

User Requirements Specifications



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Agreements of the client

Our team agreed with the client that keeping track of the employee data (employee management) is one of the top priorities for the project. Besides that, the other priority is managing the stock, but this is not mandatory for the first deadline. To continue, managing the employees is going to be done via the desktop application. We also agreed that the website is not a priority and would not be needed at the end of the first deadline (at the end of week 6). We decided that our team is going to design a logo and come up with a slogan for the company. Regarding the color scheme of the company, we agreed that this decision is left to our team.

Functional requirements

What should the system be able to do?

FR-01: Users can log into the app and the right pages based on their job function, with their username and their password.

FR-02: Human Recourses should be able to add employees.

FR-03: Human Recourses should be able to remove employees.

FR-04 Human Recourses should be able to change employees.

FR-05: Human Resource workers and managers should be able to view all employee data.

FR-06: Human Resource workers and managers should be able to search by a username and employee-id.

FR-07: Human Recourses should be able to assign work shifts.

FR-08: Human Recourses should be able to reassign work shifts.

FR-09: Human Recourses should be able to change work shifts.

FR-10: Employees can view their work shifts per week/month.

FR-11: Employees can request a leave of absence.

FR-12: Employees can change their data.

FR-13: Employees can view rules and regulations.

FR-14: Employees can file a complaint.

FR-15: Employee data should be permanently stored in a database.

FR-16: Product data should be permanently stored in a database.

FR-17: Depot workers should be able to view all product data and search for them by name and product-id.

FR-18: Depot workers should be able to view product statistics like amount sold, the amount in stock.

FR-19: Depot workers can add products and product data.

FR-20: Depot workers can remove products and product data.

FR-21: Depot workers can change products and product data.

FR-22: Work shifts for store employees get assigned automatically.

FR-23: The login system will use two-step authentication.

Musts

- FR-01: Login system based on username & password.
- FR-02: Human Recourses should be able to add employees.
- FR-03: Human Recourses should be able to remove employees.
- FR-04 Human Recourses should be able to change employees.
- FR-05: Human Resource workers and managers should be able to view all employee data.
- FR-06: Human Resource workers and managers should be able to search by a username and employee-id.
- FR-07: Human Recourses should be able to assign work shifts.
- FR-08: Human Recourses should be able to reassign work shifts.
- FR-09: Human Recourses should be able to change work shifts.
- FR-10: Employees can view their work shifts per week/month.
- FR-12: Employees can change their data.
- FR-15: Database for employees.

Should

- FR-11: Employees can request a leave of absence.
- FR-14: Employees can file a complaint.
- FR-16: Product data should be permanently stored in a database.
- FR-17: Depot workers should be able to view all product data and search for them by name and product-id.

Could

- FR-13: Employees can view rules and regulations.
- FR-18: Depot workers should be able to view product statistics like amount sold, the amount in stock.
- FR-19: Depot workers can add products and product data.
- FR-20: Depot workers can remove products and product data.
- FR-21: Depot workers can change products and product data.
- FR-22: Automated work shift assignment.

Won't

- FR-23: 2 step authentication.

Use Case: Log in (FR-01)

Actor: User

Main Success Scenario:

1. User opens the application
2. User fills in Username and Password
3. User proceeds to log in
4. System shows a page based on the user's role in the company

Extensions:

- 1a: the application was already opened by another User
 1. User Logs out
 2. Proceeds to step 2
- 3a: Username doesn't exist
 1. System displays a message that Username doesn't exist
 2. Back to step 1
- 3b: Invalid password
 1. System displays message that password is invalid
 2. Back to step 2

Use Case: Human Resources adding an employee to the database (FR-02)

Actor: HR user

Main Success Scenario:

1. HR User logs in and accesses the "Edit Employees" page.
2. System shows tab to edit employees
3. HR User fills in fields concerning personal information about the employee, like first & last name, username, password, e-mail, and job.
4. HR User adds the employee
5. System clears all information fields and adds the employee to the database.

Extensions:

- 4a: Not all fields are filled in.
 1. System shows a message that not all fields are filled in
 2. User returns to step 3.
- 4b: Username is already in use.
 1. System shows a message that username is already in use
 2. User returns to step 3.

Use Case: Human Resources should be able to remove employees (FR-03)

Actor: HR user

Main Success Scenario:

1. HR User logs in and accesses the "Edit Employees" page
2. System shows tab to edit employees
3. HR User selects an employee to remove
4. HR User removes employee
5. System removes employee from the database

Human resources employees should be able to change employee data (FR-04)

Actor: HR User

Main Success Scenario:

1. User accesses the “Employees” page
2. System shows all employee’s full names right away
3. HR user selects desired employee
4. System shows all available information about selected employee
5. HR user changes desired information about employee

Extensions:

4a: Not all personal information is available about employee

1. Fields concerning the missing information get filled with an X
2. User can choose to fill in these fields if he or she has the available information, otherwise, the use case ends

Human Recourses employees should be able to view and all employee data (FR-05)

Actor: HR

Main Success Scenario:

1. User accesses the “Employees” page
2. The system shows all employee’s full names right away
3. When the user selects an employee, the fields concerning personal information get filled in by the system, making it easy for the user to oversee
4. The system fills in the personal information fields with the information about the filtered employee.

Extensions:

3a/6a: Not all personal information is available about employee

3. Fields concerning the missing information get filled with an X
4. User can choose to fill in these fields if he or she has the available information, otherwise, the use case ends

Human Recourses employees should be able to search by username and employee-id (FR-06)

Actor: HR User

Main Success Scenario:

1. User accesses the “Employees” page
2. User also has the option to search by username or ID.
3. The user fills in either the username or the ID of the desired employee
4. User searches for the employee
5. System shows all available information about employee

5a: There is no employee with the corresponding username or ID

1. System shows a message that there is no employee with a corresponding username or ID
2. End-use case

Use Case: HR should be able to assign work shifts (FR-07)

Actor: HR user

Main Success Scenario:

1. The manager selects a certain date and a username.
2. The system will add the username to the specific date.
3. The manager fills in the beginning and end times.
4. The system will assign the time to the employee's working day.
5. The manager adds the work shift
6. The system will update the database of the work shifts.

Extension:

5a. The employee is already assigned to a work shift at that time.

1. error message pops up saying the employee already has a work shift at that time.

Use Case: HR should be able to re-assign work shifts (FR-08)

Actor: HR user

Main Success Scenario:

1. User accesses "Employees" page
2. User selects desired employee
3. System shows work shifts of the selected employee
4. User makes desired changes to work shift
5. System notifies the employee

Extensions:

4a: employee already works on the selected date

1. System shows a message that employee is already working on the selected date
2. End-use case

4b: employee did not work on the selected date in the first place

1. System shows a message that employee does not work on this day
2. End-use case

Use case: Employees can view their work shifts per week/month (FR-10)

Actor: Employee

Main success scenario:

1. User logs in
2. User accesses the "planning" tab
3. System shows work shift of the whole month

Extensions:

3a: User is not assigned for the whole month

1. System shows a message that you are free for this month
2. End-use case

Use Case: view/request adjustments work schedule (FR-11)

Actor: Employee

Main Success Scenario:

1. A page will be opened viewing the schedule of the week you are currently in.
2. User selects a week
3. The system will show the schedule for that specific week.
4. Users can request an adjustment when he/she cannot work on a specific day.
5. The system will send a message to a manager that the user wants to adjust a specific working day.
6. The user gets a message from the manager if his adjustment request got approved.

Extensions:

- 2a: Select a week where the user does not have to work.
1. Systems shows a message that you're free for that week
 2. End of use case.
- 4a: Select a day of the week when he does not have to work on it.
1. System shows a message that you're free for that day
 2. End of use case.

Use case: employees can change their data. (FR-12)

Actor: Employee

Main Success Scenario:

1. User logs in and goes to the "personal information tab"
2. The system displays all personal information
3. User changes information where needed
4. The user confirms the edit

Extensions: Not all personal information is available

1. Fields concerning the missing information get filled with an X.
2. User can choose to fill in these fields if he or she has the available information, otherwise, the use case ends.

Use case: employee can view rules and regulations (FR-13)

Actor: employee

Main Success Scenario:

1. The employee opens the "Rules and Regulations" page.
2. The System shows a list of the rules and regulations.
3. The employee can change what kind of rules and regulations they want to see (security, general, safety).
4. Systems changes the list to the employee's settings.

Use case: employee files a complaint (FR-14)

Actor: employee

Main Success Scenario:

1. The employee opens the “File complain” page.
2. The system shows different fields that the employee has to fill in to file a complaint.
3. The employee fills in the required fields and sends the complaint
4. The system clears the fields and it will send the complaint to the human resource management.

Extensions:

3a. A required field has not been filled or is not correct.

1. System shows a message that one or more required fields are empty or not in a correct format and you should change it
2. The user returns to step 3.

Use Case: Storing employee data in the database (FR-15)

Actor: manager

Main Success Scenario:

1. The manager fills in new employee data.
2. Manager adds the user.
3. The system adds the user to the database automatically and stores permanently.

Use Case: Storing product data in the database(FR-16)

Actor: Depot worker

Main Success Scenario:

1. User fills in new product data
2. User adds a product to the database
3. System adds a product to the database

Use Case: search for product information (FR-17)

Actor: HR user and Manager

Main Success Scenario:

1. User accesses the “Product” page.
2. The system shows all Products.
3. When the user clicks a product, product data will be shown in the correct field, making it easy for the user to oversee.
4. User searches for a product by name or ID
5. The system fills in the product information fields with the information about the filtered product.

Extensions:

3a/5a: Product information is missing

1. Fields concerning the missing information get filled with an X.
2. User can choose to fill in these fields if he or she has the available information, otherwise, the use case ends.

Use Case: Viewing product statistics (FR-18)

Actor: HR user and Manager

Main Success Scenario:

1. The user starts at step 6 of the main success scenario of “Use case search for product information”.
2. The user views statistics underneath the product information field.
3. System shows a form with all statistics about the selected product.
4. Users can click the close button to close the pop-up form.

Extensions:

1. Fields concerning the missing information get filled with an X.

Use Case: add products and product data (FR-19)

Actor: manager

Main Success Scenario:

1. User accesses the “product” page
2. User fills in fields with needed information about the product
3. User adds product and its data
4. System adds product and its data to the database

Use Case: removing products and product data(FR-20)

Actor: manager

Main Success Scenario:

1. User accesses the “product” page
2. System shows all product names
3. User selects a needed product
4. User removes the product from the list
5. System removes the product from the database

Use Case: change product data (FR-21)

Actor: manager

Main Success Scenario:

1. User accesses the “Product” page.
2. The system shows all Products.
3. User selects a product
4. product data will be shown in the correct field, making it easy for the user to oversee.
5. The user clicks on the change data button underneath the data fields.
6. A form pops up with all data in textboxes.
7. User changes data in the textbox to new data.
8. User clicks on the save button, data will be saved to the system.

Extension:

- 7a. User fills in invalid data
 1. Systems show a message telling the manager to change it.

Use Case: automatic work shifts (FR-22)

Actor: system, manager, and HR user

Main Success Scenario:

2. The manager adds an automatic work shift assignment on the work shift page.
3. System shows a form where you can fill in needed data.
4. The manager fills in weekday, employees, how long the work shifts should assign for in the corresponding fields.
5. The manager confirms.
6. The system now automatically adds work shifts for the right employee.

Extension:

1. the employee is already working at the date of work shifts.
 - 1a. user clicks the override button or the cancel button.

Use case: the system will use 2-step authentication (FR-23)

Actor: employee

Main Success Scenario:

1. User logs in using e-mail and password.
2. System shows the message to check mail for verification
3. System sends the link to e-mail to authenticate the e-mail
4. User authenticates e-mail by clicking the link

GUI

With this page, you can enter your username and password with the login page and then press the button to log in. You can either view your password by clicking the eye-icon in the textbox of the password or just leave it hidden. What also is a function is the cross that is in the textbox of the username, this will clear the textbox.

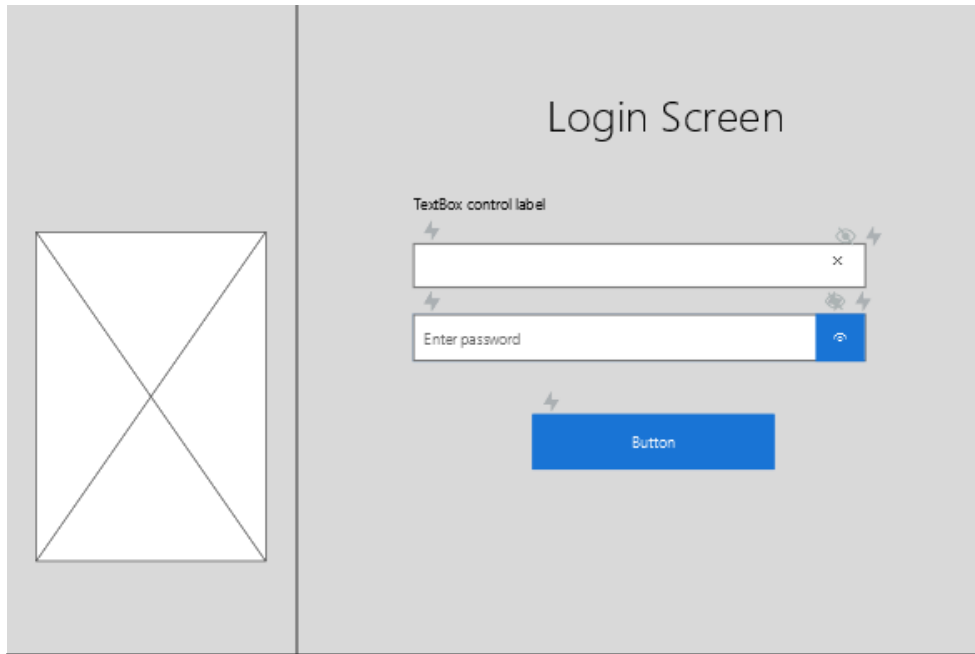


Figure 1: Login page

This is our dashboard page where you can select different pages to view for example statistics, employee information, schedule, etc. This dashboard is for both the manager and the human resource management.

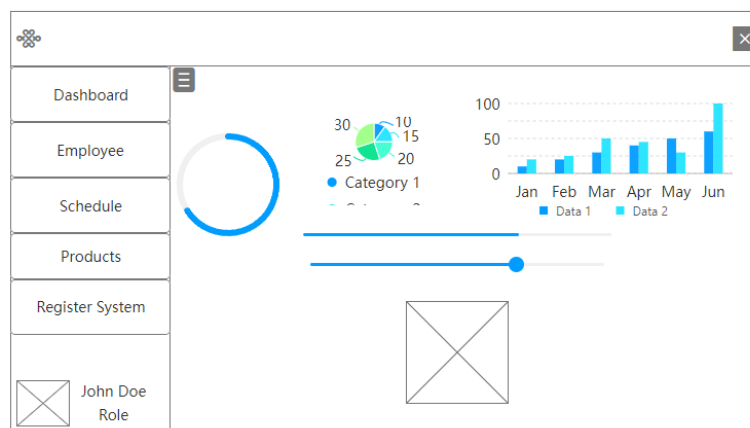


Figure 2: Dashboard

This page is called the employee planning page. Here the administration can view and moderate the schedule for each employee. The administration also has the option to search for an employee by their name and employee id.

Figure 3: Employee planning page

Next up: Personal employee information. This is what every employee can see about him-/herself. a lot of information can be changed by the employee, but not all information like salary, these things are visible though. The list next to the personal information is made for notifications, like promotion, notifying basic changes, etc.

Figure 4: Personal employee information page

Dashboard

Employee

Schedule

Products

Register System

Product management

Choose product ▼

Request reshelving

Product information:

- [Product 1]
- [Product 2]
- [Product 3]
- [Product 4]
- [Product 5]
- [Product 6]
- [Product 7]
- [Product 8]

Reshelf requests:

- [Request 1]
- [Request 2]
- [Request 3]
- [Request 4]
- [Request 5]
- [Request 6]
- [Request 7]
- [Request 8]

John Doe
Role

Figure 5: Product management pages