

Encapsulation and UML Diagrams

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Amazon

Customer Class

Code

```
Class Customer
{
    private string CustomerName;
    private string CustomerId;
    private int MobileNo;
    private string EmailId;
    private string Address;

    public void AddCustomerData()
    {
        // ToDo
    }
    public void EditCustomerData()
    {
        // ToDo
    }
    public void DeleteCustomerData()
    {
        // ToDo
    }
    public void DisplayCustomerData()
    {
        // ToDo
    }
}
```

UML Diagram :

Class Customer

-CustomerName : String

-CustomerId : String

-MobileNo. : Int

-EmailId : String

-Address : String

+AddCustomerData

+EditCustomerData

+DeleteCustomerData
+DisplayCustomerData

Employee Class

Code

```
Class Employee
{
    private string EmployeeName;
    private string EmployeeId;
    private int MobileNo;
    private string EmailId;
    private int Salary;

    public void AddEmployeeData()
    {
        // ToDo
    }
    public void EditEmployeeData()
    {
        // ToDo
    }
    public void DeleteEmployeeData()
    {
        // ToDo
    }
    public void DisplayEmployeeData()
    {
        // ToDo
    }
}
```

UML Diagram :

Class Employee

-EmployeeName : String
-EmployeeId : String
-MobileNo. : Int
-EmailId : String
-Salary : Int

+AddEmployeeData
+EditEmployeeData
+DeleteEmployeeData
+DisplayEmployeeData

Product Class

Code

```
Class Product
{
    private string ProductName;
    private int Price;
    private string ProductDetails;
    private int Reviews;
    private string Brand;

    public void AddProductData()
    {
        // ToDo
    }
    public void EditProductData()
    {
        // ToDo
    }
    public void DeleteProductData()
    {
        // ToDo
    }
    public void DisplayProductData()
    {
        // ToDo
    }
}
```

UML Diagram :

Class Products

-ProductName : String
-Price : Int
-ProductDetails : String
-Reviews : Int

-Brand : String

+AddProductData

+EditProductData

+DeleteProductData

+DisplayProductData

Orders Class

Code

Class **Orders**

```
{  
    private string OrderName;  
    private int OrderId;  
    private string OrderDetails;  
    private string ShippingAddress;  
    private int PayableAmount;  
  
    public void AddOrdersData()  
    {  
        // ToDo  
    }  
    public void EditOrdersData()  
    {  
        // ToDo  
    }  
    public void DeleteOrdersData()  
    {  
        // ToDo  
    }  
    public void DisplayOrdersData()  
    {  
        // ToDo  
    }  
}
```

UML Diagram :

Class Orders

-OrderName : String

-OrderId : Int

-OrderDetails : String

-ShippingAddress : String

-PayableAmount : Int

+AddOrdersData

+EditOrdersData

+DeleteOrdersData

+DisplayOrdersData

Seller Class

Code

```
Class Seller
{
    private string SellerName;
    private string SellerId;
    private int MobileNo;
    private string EmailId;
    private string SellerProducts;

    public void AddSellerData()
    {
        // ToDo
    }
    public void EditSellerData()
    {
        // ToDo
    }
    public void DeleteSellerData()
    {
        // ToDo
    }
    public void DisplaySellerData()
    {
        // ToDo
    }
}
```

UML Code :

Class Seller

-SellerName : String

-SellerId : String

-MobileNo. : Int

-EmailId : String

-SellerProducts : String

+AddSellerData

+EditSellerData

+DeleteSellerData

+DisplaySellerData

Apollo Hospital

Doctor Class

Code

```
Class Doctor
{
    private string DoctorName;
    private string DoctorSpecialisation;
    private int MobileNo;
    private int DoctorAge;
    private string Address;

    public void AddDoctorData()
    {
        // ToDo
    }
    public void EditDoctorData()
    {
        // ToDo
    }
    public void DeleteDoctorData()
    {
        // ToDo
    }
    public void DisplayDoctorData()
    {
        // ToDo
    }
}
```

UML Code :

Class Doctor

-DoctorName : String
-DoctorSpecialisation : String
-MobileNo. : Int
-DoctorAge : Int
-Address : String

+AddDoctorData
+EditDoctorData
+DeleteDoctorData
+DisplayDoctorData

Patient Class

Code

```
Class Patient
{
    private string PatientName;
    private int PatientSINo.;
    private int MobileNo;
    private string PatientDisease;
    private string Address;
    private int Age;

    public void AddPatientData()
    {
        // ToDo
    }
    public void EditPatientData()
    {
        // ToDo
    }
    public void DeletePatientData()
    {
        // ToDo
    }
    public void DisplayPatientData()
    {
        // ToDo
    }
}
```

UML Code :

Class Patient

-PatientName : String
-PatientSINo. : Int
-MobileNo. : Int

-PatientDiseaseType : String

-Address : String

-Age : Int

+AddPatientData

+EditPatientData

+DeletePatientData

+DisplayPatientData

Medicine Class

Code

```
Class Medicine
{
    private string MedicineName;
    private string MedicineType;
    private int Count;
    private int Price;
    private bool MedicineAvailability;
    private int Expiry;
    private string HealthCardHolders;

    public void AddMedicineData()
    {
        // ToDo
    }
    public void EditMedicineData()
    {
        // ToDo
    }
    public void DeleteMedicineData()
    {
        // ToDo
    }
    public void DisplayMedicineData()
    {
        // ToDo
    }
}
```

UML Code :

Class Medicine

-MedicineName : String
-MedicineType : String
-Count : Int
-Price : Int
-MedicineAvailability : Bool
-Expiry : int
-HealthCardHolders : String

+AddMedicineData
+EditMedicineData
+DeleteMedicineData
+DisplayMedicineData

Equipment Class

Code

```
Class Equipment
{
    private string EquipmentName;
    private string EquipmentType;
    private int Price;
    private string Status;
    private bool Availability;

    public void AddEquipmentData()
    {
        // ToDo
    }
    public void EditEquipmentData()
    {
        // ToDo
    }
    public void DeleteEquipmentData()
    {
        // ToDo
    }
    public void DisplayEquipmentData()
    {
        // ToDo
    }
}
```

<pre>} }</pre>
UML Code :

Class Equipment
-EquipmentName : String -EquipmentType : String -Price : Int -Status : String -Availability : Bool
+AddEquipmentData +EditEquipmentData +DeleteEquipmentData +DisplayEquipmentData

Staff Class
Code
<pre>Class Staff { private string StaffMember; private string StaffShift; private int Count; private int Salary; private bool Availability; private string Address; public void AddStaffData() { // ToDo } public void EditStaffData() { // ToDo } public void DeleteStaffData() { // ToDo } }</pre>

```
}  
public void DisplayStaffData()  
{  
    // ToDo  
}  
}
```

Class Staff

-StaffMember : String
-StaffShift : String
-Count : Int
-Salary : Int
-Availability : Bool
-Address : String

+AddStaffData
+EditStaffData
+DeleteStaffData
+DisplayStaffData

Police Station

Station Class

Code

Class **Station**

```
{  
    private string StationName;  
    private int StationNo.;  
    private string Address;  
    private string DepartmentType;  
    private string Zone;  
    private string StationLimits;  
  
    public void AddStationData()  
    {  
        // ToDo  
    }  
    public void EditStationData()  
    {  
        // ToDo  
    }  
    public void DeleteStationData()  
    {  
        // ToDo  
    }  
    public void DisplayStationData()  
    {  
        // ToDo  
    }  
}
```

UML Code :

Class Station

-StationName : String

-StationNo. : Int

-Address : String

-DepartmentType : String

-Zone : String

-StationLimits : String

+AddStationData

+EditStationData

+DeleteStationData

+DisplayStationData

Staff Class

Code

```
Class Staff
{
    private string StaffMember;
    private int StaffCount;
    private string StaffShift;
    private int Salary;
    private bool Availability;
    private string Designation;

    public void AddStaffData()
    {
        // ToDo
    }
    public void EditStaffData()
    {
        // ToDo
    }
    public void DeleteStaffData()
    {
        // ToDo
    }
    public void DisplayStaffData()
    {
        // ToDo
    }
}
```

UML Code :

Class Staff

-StaffMember : String

-StaffCount : Int

-StaffShift : String

-Salary : Int

-Availability : Bool

-Designation : String

+AddStaffData

+EditStaffData

+DeleteStaffData

+DisplayStaffData

Case Class

Code

Class **Case**

```
{
    private string CaseName;
    private int CaseNo.;
    private string Type;
    private string Status;
    private string CaseHandler;

    public void AddCaseData()
    {
        // ToDo
    }
    public void EditCaseData()
    {
        // ToDo
    }
    public void DeleteCaseData()
    {
        // ToDo
    }
    public void DisplayCaseData()
    {
        // ToDo
    }
}
```

UML Code :

Class Case

-CaseName : String

-CaseNo. : Int

-Type : String

-Status : String

-CaseHandler : String

+AddCaseData

+EditCaseData

+DeleteCaseData

+DisplayCaseData

Crime Class

Code

Class Crime

```
{
    private string CriminalName;
    private int CriminalId.;
    private string CrimeDetails;
    private string Type;
    private string CrimeName;

    public void AddCrimeData()
    {
        // ToDo
    }
    public void EditCrimeData()
    {
        // ToDo
    }
    public void DeleteCrimeData()
    {
        // ToDo
    }
    public void DisplayCrimeData()
    {
        // ToDo
    }
}
```

UML Code :

Class Crime

-CriminalName : String
-CriminalId. : Int
-CrimeDetails : String
-Type : String
-CrimeName : String

+AddCrimeData
+EditCrimeData
+DeleteCrimeData
+DisplayCrimeData

Prison Class

Code

```
Class Prison
{
    private string PrisonerName;
    private int PrisonerId;
    private string PrisonerDetails;
    private int PrisonNo.;
    private string PrisonerAdress;
    private string PrisonerAge;

    public void AddPrisonData()
    {
        // ToDo
    }
    public void EditPrisonData()
    {
        // ToDo
    }
    public void DeletePrisonData()
    {
        // ToDo
    }
    public void DisplayPrisonData()
    {

```

```
    // ToDo  
    }  
}
```

UML Code :

Class Prison

-PrisonerName : String
-PrisonerId : Int
-PrisonerDetails : String
-PrisionNo : Int
-PrisonerAddress : String
-PrisonerAge : String

+AddPrisonData
+EditPrisonData
+DeletePrisonData
+DisplayPrisonData

