Awesome athletics club documantation

Group 21

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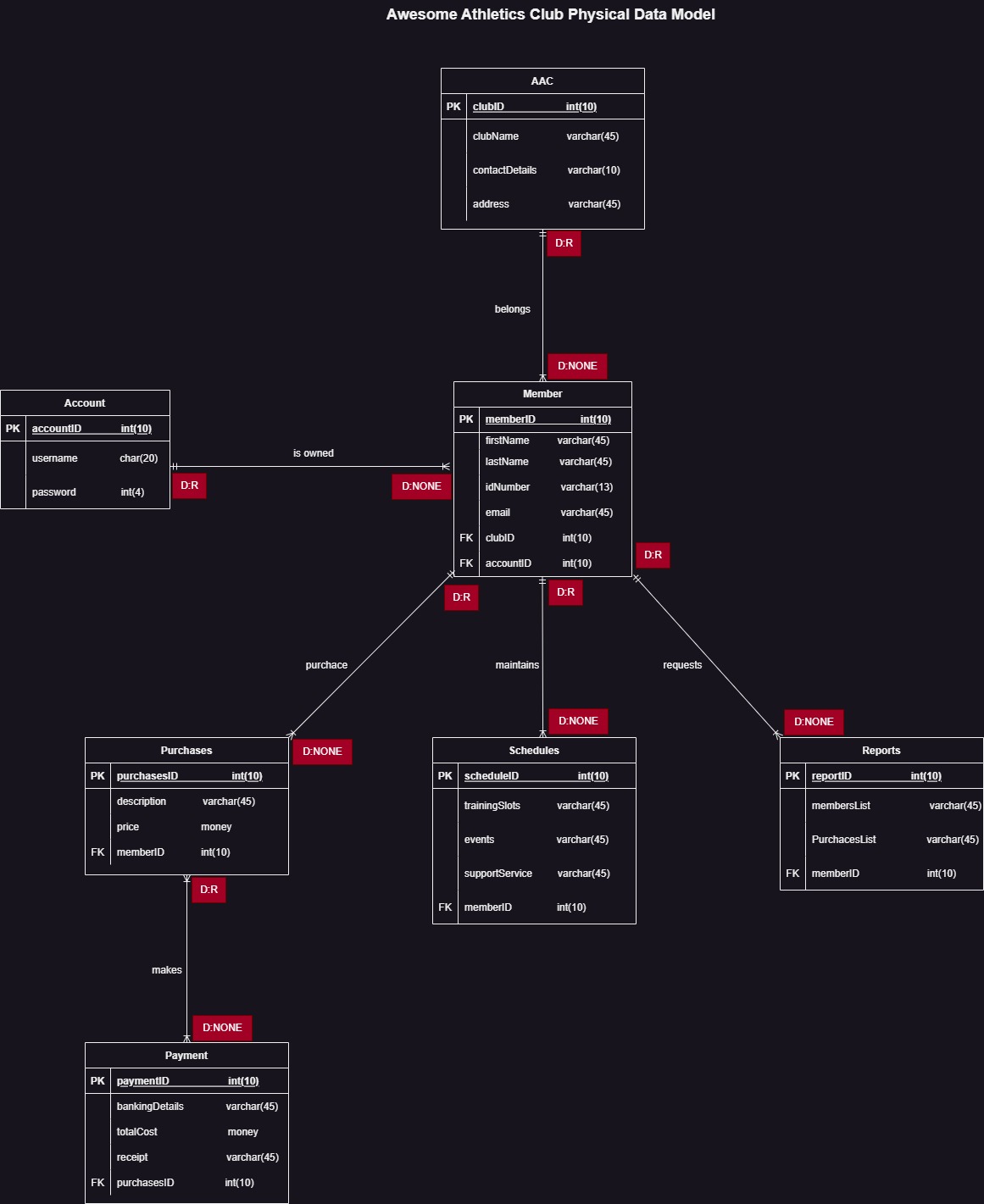
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1. **PROJECT SCOPE**

The system must satisfy the following functional requirements:

* Create Account
* Login
* Maintain Schedules
* Maintain Account
* Maintain Purchases
* Make Payment
* Request Reports

1. **PHYSICAL DATA MODEL**

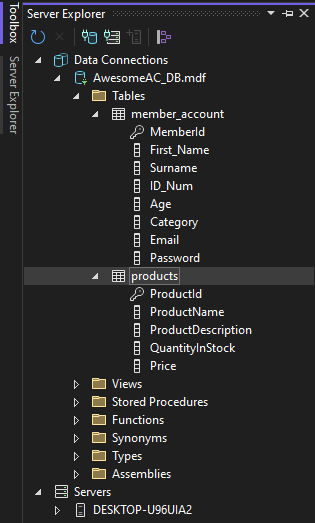
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1. **PHYSICAL DATA FLOW DIAGRAM**

**A computer screen shot of a flowchart

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1. **Database schema**

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1. **ALL SQL used**
2. Create database AwesomeAC\_DB;
3. Use AwesomeAC\_DB;
4. CREATE TABLE [dbo].[member\_account] (  
   [MemberId] INT IDENTITY (1, 1) NOT NULL,  
    [First\_Name] NVARCHAR (50) NULL,  
   [Surname] NVARCHAR (50) NULL,  
   [ID\_Num] NVARCHAR (50) NULL,  
   [Age] INT NULL,  
   [Category] NCHAR (10) NULL,  
   [Email] NVARCHAR (50) NULL,  
   [Password] INT NULL,  
   PRIMARY KEY CLUSTERED ([MemberId] ASC));
5. CREATE TABLE [dbo].[products] (  
   [ProductId] INT NOT NULL,  
   [ProductName] NVARCHAR (50) NULL,  
   [ProductDescription] CHAR (10) NULL,  
   [QuantityInStock] INT NULL,  
   [Price] MONEY NULL,  
   PRIMARY KEY CLUSTERED ([ProductId] ASC));
6. CREATE TABLE [dbo].[products] (  
   [ProductId] INT NOT NULL,  
   [ProductName] NVARCHAR (50) NULL,  
   [ProductDescription] CHAR (10) NULL,  
   [QuantityInStock] INT NULL,

[Price] MONEY NULL,  
PRIMARY KEY CLUSTERED ([ProductId] ASC));

1. "INSERT INTO member\_account (First\_Name, Surname, ID\_Num, Age, Category, Email, Password) VALUES (@FirstName, @Surname, @IDNumber, @Age, @Category, @Email, @Password)";
2. "SELECT COUNT(1) FROM member\_account WHERE Email = @Email AND Password = @Password";
3. "SELECT COUNT(1) FROM member\_account WHERE ID\_Num = @IDNumber";
4. "SELECT COUNT(1) FROM member\_account WHERE Email=@Email";
5. "SELECT First\_Name FROM member\_account WHERE Email = @Email";
6. "SELECT ID\_Num FROM member\_account WHERE Email = @Email";
7. "SELECT COUNT(1) FROM member\_account WHERE Email=@Email AND Password=@Password";
8. "SELECT First\_Name, Surname, ID\_Num, Age, Email FROM member\_account WHERE ID\_Num = @IDNumber";
9. "SELECT COUNT(1) FROM member\_account WHERE ID\_Num = @IDNum AND Email = @Email";
10. "UPDATE member\_account SET Password = @Password WHERE ID\_Num = @IDNum";
11. "UPDATE member\_account SET First\_Name = @FirstName, Surname = @Surname WHERE ID\_Num = @IDNumber";
12. "UPDATE member\_account SET Email = @Email, Password = @Password WHERE ID\_Num = @IDNumber";
13. "SELECT ProductId, ProductName, Price, QuantityInStock FROM products";
14. "UPDATE products SET QuantityInStock = QuantityInStock + 1 WHERE ProductName = @ProductName";
15. "SELECT First\_Name, Surname, ID\_Num, Age, Category FROM member\_account WHERE Category = @Category ORDER BY {sortBy}";
16. "SELECT ProductName, Price FROM products WHERE ProductDescription = @Type ORDER BY {sortBy}";

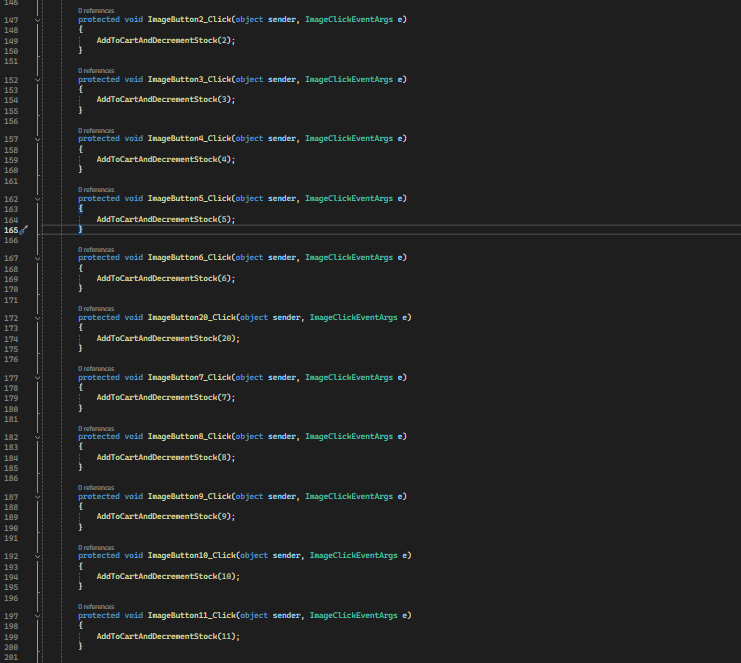
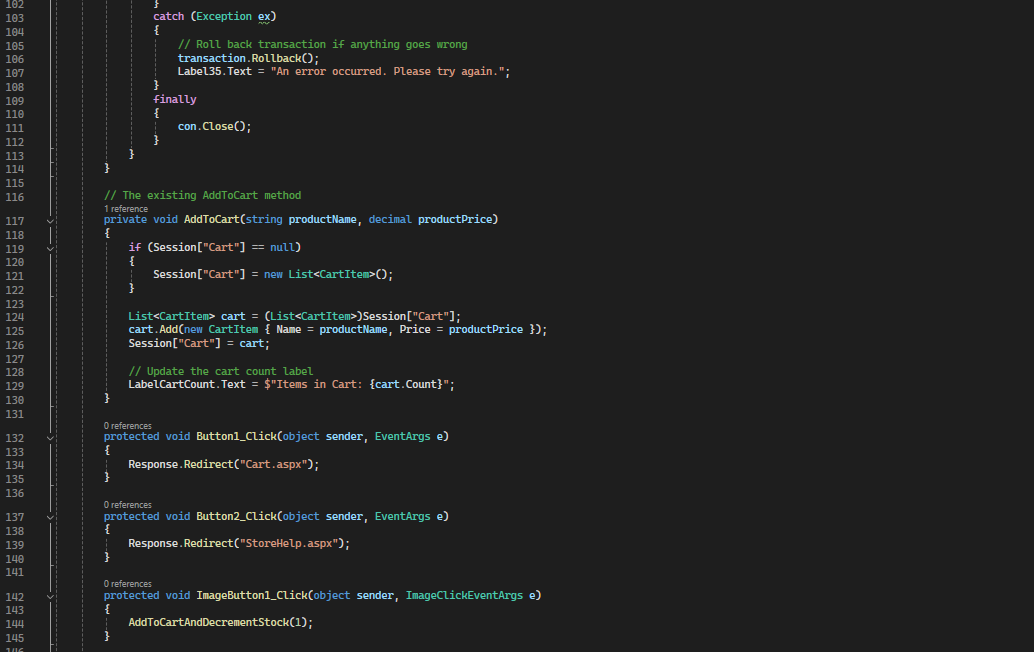
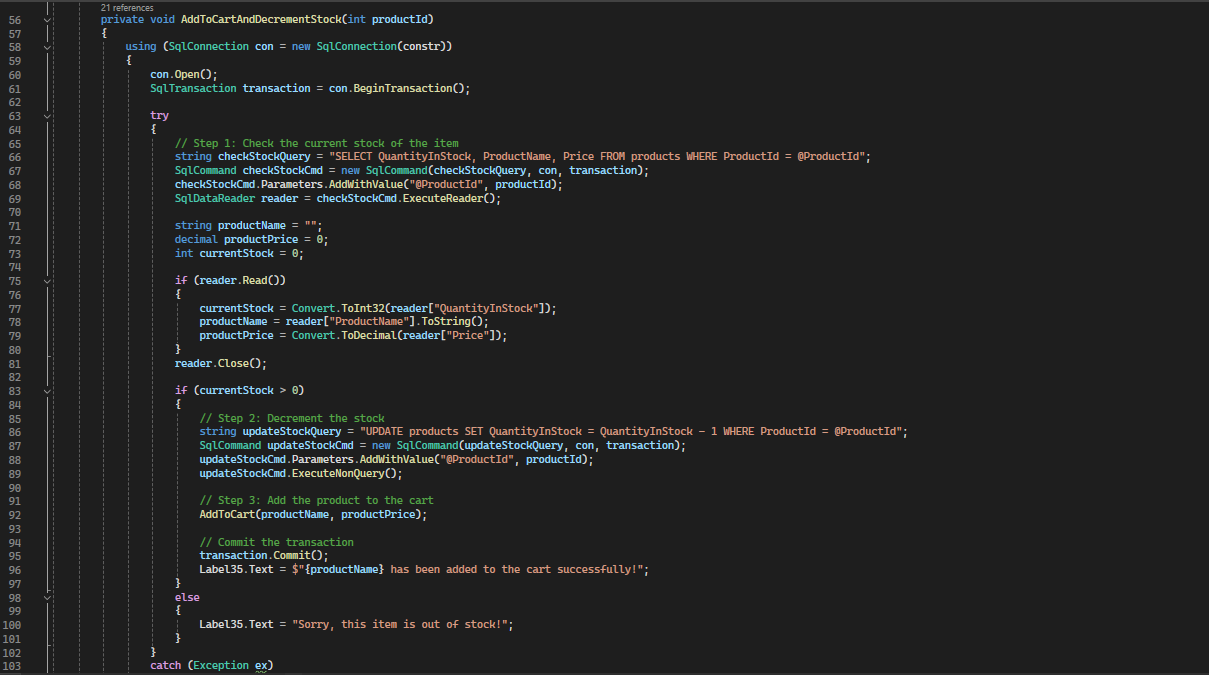
1. **Programming Code for Maintaining a Child Entity**

Code Breakdown

1. **Child Entity Management:**
   * The child entity in this context is represented by the CartItem class and the operations related to the shopping cart functionality.
2. **Method Reuse:**
   * The AddToCartAndDecrementStock method encapsulates the logic for both adding items to the cart and decrementing the product stock. This method can be reused whenever a product is added to the cart, which prevents code duplication.
   * The AddToCart method is called within AddToCartAndDecrementStock to handle the addition of items to the cart, showcasing method reuse.

**A screenshot of a computer program

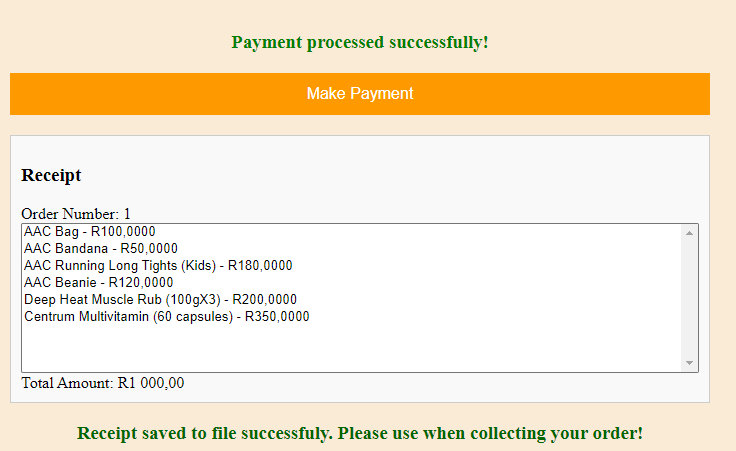
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**A screen shot of a computer program

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1. **Reports**

**- Receipt report**

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**- Saved reciept report file**

**A screenshot of a computer

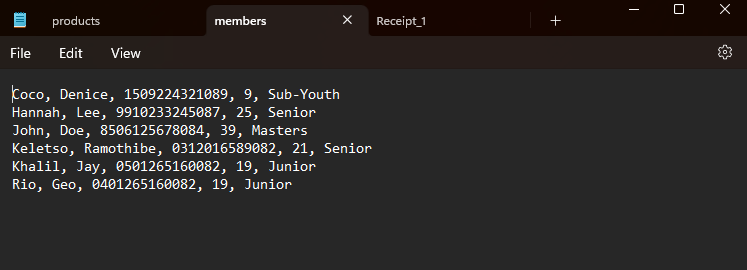
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**- Members report**

**A screenshot of a group report

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**- Saved member report file**

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**- Products report**

**A screenshot of a report

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**- Saved products report file**

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1. **User manual**

**Awesome Athletics Club System User Manual**

Getting Started

Steps to Install the System

1. **Download the Software**:
   * Obtain the latest version of the Awesome Athletics Club system from the official website or your distribution source.
2. **System Requirements**:
   * Ensure your computer meets the technical requirements (detailed below).
3. **Installation**:
   * Unzip the downloaded file (if applicable) to a directory of your choice.
   * Navigate to the unzipped folder.
   * If an installer is provided (e.g., setup.exe), double-click it to start the installation process. Follow the on-screen instructions to complete the installation.
4. **Database Setup** (if applicable):
   * If the system requires a database, ensure that you have SQL Server (or another supported database) installed and running.
   * Import the database schema provided in the installation package.
   * Configure the connection strings in the configuration files (typically found in the App\_Data folder).
5. **Launch the Application**:
   * Open your web browser and navigate to the application’s URL (e.g., http://localhost:xxxx where xxxx is the port number configured for your web application).
   * You should see the login or account creation page.
6. **Create an Account**:
   * If you are a new user, click on the "Create Account" link and fill in the required details to register.
7. **Log In**:
   * After creating an account, log in using your registered email and password.

**Technical Requirements**

System Requirements

* **Processor**:
  + Minimum: Intel i3 or equivalent.
  + Recommended: Intel i5 or equivalent for better performance.
* **RAM**:
  + Minimum: 4 GB.
  + Recommended: 8 GB or more for optimal performance.
* **Hard Drive Space**:
  + Minimum: 500 MB free disk space.
  + Recommended: 1 GB or more to accommodate additional data and files.
* **Operating System**:
  + Windows 10 or later.
  + Other systems (Linux, macOS) may require additional configuration.
* **Database**:
  + SQL Server 2012 or later (Express edition is sufficient for small deployments).
  + Ensure that the database service is running.
* **Web Browser**:
  + Latest versions of Chrome, Firefox, or Edge for the best user experience.

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