

Lab#3 – WPF

Purpose: The purpose of this assignment is to help you:

- Become familiar with WPF Data binding
- Learn to use advanced GUI

Instructions: Be sure to read the following general instructions carefully:

This assignment should be completed individually by all the students. You are encouraged to demonstrate your solution during lab session, and submit your solution **through the dropbox**. You must name your submission according to the following rule: **studentID(yourlastname)_LABnumber.zip**. e.g., 300123456(smith)_LAB#2.zip

Rubric

<u>Question 1</u>	
<u>Functionality</u>	<u>Marks</u>
WPF GUI (XAML)	2
Data Binding + ObservableCollection<T>	1+1
Status Bar	1
Functionality <ol style="list-style-type: none"> 1. Selected item(s) from combobox is added to the DataGrid row; if the selected item(s) exists in the DataGrid, change the quantity of the corresponding items rather than add new row 2. The selected item can be removed from the DataGrid 3. The quantity can be updated directly in DataGrid 4. The invoice is generated correctly 	3+2+2+2
Overall,	1
<u>Question 2</u>	
<u>Functionality</u>	<u>Marks</u>
UserControl	1.5
Dependency Property	1.5
Application to use <i>LoginUserControl</i>	2

Question 1 [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 ComboBoxes. Each ComboBox should contain a category of food offered by the restaurant (Beverage, Appetizer, Main Course and Dessert).

The user can choose from one of these ComboBoxes to add an item to a table's bill. As each item is selected in the ComboBoxes, 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			

Question2 [5 marks]

(Login User Control) Create a UserControl (similar as below) called **LoginUserControl** that contains two labels and two TextBoxs. **LoginUserControl** must provide public read-only properties that allow an application to retrieve the user inputs (i.e., login name and password). Write a driver to test **LoginUserControl**.

User Name	<input type="text"/>
Password	<input type="password"/>