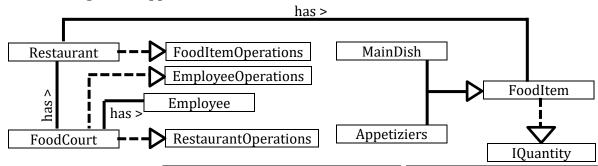
Sample Project Question

1. Food Court Management Application:



IQuantity

boolean addQuantity(int amount) boolean sellQuantity(int amount)

FoodItemOperations

boolean insertFoodItem(FoodItem f) boolean removeFoodItem(FoodItem f) FoodItem searchFoodItem(String fid) void showAllFoodItems()

RestaurantOperations

boolean insertRestaurant(Restaurant r) boolean removeRestaurant(Restaurant r) Restaurant searchRestaurant(String rid) void showAllRestaurants()

FoodItem

String fid
String name
int availableQuantity
double price

void setFid(String fid)
void setName(String name)
void setAvailableQuantity(int quantity)
void setPrice(double price)
String getFid()
String getName()
int getAvailableQuantity()
double getPrice()
abstract void showInfo()

FoodCourt

Restaurant restaurants[] Employee employees[]

Employee

String name String empId double salary

void setName(String name)
void setEmpId(String empId)
void setSalary(double salary)
String getName()
String getEmpId()
double getSalary()

Restaurant

String rid
String name
FoodItem fooditems[]
void setName(String name)
void setRid(String rid)
String getName()

EmployeeOperations

boolean insertEmployee(Employee e) boolean removeEmployee(Employee e) Employee searchEmployee(String empId) void showAllEmployees()

MainDish

String category

void setCategory(String category)
String getCategory()

Appitizers

String size

void setSize(String size)
String getSize()

Start

The *Start* class contains the main method. Inside the main method the application prompts the user to choose among the following options:

String getRid()

- 1. Employee Management
- 2. Restaurant Management
- 3. Restaurant FoodItem Management
- 4. FoodItem Quantity Add-Sell
- 5. Exit

Upon choosing any of the option the user is given some further options to choose from:

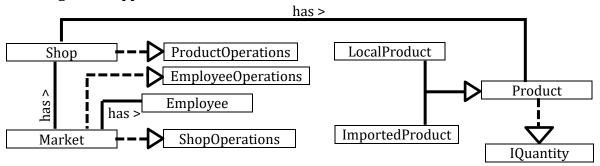
Options for Employee Management:

- 1. Insert New Employee 2. Remove Existing Employee 3. Show All Employees 4. Search an Employee 5. Go Back Options for Restaurant Management:
- 1. Insert New Restaurant 2. Remove Existing Restaurant 3. Show All Restaurants 4. Search a Restaurant 5. Go Back Options for Restaurant FoodItem Management:
- 1. Insert New FoodItem 2. Remove Existing FooItem 3. Show All FoodItems 4. Search a FoodItem 5. Go Back Options for FoodItem Quantity Add-Sell:
- 1. Add FoodItem 2. Sell FoodItem 3. Show Add Sell History 4. Go Back

The application will prompt the user to give input for the necessary values as per the choice. The application will repeatedly go on according to the user choices. Whenever FoodItem is being added or sold, the information is written in a text file and when the user requests for the add-sell history, the information written in the text file is read and displayed on screen.

Sample Project Question

2. Market Management Application:



IQuantity

boolean addQuantity(int amount) boolean sellQuantity(int amount)

ProductOperations

boolean insertProduct(Product p) boolean removeProduct(Product p) Product searchProduct(String pid) void showAllProducts()

ShopOperations

boolean insertShop(Shop s) boolean removeShop(Shop s) Shop searchShop(String sid) void showAllShops()

Product

String pid String name int availableQuantity double price

void setPid(String pid) void setName(String name) void setAvailableQuantity(int quantity) void setPrice(double price) String getPid() String getName() int getAvailableQuantity() double getPrice() abstract void showInfo()

Market

Shop shops[] Employee employees[]

Employee

String name String empId double salary

void setName(String name) void setEmpId(String empId) void setSalary(double salary) String getName() String getEmpId() double getSalary()

Shop

String sid String name Product products[] void setName(String name)

void setSid(String sid) String getName() int getNid()

EmployeeOperations

boolean insertEmployee(Employee e) boolean removeEmployee(Employee e) Employee searchEmployee(String empId) void showAllEmployees()

LocalProduct

double discountRate

void setDiscountRate(double discountRate) double getDiscountRate()

ImportedProduct

String countryName

void setCountryName(String countryName) String getCountryName()

Start

The **Start** class contains the main method. Inside the main method the application prompts the user to choose among the following options:

- **Employee Management**
- **Shop Management**
- **Shop Product Management**
- 4. Product Quantity Add-Sell

Upon choosing any of the option the user is given some further options to choose from:

Options for Employee Management:

- 1. Insert New Employee 2. Remove Existing Employee 3. Show All Employees Search an Employee 5. Go Back Options for Shop Management:
- 1. Insert New Shop
- 2. Remove Existing Shop
- 3. Show All Shops
- Search a Shop
- 5. Go Back

- Options for Shop Product Management:

1. Insert New Product

Options for Product Quantity Add-Sell:

- 2. Remove Existing Product
- 3. Show All Product
- Search a Product
- Go Back

- 1. Add Product
- 2. Sell Product
- 3. Show Add Sell History
- 4. Go Back

The application will prompt the user to give input for the necessary values as per the choice. The application will repeatedly go on according to the user choices. Whenever Product is being added or sold, the information is written in a text file and when the user requests for the add-sell history, the information written in the text file is read and displayed on screen.

Sample Project Question

Requirements:

- Object Oriented Programming Principles must be followed.
- The whole program must be organized using at least three user defined packages.
- File Read Write must be there as mentioned above.
- The program must be able to handle exceptions by itself.

Project Submission Instruction:

- It is a group project and every group must contain exactly 2 members. No more. No less.
- Fill up the form in the following link: Link: https://grgo.page.link/Qr7eJ
- I will assign a GroupID to your group, allocate a slot for your project defense and viva, and upload it in VUES.
- You will have to Zip and Upload the project in your VUES account before your allocated schedule. The name of your zipped folder will be according to your GroupID.