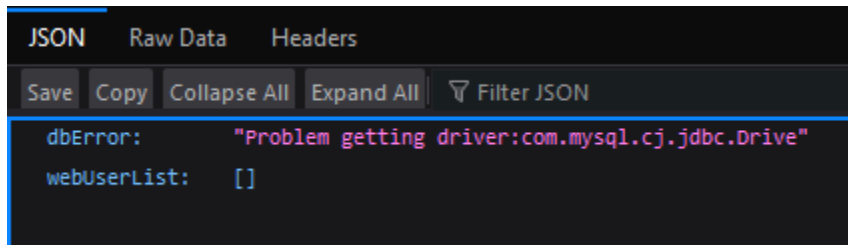


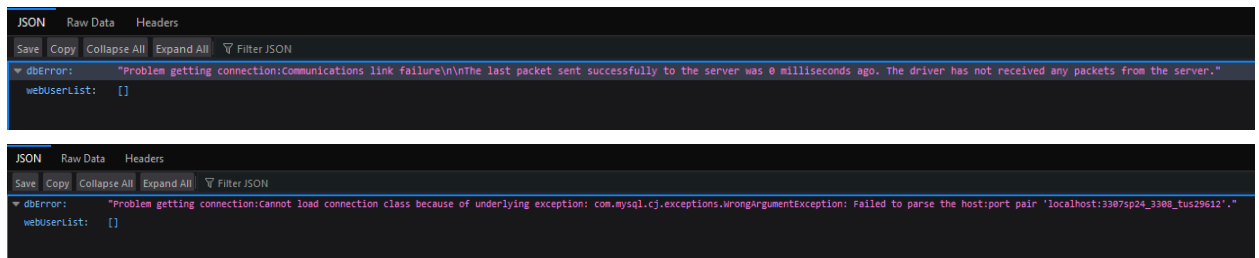
1. Missing Database Driver: I got this error by inputting the wrong database driver string in the database connection.



A screenshot of a JSON viewer interface with tabs for 'JSON', 'Raw Data', and 'Headers'. Below the tabs are buttons for 'Save', 'Copy', 'Collapse All', 'Expand All', and a 'Filter JSON' icon. The JSON data is displayed in a dark-themed editor with syntax highlighting. It shows a 'dbError' field with a red string value and a 'webUserList' field with an empty array.

```
{  "dbError": "Problem getting driver:com.mysql.cj.jdbc.Driver",  "webUserList": []}
```

2. Database Unreachable: I got this error by inputting the wrong url for the database connection.

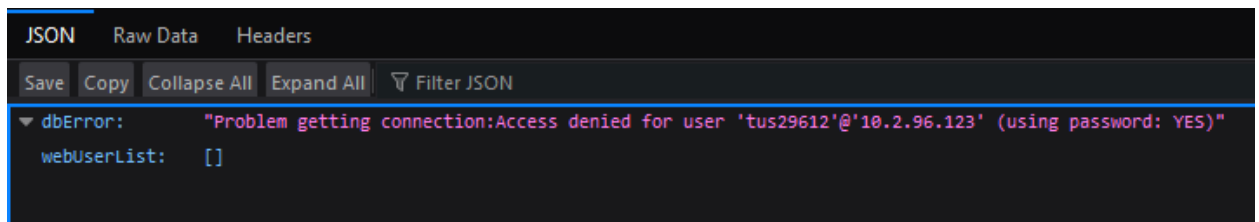


Two screenshots of JSON viewer interfaces showing database connection errors. The top screenshot shows a 'dbError' field with a long red string describing a communications link failure. The bottom screenshot shows a 'dbError' field with a red string describing a failure to parse the host/port pair.

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

```
{  "dbError": "Problem getting connection:Cannot load connection class because of underlying exception: com.mysql.cj.exceptions.WrongArgumentException: Failed to parse the host/port pair 'localhost:3307sp24_3308_tus29612'.",  "webUserList": []}
```

3. Database Not Authorized: I got this error by inputting the wrong database password in DbConn.



A screenshot of a JSON viewer interface showing a database authorization error. The 'dbError' field contains a red string indicating access denied for a specific user.

```
{  "dbError": "Problem getting connection:Access denied for user 'tus29612'@'10.2.96.123' (using password: YES)",  "webUserList": []}
```

4. Syntax error in SQL Statement: I got this error by incorrectly spacing the FROM command from the SELECT field names.

```
JSON Raw Data Headers
Save Copy Collapse All Expand All Filter JSON

dbError: ""
webUserList:
  0:
    webUserId: ""
    userEmail: ""
    userPassword: ""
    userImage: ""
    birthday: ""
    membershipFee: ""
    userRoleId: ""
    userRoleType: ""
    errorMsg: "Exception thrown in WebUserView.getAllUsers(): Unknown column 'web_user_id' in 'field list'"

String sql = "SELECT web_user_id, user_email, user_password, user_image, membership_fee, birthday, "
+ "web_user.user_role_id, user_role_type"
+ "FROM web_user, user_role where web_user.user_role_id = user_role.user_role_id "
+ "ORDER BY web_user_id "; // always order by something, not just random order.
```

5. Error Extracting Data from Result Set (bad column name): I got this error by using “email” as the column name in the SQL select statement when it should have been “user_email”.

```
JSON Raw Data Headers
Save Copy Collapse All Expand All Filter JSON

dbError: ""
webUserList:
  0:
    webUserId: ""
    userEmail: ""
    userPassword: ""
    userImage: ""
    birthday: ""
    membershipFee: ""
    userRoleId: ""
    userRoleType: ""
    errorMsg: "Exception thrown in WebUserView.getAllUsers(): Unknown column 'email' in 'field list'"

String sql = "SELECT web_user_id, email, user_password, user_image, membership_fee, birthday, "
+ "web_user.user_role_id, user_role_type "
+ "FROM web_user, user_role where web_user.user_role_id = user_role.user_role_id "
+ "ORDER BY web_user_id "; // always order by something, not just random order.
```

6. Error Extracting Data from Result Set (wrong data type): I got this error by formatting the data type for the “birthday” field incorrectly as an integer when it should have been a date.

```
JSON Raw Data Headers
Save Copy Collapse All Expand All Filter JSON
dbErrors: ""
webUserList:
  0:
    webUserId: "2"
    userEmail: "tus29612@temple.edu"
    userPassword: "somepass1"
    userImage: ""
    birthday: "bad Integer in Formatutils:1998-09-25. Error: class java.sql.Date cannot be cast to class java.lang.Integer (java.sql.Date is in module java.sql of loader 'platform'; java.lang.Integer is in module java.base of loader 'bootstrap')"
    membershipFee: "$12.00"
    userRoleId: "1"
    userRoleType: "admin"
    errorMsg: ""
```

```
// Returning the formatted value. So, you'll see these error messages right in the
// API output (JSON data) and/or you'll see it on the page in the UI.

sd.webUserId = Format.fmtInteger(results.getObject(columnLabel:"web_user_id"));
sd.userEmail = Format.fmtString(results.getObject(columnLabel:"user_email"));
sd.userPassword = Format.fmtString(results.getObject(columnLabel:"user_password"));
sd.userImage = Format.fmtString(results.getObject(columnLabel:"user_image"));
sd.birthday = Format.fmtInteger(results.getObject(columnLabel:"birthday"));
sd.membershipFee = Format.fmtDollar(results.getObject(columnLabel:"membership_fee"));
sd.userRoleId = Format.fmtInteger(results.getObject(columnLabel:"web_user.user_role_id"));
sd.userRoleType = Format.fmtString(results.getObject(columnLabel:"user_role_type"));
sd1.add(sd);
```