**Requirement Analysis:**

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**Projectname**: Employee Management

**Version**: 6-260625

**Overview:** The purpose of this document is to give an overview of the functional and not functional requirements as well as the scope and not scope of the software. It is inteneded to as a base to further processes like testing, architectural planning, …...

**Stakeholder:**

**Development:** Fabian Andiel

**Development Coach:** Oliver Tazreiter

**Customer:** Small Business LLC

**Users:** All Employees of Small Business LLC

**Scope:**

* Provide the different levels of staff with staff related overviews according to to their authorization
* Provide staff with managerial and/or admin with the ability to create, update and delete staff according to their authorization
* Giving the employees an easy method to clock in and clock out via the user interface
* Provide the employee the opportunity to request time off and track the status of their request
* Give the employees an overview over their over or minus time, wether they have rest-holiday or not and their current attendance status
* Provide a database with the current employee of the company and their roles

**Out of Scope:**

* Rest API for other systems
* Advanced Payroll like 13th and 14th salary calculation
* Company intern communication and ticketing
* Tool to schedule meetings or certain dates
* Being a calender

**Functional Requirements:**

**Employees:**

* As an employee I want to be able to only see overview of my master data consisting of:
* Firstname
* Lastname
* Street
* Zip
* City
* Country
* Telephone
* Email
* Superior
* Status
* As an employee, with any role, I want to be able to clock in and clock using my user interface
* As an employee, without the role of admin or manager, I want to apply for an holiday, measured in whole days, via the user interface
* As an employee, without the role of admin or manager, I want to see if my application for holiday is accepted, denied or pending
* As an employee employee, without the role of admin or manager, I want to see wether I have rest holiday or not
* As an employee employee, without the role of admin or manager, I want to see wether I have overtime or minus time in the current month
* As an employee, with any role, I want to be able to only see my current status. Either attending, away, sick or on holiday
* As an employee, with any role, I want the system to automatically set the appropriate statuses after I clock in or out

**Employees with manager role:**

* As a manager + employee I want to approve or deny the pending vacation requests of the employees reporting to me
* As a manager + employee I want to have a warning if my employee is asking for more holiday time off than holiday he/she has taken
* As a manager + employee I want to see a list of all the employees who are reporting to me
* As a manager + employee I want to see the master data of all the employees who are reporting to me
* As a manager + employee I want see a list of all the employees
* As a manager + employee I want to be a able to add employees, without the role admin or manager, to the system
* As a manager + employee I want to be able to remove employees, without the role admin or manager, from the system
* As a manager + employee I want to be able to update employees, without the role admin or manager
* As a manager + employee I want to be able to see a list of the holidays all the employees, who are reporting to me have already taken (OPTIONAL)
* As a manager + employee I want to see all the working hours of one individual employee (OPTIONAL)

**Employees with manager and admin role:**

* As an admin I want to be able to to add employees, having the role of manager or/and admin, to the system
* As an admin I want to be able to to udate employees, having the role of manager or/and admin
* As an admin I want to be able to delete employees, employees, having the role of manager or/and admin, from the system
* As an admin I don’t want to be able to delete employees with the manager role who have subordinates

**System:**

* There shall be the roles of manager, admin and employee in the system

**Non functional requirements:**

* The software shall be a desktop application only
* The software shall be designed with a fixed screen width
* The software is supposed to be performant (multi threading)

**Roles within:**

**Admin:** must have also the roles manager and employee,can add, delete and update manager

**Manager:** must have also the role employee, can add, delete and update employees, confirm or deny vacation requests, access the master data of the assigned employees, access a list of all employees, see the working hours of an individual employee, see a list of all employees working for them.

**Employee:** clock in and clock out, apply for holiday and track status of aplication, get an overview of overtime or minus time and consumed vacation, view their own master data, is reporting to a manager

**Technical environment:**

**Programming language:** Java 21

**Dependencies**: Lombok, jakarta.validation-api, hibernate-validator, ….

**Database technology:** PostgreSQL

**Version Control:** git/GitHub

**User Interfaces:**

**Shared:**

**Login View:**

* Input name and password
* Login Button

**Master Data View according to level of authorization:**

* Firstname
* Lastname
* Street
* Zip
* City
* Telephone
* Email
* Superior

Basic time stamp view:

* button to clock in
* button to clock out
* log today`s timestamps in and out

**Employees with no further role:**

**Main View (after successful login):**

- current status of employee

- Logout button

- encompasses the ACCESS TO THE following views:

**Vacation View:**

* Form to apply for vacation
* Section:
  + Remaining days
  + Past requests

**Time stamp view - employees:**

* Basic time stamp view
* Field with overtime oder minus time
* History of previous time bookings

**Employees with the role manager:**

**Main View (after successful login):**

- current status of employee

- encompasses the ACCESS TO THE following views:

**Time stamp view:**

* Basic time stamp view
* Field with overtime oder minus time
* History of previous time bookings

**Pending Requests View:**

* List of pending requests
* Approve/Deny Buttons

**Employees Overview View:**

* List of all employees, without the role manager or admin,
* Form to create new employee, without the role manager or admin,
* Button to delete employee, without the role manager or admin,
* Button to update employee, without the role manager or admin,
* Button to view time log and holiday history of an employee (optional)

**Employee Time Screen: (optional)**

* Their booked times
* Their booked holidays

**Admins:**

**Main View (after successful login):**

- current status of employee

- encompasses the ACCESS TO THE following views:

**Same as manager**

* **Additionally in Employees Overview View:**
* List of all employees regardless of role
* Form to create new employee regardless of role
* Button to delete employee regardless of role
* Button to update employee regardless of role