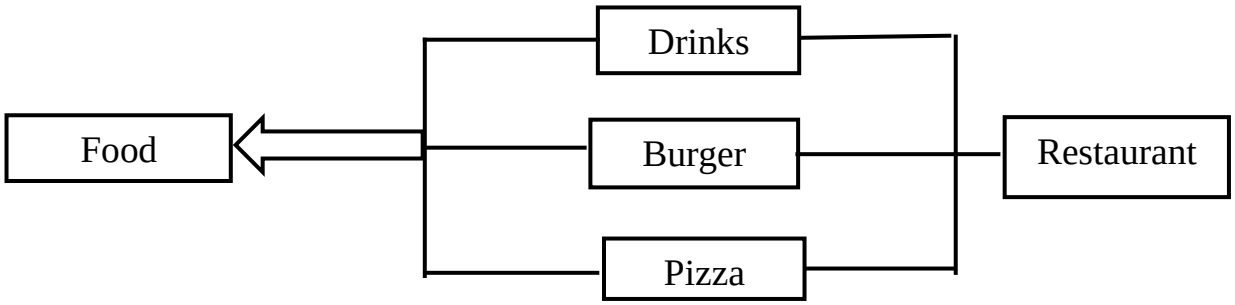
AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)
Faculty of Science and Technology (FST)
Department of Computer Science (CS)

Course Title: Object Oriented Programming 2

Lab Task : Developing a basic C# program with Association.

Look at the following class diagram and class notations carefully, and develop the program.



Food
String name String ingredients [] double price float calories
Food() Food (String name, String[] ingredients, double price, float calories) void setName(String name) void setIngredients (String[] ingredients) void setPrice(double price) void setCalories (float calories) String getName ( ) String[] getIngredients ( ) double getPrice ( ) float getCalories ( )

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void removeIngredient(String ingredient) void addingredient(String ingredient) abstract void showDetails( )

Drinks
String Type int sizeInLitter
Drinks() Drinks (String name, String[] ingredients, double price, float calories, String type, int sizeInLitter) void setType (String type) void setSize(int sizeInLitter) String getType () int getSize ()

Burger
int numberOfPatty
Burger() Burger(String name, String[] ingredients, double price, float calories, int numberOfPatty) void setNumberOfPatty (int numberOfPatty) int getNumberOfPatty () void showDetails ()

Pizza
int sizeInInches
Pizza() Pizza(String name, String[] ingredients, double price, float calories, int sizeInInches) void setSize (int SizeInInches) int getSize ()

void showDetails ()

Restaurant
String restaurantName Drink drinks[] //size of array should be 100. Burger burgers[] //size of array should be 100. Pizza pizzas[] //size of array should be 100.
Restaurant() Restaurant(String restaurantName) void setRestaurantName(String restaurantName) String getRestaurantName( ) void addDrink(Drink d) void removeDrink(Drink d) void showDrink() double calculateBill() void addBurger(Burger b) void removeBurger(Burger b) void showBurger() double calculateBill() void addPizza(Pizza p) void removePizza(Pizza p) void showPizza() double calculateBill()

Start
Inside the main method, create ***five objects of Drinks***, ***five objects of Burger*** and ***five objects of Pizza. One object of Restaurant***. Demonstrate all the methods and constructors.

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