

**Duration: 1 hour – Total Marks: 15**

**Problem:** A retail company with a chain of stores across the United States needs to build an online ordering and shopping website to increase revenue and profits. Based on historical sales data and analysis by economic experts at the company, the company has produced a relationship chart of shopping demand at stores by month of the year (In November has an important event is **Black Friday**). Below is the chart.



**Requirements:**

1. (5 points) Based on the chart above, analyze the problem from the perspective of a software developer, choosing technology to meet user needs that increase or decrease over time while saving construction costs to build, operating and maintain systems for businesses. Give at least 3 reasons for your choice.
2. (5 points) With the knowledge learned in the DMAWS course, write a to Order using Web API, with ordering functions (item name, quantity, delivery time, address, contact phone), edit order information (delivery time, delivery address) using the Code First model.
3. (5 points) Write a website with the Order functions and edit order information from the APIs listed in (2).

Note: - Database name: OrderSystem

- Table name: OrderTbl

- Field name: ItemCode (Item code), ItemName (Item name), ItemQty (Quantity), OrderDelivery (Order delivery) OrderAddress (Order Address), PhoneNumber (phone number)