

# React and Node JS Assessment

## Requirements:

1. Installation of MySQL.
2. Configuring/Adding database: wfm Database(backup.sql).
3. Checking the login functionality for WFM-Manager and Manager.

## Manager Login:

4. Printing employee data along with skills in Manager login (Employees and Skills table).
5. A button for softlock need to be added for every list item.
6. A Popup for after clicking the button with entry field to send request.

## WFM-Manager Login:

7. Printing Softlock data along with previous manager from employee table (Softlock and Employees Table).
8. A button for accepting confirmation which leads to a Modal Popup.
9. Updating values in the softlock if the request is accepted by wfm manager.

## Implementation

### As a first step we need to install MySQL into our local machine

Configuring database into the local machine:

#### Step1: -

After installation go to command prompt and type the following command  
“MySQL -u root -p” which will ask to enter the password.

```

Microsoft Windows [Version 10.0.19043.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\MuthukumaranT>mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.27 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>

```

Step2: -

After entering password for adding database into the local machine use this command “**Create database wfm** ”. It will create a new database.

Step3: -

After creating new database use this command “**MySQL -u root -p --database wfm < backup.sql**”.

Step4: -

For checking the data base tables, we can use “**Show tables**” command.

```

mysql> use wfm
Database changed
mysql> show tables;
+-----+
| Tables_in_wfm |
+-----+
| employee       |
| employees      |
| profile        |
| skillmap       |
| skills         |
| softlock       |
| softlocks      |
| users          |
+-----+
8 rows in set (0.47 sec)

mysql>

```

In order to print data in the React app, we need to have API calls for printing employee data in their respective logins.

## API CALLS

As a first step I have tried to do the api calls using sequelize calls. Because of facing some issues while running the sequelize queries I have switched to write api calls based on raw query.

### API call for printing employees

1. Api call for printing the employees from the employees table and skills of the particular employee.

```
1 route.post("/employeeDetails/:username", (
  request, response) => {
2   let username = request.params.username;
3   sequelize.query(
    'select employee_id, e.name, GROUP_CONCAT(s.name)
    as skills, manager, wfm_manager, experience from e
    mployee as e, skills as s where manager = ? gro
    up by employee_id;'
    , { replacements: [username], type: QueryTypes.
      SELECT }) .then(data => {
4     response.status(200).json(data)
5   }).catch(err => {
6     response.status(500).send(err);
7   })
8 })
```

2. This api call is a post method because in sql query the employees list has to be printed based on the Manager login.
3. So, using a local variable assigned with username of logged in manager will be passed into the sql query.
4. Based on that list of employees will be printed.

## API call for passing request to WFM-Manager

1. Api call for sending request to the wfm manager by updating values into softlock table.

```
1  route.post('/softlocked',(req,res)=>{
2      let employee_id = req.body.employee_id;
3      let manager = req.body.manager;
4      let current_date = new Date().toISOString
5      ().slice(0, 10);
6      let message = req.body.message;
7      sequelize.query(
8          `INSERT INTO softlock(employee_id,manager,requestmessage) VALUES(?,?,?,?)`
9          ,{replacements:[employee_id,manager,
10             current_date,message],type: QueryTypes.INSERT
11         }).then(data=>{
12             res.status(200).send(
13                 'Added successfull');
14             }).catch(err=>{
15                 res.status(500).send(err);
16             })
17     })
18 })
```

2. This API call is post method because we are inserting values into the table softlock as sending request to WFM-Manager.
3. Hence, using local variables for inserting values into the table from the manager home.
4. This will create a record in softlock as request sent by the manager to the WFM-Manager (which will be retrieved in the WFM-Manager side).

## API call for Printing Request to WFM-Manager

1. API call for printing list of requests from Softlock and employees table.

```
1 route.post('/softlock/:username',(req,res)=>{
2     let username = req.params.username;
3     sequelize.query(
4         'select a.employee_id,a.manager as Requestee,a.
5         reqdate,a.requestmessage,b.manager as EmployeeM
6         anager,lockid,a.status from softlock a,employee
7         s b where a.employee_id=b.employee_id and b.wfm
8         _manager = ? order by a.reqdate asc;'
9         ,{replacements:[username],type: QueryTypes.
10        SELECT}).then(data=>{
11            res.status(200).json(data)
12        }).catch(err=>{
13            res.status(500).send(err);
14        })
15    })
16 })
```

2. This API call is post method because in SQL query the softlock list has to be printed based on the Employee to Manager Relation and Manager to WFM-Manager Relation.
3. Here the username of the logged in manager will be passed as the parameter into the SQL query for populating the request.
4. As a result, requests for particular manager will be printed in the WFM-Manager home.

## API call for updating the status from WFM-Manager


















1. Api call for sending status(Accept/Reject) back to the manager by updating values into softlock table.

```
1 route.put('/updateSoftlock/:lockid',(req,res)
=>{
2   let approve_date = new Date().toISOString
  ().slice(0, 10);
3   let status = req.body.status;
4   let lockid = req.params.lockid;
5   sequelize.query(
    'update softlock set status=?,lastupdated=? wh
    ere lockid=?'
    ,{replacements:[status,approve_date,lockid],
    type: QueryTypes.UPDATE}).then(data=>{
6     res.status(200).send(status);
7   }).catch(err=>{
8     res.status(500).send(err)
9   })
10 })
```

2. This is a Put method as we are updating the record of values in the softlock table.
3. Here, using local variables for getting data from the wfm-manager to update the record in softlock table.
4. So, this call will update the values of selected record in which values will be taken from the wfm-manager home.

## USER INTERFACE

1. Initially the code has the functionality to detect the logged in person whether he is a manager or WFM-Manager.
2. If a manager logs in then few will be able to see the employees with their respective status, skill, experience provided with softlock button which will give a modal popup.

Manager					
Employee_ID	Name	Skills	Manager	Experience	
1000	Ram Krishna	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	7	 SoftLock
1001	Janarthan	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	4	 SoftLock
1002	Deenaj Keshav	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	5	 SoftLock
1003	Abdur Kadar	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	2	 SoftLock
1004	John Paul	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	7	 SoftLock
1005	Atul Kulkarni	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	5	 SoftLock
1006	Ajay Barot	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	2	 SoftLock
1007	Benny Shaw	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	2	 SoftLock
1008	Akram Khan	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	7	 SoftLock
1009	Bejoy Menon	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	2	 SoftLock
1010	Ravi Kishore	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	3	 SoftLock
1011	Hanisha Kumar	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	5	 SoftLock
1012	Bennet Johnson	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	7	 SoftLock
1013	Priya Sen	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	2	 SoftLock
1014	Roshni Agarwal	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	5	 SoftLock
1015	Deepthi Srinha	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	4	 SoftLock
1016	Divya Sharma	Core Java, Spring, Boot, Angular, Python, SQL, PL/SQL, REACT JS, NODE JS	npht	7	 SoftLock

3. After clicking on the softlock button on a particular employee, it will show a popup screen.

Edit Employee

Please confirm the soft lock that contains 1000 words

Please enter the message

Submit

Close Button

4. If WFM-Manager logs in we can observe the request sent by manager as a table in addition with a button.

WFM Manager				
Employee_ID	requestee	request date	Manager	
1011	rohit	2021-12-11	rohit	<button>SoftLock</button>

5. If WFM-Manager clicks on the button for a particular request it will raise a popup for confirmation.

Requestee:-  
rohit

Employee Manager:-  
rohit

message:-  
I need this employee

Status:-

Submit

Close Button

6. Data base will be updated using the API call.