# User Requirements Specifications Document



**Group:** 2-5

# **Version:** Version 2.0

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# Agreements/decisions

- The client wants a desktop application for management and administration, as well as a website for employees
- The shifts will be assigned by the department manager
- ♣ Shifts will last 8 hours

# Functional requirements

- FR-01: Administrators can assign shifts
- FR-02: Employees can create restock requests
- FR-03: Administrators can add or remove employees
- FR-04: Employees can view and update their personal details
- FR-05: Employees can log in and access their shift schedules
- FR-06: Administrators can perform CRUD operations on the database
- FR-07: Managers and administrators can log in to the app

- FR-08: Managers and administrators can search for employees
- FR-09: Managers can view individual performance statistics
- FR-10: System can accommodate multiple shifts
- FR-11: System Handles Employee Shift Cancellations
- FR-12: System Manages Stock
- FR-13: System Supports Employee Vacation Requests
- FR-14: System Handles Forgotten Passwords
- FR-15: System Manages User Roles and Permissions
- FR-16: System Handles Employee Additions
- FR-17: System Manages Restock Requests
- FR-18: System Supports Multiple Departments
- FR-19: System Ensures Data Integrity
- FR-20: System Manages Employee Shifts
- FR-21: System Supports Auto-Scheduling for shifts
- FR-22: System Manages Search, Filter and Sorting
- FR-23: System Manages Announcements

# Web Application:

FR-02, FR-04, FR-11, FR-12, FR-13, FR-14, FR-15, FR-17, FR-18, FR-19

#### Win Forms Application:

FR-01, FR-03, FR-05, FR-06, FR-07, FR-08, FR-09, FR-10,

FR-11, FR-13, FR-14, FR-15, FR-16, FR-18, FR-19, FR-20, FR-21, FR-22, FR-23

# Non-functional requirements

- NFR-01: Our program requires minimal maintenance.
- NFR-02: The program is secure, accessible only to logged-in users, ensuring no outside access.

- NFR-03: The system uses a database to store website and app data.
- NFR-04: The system is easy to use for administrators, managers, and employees.
- NFR-05: The system is free from bugs and operates reliably for administrators, managers, and employees.

# Use Cases

• UC-01

Use case: Login to the website

FR-07

Actor: Employee

Main Success Scenario:

- 1. Actor provides information and confirms
- 2. System confirms credentials

- 1a. Login details are incorrect
  - 1. System displays an incorrect data message
  - 2. Return to MSS 1
- 1b. No login details are provided
  - System highlights text boxes that need to be filled
  - 2. Return to MSS 1

Use case: Employee checks their shift

FR-05

Actor: Employee

Main Success Scenario:

- 1. Actor checks schedule
- 2. System displays available schedule for actor
- 3. End of use case.

#### Extensions:

# . UC-03

Use case: Employee wants to modify their personal data

FR-0.4

Actor: Employee

Main Success Scenario:

- 1. Actor wants to change profile information
- 2. System shows actor his personal data
- 3. Actor wants to modify his data
- 4. System lets the actor update his credentials 5. Actor puts the new data
- 6. System modifies the actor's data accordingly
- 7. End of use case.

#### Extensions:

5a. The actor inputs invalid data

- 1.System displays a message "Invalid data, please
   try again."
- 2.Return to MSS 5

Use case: Administrator wants to see statistics about an employee

FR-06

Actor: Administrator
Main Success Scenario:

- 1. Actor wants to open statistics
- 2. System opens statistics
- 3. Actor types the name/ID of the person whose statistics he wishes to see.
- 4. System shows statistics about the specified person
- 5. End of use case.

- 2a. The wanted employee does not exist in the system.
- 1. System displays a message "Person doesn't exist"
- 2. End of use case.

Use case: An employee wants to create a restock request.

FR-02

Actor: Employee Main

Success Scenario:

- 1. Actor wants to create a restock request
- 2. System displays a form where the actor can fill in the required information for the restock request
- 3. Actor fills in required information 4. System sends the request to the warehouse
- 5. End of use case.

- 3a. The inputted data exceeds the amount of stock left in the Warehouse
  - 1. The system displays a message "Insufficient stock in the warehouse."
  - 2. End of use case.
- 3b. The actor requests exceeds the amount of stock that can come in the shop.
  - 1.The system displays a message "Too much stock
     requested."
  - 2. End of use case.

Use case: Administration assigns shifts to employees FR-01

Actor: Administrator
Main Success Scenario:

- 1. Actor wants to check schedule
- 2. System shows assigned shifts for employees
- 3. Actor wants to add shift
- 4. System asks for shift type and employee
- 5. Actor chooses the type of shift and the employee to assign a shift to
- 6. System confirms assigning the shift and updates the schedule with the added information
- 7. End of use case.

- 2a. Schedule is empty
  - 1. System displays that there are no shifts assigned
  - 2.Return to MSS 3
- 4a. There are no employees in the system
  - 1. System shows the message that there are no employees 2. End of use case

Use case: Employee calls in sick

FR-05

Actor: Employee

Main Success Scenario:

- 1. Actor wants to check shifts
- 2. System opens available shifts
- 3. Actor wants to cancel a shift
- 4. System asks for a reason to cancel the shift
- 5. Actor chooses a reason for cancelling a shift
- 6. System displays a form where the actor can select its period of being sick
- 7. Actor selects the period
- 8. The sick request gets saved in the system
- 9. End of use case.

#### Extensions:

- 7a. The actor chooses a period that is too long
  - 1. System displays a message "The chosen period is too long. Contact the manager."
  - 2.Return to MSS 3
  - . UC-08

Use case: Customer orders a product

FR-02

Actor: Customer

Main Success Scenario:

- 1. Actor selects a product
- 2. System adds product
- 3. Actor decides to check out

- 4. System asks for shipping information
- 5. Actor gives valid information 6. System accepts order
  - 7. End of use case.

#### Extensions:

- 1a. No quantity left for this order
- 1. System displays message "No quantity left"
- 2. Return to MSS 1
- 5a. Actor gives invalid shipping information
- 3. System displays message "Invalid shipping information"
- 4. Return to MSS 7
- . UC-09

Use case: Customer searches for a product

FR-02

Actor: Customer

Main Success Scenario:

- 1. Actor wants to order a product
- 2. System shows an array of products
- 3. Actor wants to sort product specifications
- 4. System shows sorting options
- 5. Actor chooses sorting options
- 6. System shows sorted products
- 7. End of scenario

- 6a. System does not find product based on the specifications
  - 1. System displays message "No found product"
  - 2.Return to MSS 5

### . UC-10

Use case: Customer forgets password

FR-04

Actor: Customer

Main Success Scenario:

- 1. Actor forgets password
- 2. System asks for customer's email
- 3. Actor provides the email
- 4. System sends verification code to provided email
- 5. Actor writes verification code
- 6. System lets actor change his password
- 7. End of scenario

#### Extensions:

- 4a. System does not find email
  - 1 System will not send verification code
  - 2 Return to MSS 3

# . UC-11

Use Case: Administrator adds a

new employee to the system

**FR-**03

Actor: Administrator

Main Success Scenario:

- 1. The Actor wants to add a new employee.
- 2.The system prompts for the new employee's details.
- 3. The Actor provides the required information.

4. The system adds the new employee to the system.

#### Extensions:

**4a:** The provided information is incomplete.

- 1. System displays a message: "Please provide all required information."
- 2. Return to MSS 3

# . UC-12

Use Case: Employee requests vacation

time

FR-05 Actor: Employee

Main Success

#### Scenario:

- 1. The Actor wants to request time off.
- 2. The system shows the user's upcoming shifts.
- 3. The Actor selects the shifts for which they want time off.
- 4. The system displays a form for the user to provide a reason and duration.
- 5. The Actor submits the time-off request.
- 6. The system updates the schedule with the time-off information.

#### Extensions:

3a: The Actor has no upcoming shifts.

1.System displays a message: "No upcoming
 shifts found."

#### 2. End of use case.

# • UC-13:

Use Case: Administrator manages
user roles and permissions FR-06

Actor: Administrator

# Main Success

#### Scenario:

- The Actor wants to manage user roles and permissions.
- The system provides options to view and modify user roles.
- The Actor selects a user and modifies their role and permissions.
- The system updates the user's roles and permissions accordingly.

#### Extensions:

**3a:** The Actor cancels the role modification.

- · System discards the changes.
- · End of use case.

# • UC-14

Use Case: Employee manages

product inventory

**FR-**06

Actor: Employee

Main Success Scenario:

- The Actor wants to update product inventory.
- The system provides options to view and modify product quantities.
- The Actor selects a product and updates its quantity.
- The system updates the product inventory accordingly.

#### Extensions:

**3a:** The Actor cancels the inventory update.

- System discards the changes.
- End of use case.

# UC-15

Use Case: Customer provides product ratings and
reviews
FR-06

Actor: Customer

#### Main Success Scenario:

- 1. The Actor wants to provide a rating and review for a product.
- 2. The system prompts the user to select the purchased product.
- 3. The Actor selects the product.
- 4. The system opens a review section for the user to rate and write a review.
- 5. The Actor submits the rating and review.
- 6. The system records the rating and review for the specified product.

#### Extensions:

3a: The Actor has not purchased any products.

• System displays a message: "No purchased products found." • End of use case.

### · UC-16

**Use Case:** Manager Searches for Employees Based on Department

FR-08

Actor: Manager

#### Main Success Scenario:

- 1. Actor wants to find employees within the department
- 2. System provides a search functionality for department.
- 3. Actor enters the desired department in the search criteria.
- 4. System displays a list of employees matching the specified department.
- 5. End of use case.

#### Extensions:

- 3a. Actor enters a department with no employees.
  - 1. System returns an empty list of employees
  - 2. End of use case

# · UC-17

Use Case: Employee Views Shift

FR-05

Actor: Employee

#### Main Success Scenario:

1. Actor wants to view their shift history.

- 2. System provides an option to access shift history.
- 3. Employee selects the shift history option.
- 4. System displays a calendar with past shifts for the actor
- 5. End of use case.

#### Extensions:

- 2a. Actor has no previous shift history.
  - 1. System does not display past shift history
  - 2. End of use case.

### · UC-18

Use Case: Administrator Modifies Employee Information

FR-03

Actor: Administrator

Main Success Scenario:

- 1. Actor wants to update an employee's personal details.
- 2. System provides an interface to modify employee information.
- 3. Actor selects an employee and edits the necessary details.
- 4. System updates the employee's information in the database.
- 5. End of use case.

#### Extensions:

3a. Administrator encounters issues updating information.

 System notifies the actor that there was an issue with updating employee information
 Return to MSS 2.

# · UC-19

Use Case: Employee Submits Restock Request for Urgent

Items

FR-02

Actor: Employee

#### Main Success Scenario:

- 1. Actor identifies an urgent need for restocking certain items
- 2. Actor wants to restock
- 3. System provides a restock request
- 4. Actor submits a restock request
- 5. System checks if request data is correct 6. System accepts request
- 7. End of use case.

#### Extensions:

- 6a. System detects invalid request data
  - 1. System asks for correct request data
  - 2. Return to MSS 4

#### · UC-20

Use Case: System Validates Employee Login Credentials

FR-07

Actor: Employee

#### Main Success Scenario:

1. Actor attempts to log in to the system.

- 2. System validates the entered login credentials.
- 3. The system grants access to the actor.
- 4. End of use case.

#### Extensions:

- 3a. Actor enters incorrect login details
  - 1. System does not grant access to actor
  - 2. System asks for valid credentials
  - 3. Return to MSS 1

# · UC-21

Use Case: Admin searches for shift

FR-22

Actor: Amin

#### Main Success Scenario:

- 1. Actor attempts find an employee with an assigned shift.
- 2. Actor filters by the type of shift.
- 3. Actor searches employee name
- 4. System returns result.
- 5. End of use case.

- 3a. Actor enters incorrect details
  - 1. System returns an empty tab
  - 2. Return to MSS 1

Use Case: Admin approves/rejects vacation request

**FR-**13

Actor: Admin

#### Main Success Scenario:

- 1. The actor identifies vacation requests.
- 2. Actor approves/rejects a vacation request
- 3. System updates the vacation status of the employee

#### Extension:

- 1a: No Available Vacation requests
  - 1. System shows the actor that there are no vacation requests
  - 2. End of use case

# • UC-24

Use Case: Send email after announcement

**FR-**21

Actor: Admin

#### Main Success Scenario:

- 1. The actor writes a new announcement
- 2. System saves announcement and sends a notification to all employees

- 1a: Announcement is cancelled
  - 1. System does not send email
  - 2. End of use case

# UC-25

Use Case: Admin wants to add new department

**FR-**18

Actor: Admin

#### Main Success Scenario:

- 1. The actor adds a new department
- 2. System adds new department to the number of departments

#### Extension:

1a: Actor decides to not add a new department

- 1. System does not add a new department
- 2. End of use case

# • UC-26

Use Case: Admin wants to delete department

**FR-**18

Actor: Admin

#### Main Success Scenario:

- 1. The actor wants to delete a department
- 2. Actor selects the department
- 3. Actor presses delete button
- 4. System deletes the department from the number of departments

#### Extension:

1a: Actor does not select a department to delete

- 2 System does not delete department
- 3 System notifies the actor that deletion is not successful
- 4 Return to MSS 1

#### • UC-27

Use Case: User forgets password

#### **FR-**14

Actor: User

#### Main Success Scenario:

- 1. The actor forgets password
- 2. Actor wants to open forget password form
- 3. System opens the form
- 4. Actor enters his email address
- 5. System checks if email is valid
- 6. System system sends email to actor with code
- 7. Actor enters code
- 8. System checks if code is valid
- 9. System lets actor change his password
- 10. Actor changes it and confirms
- 11. System changes password in the system

#### Extension:

5a: Actor does not enter correct email address

- 1 System does not send email
- 2 End of use case

7a: Actor does not enter correct code

- 1 System does not let actor change password
- 2 End of use case

#### • UC-28

Use Case: Admin writes an announcement

**FR-**23

Actor: Admin

#### Main Success Scenario:

- 1. Actor writes an announcement
- 2. System add announcement to the number of announcements
- 3. End of use case

#### Extension:

1a: Actor cancels Announcement creation

- 1 System does not create announcement
- 2 End of use case

Use Case: Admin edits an announcement

**FR-**23

Actor: Admin

#### Main Success Scenario:

1 Actor selects announcement to edit

2 System checks if there was a selected announcement

- 3 System lets actor edit the announcement
- 4 Actor edits and confirms
- 5 System rewrites the announcement
- 6 End of use case

#### Extension:

1a: Actor does not select an announcement for edit

- 1 System does not let actor edit announcement
- 2 System notifies actor that an announcement needs to be selected
- 3 Return to MSS 1

#### • UC-30

Use Case: Admin deletes an announcement

**FR-**23

Actor: Admin

#### Main Success Scenario:

- 1 Actor selects announcement to delete
- 2 System checks if there was a selected announcement
- 3 System lets actor delete the announcement

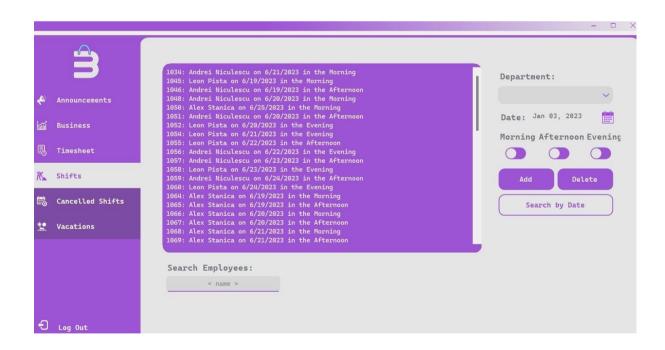
4 End of use case

#### Extension:

1a: Actor does not select an announcement for deletion

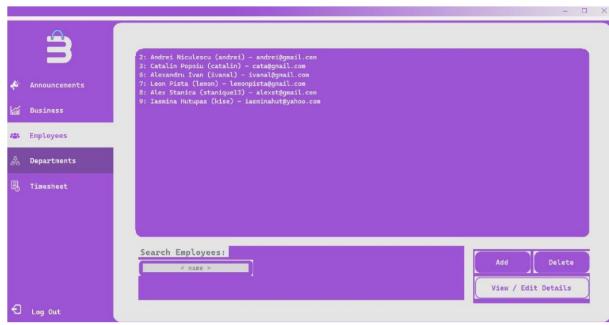
- 4 System does not let actor delete any announcements
- 5 System notifies actor that an announcement needs to be selected
- 6 Return to MSS 1

# GUI



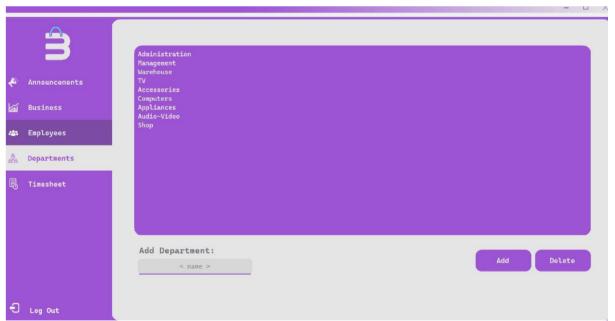
#### Description:

In the shift tab, as an admin, you will be able to Add and Delete Shifts and search for Employees who have an assigned shift.



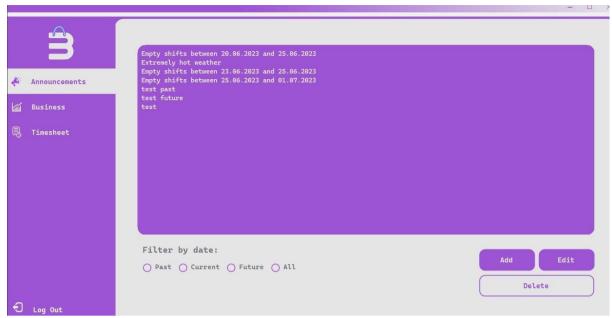
Description:

As an admin, when you open the employee tab you have the ability to add and delete an employee as well as search and edit employee credentials



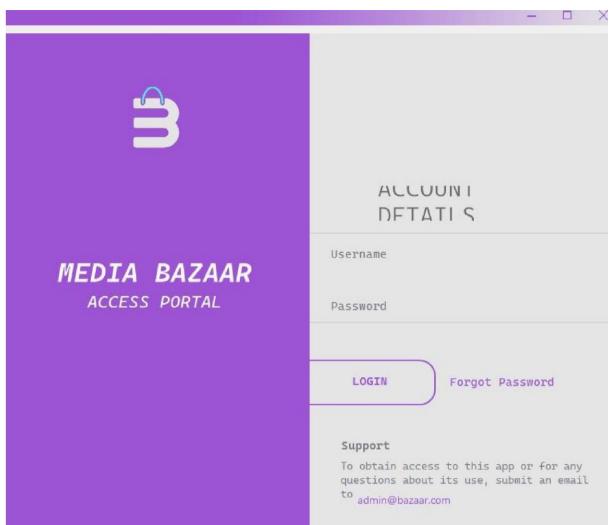
Description:

In the departments tab, you will be able to add and delete departments as well as search for them



Description:

In the announcements tab, as an admin, you are able to write a general message for all of your employees to see. If you find the message inappropriate you can choose to delete or edit it



# Description:

In the login form, you will have to know your credentials in order for you to be able to access your account. If you do not remember you can press the "Forgot Password" link

Website Wireframe

