DPP-2

//DocumentInterface.java

package FactoryMethodPatternExample;

public interface DocumentInterface {

    void open();

    void save();

    String getType();

}

//DocumentFactory.java

package FactoryMethodPatternExample;

public abstract class DocumentFactory  {

    public abstract DocumentInterface createDocument();

}

//ExcelDocument.java

package FactoryMethodPatternExample;

public class ExcelDocument implements DocumentInterface {

    public void open(){

        System.out.println("open excel document");

    }

    public void save(){

        System.out.println("save excel document");

    }

    public String getType(){

        return "excel";

    }

}

//WordDocument.java

package FactoryMethodPatternExample;

public class WordDocument implements DocumentInterface {

    public void open(){

        System.out.println("open word document");

    }

    public void save(){

        System.out.println("save word document");

    }

    public String getType(){

        return "word";

    }

}

//PdfDocument.java

package FactoryMethodPatternExample;

public class PdfDocument implements DocumentInterface{

    public void open(){

        System.out.println("open pdf document");

    }

    public void save(){

        System.out.println("save pdf document");

    }

    public String getType(){

        return "pdf";

    }

}

//ExcelDocumentFactory.java

package FactoryMethodPatternExample;

public class ExcelDocumentFactory extends DocumentFactory {

    public DocumentInterface createDocument(){

        return new ExcelDocument();

    }

}

//WordDocumentFactory.java

package FactoryMethodPatternExample;

public class WordDocumentFactory extends DocumentFactory {

    public DocumentInterface createDocument(){

        return new WordDocument();

    }

}

//Test.java

ackage FactoryMethodPatternExample;

public class Test {

    public static void main(String[] args){

        DocumentFactory wordFactory = new WordDocumentFactory();

        DocumentInterface word = wordFactory.createDocument();

        System.out.println("created document type -> " + word.getType());

        word.open();

        word.save();

        DocumentFactory excelFactory = new ExcelDocumentFactory();

        DocumentInterface excel = excelFactory.createDocument();

        System.out.println("created document type -> " + excel.getType());

        excel.open();

        excel.save();

        DocumentFactory pdfFactory = new PdfDocumentFactory();

        DocumentInterface pdf = pdfFactory.createDocument();

        System.out.println("created document type -> " + pdf.getType());

        pdf.open();

        pdf.save();

    }

}

//Output

