

Factory Management System

Final Project: REACT+ Node.js - Fullstack Application

A complete system for managing employees, departments, and shifts in a factory. The project includes both Backend (Node.js + Express + MongoDB) and Frontend (REACT, HTML, CSS, JavaScript).

Live Demo

- View Live Demo:
<https://employee-and-shift-management-syste.vercel.app/>
For example you can connect with:
username: Antonette
email: Shanna@melissa.tv
- Backend API hosted on Render:
<https://employeeandshiftmanagementsystem.onrender.com>

Main Features

- Authentication: Only registered users can log in (validated via external API)
The users are listed here: <https://jsonplaceholder.typicode.com/users>
- Employee Management:
 - View all employees in the factory and their assigned shifts
 - Add employee
 - Update employee
 - Delete employee
 - Assign shift to employee
- Department Management:
 - View all departments in the factory and their assigned managers
 - Add department
 - Update department
 - Delete department
 - Assign employee to department
- Shift Management:
 - View all shifts in the factory
 - Add shift
 - Update shift
 - Assign employee to shift
- User System:
 - Each user has a limited number of actions per day
 - When the limit is reached, the user is logged out until the next day and a prompt message is displayed

Technologies

- Backend: Node.js, Express, MongoDB
- Frontend: REACT, HTML, CSS, JavaScript
- Deployment: Vercel (Frontend), Render (Backend)

Users

- Only pre-registered users are allowed to log in.
The users are listed here: <https://jsonplaceholder.typicode.com/users>
- Each user has a daily action limit.

The users and their limitations are detailed on 'server/data/usersActionsData.json'

- When the limit is reached, the user is logged out until the next day and a prompt message is displayed

Installation & Running Locally

- Clone the repository:
Git clone <https://github.com/your-username/factory-management.git>
- Install and run the Backend:
 - cd server
 - npm install
 - npm start
- Install and run the Frontend:
 - cd client
 - npm install
 - npm run dev
- Define allowed actions per user for a specific day
 - Each user has a several number of actions they can perform per day.
 - To Login with a specific user add a record for this user and current day at 'server/data/usersActionsData.json' file.

The record that should be added looks as follows:

```
{  
  "id": <user_id>,  
  "maxActions": 5,  
  "date": "<dd/mm/yyyy>",&br/>  "actionAllowd": <numOfActionsUsedTodayForThisUser>  
},
```

<user_id> is the user_id according to: <https://jsonplaceholder.typicode.com/users>

<dd/mm/yyyy> is the current date

<actionAllowedForThisUser> is the number of actions used so far today for this user, the value in this field must be lower than maxActions"

For Example you can add:

```
{  
  "id": 2,  
  "maxActions": 500,  
  "date": "18/09/2025",  
  "actionAllowd": 0  
}
```

Project Specification:

<https://employee-and-shift-management-syste.vercel.app/docs/Final-Project-EmployeeShiftManagementSystem.pdf>

Credits

Developed by **Sarit Shikarchy**

Node.js + REACT- Final Project