**WEEK FOUR 4 ASSIGNMENT**

**Foundation Program #1(YouTube Videos):**

This program keeps track of Videos in a Video class and Comments that is left on them. This program has a Video Class that tracks the title, the author, and the length of the video in seconds. Again each video has the responsibility of storing list of comments and also has a method that returns the number of comments. A Comment class also has the responsibility of tracking the name, and the actual comment itself.

The diagram below shows the attribute and methods needed to perform this task. YouTube video Classes Diagram:

YouTube Video Program:

|  |
| --- |
| Video Class |
| \_title: string;  \_author: string;  \_length: int;  \_listOfComments: list<string>  Public Video(string video, string author, int length)  GetDetailsOfVideo() string  CountComments(int: \_numOfComments): int |
| Comment Class |
| \_name: string;  \_comments: string;  GetName(string: name): string  GetComments(string comment): string |

**Foundation Program #2(Product Ordering System:**

This program contains a list of products and customers that tracts the name, quantity, price of the each product, the product id and the name of customer. It contains methods that can compute the total cost of the ordered product, total price is calculated as the sum of the total cost of each product plus a one-time shipping cost. A packing label that returns name and product id of each product in the order. A shipping label should list the name and address of the customer of the customer. The address contains a string for the street address, the city, state/province, and country. This program is written for a company is based in the USA. If the customer lives in the USA, then the shipping cost is $5. If the customer does not live in the USA, then the shipping cost is $35.

The diagram below shows the attribute and methods used to perform this task:

Product Ordering System Class Diagram:

Product Ordering System Program:

|  |
| --- |
| Order Class |
| \_customer: Customer  \_prodducts: List<Product>  Order(Customer \_customer)  AddProduct(Product product)  TotalCost(): double  PackingLabel(): string  ShippingLabel(Customer customer): void |
| Address Class |
| \_streetAddress: string  \_city: string  \_stateProvince: string;  \_country: string;  public Address(string streetAddress, string city, string stateProvince, string country)  SetAddress(): string  GetCountry(): string  WhetherUsaorNot(string country): bool |
| Customer Class |
| \_name: string;  \_address: Address;  Customer(string name, Address address)  SetCustomerName(string name): void  GetCustomerName(): void  SetCustomerAddress(Address address): void  GetCustomerAddress(): Address  GetCountry(string country): bool |
| Product class |
| \_name: string;  \_product.Id: string;  \_price: int;  \_qauntity: int;  public Product(string name, string productId, int price, int qauntity)  SetPrice(int price): void;  GetPrice(): int;  SetProductId(string productId): void;  GetProductId(): string  SetName(): string;  GetName(): string;  Setquantity(int quantity): void;  GetQauntity(): int; |