public class Order {

// ArrayList of BillableItem objects

private List billables;

// Date and time expected represented as a Date object and and integer representing minutes

private Date orderDate;

private int estimatedTime;

// State represented as an integer (either ordered 0, preparing 1, complete 2)

private int orderstatus;

// Reference to Invoice Object (to which the order is billed represented as a String

private String InvoiceNumber;

/\* Getters and setters for

\* the billables attribute.

\* @precondition: the relevant

\* Order has to exist.

\* @postcondition: billables

\* is set or retrieved.

\*/

public void setBillables(ArrayList<Billables> billablesList){

this.billables = billablesList;

}

public int getNumberofBillables(){

return billables.size();

}

/\* Getters and setters for

\* the orderDate attribute.

\*

\* @precondition: the relevant

\* Order has to exist.

\* @postcondition: orderDate

\* is set or retrieved.

\*/

public void setOrderDate(){

Date currentDate = ?

this.orderDate = currentDate

}

public String getEstimatedOrderTime(){

int finishTime;

int currentTime = ?

finishTime += this.estimatedTime;

//Do time formatting logic

finishTime.toString();

return finishTime;

}

/\* Getters and setters for

\* the orderStatus attribute.

\*

\*

\* @precondition: the relevant

\* Order has to exist.

\* @postcondition: orderStatus

\* is set or retrieved.

\*/

public void setOrderStatus(){

this.orderStatus = 0;

}

public String getOrderStatus(){

String status;

switch(this.state){

case 1:

status = "Ordered";

break;

case 2:

status = "Preparing";

break;

case 3:

status = "Complete";

break;

default:

status = "Processing"

break;

}

return status;

}

/\* Getters and setters for

\* the InvoiceNumber attribute.

\*

\*

\* @precondition: the relevant

\* Order has to exist.

\* @postcondition: InvoiceNumber

\* is set or retrieved.

\*/

public void setInvoiceReference(String invoice){

this.InvoiceNumber = invoice;

}

public String getInvoiceReference(){

return this.InvoiceNumber

}

}

public class RoomServiceOrder extends Order{

// RoomNumber represented as an integer

private int roomNumber;

/\* Getters and setters for

\* the roomNumber attribute.

\*

\*

\* @precondition: the relevant

\* RoomServiceOrder has to exist.

\* @postcondition: roomNumber

\* is set or retrieved.

\*/

public void setRoomNumber(int number){

this.roomNumber = number;

}

public int getRoomNumber(){

return this.roomNumber;

}

}

public class TableServiceOrder extends Order{

// tableNumber represented as an integer

private int tableNumber;

/\* Getters and setters for

\* the tableNumber attribute.

\*

\*

\* @precondition: the relevant

\* TableServiceOrder has to exist.

\* @postcondition: tableNumber

\* is set or retrieved.

\*/

public void setTableNumber(int number){

this.tableNumber = number;

}

public int getTableNumber(){

return this.tableNumber;

}

}

public class CateredMealOrder extends Order{

// RoomName represented as an String

private String RoomName;

/\* Getters and setters for

\* the roomName attribute.

\*

\*

\* @precondition: the relevant

\* CateredMealOrder has to exist.

\* @postcondition: roomName

\* is set or retrieved.

\*/

public void setRoomName(String name){

this.RoomName = name;

}

public void getRoomName(){

return this.RoomName;

}

}

public class MaintenanceOrder extends Order {

// Description represented as a String

// RoomName represented as a String

private String Description;

private String RoomName;

/\* Getters and setters for

\* the Description attribute.

\*

\*

\* @precondition: the relevant

\* MaintenanceOrder has to exist.

\* @postcondition: Description

\* is set or retrieved.

\*/

public void setDescription(String description){

this.Description = description

}

public String getDescription(){

return this.Description;

}

/\* Getters and setters for

\* the roomName attribute.

\*

\*

\* @precondition: the relevant

\* MaintenanceOrder has to exist.

\* @postcondition: roomName

\* is set or retrieved.

\*/

public void setRoomName(String name){

this.RoomName = name;

}

public void getRoomName(){

return this.RoomName;

}

}