Business Applications Programming

Assignment 2 (20%)

Please complete the following exercise and submit your solution online by Friday 14th October @ 5 pm at the latest. Your submission document (word format) should follow the general guidelines as detailed under the Assignment tab in the course module on Blackboard. **Note** maximum of **6** screenshots per assignment submission.

Create a well-designed application for L2P Ltd, a company that provides residential software programming courses in locations across Ireland. The purpose of your application is to enable the front of house sales team to generate pricing and process bookings for their courses. The company currently provides the following range of programming courses, each with their own number of training days and enrollment fees (Table 1).

Courses	Training Days	Enrollment Fees
C# Fundamentals	2 Days	€900
C# Basics for Beginners	4 Days	€1,500
C# Intermediate	4 Days	€1,800
C# Advanced Topics	2 Days	€2,300
ASP.NET with C# Part A	5 Days	€1,250
ASP.NET with C# Part B	5 Days	€1,250

Table 1: Courses, Training Days & Enrollment Fees

L2P conducts its courses in seven locations across Ireland shown below (Table 2) This table also shows the accommodation fees per day at each location.

Locations	Accommadation Fees per Day
Belmullet	€219.99
Clifden	€119.99
Cork	€149.99
Dublin	€179.99
Killarney	€149.99
Letterkenny	€89.99
Sligo	€119.99

L2P

Table 2: Locations and Price per Night

L2P offers optional room upgrades to its customers, which have a set daily price across all its locations of €99.99 for a Master Suite, €69.99 for an Executive Suite, and €49.99 for a Junior Suite.

The company provides its attendees with printed certificates on the successful completion of their course free of charge, however if the attendee wishes to receive a digital certificate of completion there is an additional charge of €39.99.

Finally, L2P offers a group discount of 7.5% discount to customers who book training for 3 or more participants and who also purchase of a room upgrade option.

Basic Flow of Events

To generate a quote for a prospective customer(s), the user selects the course which the client wishes to book, the location they wish to attend the course at, and how many participant(s) wish to attend. Potential customers are also offered the room upgrade option and asked whether the participant(s) wishes to receive a digital certificate on the completion of the course. When the user clicks the '*Display*' button, the application displays the full details of the chosen course along with the enrollment cost, the lodging costs, any optional costs, and the overall cost of the course.

If the prospective customer wishes to proceed, the user clicks the '*Book*' button, after which a MessageBox with a formatted message confirming the completion of the booking is displayed. This confirmation message contains the name and location of the programming course booked along with total cost. Note: payment is processed separately from the application.

If the user wishes to check how many bookings have been processed, they can click the '*Summary*' button and the application displays the total value of bookings processed, the total enrollment fees, the total lodging fees, the total value of any options chosen, the number of bookings that availed of the group discount, and the average revenue achieved per booking.

Design Notes

Follow principles of good design.

Handle any exceptions that could occur in your project & provide user input validation as needed.

The project contains a **single** form, and you are required to include the following controls in its design - Radio Buttons, Check Box(s) & List Boxes. Include *Display*, *Book, Summary, Clear,* and *Exit* buttons. Include ToolTips & Access keys as appropriate.

Use of any collection (list, array etc.) including list view, data grid controls, along with any database is strictly prohibited.