**Purpose**: Practice the use of Windows Presentation Foundation (WPF) and Databinding, ADO.NET Entity Framework
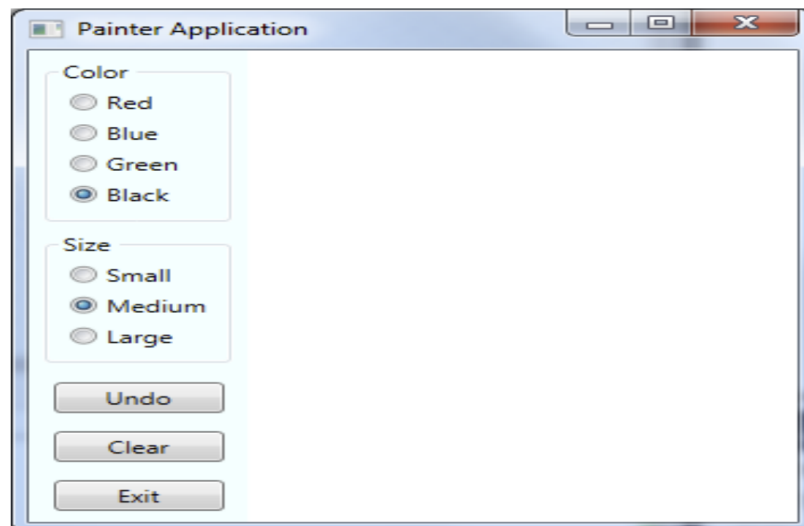
**Exercise-01:** Enhance the **Painter** application which has been covered in the Lab. Add the following new radio buttons and buttons as shown in the screen shots and add their functionality also. Exception handling should be implemented.                                                                    *[5 marks]*



**Exercise 02:**                                                                                                    *[10 marks]*

Build the following Dental Payment System App using WPF. You can use appropriate layout controls. Implement the following business requirements:

If patient is Senior, then give 10% discount, if he/she is in category –Kids/Youth then 15% discount. Add one combo box (not shown in screen shot) under Address textbox (a drop down for Provinces – Alberta – HST 7%, Ontario- HST 13% and Quebec- HST 6%).  As per the selection of the province, Total Charges should be calculated accordingly. (Adding GST and giving discount)

**Question 03:**                                                                                   *[15 marks]*

(Restaurant Bill Calculator) A restaurant wants **a WPF app** that calculates a table's bill. The app should display all following menu items (shown below) in four Combo Boxes. Each Combo Box should contain a category of food offered by the restaurant (Beverage, Appetizer, Main Course and Dessert).

The user can choose from one of these Combo Boxes to add an item to a table's bill. As each item is selected in the Combo Boxes, add to the DataGrid Control, and add the price of that item to the bill. The user can click the Clear Bill Button to restore the Subtotal:, Tax: and Total: fields to $0.00. Add your student name and your company's (i.e., Centennial College) logo at the status bar, when user clicks the logo, company's website is opened in Internet explorer.
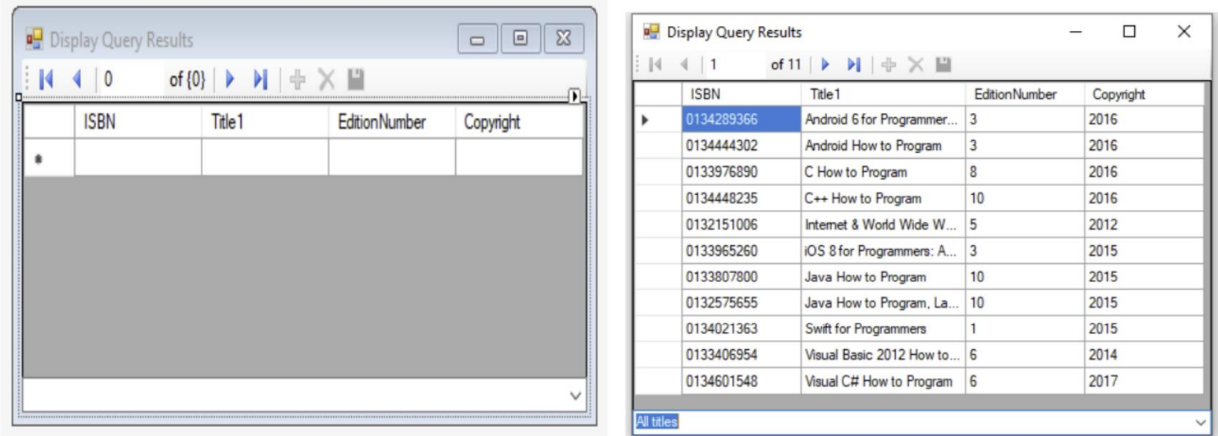
| Name | Category | Price | Name | Category | Price |
|---|---|---|---|---|---|
| Soda | Beverage | $1.95 | Chicken Alfredo | Main Course | $13.95 |
| Tea | Beverage | $1.50 | Chicken Picatta | Main Course | $13.95 |
| Coffee | Beverage | $1.25 | Turkey Club | Main Course | $11.95 |
| Mineral Water | Beverage | $2.95 | Lobster Pie | Main Course | $19.95 |
| Juice | Beverage | $2.50 | Prime Rib | Main Course | $20.95 |
| Milk | Beverage | $1.50 | Shrimp Scampi | Main Course | $18.95 |
| Buffalo Wings | Appetizer | $5.95 | Turkey Dinner | Main Course | $13.95 |
| Buffalo Fingers | Appetizer | $6.95 | Stuffed Chicken | Main Course | $14.95 |
| Potato Skins | Appetizer | $8.95 | Apple Pie | Dessert | $5.95 |
| | | | | | |
| Nachos | Appetizer | $8.95 | Sundae | Dessert | $3.95 |
| Mushroom Caps | Appetizer | $10.95 | Carrot Cake | Dessert | $5.95 |
| Shrimp Cocktail | Appetizer | $12.95 | Mud Pie | Dessert | $4.95 |
| Chips and Salsa | Appetizer | $6.95 | Apple Crisp | Dessert | $5.95 |
| Seafood Alfredo | Main Course | $15.95 | | | |

**Question 04:** Database(s) which you need for this assignment are on D2L/Blackboard *[10 marks]*

Create a Windows Form App/WPF to manipulate the data within Books database and displays the results of the following queries: (Refer code example/project covered in the class – JoinQueries )

1. Get a list of all the titles (title and edition number) and the authors (author id and first name) who wrote

them. Sort the results by title.

2. Get a list of all the authors grouped by titles, sorted by title; for a given title sort the author names

alphabetically by last name then first name.

**Question 05:** Following project DisplayQueryResult has been covered in the class. *[10 marks]*



You need to enhance it by doing the following:

a) Add query in the drop down which displays all books with edition number > 5

b) Add query in the drop down which displays all the books on Java