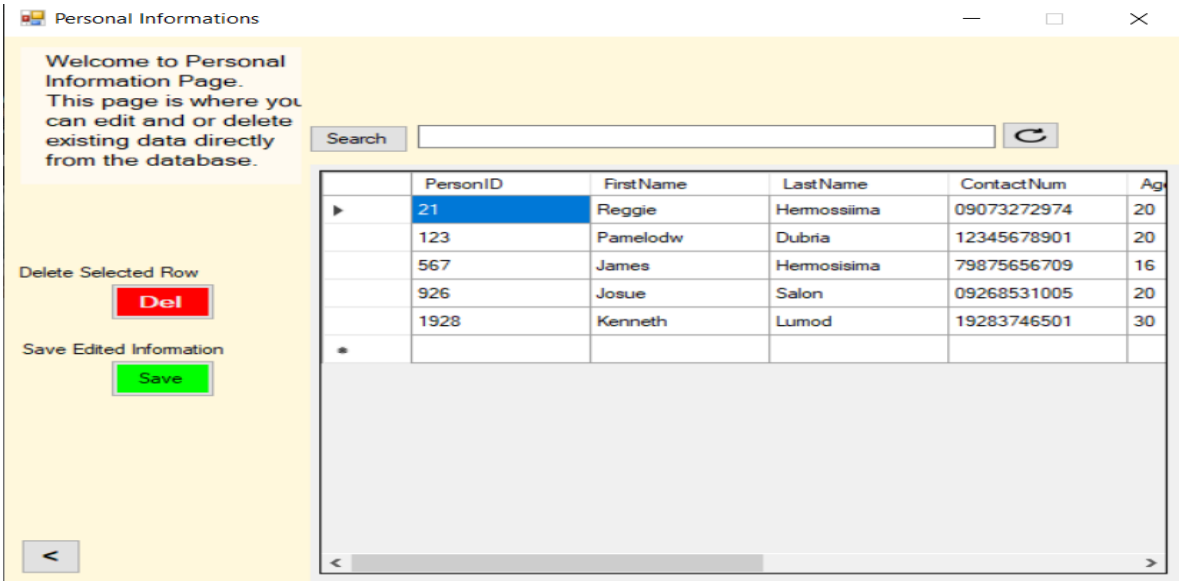
CHAPTER 3

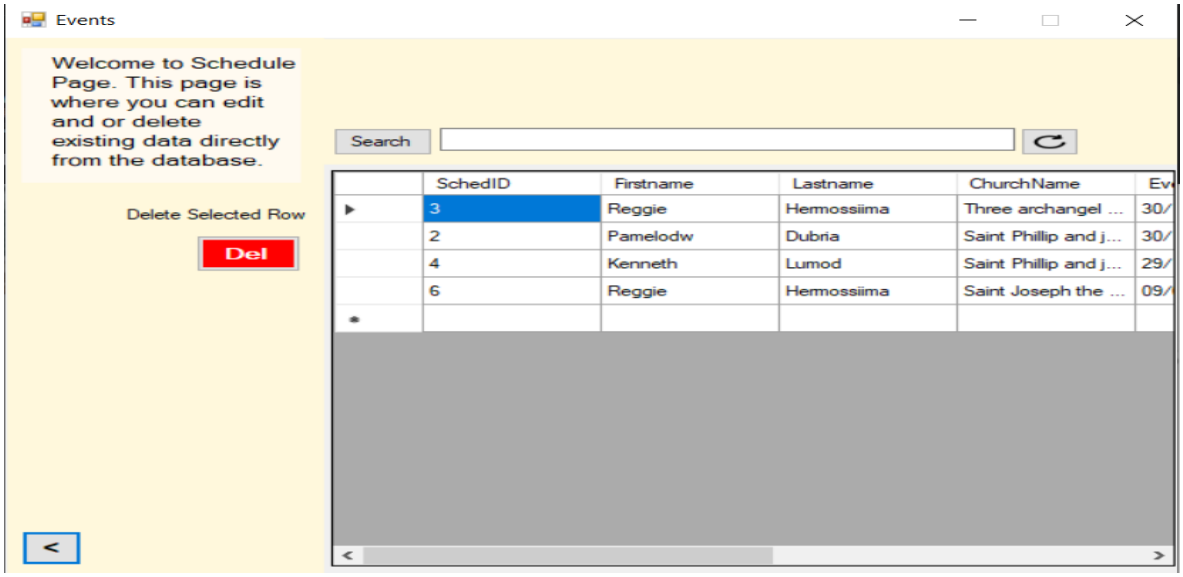
3.1 UI Design and Features

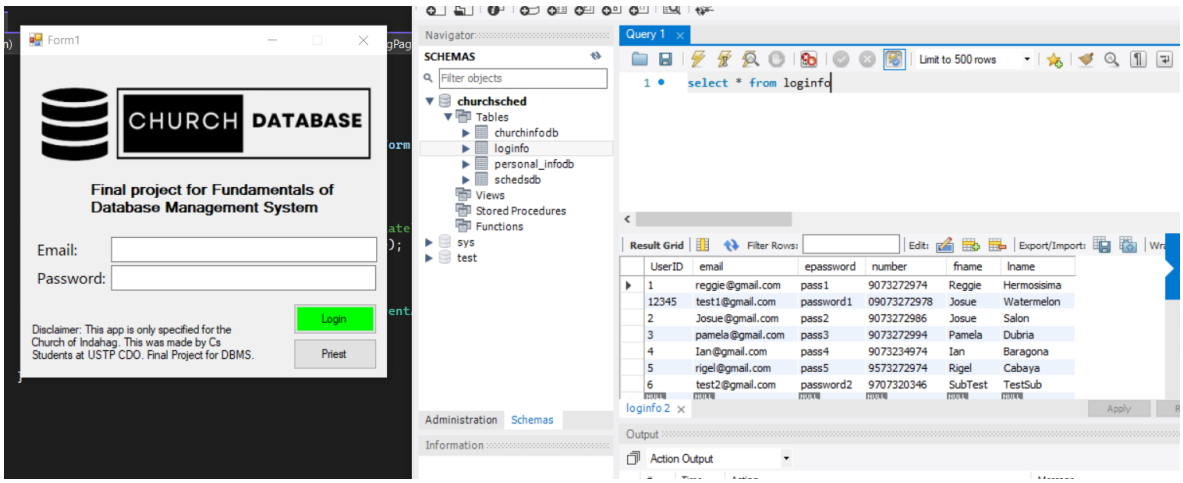


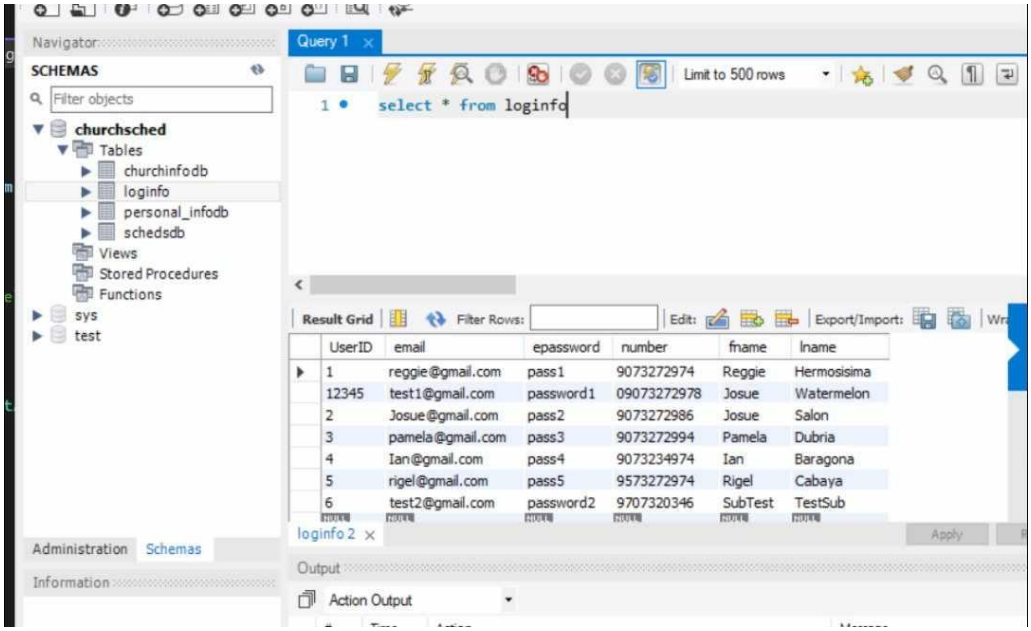


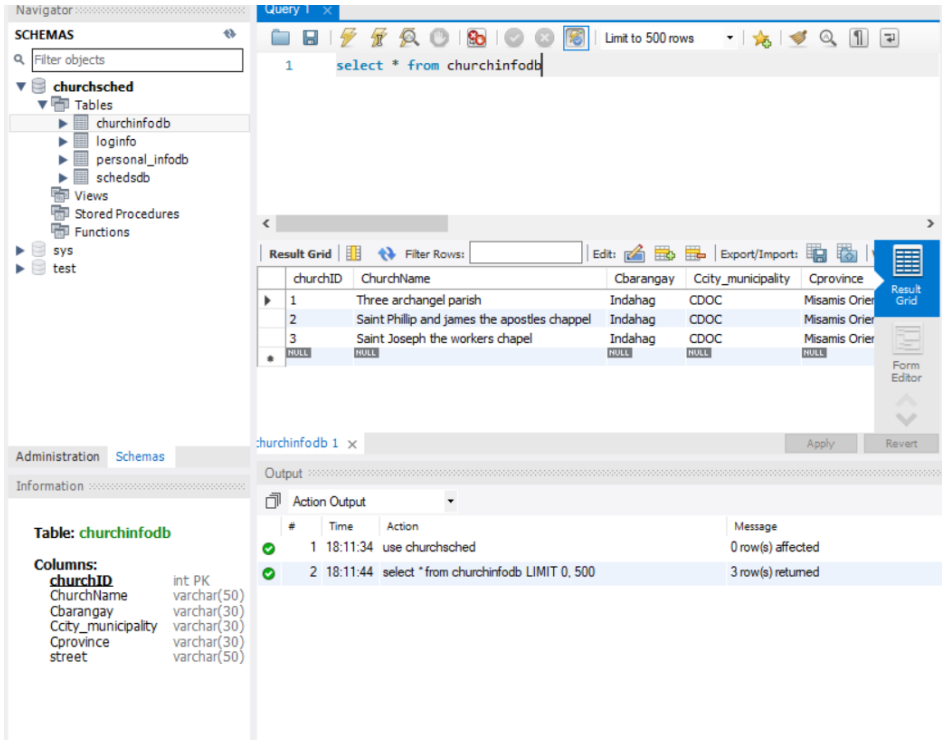


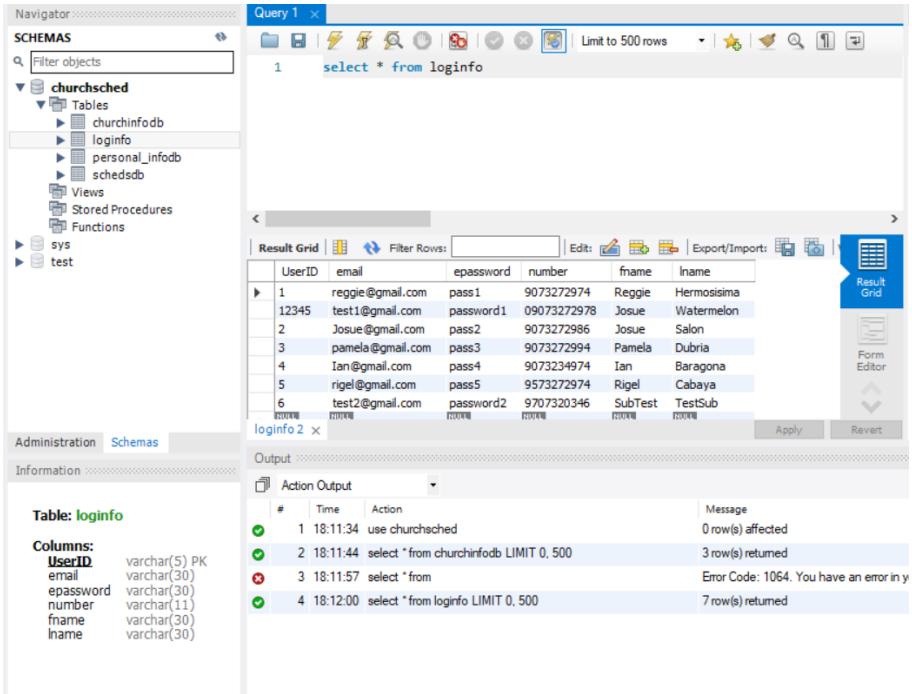

Personal Informations
Welcome to Personal Information Page. This page is where you can edit and or delete existing data directly from the database.
Search
PersonID
FirstName
LastName
ContactNum
21
Reggie
Hermossiima
09073272974
20
123
Pamelodw
Dubria
12345678901
20
567
James
Hermosisima
79875656709
16
926
Josue
Salon
09268531005
20
1928
Kenneth
Lumod
19283746501
30
Delete Selected Row
Del
Save Edited Information
Save
<

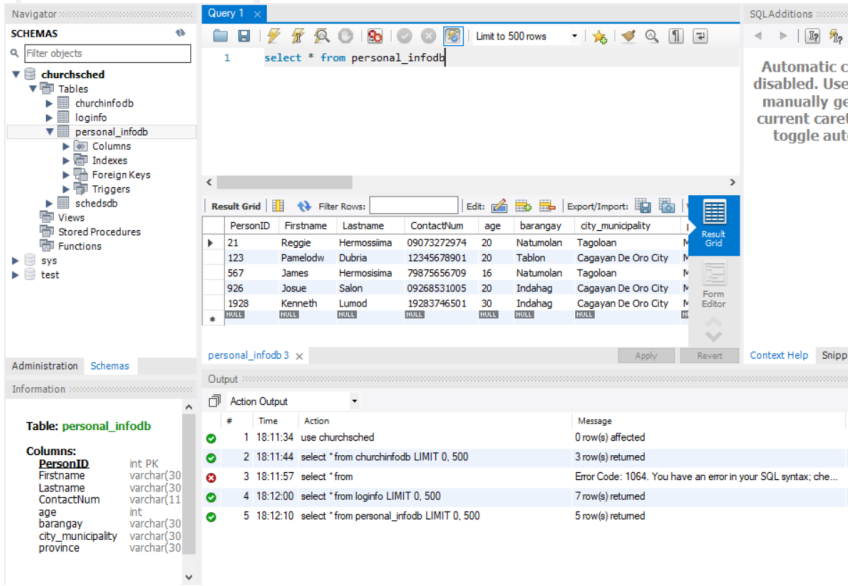

Events
Welcome to Schedule Page. This page is where you can edit and or delete existing data directly from the database.
Search
SchedID
Firstname
Lastname
ChurchName
3
Reggie
Hermossiima
Three archangel ...
2
Pamelodw
Dubria
Saint Phillip and j...
4
Kenneth
Lumod
Saint Phillip and j...
6
Reggie
Hermossiima
Saint Joseph the ...
Delete Selected Row
Del
<

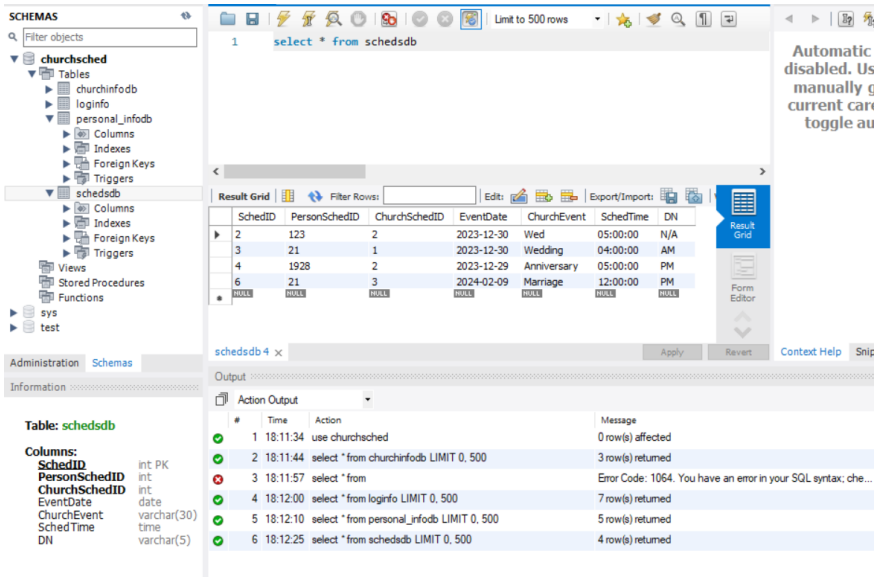

Form1
CHURCH DATABASE
Final project for Fundamentals of Database Management System
Email:
Password:
Disclaimer: This app is only specified for the Church of Indahag. This was made by Cs Students at USTP CDO. Final Project for DBMS.
Login
Priest
Navigator
SCHEMAS
churchsched
Tables
churchinfodb
loginfo
personal_infodb
schedsdb
Views
Stored Procedures
Functions
sys
test
Query 1
select * from loginfo
Result Grid
UserID
email
epassword
number
fname
lname
1
reggie@gmail.com
pass1
9073272974
Reggie
Hermosisima
12345
test1@gmail.com
password1
09073272978
Josue
Watermelon
2
Josue@gmail.com
pass2
9073272986
Josue
Salon
3
pamela@gmail.com
pass3
9073272994
Pamela
Dubria
4
Ian@gmail.com
pass4
9073234974
Ian
Baragona
5
rigel@gmail.com
pass5
9573272974
Rigel
Cabaya
6
test2@gmail.com
password2
9707320346
SubTest
TestSub
loginfo 2
Administration
Schemas
Information
Output
Action Output


Navigator
SCHEMAS
Filter objects
churchsched
Tables
churchinfodb
loginfo
personal_infodb
schedsdb
Views
Stored Procedures
Functions
sys
test
Administration
Schemas
Information
Query 1
Limit to 500 rows
1 select * from loginfo
Result Grid
Filter Rows:
Edit:
Export/Import:
UserID email epassword number fname lname
1 reggie@gmail.com pass1 9073272974 Reggie Hermosisima
12345 test1@gmail.com password1 09073272978 Josue Watermelon
2 Josue@gmail.com pass2 9073272986 Josue Salon
3 pamela@gmail.com pass3 9073272994 Pamela Dubria
4 Ian@gmail.com pass4 9073234974 Ian Baragona
5 rigel@gmail.com pass5 9573272974 Rigel Cabaya
6 test2@gmail.com password2 9707320346 SubTest TestSub
loginfo 2
Apply
Output
Action Output


Navigator
SCHEMAS
Filter objects
churchsched
Tables
churchinfodb
loginfo
personal_infodb
schedsdb
Views
Stored Procedures
Functions
sys
test
Administration
Schemas
Information
Table: churchinfodb
Columns:
churchID int PK
ChurchName varchar(50)
Cbarangay varchar(30)
Ccity_municipality varchar(30)
Cprovince varchar(30)
street varchar(50)
Query 1
Limit to 500 rows
1 select * from churchinfodb
Result Grid
Filter Rows:
Edit:
Export/Import:
churchID ChurchName Cbarangay Ccity_municipality Cprovince
1 Three archangel parish Indahag CDOC Misamis Orie
2 Saint Phillip and james the apostles chappel Indahag CDOC Misamis Orie
3 Saint Joseph the workers chapel Indahag CDOC Misamis Orie
Result Grid
Form Editor
churchinfodb 1
Apply
Revert
Output
Action Output
Time Action Message
1 18:11:34 use churchsched 0 row(s) affected
2 18:11:44 select * from churchinfodb LIMIT 0, 500 3 row(s) returned


Navigator
SCHEMAS
Filter objects
churchsched
Tables
churchinfodb
loginfo
personal_infodb
schedsdb
Views
Stored Procedures
Functions
sys
test
Administration
Schemas
Information
Table: loginfo
Columns:
UserID varchar(5) PK
email varchar(30)
epassword varchar(30)
number varchar(11)
fname varchar(30)
lname varchar(30)
Query 1
Limit to 500 rows
1 select * from loginfo
Result Grid
Filter Rows:
Edit:
Export/Import:
UserID email epassword number fname lname
1 reggie@gmail.com pass1 9073272974 Reggie Hermosisima
12345 test1@gmail.com password1 09073272978 Josue Watermelon
2 Josue@gmail.com pass2 9073272986 Josue Salon
3 pamela@gmail.com pass3 9073272994 Pamela Dubria
4 Ian@gmail.com pass4 9073234974 Ian Baragona
5 rigel@gmail.com pass5 9573272974 Rigel Cabaya
6 test2@gmail.com password2 9707320346 SubTest TestSub
Result Grid
Form Editor
loginfo 2
Apply
Revert
Output
Action Output
Time Action Message
1 18:11:34 use churchsched 0 row(s) affected
2 18:11:44 select * from churchinfodb LIMIT 0, 500 3 row(s) returned
3 18:11:57 select * from Error Code: 1064. You have an error in y
4 18:12:00 select * from loginfo LIMIT 0, 500 7 row(s) returned


Navigator
SCHEMAS
Filter objects
churchsched
Tables
churchinfodb
loginfo
personal_infodb
Columns
Indexes
Foreign Keys
Triggers
schedsdb
Views
Stored Procedures
Functions
sys
test
Administration
Schemas
Information
Table: personal_infodb
Columns:
PersonID int PK
Firstname varchar(30
Lastname varchar(30
ContactNum varchar(11
age int
barangay varchar(30
city_municipality varchar(30
province varchar(30
Query 1
Limit to 500 rows
1 select * from personal_infodb
Result Grid
Filter Rows:
Edit:
Export/Import:
PersonID Firstname Lastname ContactNum age barangay city_municipality
21 Reggie Hermossiima 09073272974 20 Natumolan Tagoloan
123 Pamelodw Dubria 12345678901 20 Tablon Cagayan De Oro City
567 James Hermosisima 79875656709 16 Natumolan Tagoloan
926 Josue Salon 09268531005 20 Indahag Cagayan De Oro City
1928 Kenneth Lumod 19283746501 30 Indahag Cagayan De Oro City
Result Grid
Form Editor
personal_infodb 3
Apply
Revert
SQLAdditions
Automatic c
disabled. Use
manually ge
current carel
toggle aut
Context Help
Snipp
Output
Action Output
Time Action Message
1 18:11:34 use churchsched 0 row(s) affected
2 18:11:44 select * from churchinfodb LIMIT 0, 500 3 row(s) returned
3 18:11:57 select * from Error Code: 1064. You have an error in your SQL syntax; che...
4 18:12:00 select * from loginfo LIMIT 0, 500 7 row(s) returned
5 18:12:10 select * from personal_infodb LIMIT 0, 500 5 row(s) returned


SCHEMAS
Filter objects
churchsched
Tables
churchinfodb
loginfo
personal_infodb
Columns
Indexes
Foreign Keys
Triggers
schedsdb
Columns
Indexes
Foreign Keys
Triggers
Views
Stored Procedures
Functions
sys
test
Administration
Schemas
Information
Table: schedsdb
Columns:
SchedID int PK
PersonSchedID int
ChurchSchedID int
EventDate date
ChurchEvent varchar(30)
SchedTime time
DN varchar(5)
Limit to 500 rows
1 select * from schedsdb
Result Grid
Filter Rows:
Edit:
Export/Import:
SchedID PersonSchedID ChurchSchedID EventDate ChurchEvent SchedTime DN
2 123 2 2023-12-30 Wed 05:00:00 N/A
3 21 1 2023-12-30 Wedding 04:00:00 AM
4 1928 2 2023-12-29 Anniversary 05:00:00 PM
6 21 3 2024-02-09 Marriage 12:00:00 PM
Result Grid
Form Editor
schedsdb 4
Apply
Revert
Context Help
Output
Action Output
Time Action Message
1 18:11:34 use churchsched 0 row(s) affected
2 18:11:44 select * from churchinfodb LIMIT 0, 500 3 row(s) returned
3 18:11:57 select * from Error Code: 1064. You have an error in your SQL syntax; che...
4 18:12:00 select * from loginfo LIMIT 0, 500 7 row(s) returned
5 18:12:10 select * from personal_infodb LIMIT 0, 500 5 row(s) returned
6 18:12:25 select * from schedsdb LIMIT 0, 500 4 row(s) returned

3.2 Authorization Rule:

Authorization rules are to control access and actions within the developed desktop application for event scheduling at Indahag Parish.

Below are some authorization rules to consider:

User and Admin Access Level:

- **Church personnel**(To be able to view, edit, add and delete data from the database)
- **Priest** (limited access: to be able to view the scheduled data)
- **Admin**(Developer): To be able to maintain and provide support for the said application.

Access Restrictions:

- If the user is not a part of the church organization, therefore they aren't authorized to see and edit the said database.
- The application is STRICTLY for the Priest and his Personnel from the church.

Administrative Support and Troubleshooting:

- The admins will be the backend of this application incase problems will occur and or arise during the usage.

By implementing these comprehensive authorization rules, the application maintains a structured access framework, safeguarding data integrity, and ensuring efficient event scheduling management within the context of the Indahag Parish.

3.3 Database Maintenance Schedule

Maintenance occurs weekly on Sundays at 6 PM, totaling four sessions each month. This proactive approach aims to enhance system efficiency and provide a seamless user experience.

Activities:
Weekly sessions cover the following:

- **Software Updates:** Ensuring the application operates on the latest version involves incorporating bug fixes and feature improvements. This process is ongoing as the app continually strives for optimal enhancements to meet user satisfaction.
- **Database Optimization:** Enhancing database performance to maintain efficient data retrieval and storage.
- **Backup Checks:** Verifying the integrity of data backups and ensuring swift recovery procedures in case of unexpected events.
-
- **User Access Review:** Reviewing and updating user roles and permissions to align with current requirements.
- **Performance Monitoring:** This application utilizes 67.2 megabytes of storage, and during testing, it utilizes 13.1 megabytes per second of RAM. The database consumption also depends on the size of the database needed to be created and the amount of individuals to be inserted as well as events.
- **User Feedback Analysis:** Reviewing user feedback to identify areas of improvement and implementing necessary adjustments.

Communication:
Timely notifications keep users informed of the maintenance schedule, promoting transparent communication.

Flexibility:
The researchers remain adaptable for urgent updates or critical tasks, ensuring swift issue resolution without compromising app reliability.

This schedule prioritizes a consistently reliable scheduling app for efficient event management at Indahag Parish.

3.4 Database Recovery Policy

Scope and Purpose

The database recovery policy of the Indahag Parish Event Scheduling Application provides clear instructions for quick and efficient recovery in the event of data loss, corruption, or system failure, protecting all application components and data. This policy outlines safe backup procedures, establishes acceptable periods for data loss and restoration, and designates roles and duties for communication, backup, and recovery. For the parish, continuous testing and policy changes guarantee optimal security of information and smooth event scheduling continuity.

Recovery Objectives

Recovery Point Objective (RPO): The maximum acceptable amount of data loss is 1 hour.

Recovery Time Objective (RTO): The maximum acceptable time to restore the database to operational state is 4 hours.

Backup and Recovery Procedures

- **Backup Procedures:**
    1. Full backups will be performed weekly during scheduled maintenance on Sundays at 6 PM.
    2. Differential backups will be performed daily at 12 AM.
    3. Backups will be stored both on-site and in a secure cloud storage location.
    4. Backup verification and testing will be conducted monthly during maintenance sessions.
- **Recovery Procedures:**
    1. Identify the nature of the data loss or corruption.
    2. Determine the most recent available backup.
    3. Initiate the recovery process using appropriate tools and methods.
    4. Restore data from the backup to a designated location.
    5. Verify the integrity of the restored data.
    6. Bring the application back online and ensure functionality.

Roles and Responsibilities

Database Administrator (Researchers):

Perform backups, initiate recovery, monitor backup status, maintain recovery tools, and communicate with stakeholders.

Church Personnel:

Input and manage event data (creation, editing, deletion), adhere to authorization rules and access restrictions, and promptly report any application issues or concerns to the priest or database administrators

Priest:

Be notified of any significant data loss or recovery events.

Communication and recovery protocol

Should the application encounter any issues, the parish must promptly inform the priest and pertinent parish staff, clearly outlining the problem's scope and nature. Established communication protocols will trigger stakeholder notifications in case of data loss or recovery events, ensuring both the priest and staff are kept informed. Subsequently, the designated personnel will execute established recovery procedures, maintaining frequent communication with the parish to provide updates on the issue's status until the application regains its normal functionality.

Data Retention

Retention Schedule:

- Full backups will be retained for 3 months on-site and indefinitely in the secure cloud storage location.
- Differential backups will be retained for 1 week on-site and for 1 month in the secure cloud storage location.

Secure Disposal:

- Outdated backups on-site will be subjected to comprehensive removal procedures conforming to recognized standards.
- Outdated backups in the cloud storage will be deleted using the cloud provider's secure deletion tools and processes.

3.4 Other Supporting Materials

C# Windows Form Application or .NET framework + MySql

https://www.c-sharpcorner.com/article/connect-mysql-with-c-sharp-net-framework-in-visual-studio-2019/#:~:text=Moreover%2C%20to%20connect%20using%20MySQL,it%20through%20the%20following%20code.&text=The%20above%20code%20can%20be,it%20in%20our%20next%20article.

https://www.youtube.com/watch?v=fUK94jOFwBc

https://www.youtube.com/watch?v=OPDPI5exPp8

https://www.youtube.com/watch?v=t9ivUosw_iI&list=PLih2KERbY1HHOOJ2C6FOrVXIwg4AZ-hk1

Home
Questions
Tags
Users
Companies
COLLECTIVES
Explore Collectives
LABS
Discussions
TEAMS

C# MySQL Search query

Asked 7 years, 11 months ago Modified 7 years, 11 months ago Viewed 3k times

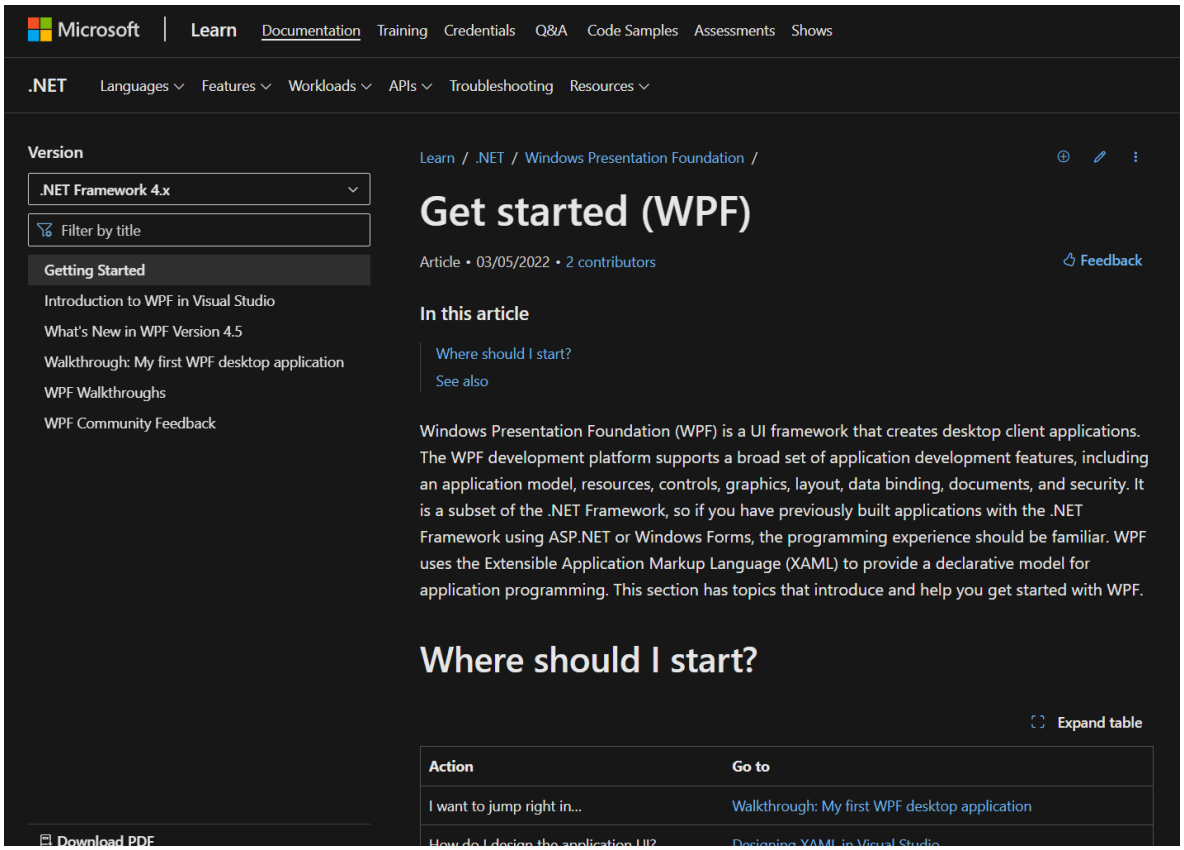
1

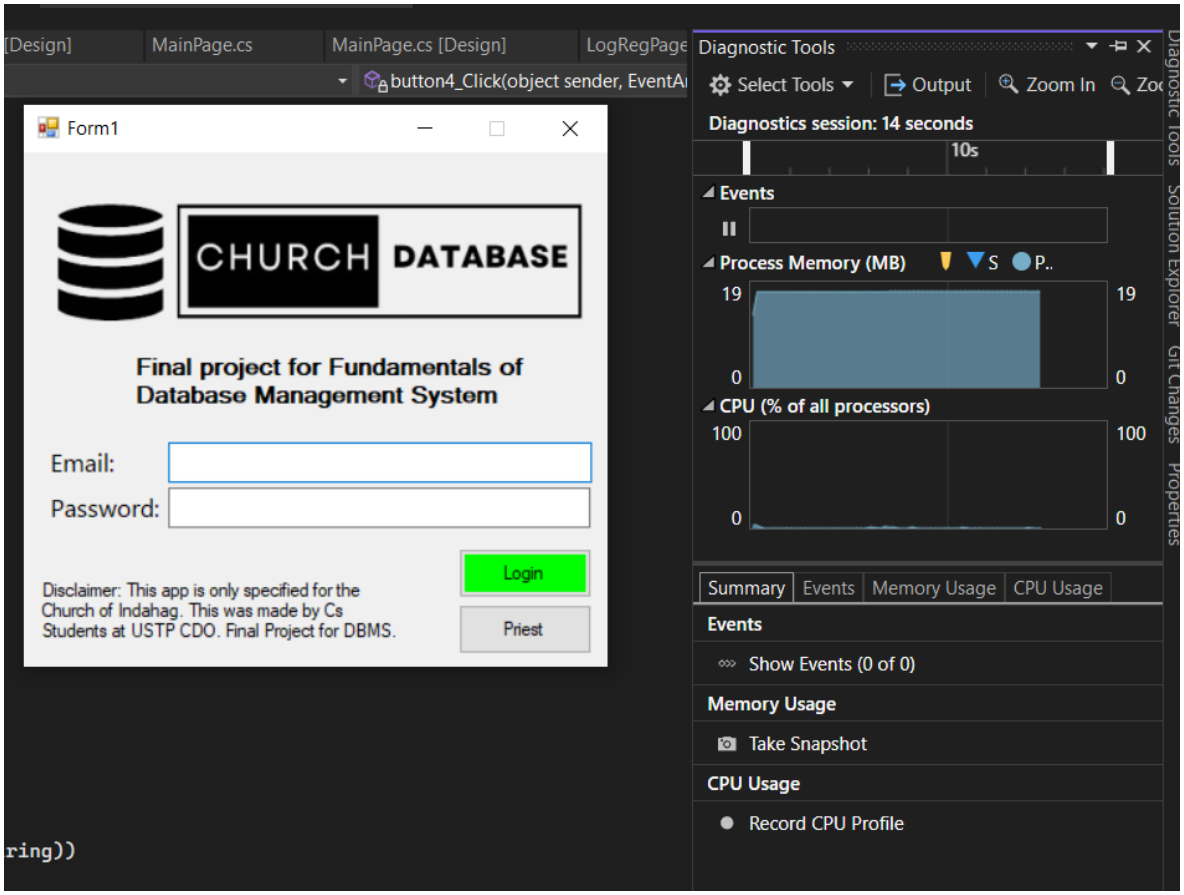
This code has a function to search for the patient's room assignment:

```
else if(radioButton1.Checked == true)
{
    DataTable table = new DataTable();
    cmd = new MySqlCommand("Select * from patientinfo where LastName and FirstName = '" +
    reader = cmd.ExecuteReader();
    MySqlDataReader dr = cmd.ExecuteReader();
    if(dr.Read())
    {
        label2.Text = dr.GetString("LastName") + "," + dr.GetString("FirstName");
        label6.Text = dr.GetString("Room");
        if(label6.Text == "506")
        {
            label3.Text = "Payward Building";
        }
        else if(label6.Text == "507")
        {
            label3.Text = "Payward Building";
        }
    }
    else
    {
        MessageBox.Show("No Data! Please Try Again", "Warning", MessageBoxButtons.OK);
        con.Close();
    }
```

I am having difficulties to search for the patient name, which is stored as two different fields in the database, `FirstName` and `LastName`. I want only to input on the combination of the first name and last name.

c# mysql


Microsoft | Learn Documentation Training Credentials Q&A Code Samples Assessments Shows
.NET Languages Features Workloads APIs Troubleshooting Resources
Version
.NET Framework 4.x
Filter by title
Getting Started
Introduction to WPF in Visual Studio
What's New in WPF Version 4.5
Walkthrough: My first WPF desktop application
WPF Walkthroughs
WPF Community Feedback
Download PDF
Learn / .NET / Windows Presentation Foundation /
Get started (WPF)
Article • 03/05/2022 • 2 contributors
Feedback
In this article
Where should I start?
See also
Windows Presentation Foundation (WPF) is a UI framework that creates desktop client applications. The WPF development platform supports a broad set of application development features, including an application model, resources, controls, graphics, layout, data binding, documents, and security. It is a subset of the .NET Framework, so if you have previously built applications with the .NET Framework using ASP.NET or Windows Forms, the programming experience should be familiar. WPF uses the Extensible Application Markup Language (XAML) to provide a declarative model for application programming. This section has topics that introduce and help you get started with WPF.
Where should I start?
Expand table
Action
Go to
I want to jump right in...
Walkthrough: My first WPF desktop application


[Design]
MainPage.cs
MainPage.cs [Design]
LogRegPage
button4_Click(object sender, EventA
Form1
CHURCH DATABASE
Final project for Fundamentals of Database Management System
Email:
Password:
Login
Disclaimer: This app is only specified for the Church of Indahag. This was made by Cs Students at USTP CDO. Final Project for DBMS.
Priest
ring))
Diagnostic Tools
Select Tools
Output
Zoom In
Diagnostics session: 14 seconds
10s
Events
Process Memory (MB)
19
0
CPU (% of all processors)
100
0
Summary
Events
Memory Usage
CPU Usage
Show Events (0 of 0)
Take Snapshot
Record CPU Profile

Member's Role:

- Database Administrator(Cabaya, Rigel Ray)
- Database Designer/Modeller(Salon, Josue)
- System Analyst(Dubria, Pamela)
- App Developer(Hermosisima, Reggie & Baragona, Ian Rester)