1. Missing Database Driver

You could generate this error by mistyping the driver string in the dbconn.Java file because Java.sql could not find the right driver. To fix this error is by making sure you type in the right driver string.

```
// 20241001111505
// http://localhost:8080/webUser/getAll


{

  "dbError": "Problem getting driver:5com.mysql.cj.jdbc.Driver",
  "webUserList": [


  ]
}
```

2. Database Unreachable

You could generate this error by not tunneling in when accessing the database. To fix this error, you need to tunnel when accessing database.

```
// 20241001112505
// http://localhost:8080/webUser/getAll


{

  "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": [


  ]
}
```

3, Database Not Authorized

You could generate this error by not putting in your right databaase username or password. To fix this error make sure your put in username and password correctly.

```
// 20241001111559
// http://localhost:8080/webUser/getAll


{
  "dbError": "Problem getting connection:Access denied for user
'1tuo65794'@'129.32.95.123' (using password: YES)",
  "webUserList": [

  ]
}
```

4. Syntax error in SQL Statement

You could generate this error if you have a typo in your SQL statement in your otherview.java. I miss type by as bye. To fix this error make sure you have no typo in your SQL statement, and you can run your statement in Mysql workbench beforehand.

```
// 20241001111641
// http://localhost:8080/webUser/getAll


{
  "dbError": "",
  "webUserList": [
    {
      "webUserId": "",
      "userEmail": "",
      "userPassword": "",
      "userImage": "",
      "birthday": "",
      "membershipFee": "",
      "userRoleId": "",
      "userRoleType": "",
      "errorMsg": "Exception thrown in WebUserView.getAllUsers(): You
have an error in your SQL syntax; check the manual that corresponds to
your MariaDB server version for the right syntax to use near 'BYE
web_user_id' at line 1"
    }
  ]
}
```

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

You could generate this by typing in the wrong column name when you try to get the data from the Database. I type birthyear instead of birthday for the error. To Fix this error make sure that you are typing in the right column name.

```
// 20241001111908
// http://localhost:8080/webUser/getAll

{
  "dbError": "",
  "webUserList": [
    {
      "webUserId": "1",
      "userEmail": "sallt@temple.edu",
      "userPassword": "dw",
      "userImage": "cat1",
      "birthday": "",
      "membershipFee": "",
      "userRoleId": "",
      "userRoleType": "",
      "errorMsg": "Exception thrown in WebUserView.getAllUsers(): Column
'birthyear' not found."
    }
  ]
}
```

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

You could generate this error by not formatting the data type correctly as you get it from the Database. I format web_user_id as a Date instead of an integer. To fix this error, make sure you are formating the data type correctly by looking at the data type in the database.

```
1    // 20241001112349
2    // http://localhost:8080/webUser/getAll
3
4  ▼ {
5      "dbError": "",
6  ▼   "webUserList": [
7  ▼     {
8          "webUserId": "bad date in FormatUtils.formatDate: 1. Error:
       class java.lang.Integer cannot be cast to class java.util.Date
       (java.lang.Integer and java.util.Date are in module java.base of
       loader 'bootstrap')",
9          "userEmail": "sallt@temple.edu",
10         "userPassword": "dw",
11         "userImage": "cat1",
12         "birthday": "01/01/2017",
13         "membershipFee": "$1,234.60",
14         "userRoleId": "1",
15         "userRoleType": "ADMIN",
16         "errorMsg": ""
17       },
```