/\* An invoice is a bill that charges customers for provided services or goods, with a statement of sum due for these services and goods.\*/

Public class Invoice {

/\*The name of the customers will be stored as a string when it is provided.\*/

Private String Names;

/\*The current credit card number will be stroned in an array.\*/

Private int[]CCNum;

/\*The expiration date of the credit card will also be stored in an array.\*/

Private int[]CCExp;

/\*The billable items will be stored in an arrayllist and shows the available items customers can order.\*/

Private ArrayList <String> Billable Items

/\*This returns the name of the customer when he or she is ordering.\*/

Public String getNames(){…}

/\*

Public String getBillable(){…}

/\*This returns the credit card number of the customer that was provided.\*/

Public int getCCNum(){…}

/\*This returns the credit card expiration date of the customer.\*/

Public int getCCExp(){…}

/\*This method sets or updates the name of the customer.

@pre There isn’t a string in Private String Names or needs to be updated

@post Private String Names= name

/\*

Public void setName(String name){…}

/\*This method sets or updates the credit card number of the customers.

@pre There isn’t an array or it needs to be updated

@post private int[]CCNum=a

\*/

Public void setCCNum(int []a){…}

/\*This method sets or updates the credit card expiration date.

@pre There isn’t an array or it needs to be updated

@post private int[]CCExp=b

\*/

Public void setCCExp(int []b){…}

}

/\* The Billable Items are items that are resupplied to the customers when needed like towels, soaps, and etc. Most of the billable items are free of charge.\*/

Public class BillableItems{

/\*The name of the items that is offered to the customer.\*/

Private string BillableName;

/\*It contains the price of items.\*/

Private double price;

/\*It contains the date the item will be expired. \*/

Private double date;

/\*It contains the time the item will be expired.\*/

Private double time;

/\* This returns the name of the item. \*/

Public string getBName(){…}

/\*This returns the price of the item.\*/

Public double getPrice(){…}

/\*This returns the expiration date of the item.\*/

Public double getDate(){…}

/\*This returns the time the time will expire.\*/

Public double getTime(){…}

/\*This method will add the available billable items to the array list of the items.

@pre There should be an array list that exist which is Private ArrayList <String> Billable Items from Invoice object.

@post The item will be added to the array list.

\*/

Public void addItems(string a, double b, double c, double d)[…}

/\*This method will remove the available billable items to the array list of the items.

@pre There should be an array list that exist which is Private ArrayList <String> Billable Items from Invoice object.

@post The item will removed from the array list.

\*/

Public void RemoveItems(string a, double b, double c, double d)[…}

}

/\*Restaurant is part of the hotel management software. \*/

Public class Restaurant{

/\*The numofTable contains the number of table available in the restaurant of the hotel.\*/

Private int numofTable;

/\*The array list is used to contain the list of restaurant items.\*/

Private ArrayList <Object> RestItem;

/\*The array list is used to contain the list of catered meals.\*/

Private ArrayList<Object>CateredMeals;

/\*This returns the number of table of the restaurant.\*/

Public getTable(){…}

/\*This returns the list of available restaurant items on the menu.\*/

Public getRestaurantItem(){…}

/\*This returns the list of available catered meals on the menu.\*/

Public getCateredMeals(){…}

}

/\*The RestaurantMenuItem is an object that allows the adding and removing of items from the menu of the arraylist from the Restaurant class. \*/

Public class RestaurantMenuItem{

/\*This contains the name of the restaurant items.\*/

Private string ItemName;

/\*This contains the price of the restaurant items.\*/

Private double Price;

/\*This contains the information about the menu items.\*/

Private string Description;

/\*This returns the name of the menu items.\*/

Public getItemName(){…}

/\*This returns the price of the menu items\*/

Public getPrice(){…}

/\*This returns the description of the menu items.\*/

Public getDescription(){…}

/\*This method adds a new item into the menu.

@pre Private ArrayList <Object> RestItem from the Restaurant class must be created.

@post Item is added to the array list.

\*/

Public void addItem(String a, double b, string c){…}

/\*This method removes item from the menu.

@pre The array list of restaurant menu must be available and created.

@post The item from the array list is removed.

\*/

Public void removeItem(String a, double b, string c){…}

}

/\*The CateredMealItem is an object that adds and removes catered items from the menu of array list for catered items.\*/

Public class catered meal item{

/\*This contains the name of the catered item.\*/

Private string MealName;

/\*This contains the price of the catered item per person.\*/

Private double PricePerSeat;

/\*This contains the description of the catered item.\*/

Private string CaterDescription;

/\*This returns the name of the catered item.\*/

Public getCateredName(){…}

/\*This returns the price per person of the catered item.\*/

Public getPrice(){…}

/\*This returns the description of the catered item.\*/

Public getDescrip(){…}

/\*This method will add a catered item to the current menu of the catered items which is in the array list.

@pre There must be an existing array list of the catered item.

@post The catered item will be added to the list of the catered item array list.

\*/

Public void addCater(String name, double price, string descrip){…}

/\*This method will remove a catered item to the current menu of the catered items which is in the array list.

@pre There must be an existing array list of the catered item.

@post The catered item will be removed from the list of the catered item array list.

\*/

Public void removeCater(String name, double price, string descrip ){…}

}