

Programming assignment for Software Engineer: Employee Registry

General information

- for implementation, please use your GitHub account for the project
- make sure the repositories are public
- after completion submit a link with the repository that contains the solution
- make sure to show proper Git usage
- scheduled time: 7 days
- any changes after submitting the challenge will invalidate

Product request

Our stakeholder Awesome Company GmbH is missing an overview of their employees. They need an application that enables managing the employees and their departments.

Here are the features the application must contain

- The user of the application must be able to sign-in and to sign-up
- Only user with special privileges can create, delete, or update employees
- All users can see the list of all employees and the details of an employee
- Importing list of employees via CSV file
- The detail of an employee consists of their personal data, address, and department
- Only user with special privileges can create, rename and delete departments
- List of all departments and number of employees
- Assigning user to department
- Displaying who assigned or moved an employee to a department
- Displaying employees by departments

An employee must have:

- last name
- first name
- address
- job title
- Department

A department must have a name

Task

Implement the backend and the frontend of the requested application. Design the data model and create respective schemas and diagrams.

Requirements:

- MERN-Stack
- containerized
- Mono-repo with yarn workspaces and packages

Backend Part

The backend must be implemented as a RESTful webservice which implements the business logic using node.js. For persistent storage please use MongoDB. Provide a clean appropriate architecture, pay attention to segregation of duties. Use Layered Architecture.

Frontend Part

- the frontend must be implemented with React
- it is up to you how to handle local and global states and how to integrate the API
- you can choose any UI framework you want
- using boilerplates is allowed
- only latest version of Mozilla Firefox and Chrome must be supported

Hints: Please consider this code challenge as a team project. Your colleagues must understand your code, architecture, workflow, and decisions. Please follow best practices. Not all information is given (purposefully), and it is up to the engineer as to how they are going to do things.