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ASSIGNMENT.NO.7

TITLE : Prepare a State Model

Identify States and events for your system. Study state transitions and identify Guard conditions. Draw State chart diagram with advanced UML 2 notations. Implement the state model with a suitable object-oriented language

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package onlineshopping;

public class Admin {

public static void main(String[] args) {

customer a1 = new customer("abcd","wxyz.");

a1.registration();

a1.validated();

a1.viewproduct();

a1.cart();

a1.payment();

}

}

-----------------------------------------------------------------------------------------

package onlineshopping;

public class customer {

private String id;

private String password;

private state state1 = state.REGISTER;

public customer(String id, String password) {

super();

this.id = id;

this.password = password;

}

public void registration()

{

if (this.getstate().equals(state.REGISTER))

{

System.out.println("Registration of CUSTOMER: '" + getid() + "' is SUCCESSFUL");

setstate(state.LOGIN);

}

else

{

System.out.println("Registration Not successful!");

}

}

public void validated()

{

if (this.getstate().equals(state.LOGIN))

{

System.out.println("'" + getid() + "' is a Valid Customer!");

setstate(state.VIEW\_PRODUCT);

}

else

{

System.out.println("Customer is invalid.");

}

}

public void viewproduct()

{

if (this.getstate().equals(state.VIEW\_PRODUCT))

{

System.out.println("Customer is Viewing or Searching products!");

setstate(state.CART);

}

else

{

System.out.println("Unable to search or view products.");

}

}

public void cart()

{

if (this.getstate().equals(state.CART))

{

System.out.println("Customer has added products into the cart!");

System.out.println("Customer has removed certain products from the cart!");

setstate(state.PAYMENT);

}

else

{

System.out.println("Unable to add/remove products.");

}

}

public void payment()

{

if (this.getstate().equals(state.PAYMENT))

{

System.out.println("PAYMENT successful.\nCustomer '"+ getid() +"' has SUCCESSFULLY paid!");

setstate(state.PAYMENT);

}

else

{

System.out.println("Payment unsuccessful!");

}

}

public String getid() {

return id;

}

public void setid(String id) {

this.id = id;

}

public String getContent() {

return password;

}

public void setContent(String password) {

this.password = password;

}

public state getstate() {

return state1;

}

public void setstate(state state) {

this.state1 = state;

}

}

-----------------------------------------------------------------------------------

package onlineshopping;

public enum state {

      REGISTER,LOGIN,VIEW\_PRODUCT,CART,PAYMENT;

}

------------------------------------------------------------------------------------

OUTPUT:

Registration of CUSTOMER: 'abcd' is SUCCESSFUL

'abcd' is a Valid Customer!

Customer is Viewing or Searching products!

Customer has added products into the cart!

Customer has removed certain products from the cart!

PAYMENT successful.

Customer 'abcd' has SUCCESSFULLY paid!