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| animatedLOGO | **Assignment No. 01 (Graded) SEMESTER SPRING 2021 CS304- Object Oriented Programming** | **Total Marks: 20**  **Due Date 20/05/2021** |
| **Solution**  **NAME: TAMKEEN SAJJAD**  **ID: MC200400003**  **Course: MIT** | | |

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|  | **Marks: 20** |
| Identify Nouns Due to Ramadan, your nearby community wants to launch an “Online Grocery Store” so that, **people** can purchase **groceries** from home and able to maintain social distance. This precaution will allow reducing the movement of people in Ramadan and minimize the spread of disease COVID-19. The XYZ store will offer various **products**. The **user** will be shown a list of products, which can be selected or deselected from the provided list. The user will need to get registered to buy Products. At the end of shopping, the **customer** can double-check all the Products added into his **Cart** and verify the total amount before payment. The Store **Administrator** will manage Products and assign orders to Delivery **Boys**. Identify Classes: **Task#1. Extract the main objects (entities) of above system.** People/customer  Groceries/products  Cart  Administrator  Boys Identify Associations Customer is a Person  Administrator is a Person  Delivery Boys is a Person  Cart contains Products Groups Identify Attributes: **Task#2. Find the necessary attributes and functions that need to be associated with each object.** Customer: Name, CNIC, Contact, Address, Account, Registered  Products: Name, Unit Price, Unit,  Cart: Product Group, Bill, Payment Mode, Assigned, Status  Product Group: No of Products, Price  Administrator: Name, CNIC, Contact, Designation  Boys: Name, CNIC, Contact, Vehicle, Serial No. Identify Verbs: **Task#3. Identify the relationships among identified objects.** Due to Ramadan, your nearby community wants to **launch** an “Online Grocery Store” so that, people can **purchase** groceries from home and able to maintain social distance. This precaution will allow reducing the movement of people in Ramadan and minimize the spread of disease COVID-19. The XYZ store will **offer** various products. The user will be **shown** a list of products, which can be **selected** or deselected from the provided list. The user will need to get **registered** to **buy** Products. At the end of shopping, the customer can **double-check** all the Products added into his Cart and **verify** the total amount before payment. The Store Administrator will **manage** Products and **assign** orders to Delivery Boys. Identify Verbs: Customer: Select Products, Orders, Pays, registered with store, verify the cart, track orders  Products: selected  Cart: contain products, calculate the bills, process the order  Product Group: contains products  Administrator: Assign orders, track orders, check payments, registered with store  Boys: deliver the order, update the administrator, registered with store Task#4. Construct a final comprehensive Class diagram showing all objects and their relationships along with their attributes and functions. | |