Project Overview and Design – Final Project

Non-Profit Club Management Software

Final Project Notes: The logging to the event viewer has been removed. It can cause issues if the event type has not been logged before using administer mode. When more is done with the software in the future, a better way of logging errors will be implemented.

The ability to add people to events has been taken from the final design because of time constraints and we wanted to make sure the base program was perfect. The data table will remain for future upgrades. The payments part of the application can track who has paid for what event.

The database needed several adjustments to better the needs of the application in sprint 3. The older database needs to be deleted and then run the creation script for the new database.

The test data has been removed for the release version of the project.

New documentation has been added with a user manual document.

The Program now requires a login to use the application. The Member ID and password are used to access the program. The default admin account will be part of the final project. The Administrator's account cannot have access privileges change, only the password.

Login Information

Member ID: 0

Password: admin

Also for the theme we used the ExpressionDark.xaml theme that Microsoft provides for free to them all of the controls. We believe that this gives the program a more professional feel and goes well with the look of Windows 10.

Introduction

The purpose of this project is to provide management software for a local non-profit club. This software will allow tracking of important information that is needed to run the club.

This application would be able to:

- Track member information
- Organize who is involved with which fundraising activity
- Keep track of important club information
- Keep track of payments from the members for things like:
    - Member dues
    - Payments for events like trips or other activities
    - Donations to the club
- Maintain a calendar with event dates for the club

The software will be written in C# and use either MongoDB or MYSQL as the database engines that can be stored on a web server. The type of database to be used will be decided in the initial sprint after seeing what level of complexity is needed for the data.

This application would be designed so that the information stored in the database can be used for future added features like:

- A mobile application to get information out to the members
- A web version of the application for remote access

The database this software interfaces with will be able to be used for future applications for the membership. This could include a mobile application to send information to the members and a web interface to allow remote access to update information.

Target Audience

The leadership of the non-profit club. This includes the officers and the board of directors that handle the operations of the club. This will allow them to better keep track of the membership and fundraising activities.

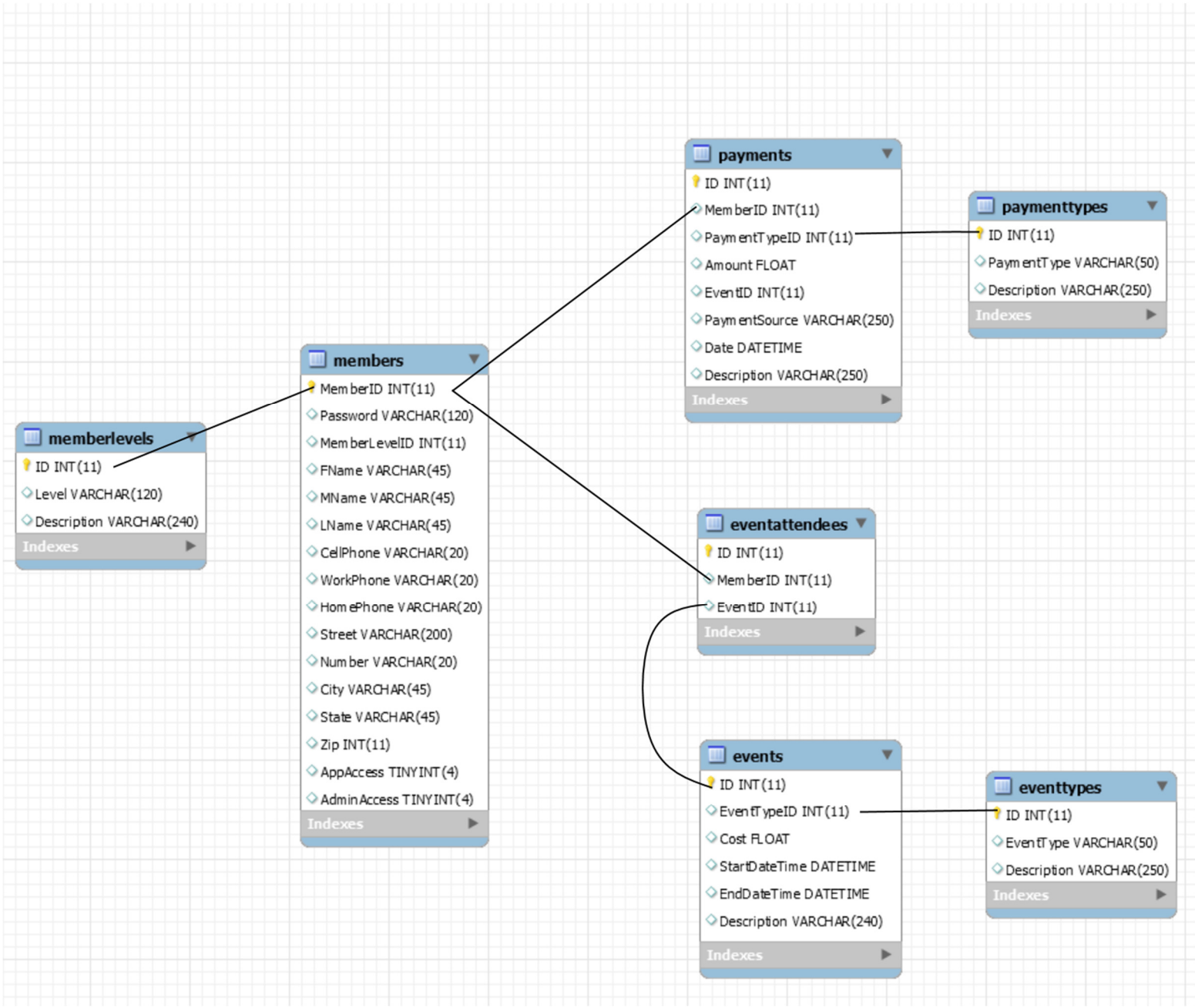
Deliverables

The front end program and the database that it interacts with to store the club information. The front end will be a C# application that can be installed on a Windows PC.

Phases / Details of Tasks

- Database Engine and development environment for the application
    - Database: MYSQL
    - Development environment: Visual Studio
        - C# with a WPF Front end
- Design the Database Layout and what fields it will have
- Design connection class
    - Create configuration that will point to where the database is hosted
        - Hostname / IP Address
        - Username / Password
        - Security Configuration
    - Create functions that each interface can call to get the information that it needs
- Main GUI – Used for navigation for all of the following interfaces
    - Design the interface
    - Code controls
- Member Add/Edit GUI – Used to add new members or to edit existing member's information.
    - Design the interface
    - Code controls
- Member Search GUI – Search the member database based on specific criteria
    - Design the interface
    - Code controls
- Add/Edit Event GUI – Add a new event or edit an existing event's information
    - Design the interface
    - Code controls
- View Events GUI – View a list of events the club has scheduled
    - Design the interface
    - Code controls
- Payment GUI – Enter a payment to the club
    - Design the interface
    - Code controls
- Admin GUI – Edit information like user rights and other information like types of payments and events.
    - Design the interface
    - Code controls
- Login Interface – Ability to login to the application so only specific users can access certain features
    - Code the login logic
- Testing
    - Check for issues and ways to optimizes the program and implement them
- Deployment
    - Create deployment package and documentation

Database Diagram



Timeline

Sprint 1	
Task	**Developer(s)**
Discuss initial stage and what is needed out of the application. Create initial design documentation	Team
Design database/choose database engine/Code connection class	John Weeks
Design Main GUI	Jason Hopper
Design Member Add/Edit GUI and Member Search GUI	Robert Babol

Sprint 2	
Task	**Developer(s)**
Discuss 2nd stage and any issues that need to be addressed.	Team
Finish the Database connection class.	John Weeks
Code controls for Main GUI and start work on theming the application.	Jason Hopper
Code Controls for Member Add/Edit GUI and Member Search GUI	Robert Babol
Add GUI for Payments / View Payments / Search Payments	John Weeks
Add GUI for Events / View Events GUI / Search Events	Robert Babol

Sprint 3	
Task	**Developer(s)**
Discuss 3rd stage and any issues that need to be addressed. Finalize any features we want to add to the software and update the design documentation to reflect it.	Team
Code GUI for Events / View Events GUI / Events Search	Robert Babol
Add Administration GUI / Code Controls for Administration GUI	John Weeks
Code GUI for Payments GUI / View Payments GUI / Payments Search GUI	Jason Hopper
Add Login GUI and Code Login Interface	John Weeks
Analyze database and make any adjustments that may be need to optimize it and the application	John Weeks

Sprint 4	
Task	**Developer(s)**
Discuss final stage and any issues that need to be addressed	Team
Finalize theme / color scheme for the application / Make the data grids look better / ~~Add logging for any exceptions that are thrown: Removed due to issues with it crashing the program.~~	Team
Add the ability to change the logo	John Weeks
Test the database layer and fix any issues found in the database layer	John Weeks
Test Main GUI	John Weeks
Fix any issues found in testing of Main GUI	John Weeks
Test Member Add/Edit GUI and Member Search GUI	Jason Hopper/ Robert Babol
Fix any issues found in testing of Member Add/Edit GUI and Member Search GUI	Jason Hopper/ Robert Babol
Test Payments GUI	Robert Babol
Fix any issues found in testing of Payments GUI	Robert Babol
Test Events GUI	Jason Hopper
Fix any issues found in testing of Events GUI	Jason Hopper
Final testing of all features	Team
Create release documentation with instructions for installation and use.	Team
Prep for deployment	John Weeks

Deliverables

Sprint 1

- Initial Design Document with Database Design
- Database
- Initial Database Connection Class
- Add GUIS:
    - Main
    - Member Add/Edit GUI and Member Search GUI

Sprint 2

- Update the Design Document with full descriptions of how the application works
- Final database connection class
- Coded controls:
    - Main GUI
    - Member Add/Edit GUI and Member Search GUI
- Add GUIS:
    - Payments
    - Events

Sprint 3

- Finalize any features that need to be added.
- Coded controls:
    - Events
    - Payments
- Add GUI and code controls:
    - Administration
    - Login
- Initial build of the project

Sprint 4

- Final project:
    - Fronted application
    - Database
- Documentation