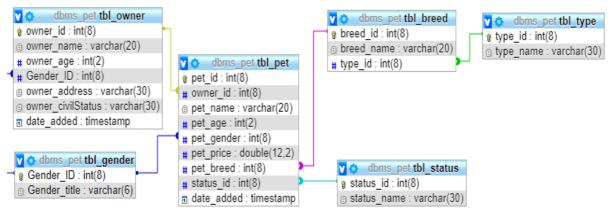
Objectives:

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

Materials:

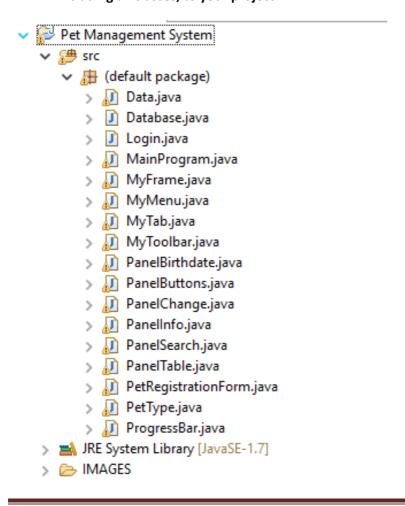
- 1. PC or Laptop
- 2. WAMP/XAMPP Installer
- 3. Web Browser or CLI

Background

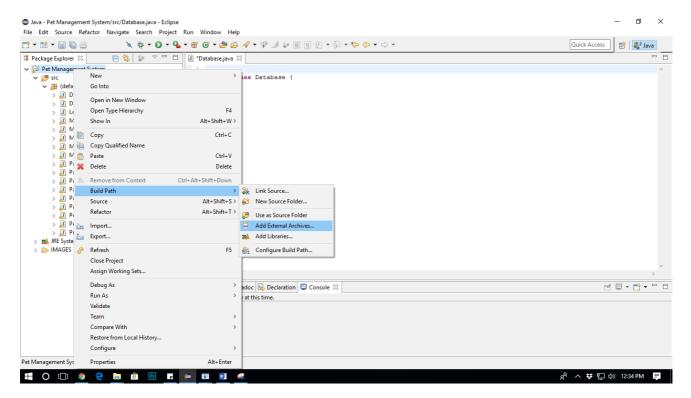


Instructions:

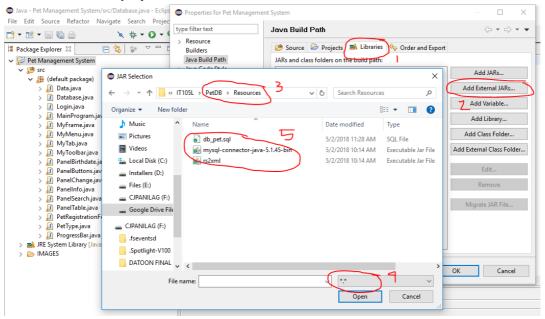
1. Create java project "Pet Management System". Then, drag all the files [Downloaded java file], including all classes, to your project.

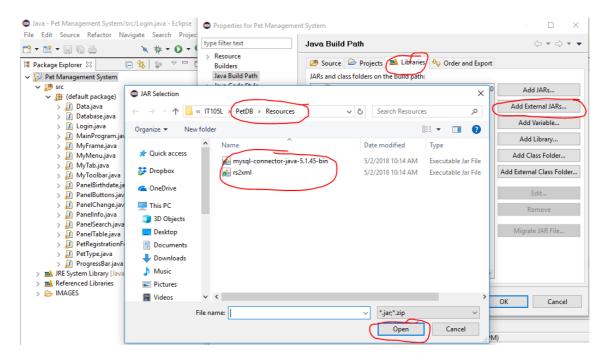


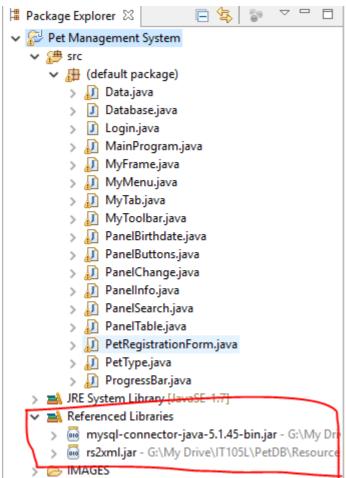
2. Right-click on the project. Then, click Build path>Add External Achieves



3. Then follow the display below:







```
🔝 Database.java 🛭
🛱 Package Explorer 🛭
🗸 📂 Pet Management System
                                                 1 import java.sql.*;
   public class Database {
     Data.java
Database.java
                                                        private Connection conn=null;
                                                        private Statement st=null;
          Login.java
                                                        private ResultSet rs=null;
        > 🚺 MainProgram.java
        > 🚺 MyFrame.java
                                                        private String SQL="";
          MyMenu.java
                                                        private String strConn="jdbc:mysql://localhost:3306/";
          MyTab.java
          MyToolbar.java
                                                        public void DB_Connection(String db_name) {
          PanelBirthdate.java
                                                             try {
        > III PanelButtons.java
                                                                 Class.forName("com.mysql.jdbc.Driver");
        > II PanelChange.java
                                                                 strConn+=db_name;
        > II PanelInfo.java
                                                                 conn=DriverManager.getConnection(strConn, "root", "");
        > II PanelSearch.java
                                                                 System.out.println("Connection Successful");
        > 🚺 PanelTable.java
                                                             } catch (Exception e) {
          PetRegistrationForm.java
                                                                 System.out.println("Error 101: DB_Connection\n "+e.getMessage());
        > 🔝 PetType.java
        > 🚺 ProgressBar.java
   > 🕍 JRE System Library [JavaSE-1.7]

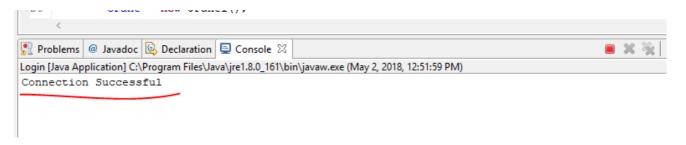
✓ ➡ Referenced Libraries

       mysql-connector-java-5.1.45-bin.jar - G:\My Dri
        ss2xml.jar - G:\My Drive\IT105L\PetDB\Resource
   > 🌦 IMAGES
```

```
☐ Package Explorer 
☐

                                               Database.java
                                                              Login.java
                                                                           🗸 📂 Pet Management System
                                                 5
                                                        JLabel back;
   🗸 🔠 (default package)
                                                        Database db=new Database():
        > 🕖 Data.java
        > II Database.java
                                                 90
                                                        public MainProgram() {
                                                            db.DB_Connection("dbms_pet");
icon=new ImageIcon("IMAGES/123.jpg");
          Login.java
        > 🔝 MainProgram.java
        > // MyFrame.java
                                                             back=new JLabel("",icon,0);
                                                13
        > // MyMenu.java
                                                        public void setUI(){
                                                140
        > III MvTab.iava
                                                15
                                                             setJMenuBar(new MvMenu());
          MyToolbar.java
                                                16
                                                             add(new MyToolbar(),BorderLayout.NORTH);
          PanelBirthdate.java
                                                17
                                                             //add(new PanelChange(), BorderLayout.CENTER);
        > 🚺 PanelButtons.java
                                                18
        > D PanelChange.java
                                                19
                                                             add(new MyTab(), BorderLayout.CENTER);
        > 🚺 PanelInfo.java
                                                20
                                                             //add(new PanelInfo(),BorderLayout.WEST);
        > II PanelSearch.java
                                                21
                                                             //add(new PanelButtons(),BorderLayout.SOUTH);
        > In PanelTable.iava
                                                22
                                                             setTitle("Main Program");
        > DetRegistrationForm.java
                                                23
                                                             setExtendedState(MAXIMIZED BOTH);
        > 🚺 PetType.java
                                                24
                                                             //setUndecorated(true);
        > 🚺 ProgressBar.java
                                                25
                                                             getContentPane().setBackground(new Color(0, 90, 250, 90));
   > A JRE System Library [JavaSE-1.7]
                                                26
                                                             setDefaultCloseOperation(DISPOSE ON CLOSE);
   > M mysql-connector-java-5.1.45-bin.jar - G:\My Driv
      > 👼 rs2xml.jar - G:\My Drive\IT105L\PetDB\Resource
   > 📂 IMAGES
```

Run the program



Error

```
🗸 📂 Pet Management System
                                          5
                                                  JLabel back;
  🗸 进 src
     7
                                                  Database db=new Database();
       > 🚺 Data.java
                                           8
       > 🚺 Database.java
                                           90
                                                  public MainProgram() {
                                                    db.DB Connection("dbms_petdsd");
icon=new ImageIcon("IMAGES/123.jpg");
       > J Login.java
                                          10
       > 🕖 MainProgram.java
                                          11
       > 🕼 MyFrame.java
                                          12
                                                     back=new JLabel("",icon,0);
                                          13
       > 🚺 MyMenu.java
                                          140
                                                 public void setUI(){
       > 🕖 MyTab.java
                                          15
                                                     setJMenuBar(new MyMenu());
       > 🚺 MyToolbar.java
                                                     add(new MyToolbar(),BorderLayout.NORTH);
                                          16
       > 🚺 PanelBirthdate.java
                                          17
                                                     //add(new PanelChange(), BorderLayout.CENTER);
       > 🚺 PanelButtons.java
                                          18
       > D PanelChange.java
                                          19
                                                     add(new MyTab(), BorderLayout.CENTER);
       > 🚺 PanelInfo.java
                                          20
                                                     //add(new PanelInfo(),BorderLayout.WEST);
       > D PanelSearch.java
                                          21
                                                     //add(new PanelButtons(),BorderLayout.SOUTH);
       > 🚺 PanelTable.java
                                                     setTitle("Main Program");
                                          22
       > DetRegistrationForm.java
                                          23
                                                     setExtendedState(MAXIMIZED BOTH);
       > 🚺 PetType.java
                                          24
                                                     //setUndecorated(true);
       > 🕡 ProgressBar.java
                                          25
                                                     getContentPane().setBackground(new Color(0, 90, 250, 90));
  > A JRE System Library [JavaSE-1.7]
                                          26
                                                     setDefaultCloseOperation(DISPOSE_ON_CLOSE);
  27
    > omysql-connector-java-5.1.45-bin.jar - G:\My Driv
                                          28
                                          29 }
     > a rs2xml.jar - G:\My Drive\IT105L\PetDB\Resource
  > 🍃 IMAGES
🥷 Problems 🍭 Javadoc 🗟 Declaration 星 Console 🛭

    × %

Login [Java Application] C:\Program Files\Java\jre1.8.0_161\bin\javaw.exe (May 2, 2018, 12:53:42 PM)
Error 101: DB Connection
 Unknown database 'dbms petdsd'
🚺 Database.java 🖾 🚺 Login.java
                                  MainProgram.java
                                                        PanelTable.java
😘 3 import javax.swing.JTable;
4 import net.proteanit.sql.DbUtils;
   5
   6 public class Database {
   7
   8
          private Connection conn=null;
   9
          private Statement st=null;
  10
           private ResultSet rs=null;
  11
Wa12
          private String SQL="";
           private String strConn="jdbc:mysql://localhost:3306/";
 13
 14
26⊖
          public void displayRecords(String strQuery, JTable table) {
27
                try {
28
                     st=conn.createStatement();
29
                     rs=st.executeQuery(strQuery);
30
                     table.setModel(DbUtils.resultSetToTableModel(rs));
31
                } catch (Exception e) {
32
                     System.out.println("Error 102: displayRecords\n "+e.getMessage());
33
                } //end of try
34
35
          }//end of displayRecords
```

```
Database,java

☑ Login,java
☑ MainProgram.java
☑ *PanelTable,java
※
  1⊕ import java.awt.*; ...
ն 6 public class PanelTable extends JPanel{
       static JTable tbl Pet;
        static DefaultTableModel model_pet =new DefaultTableModel();
       static TableRowSorter tbl_Sort=new TableRowSorter();
№ 9
 11
        Database db=new Database(); //instantiating database class
 12
 13⊖
        public PanelTable() {
        14
15
          tbl_Pet=new JTable(model_pet); //instantiating table
         db.displayRecords("Select *from tbl pet", tbl Pet); //calling the method with query and name of the table
           setLayout(new BorderLayout());
 20
           add(new JScrollPane(tbl_Pet), BorderLayout.CENTER);
 22⊖
       public static int getRowCount() {
 23
           return model_pet.getRowCount()+1;
 24
 25 }
26
```