

EPSILON NET

Coding School

Το πρώτο **Epsilon Net Coding School**
σε τεχνολογίες **.NET** είναι γεγονός!



SESSION 11 - EXERCISES

Write a **C# program** to handles a **Coffee Shop** and should implement **CRUD** operations for the following entities:

- **Customer** (ID, Code, Description)
- **Product** (ID, Code, Description, ProductCategoryId, Price, Cost)
- **ProductCategory** (ID, Code, Description, ProductType (enum))
- **Employee** (ID, Name, Surname, EmployeeType (enum),
SalaryPerMonth)
- **Transaction** (ID, Date, CustomerID, EmployeeID, PaymentMethod
(enum), Total Price)
- **TransactionLine** (ID, ProductID, Quantity, Price, Discount, Total Price)
- **Monthly Ledger** (Year, Month, Income, Expenses, Total) - **Read Only**

Business Rules

- A Retail Transaction can have only one **Customer** (Code=001, Description=Retail Customer) but can have **multiple Products**.
- The total price on a transaction is calculated by multiplying the amount of the products sold with each product's price.
- If the total price of the transaction is above 10 Euros a **15% Discount** applies on the Total Price.
- **Payment Method** is **Cash** and **Credit Card**.
- **Product Types** are **Coffee, Beverages, and Food**.
- **Employee Types** are **Manager, Cashier, Barista and Waiter**.
- **Each shop should have:** 1 Manager, 1-2 Cashiers, 1-2 Baristas and 1-3 Waiters.
- If the Transaction after discount is **above 50 euros**, then the payment should always be with **Cash**.
- A Monthly ledger calculates the income and the expenses of this shop. The Renting Cost of the Coffee Shop is 3000 Euros per Month.