

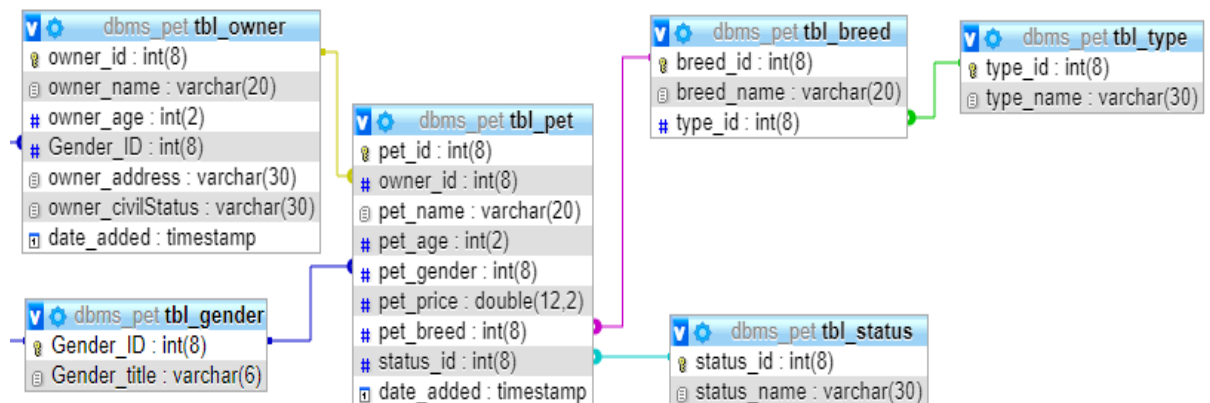
Objectives:

1. To connect Java to MySQL server
2. Create Encapsulated class for CRUD operations and other transactions

Materials:

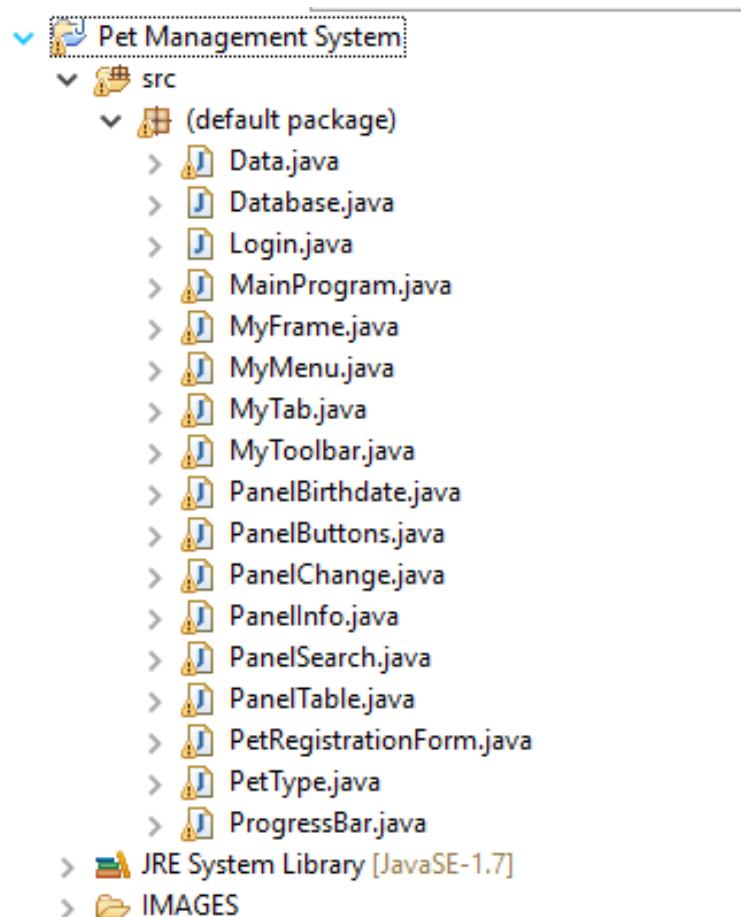
1. PC or Laptop
2. WAMP/XAMPP Installer
3. Web Browser or CLI

Background

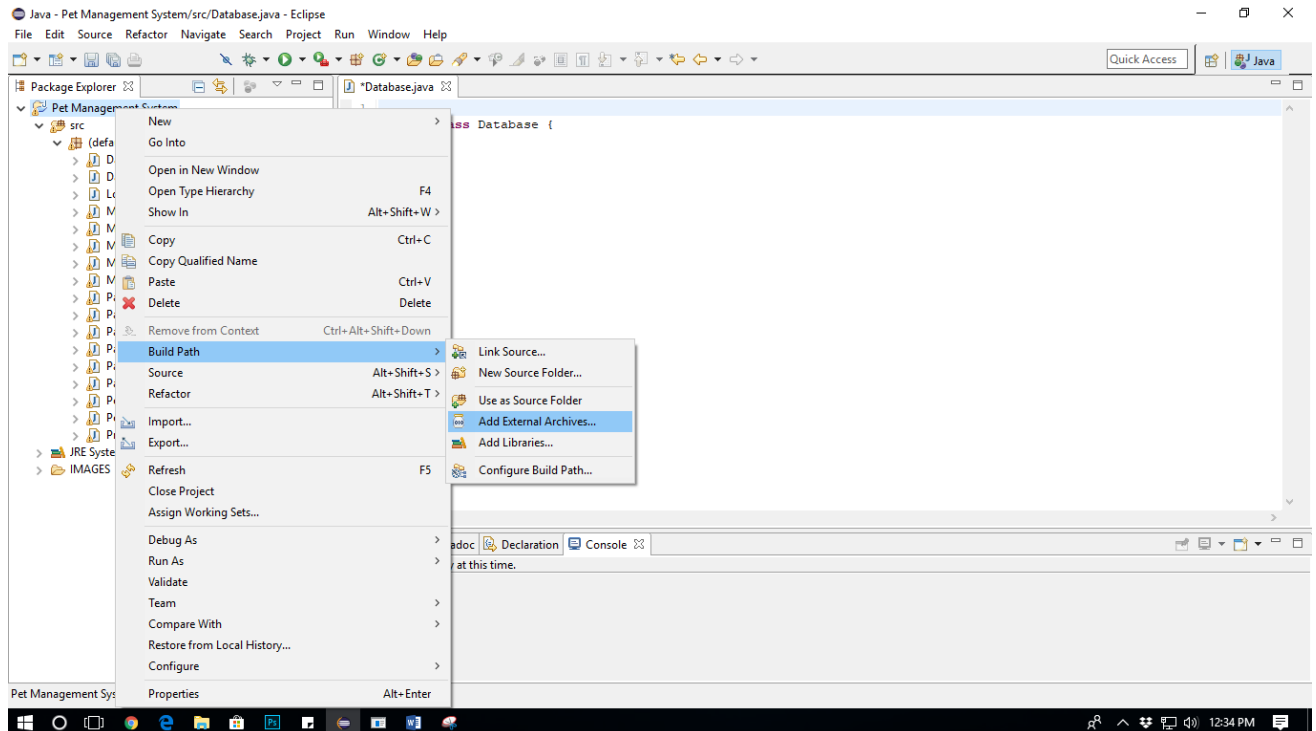


Instructions:

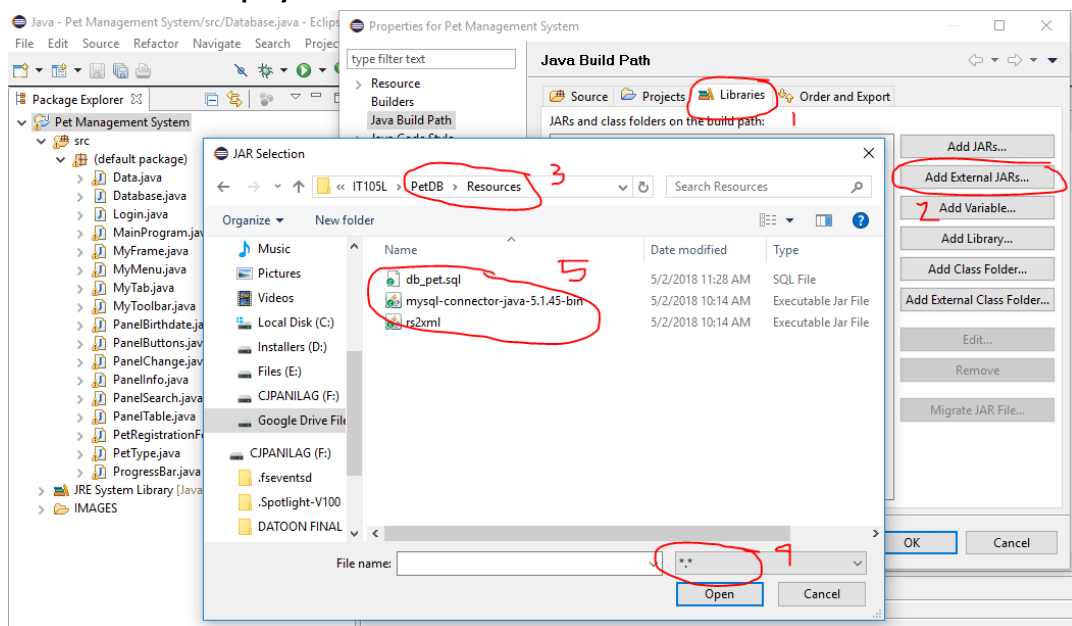
1. Create java project “Pet Management System”. Then, drag all the files [Downloaded java file], including all classes, to your project.

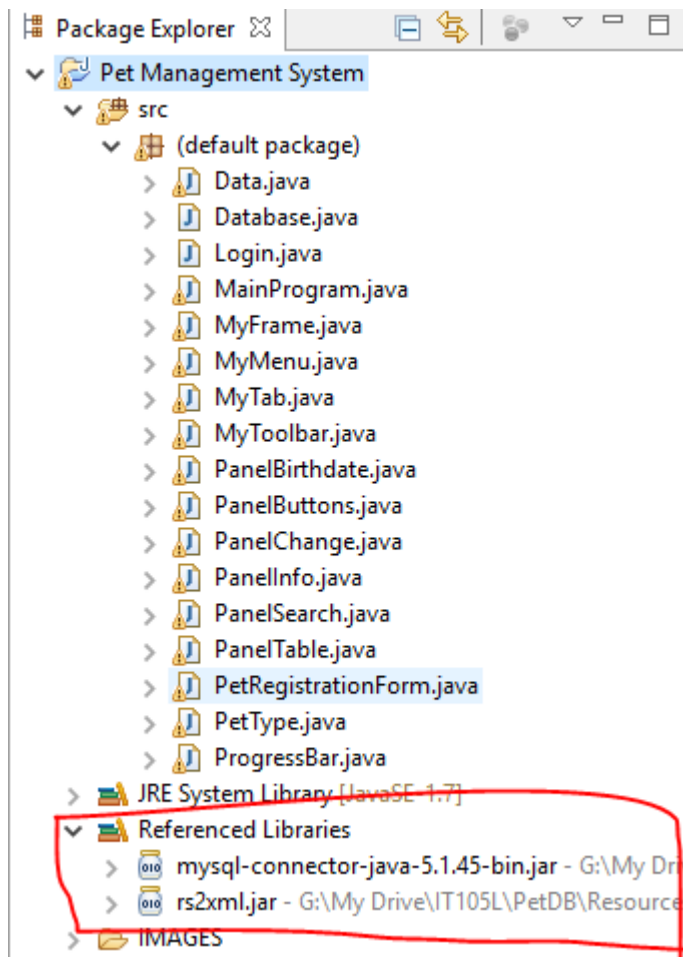
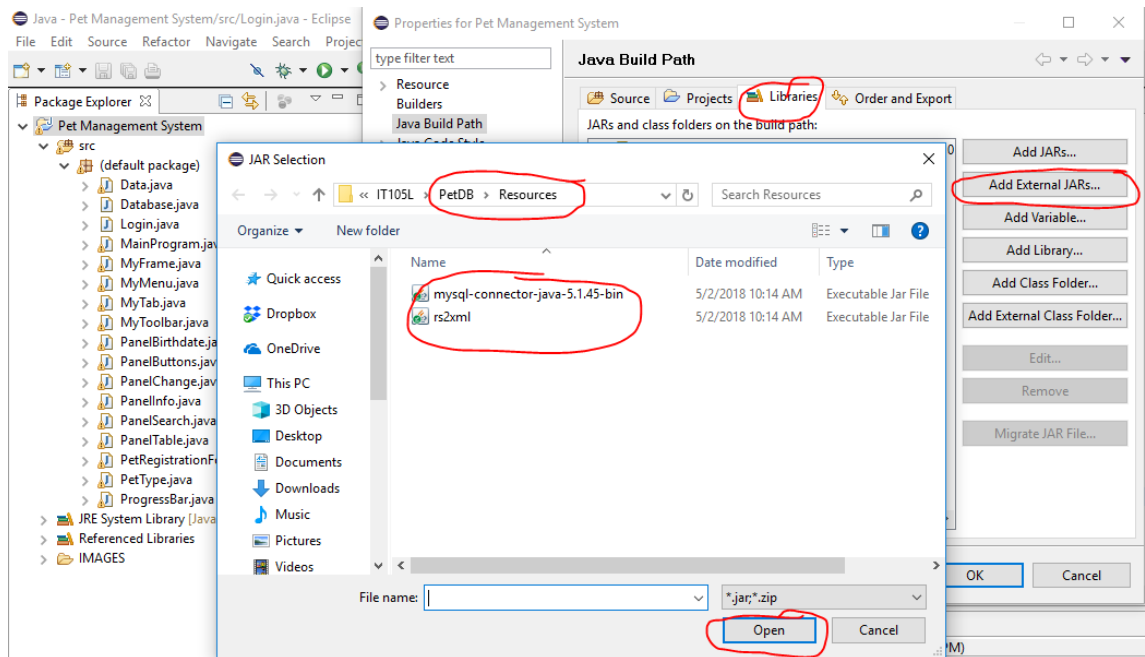


2. Right-click on the project. Then, click Build path>Add External Achieves



3. Then follow the display below:





```

1 import java.sql.*;
2
3 public class Database {
4
5     private Connection conn=null;
6     private Statement st=null;
7     private ResultSet rs=null;
8
9     private String SQL="";
10    private String strConn="jdbc:mysql://localhost:3306/";
11
12    public void DB_Connection(String db_name) {
13        try {
14            Class.forName("com.mysql.jdbc.Driver");
15            strConn+=db_name;
16            conn=DriverManager.getConnection(strConn,"root","");
17            System.out.println("Connection Successful");
18        } catch (Exception e) {
19            System.out.println("Error 101: DB_Connection\n "+e.getMessage());
20        }
21    }
22
23 }
24
25

```

```

5    JLabel back;
6
7    Database db=new Database();
8
9    public MainProgram() {
10        db.DB_Connection("dbms_pet");
11        icon=new ImageIcon("IMAGES/123.jpg");
12        back=new JLabel("",icon,0);
13    }
14    public void setUI() {
15        setJMenuBar(new MyMenu());
16        add(new MyToolbar(), BorderLayout.NORTH);
17        //add(new PanelChange(), BorderLayout.CENTER);
18
19        add(new MyTab(), BorderLayout.CENTER);
20        //add(new PanelInfo(), BorderLayout.WEST);
21        //add(new PanelButtons(), BorderLayout.SOUTH);
22        setTitle("Main Program");
23        setExtendedState(MAXIMIZED_BOTH);
24        //setUndecorated(true);
25        getContentPane().setBackground(new Color(0, 90, 250, 90));
26        setDefaultCloseOperation(DISPOSE_ON_CLOSE);
27
28    }
29 }

```

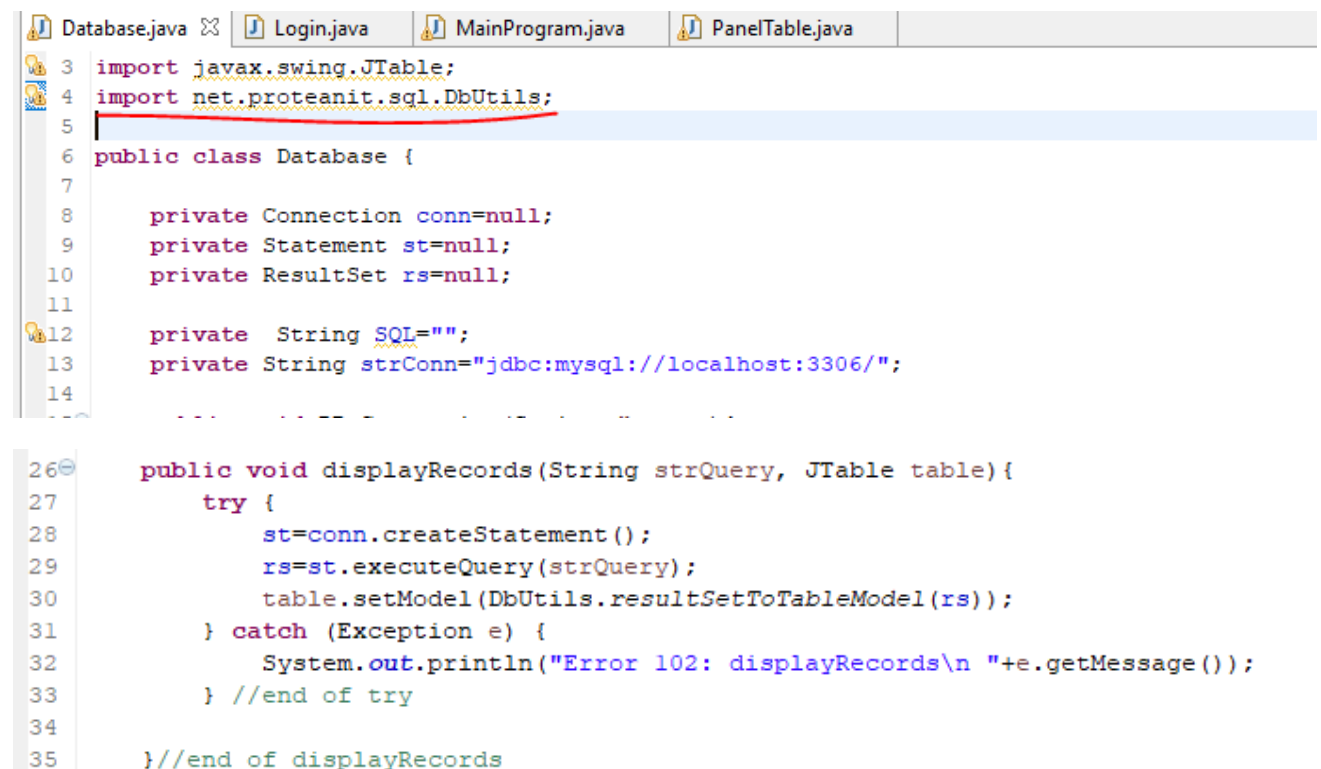
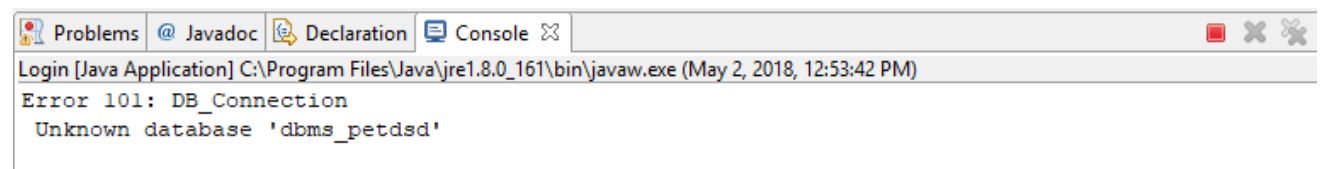
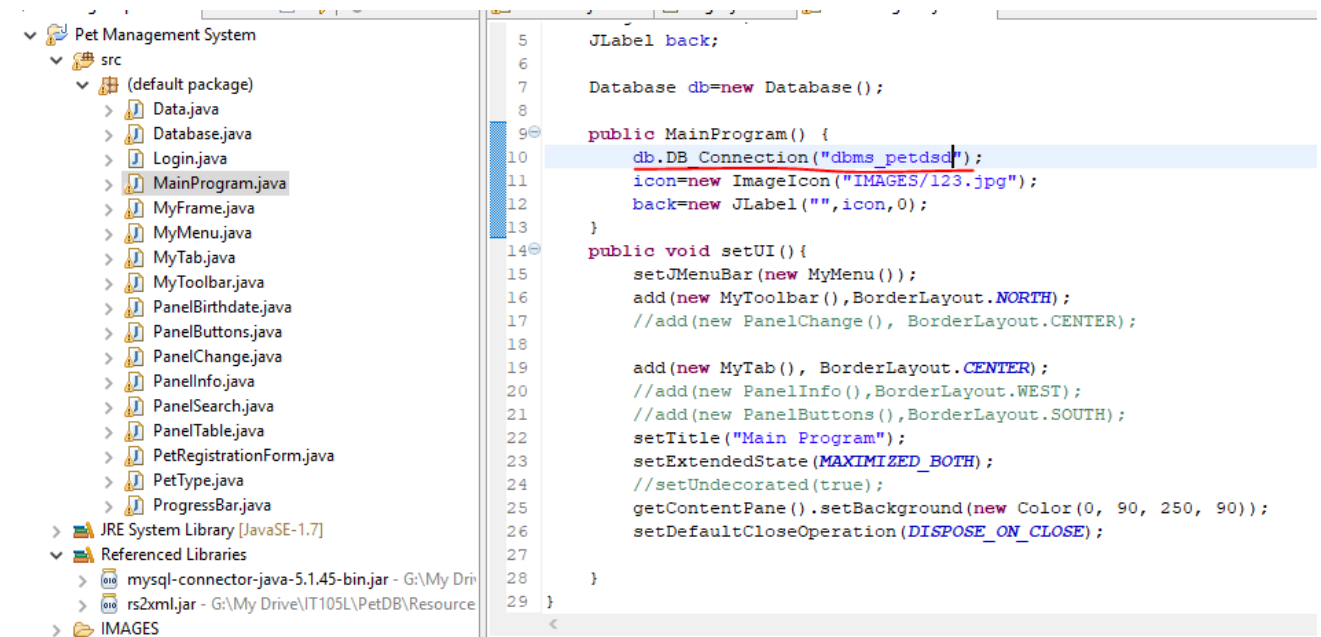
Run the program

```

Login [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (May 2, 2018, 12:51:59 PM)
Connection Successful

```

Error



```
Database.java Login.java MainProgram.java *PanelTable.java ✕
1 import java.awt.*;
2
3
4
5
6 public class PanelTable extends JPanel{
7     static JTable tbl_Pet;
8     static DefaultTableModel model_pet =new DefaultTableModel();
9     static TableRowSorter tbl_Sort=new TableRowSorter();
10
11     Database db=new Database(); //instantiating database class
12
13     public PanelTable() {
14         db.DB_Connection("dbms_pet"); //calling the method w/c establishes database connection
15         model_pet=new DefaultTableModel(); //instantiating table model
16         tbl_Pet=new JTable(model_pet); //instantiating table
17         db.displayRecords("Select *from tbl_pet", tbl_Pet); //calling the method with query and name of the table
18
19         setLayout(new BorderLayout());
20         add(new JScrollPane(tbl_Pet), BorderLayout.CENTER);
21     }
22     public static int getRowCount(){
23         return model_pet.getRowCount()+1;
24     }
25 }
26
```