

Open Eclipse : Make a new project. Add a class named JDBC_excel.java

*****We will be using only JRE 1.8, no need of downgrading*****

For this we need an external jar file : **fillo-1.18.jar**

URL to download : <https://jar-download.com/artifacts/com.codoid.products/fillo/1.18/source-code>

We Used ECLIPSE OXYGEN (any version can be used). Also tried out with Eclipse MARS, it works.

Create the required XML File (as per requirements) from which the data has to be inserted into the Excel sheet, which acts as your database.

We can also select the contents present in the excel sheet and view it if necessary.

Reference the fillo-1.18.jar in the package that you are working on.

Steps:

1. Right click on the package -> Build Path -> Configure Build Path -> Libraries -> Add external JARs -> add the required jar file.

After referencing the external jar file, check the referenced libraries if this JAR file has been added there.

Finish the coding part of the Insertion and selection program on the class file JDBC_excel.java that had been created.

CODE FOR JDBC_excel.java :

```
import java.io.File;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.DocumentBuilderFactory;

import org.w3c.dom.Document;
import org.w3c.dom.Element;
import org.w3c.dom.Node;
import org.w3c.dom.NodeList;
```

```

import com.codoid.products.fillo.Fillo;
import com.codoid.products.fillo.Recordset;

public class JDBC_excel {
    public static void main(String[] args) throws Exception {

        Fillo fillo=new Fillo();
        com.codoid.products.fillo.Connection
connection=fillo.getConnection("/Users/mukundwn/Downloads/book1.xlsx");
        String strQuery="Select * from Sheet1";
        Recordset recordset=connection.executeQuery(strQuery);

        DocumentBuilderFactory docBuilderFactory =
DocumentBuilderFactory.newInstance();
        DocumentBuilder docBuilder =
docBuilderFactory.newDocumentBuilder();
        Document doc = docBuilder.parse (new File("/Users/mukundwn/
eclipse-workspace/XMLInsertion/Database.xml"));
        doc.getDocumentElement().normalize();
        System.out.println ("Root element of the doc is " +
doc.getDocumentElement().getNodeName());
        NodeList listOfPersons = doc.getElementsByTagName("Profile");
        for(int s=0; s<listOfPersons.getLength(); s++){
            Node firstPersonNode = listOfPersons.item(s);
            if(firstPersonNode.getNodeType() == Node.ELEMENT_NODE){
                Element firstPersonElement = (Element)firstPersonNode;
                NodeList nameList =
firstPersonElement.getElementsByTagName("Name");
                Element nameElement =(Element)nameList.item(0);

                NodeList textFNList = nameElement.getChildNodes();
                String name=((Node)textFNList.item(0)).getNodeValue().trim();

                NodeList emailList =
firstPersonElement.getElementsByTagName("Email");
                Element emailElement =(Element)emailList.item(0);

                NodeList textLNList = emailElement.getChildNodes();
                String email= ((Node)textLNList.item(0)).getNodeValue().trim();

                int i=connection.executeUpdate("insert into Sheet1(Name,email)
values('"+name+"','"+email+"')");
            }
        }
    }
}

```

```

        while(recordset.next()){
            System.out.println("name: "+recordset.getField("name")+" email:
"+recordset.getField("email"));
        }

        recordset.close();
        connection.close();

    }

}

```

CORRESPONDING XML FILE :

DATABASE.XML

```

<?xml version = "1.0" encoding="UTF-8"?>
<!DOCTYPE note SYSTEM "DatabaseDTD.dtd">
<Profiles>
    <Profile id="A1">
        <Name>Vijay Nirmal</Name>
        <Email>abc@outlook.com</Email>
        <Password>abc@outlook.com</Password>
    </Profile>
    <Profile id="A2">
        <Name>Kogul Karna</Name>
        <Email>qwe@outlook.com</Email>
        <Password>abc@outlook.com</Password>
    </Profile>
    <Profile id="A3">
        <Name>Mukund WN</Name>
        <Email>zxc@outlook.com</Email>
        <Password>abc@outlook.com</Password>
    </Profile>
</Profiles>

```

Since there is a reference to a DTD file in the XML file above, the following DTD file must be present in the same directory as the xml file.

DatabaseDTD.dtd:

```
<?xml version = "1.0" encoding="UTF-8"?>
<!ELEMENT Profiles (Profile+)>
<!ELEMENT Profile (Name,Email,Password)+>
<!ATTLIST Profile id ID #REQUIRED>
<!ELEMENT Name (#PCDATA)>
<!ELEMENT Email (#PCDATA)>
<!ELEMENT Password (#PCDATA)>
```

book1.xlsx :

The excel sheet must contain attributes name and email. Also type in some default values so that when we run the program for the first time, there is some data to fetch from. Else it will throw an error.

name	email
mukund	abc@g.com
ssa	aaa@ggg.com
Vijay Nirma	abc@outlook.com
Kogul Karn	qwe@outlook.com
Mukund WN	xc@outlook.com
Vijay Nirma	abc@outlook.com
Kogul Karn	qwe@outlook.com
Mukund WN	xc@outlook.com