

## Business Applications Programming

### Assignment 1 (15%)

Please complete the following exercise and submit your solution in the online dropbox provided by **Friday 30<sup>th</sup> September @ 5 pm** at the latest. Your submission document (word format) should follow the general guidelines as detailed in the Assignment folder. Note only one submission is accepted per assignment.

#### *Simple Table Order App*

Create a well-designed application that allows “*PizzaBothán*” staff to take table orders from customers.

When the form loads (or has been cleared for next user), the server enters their name and the table number that they are serving. On pressing the **Start** button, the server is brought to an order screen, where they can enter the number of each type of pizzas that the customers want to order.

When the **Order** button is pressed, the application displays the server’s name, the total number of Pizza’s ordered, and along with total value of that order.

If the user presses the **Summary** button, the application (if at least one transaction has taken place prior to being pressed) displays the total number of transactions, total pizzas sold, total company receipts, the average transaction value and the numbers of each pizza sold. If the **Clear** button is pressed at any time, the form is reset for the next user. On pressing the **Exit** button, the form closes.

Ensure that you handle any exceptions that could occur in your project and ensure that the user is helped recover from any error of this type. Remember to use good naming conventions for controls & variable names; include remarks at the top of each event handler and at the top of the class. Include ToolTips & Access Keys as appropriate.

Your application is **required** to follow the design and format of the form in the screen shots on the following pages.

The screenshot shows a window titled "Welcome to PizzaBothán". Inside, there is a form with two input fields: "Server Name:" containing "Neil Keane" and "Table Number:" containing "8". To the right of these fields is a "Start" button. Below the form is a large logo for "PizzaBothán" featuring a stylized 'P' in a teal square on a dark purple background.

**Fig 1: On Form Load || Clear Button Pressed, & User Data Entered**

The screenshot shows the same window, but the title bar now reads "Neil Keane @ Table 8". The main content area displays a "Menu" section with a table of items. Below the menu is a row of four buttons: "Order", "Clear", "Summary", and "Exit". The "PizzaBothán" logo remains at the bottom.

Menu		
Ham Pizza	<input type="text" value="0"/>	@ €7.99
Pepperoni Pizza	<input type="text" value="0"/>	@ €8.99
Pineapple Pizza	<input type="text" value="0"/>	@ €9.99
Calzoni	<input type="text" value="0"/>	@ €11.99

**Fig 2: Form after Start Button Pressed**

**Table Summary**

Menu

Ham Pizza	5	@ €7.99
Pepperoni Pizza	5	@ €8.99
Pineapple Pizza	0	@ €9.99
Calzoni		

Order Clear Summary ExitButton

**Table Order Summary Data**

Server Name	Neil Keane
Number Pizza's Ordered	10
Total Table Receipts	€84.90

**P** PizzaBothán

**Fig 3: After Data Entered & Order Button Clicked**

**Company Summary Data**

Total Pizza's Sold

Ham Pizza	5
Pepperoni Pizza	5
Pineapple Pizza	5
Calzoni	5

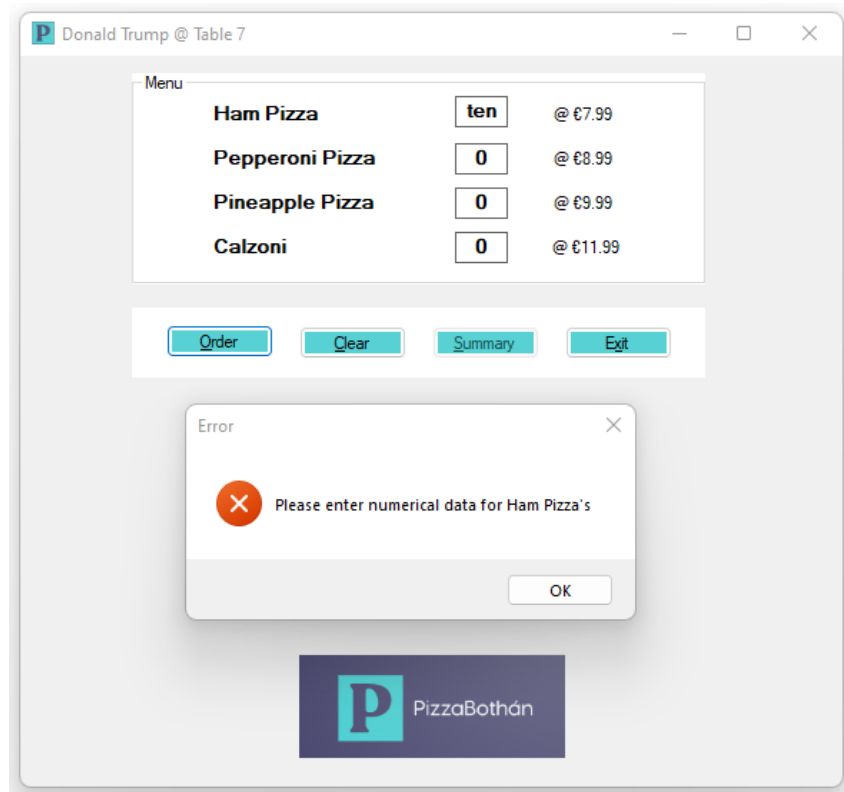
Order Clear Summary Exit

**Company Summary Data**

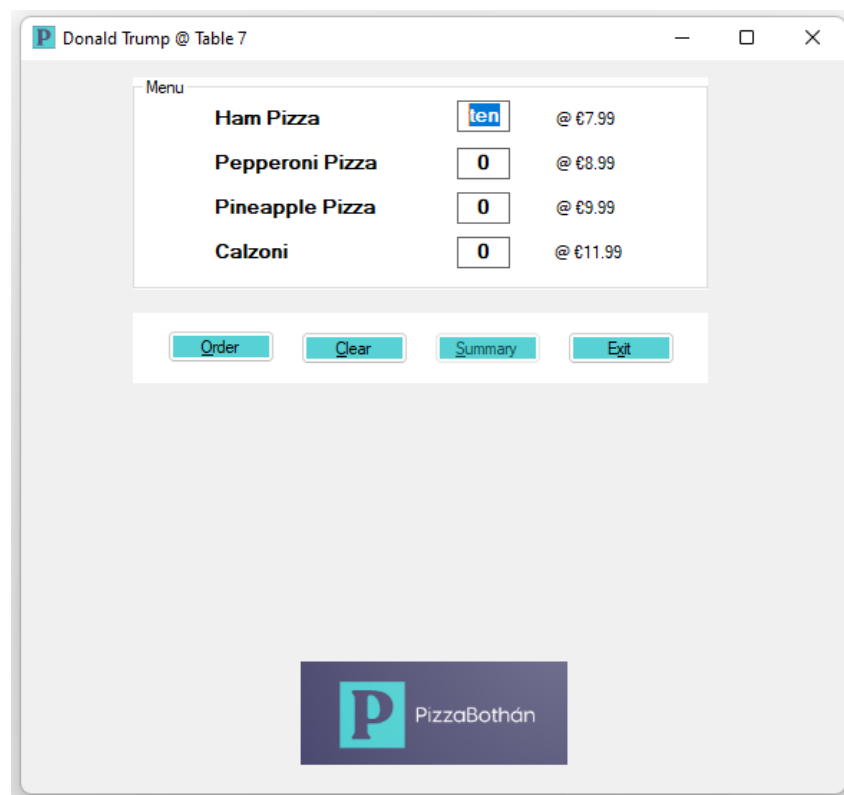
Total Company Transactions	2
Number Pizza's Ordered	20
Total Company Receipts	€194.80
Avg Transaction Value	€97.40

**P** PizzaBothán

**Fig 4: After Company Summary Button Clicked**



**Fig 5: Input Error – handled**



**Fig 6: After OK button pressed in Message Box**