MediStore Manager

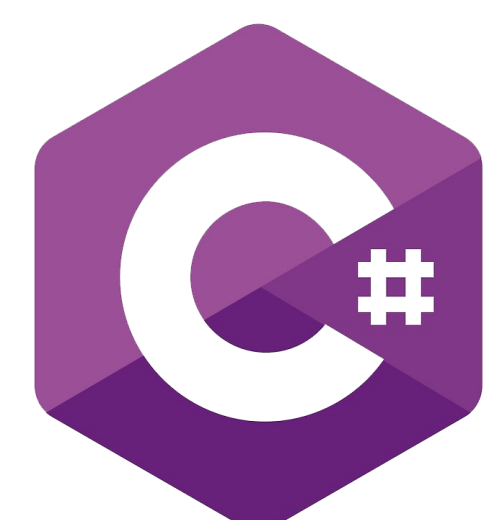Jackson Rodgers (CS)

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Problem Statement

During the fall semester in 2020, Kevin co-op'd at a local medical supply store named Accucare Home Medical Equipment. The software the store used for managing customers, inventory, and work tickets was old and was a regular source of headaches for the staff. It contained all the necessary functions but was lacking in quality-of- life features and was unintuitive to use.
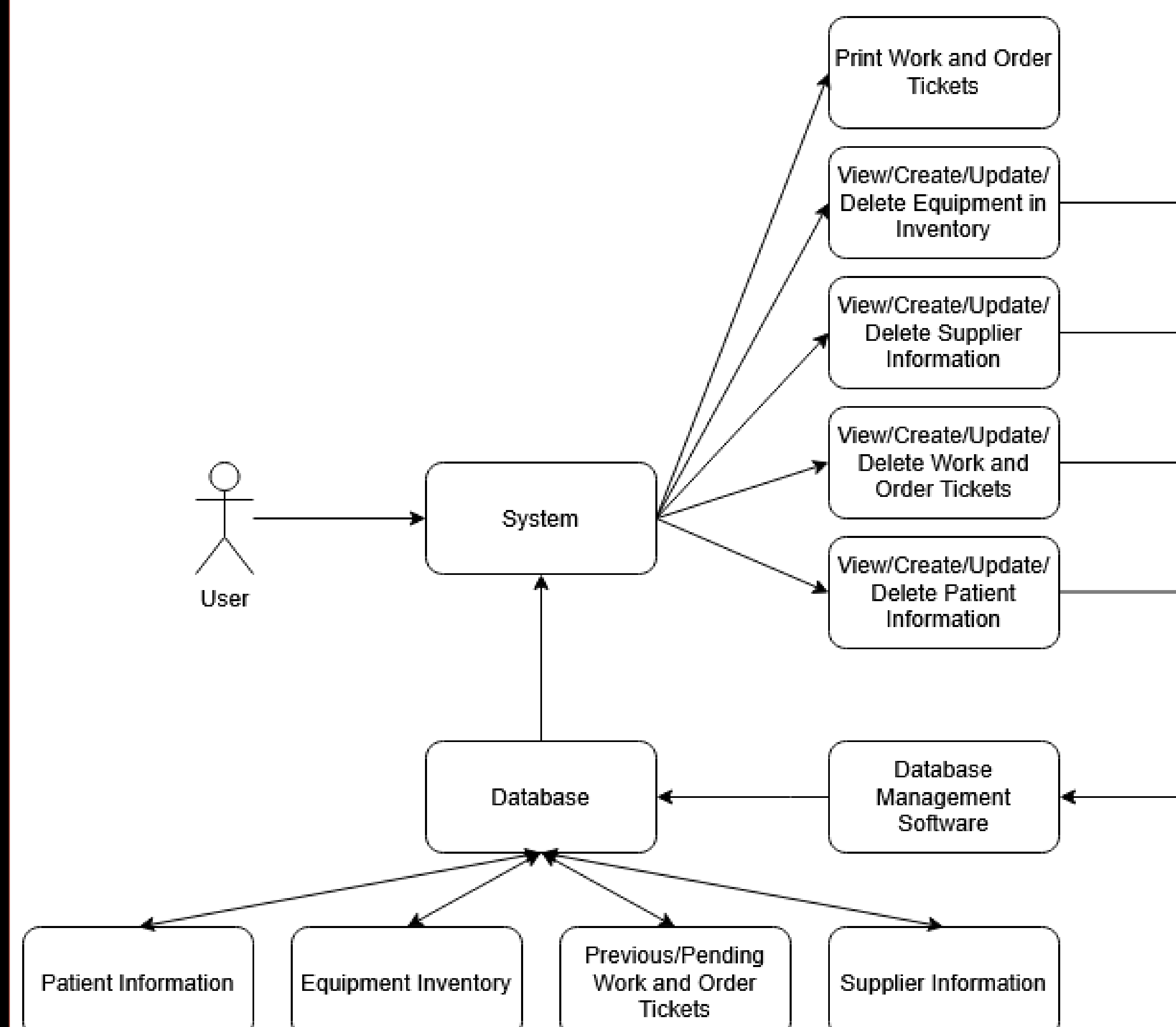
Solution

Develop a more user-friendly software that can be used to manage a medical supply store. It is an open source and free software so that it is accessible to any medical supply store that needs it.

Technologies Used

System Overview

The user interface was designed using Microsoft WPF, with the logic for the functionality being written in C#. The database is stored in MySQL and is connected to the application in the C# code. The application has different tabs for Patients, Inventory, Suppliers, and Orders. Each one allows the user to view existing data and create new or update data as needed. Work orders and supply orders can be created to keep track of store operations.

Challenges

- Learning WPF with no prior experience in designing a user interface.
- Dedicated a significant amount of time and effort to creating an efficient and robust database design.
- With little existing public data to match our needs, we used DeepSeek to help populate database with test data.

Features

- User accounts with variable levels of access.
- Connection to a locally created MySQL database.
- Search functions for stored information.
- Creation of order tickets for inventory.
- Automatic updates of inventory.
- Creation of work tickets for jobs performed by staff.
- Unit test for database functions.

Future Work

Some improvements that can still be made to the application include:
- Support for additional OS's
- Database analytics tools