

Conestoga College - SET

# BookStore's log

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SET

(PROG2111)

## Phase 1: Project Idea & Use Case

### **Lian:**

- Created github repository for final project.
- All members are invited and made sure they are allowed to access the project.

### **Matthew:**

- Helped decide on the book store management system as our project idea.
- Worked with the team to discuss why a relational database is needed for this system.
- Set up the initial project structure and framework.

### **Nick:**

- Worked with the team to brainstorm potential ideas for a scenario that requires a relational database system.
- Identified use case for our scenario of a book management system

## Phase 2: Data Modeling & ER Diagram

### **Lian:**

- I helped design and develop order entities for realistic Bookstore shops.
- I helped to identify entities, attributes and their relationship.

### **Matthew:**

- Identified the main entities like Customer, Book, Order and Publisher.
- Drew the basic structure of the ER diagram.
- Helped define the relationships between different entities.

### **Nick:**

- Analyzed the Book management system and identified a number of entities and relationships.
- Reviewed the ER Diagram and provided feedback to the team.

## Phase 3: Normalization

### **Lian:**

- I helped organize the diagram in excelsheet for 1NF, 2NF, 3NF.

### **Matthew:**

- Worked on converting the ER diagram into normalized tables.
- Helped identify which data should go into separate tables to avoid duplication
- Checked the normalization process to make sure it followed 3NF rules.

### **Nick:**

- Helped organize data tables into 1NF and identify redundant data.
- Helped identify relationships between entities and normalize to 3NF.

## Phase 4: DDL Statements

### **Lian:**

- I was responsible for writing the DDL scripts and made sure it follow 3NF diagram.

### **Matthew:**

- Reviewed the DDL scripts to make sure they were correct.
- Tested the DDL statements to see if the tables were created properly in MySQL
- Made small changes to the DDL if needed.

### **Nick:**

- Helped create data for the database.
- Used mySQL commands to help test and refine the database schema\

## Phase 5: Programmatic Access & CRUD Operations

### **Lian:**

- I was responsible for designing the UI.
- Responsible for writing the data layers for customer, book and order.
- Then fixed all the warnings and errors and comments.
- Then helped to put all the layers together.

### **Matthew:**

- Wrote the MainWindow code for the user interface.
- Implemented the shopping cart system and order processing logic.
- Added the quantity input feature for selecting how many books to buy.
- Fixed errors and warnings in the code.
- Tested the application to make sure the order and cart functions work correctly.
- Helped combine all the C# files together into one working application.

### **Nick:**

- Helped set up the database manager responsible for connecting and communicating with the database.
- Helped create the necessary classes that would represent the various entities in the application
- Helped implement the validation for user input on a number of elements.
- Added additional UI functionality where needed.
- Tested various aspects of the application to ensure application quality.

- Discussed with team members about the various concepts of interacting with a database.
- Commenting various functions and files.