

3344 Web API Homework

1. Missing Database Driver

- To simulate this error, remove the mysql driver (Right click on the Jar file and select “remove”)
- To fix this error, add reference of two jar files (gson-2.6.2.jar, mysql-connector-java-5.1.14-bin.jar)

```
Output X
GlassFish Server 4.1.1 X Web_API_Sample (run) X
PWC6197: An error occurred at line: 8 in the jsp file: /webAPIs/2_listUsersAPI_most_code_in_classes.jsp
PWC6199: Generated servlet error:
cannot find symbol
  symbol:   class Gson
  location: class org.apache.jsp.webAPIs_2_005f1istUsersAPI_005fmost_005fcode_005fin_005fclasses_jsp
PWC6197: An error occurred at line: 8 in the jsp file: /webAPIs/2_listUsersAPI_most_code_in_classes.jsp
PWC6199: Generated servlet error:
cannot find symbol
  symbol:   class Gson
  location: class org.apache.jsp.webAPIs_2_005f1istUsersAPI_005fmost_005fcode_005fin_005fclasses_jsp
    at org.apache.jasper.compiler.DefaultErrorHandler.javacError(DefaultErrorHandler.java:129)
    at org.apache.jasper.compiler.ErrorDispatcher.javacError(ErrorDispatcher.java:299)
    at org.apache.jasper.compiler.Compiler.generateClass(Compiler.java:392)
    at org.apache.jasper.compiler.Compiler.compile(Compiler.java:453)
    at org.apache.jasper.JspCompilationContext.compile(JspCompilationContext.java:625)
    at org.apache.jasper.servlet.JspServletWrapper.service(JspServletWrapper.java:375)
    at org.apache.jasper.servlet.JspServlet.serviceJspFile(JspServlet.java:473)
    at org.apache.jasper.servlet.JspServlet.service(JspServlet.java:377)
    at javax.servlet.http.HttpServlet.service(HttpServlet.java:790)
    at org.apache.catalina.core.StandardWrapper.service(StandardWrapper.java:1682)
    at org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:318)
    at org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:160)
    at org.apache.catalina.core.StandardPipeline.doInvoke(StandardPipeline.java:734)
```

HTTP Status 500 - Internal Server Error

type Exception report

message Internal Server Error

description The server encountered an internal error that prevented it from fulfilling this request.

exception

org.apache.jasper.JasperException: PWC6033: Error in Javac compilation for JSP

PWC6199: Generated servlet error:
source value 1.5 is obsolete and will be removed in a future release

PWC6199: Generated servlet error:
target value 1.5 is obsolete and will be removed in a future release

PWC6199: Generated servlet error:
To suppress warnings about obsolete options, use -Xlint:-options.

PWC6199: Generated servlet error:
package com.google.gson does not exist

PWC6197: An error occurred at line: 8 in the jsp file: /webAPIs/2_listUsersAPI_most_code_in_classes.jsp

PWC6199: Generated servlet error:
cannot find symbol
 symbol: class Gson
 location: class org.apache.jsp.webAPIs_2_005f1istUsersAPI_005fmost_005fcode_005fin_005fclasses_jsp

PWC6197: An error occurred at line: 8 in the jsp file: /webAPIs/2_listUsersAPI_most_code_in_classes.jsp

PWC6199: Generated servlet error:
cannot find symbol
 symbol: class Gson
 location: class org.apache.jsp.webAPIs_2_005f1istUsersAPI_005fmost_005fcode_005fin_005fclasses_jsp

note The full stack traces of the exception and its root causes are available in the GlassFish Server Open Source Edition 4.1.1 logs.

GlassFish Server Open Source Edition 4.1.1

2. Database Unreachable

- To simulate this error, not tunneled in. If we are not tunneled in (or our PC/MAC is unable to connect to cis-linux2's MySql database management system for any reason)

- To fix this error, tunneled in

```
{
  dbError: "Problem getting connection:Communications link failure The last packet sent successfully to the server was 0 milliseconds ago. The driver has not received any packets from the server.",
  webUserList: [ ]
}
```

[+ - View source](#)

3. Database Not Authorized

- To simulate this error, change something in our connect string (perhaps incorrect database name, or username or password)

For example: String dbAndPass = "SP20_3344_tuk85873?user=tuk85873&password=123456";

- To fix this error, correct database name, or username or username or password

```
{
  dbError: "Problem getting connection:Access denied for user 'tuk85873'@'cis-linux2-priv.temple.edu' (using password: YES)",
  webUserList: [ ]
}
```

[+ - View source](#)

4. Syntax error in SQL Statement

- To simulate this error, change something in our sql statement (perhaps misspell a keyword or table name or column name)

For example: String sql="SELECT web_user_id, user_email, user_password, membership_fee, birthday FROM webUser ORDER BY web_user_id";

- To fix this error, correct the table name in our sql statement

```

{
  dbError: "",
  - webUserList: [
    - {
      webUserId: "",
      userEmail: "",
      userPassword: "",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in WebUserView.allUsersAPI(): Table 'SP20_3344_tuk85873.webuser' doesn't exist"
    }
  ]
}

```

5. Error Extracting Data from Result Set (bad column name)

- To simulate this error, misspell a column name in the constructor of the StringData class

For example: `this.webUserId = FormatUtils.formatInteger(results.getObject("webuserid"));`

- To fix this error, correct the misspelled column name

```

{
  dbError: "",
  - webUserList: [
    - {
      webUserId: "",
      userEmail: "",
      userPassword: "",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in model.webUser.StringData (the constructor that takes a ResultSet): Column 'webuserid' not found."
    },
    - {
      webUserId: "",
      userEmail: "",
      userPassword: "",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in model.webUser.StringData (the constructor that takes a ResultSet): Column 'webuserid' not found."
    },
    - {
      webUserId: "",
      userEmail: "",
      userPassword: "",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in model.webUser.StringData (the constructor that takes a ResultSet): Column 'webuserid' not found."
    }
  ]
}

```

6. Error Extracting Data from Result Set (wrong data type)

- To simulate this error, convert data of one type using the wrong data type for formatting method

For example: `this.birthday = FormatUtils.formatString(results.getObject("birthday"));`

- To fix this error, correct the format data type

```
{
  dbError: "",
  webUserList: [
    - {
      webUserId: "1",
      userEmail: "tuk85873@temple.edu",
      userPassword: "test123!",
      birthday: "",
      membershipFee: "",
      errorMsg: ""
    },
    - {
      webUserId: "2",
      userEmail: "cindytran311@gmail.com",
      userPassword: "abc456!",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in model.webUser.StringData (the constructor that takes a ResultSet): java.sql.Date cannot be cast to java.lang.String"
    },
    - {
      webUserId: "3",
      userEmail: "htran@yahoo.com",
      userPassword: "123abc@",
      birthday: "",
      membershipFee: "",
      errorMsg: "Exception thrown in model.webUser.StringData (the constructor that takes a ResultSet): java.sql.Date cannot be cast to java.lang.String"
    },
    - {

```