

build an application that can determine payments for employees and invoices alike.

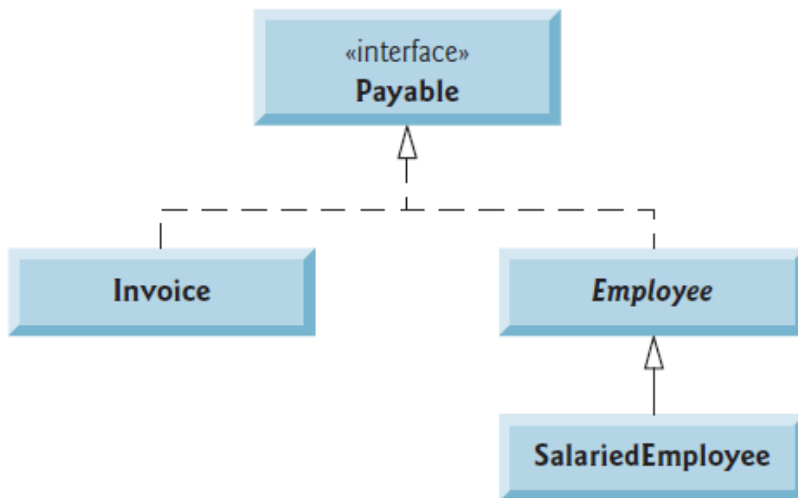
Create interface **Payable**, which contains method **getPaymentAmount** that returns a double amount that must be paid for an object of any class that implements the interface.

Method **getPaymentAmount** is a general-purpose version of method **earnings** of the **Employee** hierarchy — method **earnings** calculates a payment amount specifically for an **Employee**, while **getPaymentAmount** can be applied to a broad range of unrelated objects.

Implement class **Invoice**, which implements interface **Payable**.

Now, modify class **Employee** such that it also implements interface **Payable**.

Update **Employee** subclasses created previously to “fit” into the **Payable** hierarchy by renaming **SalariedEmployee** method **earnings** as **getPaymentAmount** and so on.



Use this modified tester to have elements of **Employee** subclasse, and other elements purchased for the office.

```
public class PayableInterfaceTest
```

```

{ public static void main( String[] args ) {

// create four-element Payable array
Payable[] payableObjects = new Payable[ 4 ];
// populate array with objects that implement Payable
payableObjects[ 0 ] = new Invoice( "01234", "seat", 2, 375.00 );
payableObjects[ 1 ] = new Invoice( "56789", "tire", 4, 79.95 );
payableObjects[ 2 ] = new SalariedEmployee( "John", "Smith", "111-11-1111", 800.00 );
payableObjects[ 3 ] = new SalariedEmployee( "Lisa", "Barnes", "888-88-8888", 1200.00 );
System.out.println("Invoices and Employees processed polymorphically:\n" );
// generically process each element in array payableObjects
for ( Payable currentPayable : payableObjects )
{
    // output currentPayable and its appropriate payment amount
    System.out.printf( "%s \n%s: $%,.2f\n\n",
currentPayable.toString(), "payment due", currentPayable.getPaymentAmount();
    } //endfor
} // end main
} // end class PayableInterfaceTest

```

Draw the complete UML