**Requirement Analysis:**

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**Projectname**: Employee Management

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**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 role 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
* Overview of past booked time

**Functional Requirements:**

**Shared:**

* As Employees with any role we all have 25 days per year vacation and we are proud of it
* As Employees with any role we all work 5 days 8 hours a day per week and we are proud of it
* As an employee with any role I want to see wether I have rest holiday or not
* As an employee, with any role, I want to be able to clock in and clock using my user interface
* As an employee employee, with any role, 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:**

* 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 I want to have a warning wether im asking for more holiday than I am entitled to

**Employees with manager role:**

* As an employee + admin I want to see the master data of all the managers consisting of:
* Firstname
* Lastname
* Address
* Telephone
* Email
* Username
* Passwortd
* Subordinates
* Roles
* Status
* Vacation Entitlement
* Remaining Vacation
* Working hours per week
* As a manager + employee I want a status “Just\_Created” to be set with a new employee that has not yet started to work
* 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 and the employees without a supervisor
* As a manager + employee I want see a list of all the employees
* As a manager + employee, I want that my vacations are AUTMATICALLY ACCEPTED since I don’t have to ask anyone
* 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 I want to be able to promote employees to managers.

**Employees with manager and admin role:**

* As an admin I want to see the master data of all the managers consisting of:
* Firstname
* Lastname
* Address
* Telephone
* Email
* Username
* Passwortd
* Subordinates
* Roles
* Status
* Vacation Entitlement
* Remaining Vacation
* Working hours per week
* As an admin I want a status “Just\_Created” to be set with a new manager or admin that has not yet started to work
* 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 having the role of manager or/and admin, from the system
* As an admin I want to be able to promote managers to admins.

**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 managers. Nobody reports to an admin. This role is just in regards to managers.

**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 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, is reporting to a manager, can temporarliy not have 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
* End Program button

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

- acess to time view and vacation view

**Vacation View:**

* Form to apply/book for vacation
  + - Input for Start Date
    - Input for End Date
    - Notes
* Vacation entitlement
* Remaining vacation
* Past Vacation Requests
* Submit button
* Go back button

**Time View:**

* “Target hours”: Heading that shows the supposed working hours per month up to the current day
* “Booked time ”: Time bookings made by the employee up to the current day of the mont
* “Difference”: Difference between booked time and actual hours
* Form to book the time:
  + Start Time Input
  + End Time Input
* Clock in button
* Clock out button
* Go Back Button

**Employees with no further role:**

Only have the shared windows

**Employees with the role manager:**

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

- encompasses the ACCESS TO THE following views:

**Time stamp view:**

* See above – shared section

**Vacation view:**

* See above – shared section

**Pending Requests View:**

* List of pending requests with the fields:
  + - * Start-date
      * End-date
      * Notes
      * Creator
      * Confirm
      * Deny
      * Confirm button
      * Deny button
* Go back button

**Employees Overview View:**

* List of all employees consisting of:
  + - * Id
      * Firstname
      * Lastname
      * Reporting to
      * Status
      * Role
* List of all employees the user can update consisting of:
* Id
* Firstname
* Lastname
* Address
* Status
* Role
* “Create new Employee” Button
* “Delete Employee” Button
* “Update Employee” Button
* “Master Data” Button
* “Go Back” Button

**Create Employee view( subview to empl. overview):**

* Form to create an employee consisting of:
  + - Firstname
    - Lastname
    - Address
    - Telephone
    - Email
    - Username
    - Password
    - Vacation entitlement
    - Workhours per week
    - Roles Checkbox
    - Superior (disabled for admin users)
    - Selected subordinates (disabled for manager and admin users)
* Submit Button
* Reset Button
* Go Back Button

**Create new Address view (subview to create employee view):**

* + - * form constisting of:
* street
* housenumber
* doornumber
* zip
* city
* country
  + - * “Submit” button
      * “Reset” button
      * “Go back” button

**Master Data view ( subview to empl. overview):**

* Label – value aggregation:
  + Firstname
  + Lastname
  + Address
  + Telephone
  + Email
  + Username
  + Password
  + Subordinates
  + Roles
  + Status
  + Vacation Entitlement
  + Remaining Vacation
  + Working hours/week: 40h
* “Go back” Button

**Employees with the role manager and admin:**

* the same as with only the role manager and admins