Internet Application Development
Lab 7

Dated: 13-03-2026

Registration No:_____

Full Name: _____

Problem 1) Refer to Lab 1 (Problem 2(i) and (iii)), you have to incorporate *business intelligence* in your order processing system by adding *customer segmentation analysis*.

Customer segmentation is the process of dividing a company's customer base into smaller, distinct groups that share similar characteristics, such as demographics, behaviors, or preferences.

You are advised to do segmentation of *customer behavior* mainly considering *purchase habits*.

Suggested Methodology

a) Define and describe customer segments of your own choice: e.g. *Frequent Customer, Premium Customer,..*
b) Draw a prototype interface on paper for segmentation analysis.
c) Write SQL queries to generate segmentation data.
d) Develop an interface in visual studio for segmentation analysis. Write code for a suitable handler which will execute queries developed in part (c) above and display segmented data to employees of the company?

Assumption: Sufficient numbers of orders are present in database.

Problem 2) How you can automate targeted marketing using above segments?
[Hint: *For all royal customers send them a complimentary gift through courier and a message of thanks through email/sms*]

Problem 3) Develop test cases for your segmentation analysis platform?
[Hints: (i) *No customer in a particular segment*
(ii) *Uneven distribution of customers across segments*]