

Task 11

Setting Up MySQL with Docker and Vanilla JavaScript for Testing Database Connections

1. Set up MySQL Using Docker

```
Rudraksh Jhaveri x + v
Microsoft Windows [Version 10.0.22631.3810]
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C:\Users\wellb>docker run --name rudraksh-mysql -e MYSQL_ROOT_PASSWORD=helloworld -e MYSQL_DATABASE=rudrakshDB -p 9306:3306 -d mysql
Unable to find image 'mysql:latest' locally
latest: Pulling from library/mysql
d9a40b27c30f: Pull complete
d948328c7651: Pull complete
c1e267313ede: Pull complete
7478f013875a: Pull complete
9221a2250289: Pull complete
d1f57baa52d5: Pull complete
35c3d30e8624: Pull complete
3d4d1dd0cca6: Pull complete
08bfe3f7d1c5: Pull complete
537e7daeeea3: Pull complete
Digest: sha256:72a37ddc9f839cfd84f1f6815fb31ba26f37f4c200b90e49607797480e3be446
Status: Downloaded newer image for mysql:latest
0bb6d5d42bdbafaf979907e53b8026aad915f846450856e62ab5d627376d0cc6

C:\Users\wellb>
```

2. Verify Container Status

```
Rudraksh Jhaveri x + v
C:\Users\wellb>docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
0bb6d5d42bdb   mysql     "docker-entrypoint.s..." 2 hours ago   Up 3 minutes   33060/tcp, 0.0.0.0:9306->3306/tcp   rudraksh-mysql

C:\Users\wellb>
```

3. Test Database Connection Using Vanilla JavaScript.

- npm init -y

```
D:\Rudraksh_mysql_test>npm init -y
Wrote to D:\Rudraksh_mysql_test\package.json:

{
  "name": "rudraksh_mysql_test",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "mysql2": "^3.10.2"
  },
  "devDependencies": {},
  "description": ""
}
```

- `npm i mysql2`

```
D:\Rudraksh_mysql_test>npm i mysql2  
  
up to date, audited 13 packages in 1s  
  
found 0 vulnerabilities
```

- Create an `index.js` file and write the code in it.

```
index.js  X  
index.js > ...  
1  const mysql = require('mysql2');  
2  
3  const connection = mysql.createConnection({  
4    host: 'localhost',  
5    port: '9306',  
6    user: 'root',  
7    password: 'helloworld',  
8    database: 'rudrakshDB'  
9  });  
10  
11 connection.connect((err) => {  
12   if (err) {  
13     console.error('Error connecting to MySQL:', err.stack);  
14     return;  
15   }  
16   console.log('Connected to MySQL as ID:', connection.threadId);  
17  
18  
19   connection.end();  
20 });  
21 |
```

- `node index.js`

```
D:\Rudraksh_mysql_test>node index.js  
Connected to MySQL as ID: 9  
  
D:\Rudraksh_mysql_test>
```