

User Requirements Specification

Software solution for “Media Bazaar”
GROUP 1

Members: Bohdan Tymofieienko, Stelian Rumenov, Andreea Sindrilaru, Andrei Sava.

Tutor: Pencheva, Sabina S.

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Agreements with client

Sides:

Client: Media Bazaar represented by Andre Postma, "*Client*" later in this document.

Contractor: Group 1 (name TREE), "*Contractor*" later in this document.

Agreements:

- 1) Contractor does the problem analysis.
- 2) Contractor prepares the problem solution in form of information system.
- 3) Contractor implements the solution in form of standalone software application for Windows operating system and a website.

Application is intended for employee management and shift scheduling. More information can be found in the "Project plan document. Software solution for Media Bazaar."

The website is intended to be used by the employees to view their schedule, announcements, edit personal details and send messages to admins if something occurs and they can't attend work.

- 4) Team presents the product to the Client.
- 5) First phase of the project must be completed before March 25th.
- 6) Second phase of the project must be completed before May 9th.
- 7) Third phase of project must be completed before June 6th.

Functional requirements

- All the requirements were discussed with client. *“User” later in the document is an abstract alias to describe the functionality.*
- *MoSCoW table represents four levels of task prioritizing. The abbreviation stands for Must, Should, Could and Won't. You may find it in the column 4 (“Priority”).*
We consider it crucially important to define priorities before implementation phase, so both developers and client have realistic expectations on project results.
- *Naming convention:*
{FR-(Abbreviation from user's type name)-(count in two-digit format)}

Waterfall phase (until March 25th):

ID	Name	Description	Priority
Administration side- Application			
FR-A-01	Login	User can login to the system with personal credentials	Must
FR-A-02	Change password	User can change the password	Must
FR-A-03	View employees	User can view list of employees	Must
FR-A-04	View employee's details	User can view employee's details	
FR-A-05	Add employee	User can add new employee to the system <i>See "Appendix A" for information stored about employees</i>	Must
FR-A-06	Update employee	User can update employee information	Must
FR-A-07	Modify employee status	User can modify employee status (Not started yet, working, stopped)	Must
FR-A-08	View shift schedule	User can view overall work shift schedule for a selected period of time.	Must
FR-A-9	Assign shifts to employee	User can assign one of the three shifts to employee. a. Morning (7:00 – 15:00) b. Day (15:00 – 23:00) c. Night	Must

		(23:00 – 7:00)	
FR-A-10	Update employee's schedule	User can update information concerning employee's schedule.	Must
FR-A-11	Cancel employee's shift	User can cancel shift assignment for the employee	Must
FR-A-12	Add administrator	User can add new administrator to the system	Should
FR-A-13	Add manager	User can add new manager to the system	Should

ID	Name	Description	Priority
Management side- Application			
FR-M-01	Login	User can login to the system with personal credentials	Must
FR-M-02	Change password	User can change the password	Must
FR-M-03	View employees	User can view list of employees	Must
FR-M-04	View employee's details	User can view employee's details	Must
FR-M-05	View shift schedule	User can view overall work shift schedule for a selected period of time.	Must
FR-M-06	View statistical information	User can view statistical information. <i>For a selected date :</i>	Should

		<ul style="list-style-type: none"> i) Total number of employees. ii) Total salary paid. iii) Total number of hours worked. <p><i>For a selected time period:</i></p> <ul style="list-style-type: none"> i) Average number of employees per work shift. ii) Total salary paid to all employees. iii) Average hourly wage per employee iv) Total number of hours worked by all employees. v) Average number of hours worked by an employee. vi) Filtered based on selected department 	
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Please note: More than one iteration is expected soon. In the section below we describe first iteration of length of 3 weeks (until June 6th , 2021).

See “Project plan. Phasing” for more details.

Iteration I (until April 18th):

ID	Name	Description	Priority	Use case
Employee side - Website				
FR-E-01	Login	User can login to the website with personal credentials.	Must	US-W-01
FR-E-02	Logout	User can logout from the system.	Must	US-W-02
FR-E-03	Change password	User can change his/her password	Must	US-W-03
FR-E-04	Change first name	User can change his/her first name	Must	US-W-04
FR-E-05	Change last name	User can change his/her last name	Must	US-W-04

FR-E-06	Change Address	User can change his/her address	Must	US-W-04
FR-E-07	Change email address	User can change his/her email address	Must	US-W-04
FR-E-08	Change username	User can change his/her username	Must	US-W-04
FR-E-09	Change password	User can change his/her automated generated password	Must	US-W-04
FR-E-10	View schedule	User can view own schedule for a certain week.	Must	US-W-05
FR-E-11	Set preferences on schedule	User can set preferences (e.g., days off) on working schedule. <i>See "Appendix B. Availability for shifts" for Preferences arrangement.</i>	Must	US-W-06
FR-E-12	Send message to administrators	User can contact administrators via message.	Should	US-W-07
FR-E-13	View announcements	User can view announcements.	Could	US-W-08

Iteration II (until May 9th):

ID	Name	Description	Priority	Use case
Administrator side - Application				
FR-A-14	View list of products in stock	User can view list of products in stock. <i>See "Appendix C: for details."</i>	Must	US-A-13
FR-A-15	Add product	User can add product to the system. <i>See "Appendix C: for details."</i>	Must	US-A-14
FR-A-16	Modify product's name	User can modify product's name.	Must	US-A-15
FR-A-17	Modify product's cost price	User can modify product's cost price.	Must	US-A-15
FR-A-18	Modify product's selling price	User can modify product's selling price.	Must	US-A-15
FR-A-19	Modify product's size	User can modify product's size.	Must	US-A-15

FR-A-20	Modify product's department	User can modify product's department.	Must	US-A-15
FR-A-21	Modify restocks threshold.	User can modify restocks threshold.	Should	US-A-16
FR-A-22	Delete product from the system.	User can delete product from the system	Must	US-A-17
FR-A-23	Notify product stock is low	User is notified when the number of items in stock is below the restock threshold	Must	US-A-17
FR-A-23	Send a restock request.	User can send a stock request (Product and amount).	Must	US-A-18
FR-A-24	Receive message from stock request	User is notified if the request has been accepted or declined by the depot	Must	US-A-18

ID	Name	Description	Priority	Use case
Depot worker side- Application				
FR-D-1	Login	User can log in.	Must	US-D-1
FR-D-2	Logout	User can logout	Must	US-D-2
FR-D-3	View list of requests.	User can view a list of restock requests.	Must	US-D-3

FR-D-4	Accept restock request.	User can accept restock request.	Must	US-D-4
FR-D-4	Reject restock request.	User can reject restock request.	Must	US-D-5
FR-D-5	Send restock request to depot.	User can send restock request to depot workers	Must	US-D-6

Iteration III (until June 6th):

ID	Name	Description	Priority	Use case
Administrator side- Application				
FR-A-25	View list of departments in stock	User can view list of departments. <i>See "Appendix D: for details."</i>	Must	US-A-25
FR-A-26	Add department	User can add new department. <i>See "Appendix D: for details."</i>	Must	US-A-26
FR-A-27	Modify department 's name	User can modify departments' name.	Must	US-A-27
FR-A-28	Modify department 's Manager.	User can modify department's cost price. <i>*Fixed contract only</i>	Must	US-A-28
FR-A-29	Remove department	User can remove certain department.	Must	US-A-29

FR-A-29	Use auto-scheduling mechanism.	User can input date period and shifts for this period will be scheduled.	Must	US-A-30
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ID	Name	Description	Priority	Use case
Manager side - Application				
FR-M-07	View statistics for employee attendance.	User can view statistics for employee attendance.	Must	US-M-07
FR-M-08	View statistics for employee attendance and for product per department.	User can view statistics for employee attendance and for product per department.	Must	US-M-08

ID	Name	Description	Priority	Use case
Employee side - Website				
FR-E-14	Check-in for certain shift.	User can check-in for a chosen shift. <i>*only for the future shift in the day of check in.</i>	Must	US-W-09
FR-E-15	Check-out for certain shift.	User can check-out for a chosen shift. <i>*only for the past shift in the day of check in.</i>	Must	US-W-10

Use cases - Application

1) **US-A-01: Administrator logs in**

Actors: Administrator

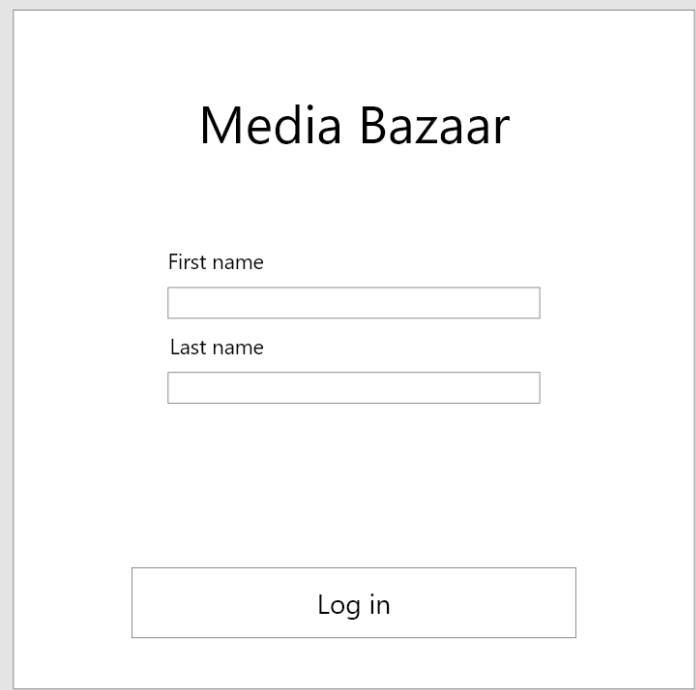
Requirement(s): **FR-A-01**

Main Success Scenario:

1. Administrator runs on app icon.
2. Login form is open.
3. Administrator inputs login and password.
4. Administrator presses "Log in".
5. Administrator form is open.

Extension:

1. Field is empty
 - a. Notify user.
2. Login is incorrect
 - a. Notify user.
3. Password is incorrect
 - a. Notify user.



The screenshot shows a login interface for 'Media Bazaar'. At the top, the title 'Media Bazaar' is centered. Below it, there are two input fields: 'First name' and 'Last name', each with a corresponding text box. At the bottom, there is a 'Log in' button.

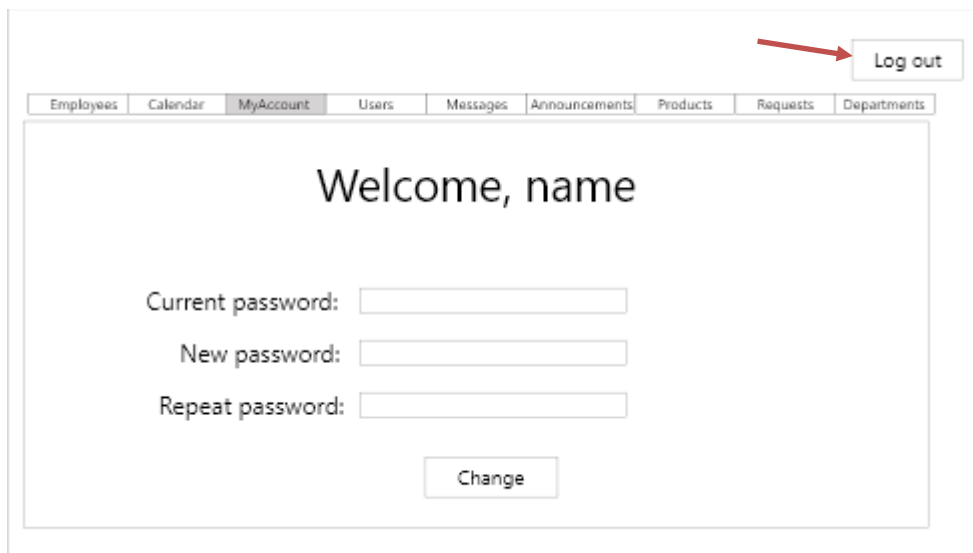
2) **US-A-02: Administrator logs out**

Actors: Administrator

Requirement(s): **FR-A-02**

Main Success Scenario:

1. Administrator clicks on “Log out”.
2. Log in form is opened.



The screenshot shows a web application interface. At the top right, there is a 'Log out' button with a red arrow pointing to it. Below the navigation bar, there is a 'MyAccount' section. The 'MyAccount' section contains a 'Welcome, name' message, three password input fields labeled 'Current password:', 'New password:', and 'Repeat password:', and a 'Change' button.

3) **US-A-02: Administrator changes password**

Actors: Administrator

Requirement(s): **FR-A-03**

Main Success Scenario:

1. Administrator clicks on “MyAccount”.
2. Administrator inserts current password.
3. Administrator inserts new password.
4. Administrator repeats new password.
5. Administrator clicks on “Change”.
6. System shows that information has been successfully updated.

Extension:

1. Field is empty
 - a. Notify user.
2. Current password is wrong.
 - a. Notify user.

Log out


Employees Calendar **MyAccount** Users Messages Announcements Products Requests Departments

Welcome, name

Current password:

New password:

Repeat password:



4) US-A-04: Administrator views the list of employees

Actors: Administrator

Requirement(s): **FR-A-04**

Main Success Scenario:

1. Administrator clicks on "Employees".
2. Grid with employee information is shown

Log out

Employees **Calendar** MyAccount Users Messages Announcements Products Requests Departments

The search bar can find departments, first names of the employees, etc.

Id	First name	Last name	Department	Email
0	Name	Surname	Dep	email
1	Name	Surname	Dep	email
2	Name	Surname	Dep	email
3	Name	Surname	Dep	email
4	Name	Surname	Dep	email
5	Name	Surname	Dep	email

5) US-A-05: Administrator view details of certain employee

Actors: Administrator

Requirement(s): **FR-A-05**

Main Success Scenario:

1. Administrator clicks on "Employees".
2. Grid with employee information is shown.
3. Administrator clicks on certain row.

4. Row, representing a certain employee is now selected.
5. Administrator clicks on view
6. Separate form with details is opened.

View employee

First name Text	Id Text	Hourly wage Text
Last name Text	Email Text	Account number Text
Country Text	Date of birth Text	Department Text
City Text	Date of first working day Text	Role Text
Street Text	Shifts Text	Contract Text
Number Text	Status Text	
Zip-code Text		

Done

Please note: In this case fields are read-only. Meaning one can read but not modify.

6) US-A-06: Administrator adds new employee to the system

Actors: Administrator

Requirement(s): **FR-A-06**

Main Success Scenario:

1. Administrator clicks on "Employees".
2. Administrator clicks on "Add employee".
3. Separate form is opened.
4. Administrators insert all the data needed. *(See Appendix A for details)*
5. Administrator clicks on "Add".
6. System notifies user that new employee was successfully added.
 - a. Automatically generated password is shown on the screen
 - i. Administrator writes it down on paper and closes the window with password.

Extension:

1. Field is empty
 - a. Notify user.
2. Email is invalid format.
 - a. Notify user.
3. Name is invalid format.
 - a. Notify user.

Add employee

First name	Email	Hourly wage
<input type="text"/>	<input type="text"/>	<input type="text"/>
Last name	Date of birth	Account number
<input type="text"/>	<input type="text"/>	<input type="text"/>
Country	Date of first working day	Department
<input type="text"/>	<input type="text"/>	<input type="text"/>
City	Shifts	Role
<input type="text"/>	<input type="text"/>	<input type="text"/>
Street	Status	Contract
<input type="text"/>	<input type="text"/>	<input type="text"/>
Number		
<input type="text"/>		
Zip-code		
<input type="text"/>		

Add employee

7) US-A-07: Administrator updates employee information

Actors: Administrator

Requirement(s): **FR-A-07, FR-A-08**

Main Success Scenario:

1. Administrator clicks on “Employees”.
2. Grid with employee information is shown.
3. Administrator clicks on certain row.
4. Row, representing a certain employee is now selected.
5. Administrator clicks on “Edit”.
6. Separate form with details is opened.
7. Administrator may change certain fields.
8. Employee status may be changed.

Extension:

1. Field is empty.
 - a. Notify user.
2. Email is invalid format.
 - a. Notify user.
3. Name is invalid format.
 - a. Notify user.

Edit employee _ □ ×

First name <input type="text"/>	Id <input type="text"/>	Hourly wage <input type="text"/>
Last name <input type="text"/>	Email <input type="text"/>	Account number <input type="text"/>
Country <input type="text"/>	Date of birth <input type="text"/>	Department <input type="text"/> ▾
City <input type="text"/>	Date of first working day <input type="text"/>	Role <input type="text"/> ▾
Street <input type="text"/>	Number <input type="text"/>	Contract <input type="text"/> ▾
Zip-code <input type="text"/>	Shifts <input type="text"/> ▾	
	Status <input type="text"/> ▾	

Please note: Only certain field may be modified. See “Appendix A” for more details.

8) US-A-08: Administrator views overall work shift schedule for a selected period.

Actors: Administrator

Requirement(s): **FR-A-09**

Main Success Scenario:

1. Administrator clicks on “Schedule”.
2. Administrator selects the certain dates
3. Schedule with requested dates is shown.
4. Administrator clicks on certain shift.
5. Separate form with details is opened.
6. Administrator sees the list of employees assigned to the shift.
7. Administrator clicks on “Done”.

[Log out](#)

Employees	Calendar	MyAccount	Users	Messages	Announcements	Products	Requests	Departments																																																																																																																
<div style="display: flex; align-items: flex-start;"><table border="1" style="width: 70%; border-collapse: collapse;"><thead><tr><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th><th>Saturday</th><th>Sunday</th></tr></thead><tbody><tr><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td></tr><tr><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td></tr><tr><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td></tr><tr><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td></tr><tr><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td></tr><tr><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td></tr><tr><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td></tr><tr><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td></tr><tr><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td></tr><tr><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td><td>Morning</td></tr><tr><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td><td>Day</td></tr><tr><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td><td>Night</td></tr><tr><td>Morning</td><td>Morning</td><td>Morning</td><td></td><td></td><td></td><td></td></tr><tr><td>Day</td><td>Day</td><td>Day</td><td></td><td></td><td></td><td></td></tr><tr><td>Night</td><td>Night</td><td>Night</td><td></td><td></td><td></td><td></td></tr></tbody></table><div style="width: 30%; padding-left: 10px;"><div style="margin-bottom: 10px;"><small>If user wants to manually schedule, he needs to click on the calendar day and choose a shift from the popup</small></div><div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;">Auto-schedule</div><div><small>Auto-schedule will open a window to choose a shift from the popup and assign it to the employee</small></div></div></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Previous week</div><div>Employees checked-in today: label</div><div>Next week</div></div> <div style="margin-top: 5px; font-size: 0.8em;"><small>By double clicking this label a popup window with checked-in employees will appear</small></div>									Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Morning	Morning	Morning	Morning	Morning	Morning	Morning	Day	Day	Day	Day	Day	Day	Day	Night	Night	Night	Night	Night	Night	Night	Morning	Morning	Morning	Morning	Morning	Morning	Morning	Day	Day	Day	Day	Day	Day	Day	Night	Night	Night	Night	Night	Night	Night	Morning	Morning	Morning	Morning	Morning	Morning	Morning	Day	Day	Day	Day	Day	Day	Day	Night	Night	Night	Night	Night	Night	Night	Morning	Morning	Morning	Morning	Morning	Morning	Morning	Day	Day	Day	Day	Day	Day	Day	Night	Night	Night	Night	Night	Night	Night	Morning	Morning	Morning					Day	Day	Day					Night	Night	Night				
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A label referenced by red arrow (See picture above) is a button. Clicking on it opens a separate window (See next page).

9) US-A-09: Administrator assigns shift to employee

Actors: Administrator

Requirement(s): **FR-A-10**

Main Success Scenario:

1. Administrator clicks on “Schedule”.
2. Administrator selects the certain dates
3. Schedule with requested dates is shown.
4. Administrator clicks on certain shift.
5. Separate form with details is opened.
6. Administrator sees the list of available employees.
7. Administrator chooses employee from the list.
8. Administrator clicks on “Assign”.
9. Administrator clicks on “Done”.

Assign employee _ □ X

Available shop workers

Search

Search

Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001

Assign

Cancel

Employee 1	0001
Employee 1	0001

Done

In the separate window administrator can see the list of available shop workers and list of shop workers assigned for this shift.

10) US-A-10: Administrator updates the schedule

Actors: Administrator

Requirement(s): **FR-A-11, FR-A-12**

Main Success Scenario:

1. Administrator clicks on “Schedule”.
2. Administrator selects the certain dates
3. Schedule with requested dates is shown.
4. Administrator clicks on certain shift.
5. Separate form with details is opened.
6. Administrator sees the list of employees.
7. Administrator chooses employee from the list
8. Administrator clicks on “Cancel”.
9. Administrator clicks on “Done”.

Assign employee

Available shop workers

Search

Search

Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001

Assigned shop workers

Assign

Cancel

Employee 1	0001
Employee 1	0001

Done

11) US-A-11: Administrator adds new user to the system

Actors: Administrator

Requirement(s): **FR-A-12, FR-A-13**

Main Success Scenario:

1. Administrator clicks on “Users”.
2. List of accounts is shown.
3. Administrator clicks on “Add”.
4. Separate form is opened.
5. Administrator fills in the textboxes.
6. Administrator clicks on “Add”.

Log out

Employees Calendar MyAccount **Users** Messages Announcements Products Requests Departments

Search

First name	Last name	Role	Email
Name 1	Surname 1	Administrator	adm@mediabazaar.com
Name 1	Surname 1	Administrator	adm@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com

Add

Remove

See next page.

Add new user

Role

First Name

Last Name

Email

Add

Please note: This is the solution for the first phase of the project. Later more requirements for administrator and manager accounts can be discussed and added.

12) US-A-12: Administrator removes user from the system

Actors: Administrator

Requirement(s): **FR-A-15, FR-A-16**

Main Success Scenario:

1. Administrator clicks on “Accounts”.
2. List of accounts is shown.
3. Administrator selects row to remove.
4. Administrator clicks on “Remove”.
5. System informs user that operation was successful.

Log out

Employees Calendar MyAccount **Users** Messages Announcements Products Requests Departments

Search

First name	Last name	Role	Email
Name 1	Surname 1	Administrator	adm@mediabazaar.com
Name 1	Surname 1	Administrator	adm@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com
Name 1	Surname 1	Manager	manager@mediabazaar.com

Add

Remove

13) US-A-13: Administrator views list of products in stock

Actors: Administrator

Requirement(s): **FR-A-14**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Products*” button.
2. An overview of all products is shown.

[Log out](#)

Employees	Calendar	MyAccount	Users	Messages	Announcements	Products	Requests	Departments
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Filter products by department

▼

Name	Cost Price	Sell price	Department	InStock
Name 1	1	2	Electronics	5
Name 1	1	2	Electronics	5
Name 1	1	2	Electronics	5
Name 1	1	2	Electronics	5
Name 1	1	2	Electronics	5

Add

Update

Remove

Request

14) US-A-14: Administrator adds product to the system

Actors: Administrator

Requirement(s): **FR-A-15**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Products*” tab.
2. Administrator clicks on “Add product” button
3. Administrator fills in necessary fields
4. Administrator clicks on “Add” button
5. System notifies user that a product was successfully added

Extensions:

5.1. Field is empty

1. Notify user
2. Back to step 3 of MSS

5.2. Field is in wrong format

1. Notify user
2. Back to step 3 of MSS

The screenshot shows a web form titled "Add product" with a close button (X) in the top right corner. The form contains several input fields: "Name", "Cost price", "Selling price", "Size" (which is a group containing "Length", "Width", and "Height" sub-fields), "Department", and "Restock treshold". At the bottom of the form is a large "Add" button.

15) US-A-15: Administrator modifies product's name*

Actors: Administrator

Requirement(s): **FR-A-16 to FR-A-20**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Products*” tab
2. Administrator clicks on a product
3. Administrator clicks on “*Update*” button
4. Administrator changes the necessary field
5. Administrator clicks on the “*Save*” button

Extensions:

- 5.1. Field is in in correct format
 1. Notify user
 2. Back to step 4 of MSS
- 5.2. Field is empty
 1. Notify user
 2. Back to step 4 of MSS

****same use-case applies for product's cost price, selling price, size dimensions, department***

The screenshot shows a web form titled "Edit product". It contains the following fields and controls:

- Name:** A text input field with the placeholder text "Text".
- Cost price:** A numerical input field with the value "0".
- Selling price:** A numerical input field with the value "0".
- Size:** Three separate numerical input fields for "Length", "Width", and "Height", each with the value "0".
- Department:** A text input field with the placeholder text "Text".
- Restock threshold:** A numerical input field with the value "0".
- Edit:** A large button at the bottom of the form.

16) US-A-16: Administrator modifies product's restock threshold

Actors: Manager

Requirement(s): **FR-A-21**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Products*” tab
2. Administrator clicks on a product
3. Administrator clicks on “*Update*” button
4. Administrator changes the necessary field
5. Administrator clicks on the “*Save*” button

Extensions:

4.1. Field is in in correct format

1. Notify user
2. Back to step 4 of MSS

4.2. Field is empty

1. Notify user
2. Back to step 4 of MSS

The screenshot shows a web form titled "Edit product". It contains several input fields: "Name" (text), "Cost price" (number, value 0), "Selling price" (number, value 0), "Size" (three separate number fields for Length, Width, and Height, all with value 0), "Department" (text), and "Restock threshold" (number, value 0). The "Restock threshold" field is highlighted with a red rectangular border. At the bottom of the form is a large button labeled "Edit".

17) US-A-17: Administrator deletes product from system

Actors: Manager

Requirement(s): **FR-A-22**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Products*” tab
2. Administrator clicks on a particular product
3. Administrator clicks on “*Delete*” button and confirms choice
4. System notifies user that the product was deleted successfully

Log out

Employees	Calendar	MyAccount	Users	Messages	Announcements	Products	Requests	Departments																																			
Filter products by department <input type="text"/>																																											
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Name</th><th>Cost Price</th><th>Sell price</th><th>Department</th><th>InStock</th></tr></thead><tbody><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr><tr><td>Name 1</td><td>1</td><td>2</td><td>Electronics</td><td>5</td></tr></tbody></table>									Name	Cost Price	Sell price	Department	InStock	Name 1	1	2	Electronics	5	Name 1	1	2	Electronics	5	Name 1	1	2	Electronics	5	Name 1	1	2	Electronics	5	Name 1	1	2	Electronics	5	Name 1	1	2	Electronics	5
Name	Cost Price	Sell price	Department	InStock																																							
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Name 1	1	2	Electronics	5																																							
Name 1	1	2	Electronics	5																																							
					<div style="text-align: right;"><div>Add</div><div>Update</div><div>Remove</div><div>Request</div></div>																																						

18) US-A-18: Administrator sends a stock request (product and amount)

Actors: Manager

Requirement(s): **FR-A-23**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Stock*” tab
2. Administrator clicks on “*Request*” button
3. Administrator inputs product and amount
4. Administrator clicks on “*Request*” button

Extensions:

- 4.1. Field is in in correct format
 1. Notify user
 2. Back to step 3 of MSS
- 4.2. Field is empty
 1. Notify user
 2. Back to step 3 of MSS

Request products □ ×

label
contains info about product

Amount

Request

19) US-D-01: Depot worker logs in

Actors: Depot worker

Requirement(s): **FR-D-01**

Pre-condition: System is running

Main Success Scenario:

1. User inputs username and password
2. User clicks on “Login” button
3. System redirects user to Home page

Extensions:

- 2.1. Username or password is incorrect
 1. Notify user
 2. Back to step 1 of MSS
- 2.2. Field is empty
 1. Notify user
 2. Back to step 1 of MSS

Media Bazaar

First name

Last name

Log in

20) US-D-02: Depot worker logs out


Actors: Depot worker

Requirement(s): **FR-D-02**

Pre-condition: Depot worker logged in successfully

Main Success Scenario:

1. Depot worker clicks on “Log out” button
2. System redirects user to Login window



Restock requests

ID	ItemID	Name	AmountRequested	Date	Status
0	23	Laptop	4	1.01.2021	Pending
1	19	Laptop	20	1.01.2021	Pending
2	23	Laptop	40	1.01.2021	Accepted
3	5	Laptop	100	1.01.2021	Rejected
4	6	Laptop	20	1.01.2021	Pending
5	6	Laptop	10	1.01.2021	Accepted

Buttons: Refresh, Accept, Reject

21) US-D-03: Depot worker views list of restock requests

Actors: Depot worker

Requirement(s): **FR-D-03**

Pre-condition: Depot worker logged in successfully

Main Success Scenario:

1. Depot worker is redirected to Home page with restock requests after login
2. Depot worker is presented the list of current restock requests

Log out

Restock requests

ID	ItemID	Name	AmountRequested	Date	Status
0	23	Laptop	4	1.01.2021	Pending
1	19	Laptop	20	1.01.2021	Pending
2	23	Laptop	40	1.01.2021	Accepted
3	5	Laptop	100	1.01.2021	Rejected
4	6	Laptop	20	1.01.2021	Pending
5	6	Laptop	10	1.01.2021	Accepted

Refresh

Accept

Reject

22) US-D-04: Depot worker accepts restock request

Actors: Depot worker

Requirement(s): **FR-D-04**

Pre-condition: Depot worker logged in successfully

Main Success Scenario:

1. Depot worker is redirected to Home page with restock requests after login
2. Depot worker is presented the list of current restock requests
3. Depot worker clicks on the “Accept” button next to the chosen restock request

Log out

Restock requests

ID	ItemID	Name	AmountRequested	Date	Status
0	23	Laptop	4	1.01.2021	Pending
1	19	Laptop	20	1.01.2021	Pending
2	23	Laptop	40	1.01.2021	Accepted
3	5	Laptop	100	1.01.2021	Rejected
4	6	Laptop	20	1.01.2021	Pending
5	6	Laptop	10	1.01.2021	Accepted

Refresh

Accept

Reject

23) US-D-05: Depot worker rejects restock request

Actors: Depot Worker

Requirement(s): **FR-D-05**

Pre-condition: Depot worker logged in successfully

Main Success Scenario:

1. Depot worker is redirected to Home page with restock requests after login
2. Depot worker is presented the list of current restock requests
3. Depot worker clicks on the “Reject” button next to restock request
4. A separate window appears with reject reason.

Log out

Restock requests

ID	ItemID	Name	AmountRequested	Date	Status
0	23	Laptop	4	1.01.2021	Pending
1	19	Laptop	20	1.01.2021	Pending
2	23	Laptop	40	1.01.2021	Accepted
3	5	Laptop	100	1.01.2021	Rejected
4	6	Laptop	20	1.01.2021	Pending
5	6	Laptop	10	1.01.2021	Accepted

Refresh

Accept

Reject

Rejected Request

Reason for rejection

Send

24) US-A-25: User views list of departments

Actors: User as Administrator

Requirement(s): **FR-A-25**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Manager clicks on “Departments”.
2. System displays list of departments

Log out

Employees	Calendar	MyAccount	Users	Messages	Announcements	Products	Requests	Departments
ID	Department	Number of employees	Department manager					
1	Department 1	6	Department manager					
2	Department 1	5	Department manager					
3	Department 1	4	Department manager					
4	Department 1	10	Department manager					
5	Department 1	12	Department manager					

AddEditDeleteView

25) US-A-25: User views department details

Actors: User as Administrator

Requirement(s): **FR-A-25**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. User clicks on “Departments”.
2. System displays list of departments
3. User clicks on “View”.
5. Separate window with department details appears.

The screenshot shows a window titled "View Department" with standard window controls (minimize, maximize, close) in the top right corner. The window contains the following elements:

- A label "Name" above a text input field containing the word "Text".
- A label "Department Manager" above a text input field containing the name "Ryan Branham".
- A section header "Employees working in this department" above a table.
- A table with 8 rows, each containing the text "Employee 1".
- A "Done" button at the bottom center, with a blue arrow pointing to it from the bottom right.

26) US-A-26: User adds new department

Actors: User as Administrator

Requirement(s): **FR-A-26**

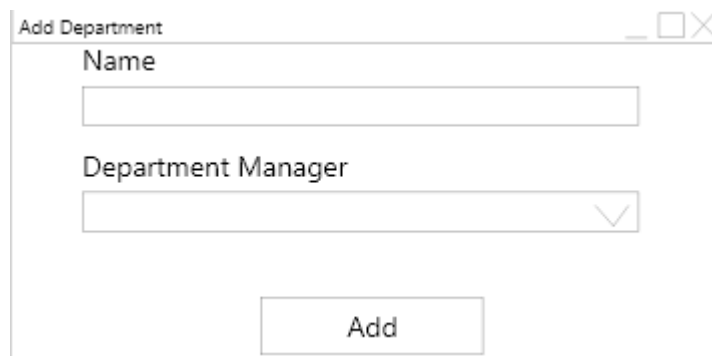
Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Departments*” tab.
2. Administrator clicks on “*Add Department*” button.
3. Administrator fills in the necessary fields.
4. Administrator clicks on the “*Add*” button.
5. System notifies User that the department was added successfully

Extensions:

- 5.1. Fields were in incorrect format
 1. Notify user
 2. Back to step 3 of MSS
- 5.2. Field is empty
 1. Notify user
 2. Back to step 3 of MSS



The screenshot shows a dialog box titled "Add Department" with a close button (X) in the top right corner. Inside the dialog, there are two input fields. The first field is labeled "Name" and is empty. The second field is labeled "Department Manager" and is also empty, with a small downward arrow icon on the right side of the field. Below these two fields, centered, is a button labeled "Add".

27) US-A-27: User modifies department's name

Actors: User as Administrator

Requirement(s): **FR-A-27**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Departments*” tab.
2. Administrator chooses a particular department from the list and clicks on it.
3. Administrator clicks on “*Edit*” button.
4. Administrator input new name in appropriate field.
5. Administrator clicks on “*Save*”
6. System notifies the User the change was successful

Extensions:

6.1. Fields was in incorrect format

1. Notify user
2. Back to step 4 of MSS

6.2. Field is empty

1. Notify user
2. Back to step 4 of MSS

Edit Department

Name

Text

Department Manager

Ryan Branham

Edit

28) US-A-28: Administrator changes department's manager

Actors: User as Administrator

Requirement(s): **FR-A-28**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on "*Departments*" tab.
2. Administrator chooses a particular department from the list and clicks on it.
3. Administrator clicks on "*Change manager*".
4. Administrator assigns new manager from available list of employees
5. System notifies User the change was successful.

Edit Department

Name

Text

Department Manager

Ryan Branham

Edit

29) US-A-29: Administrator removes department

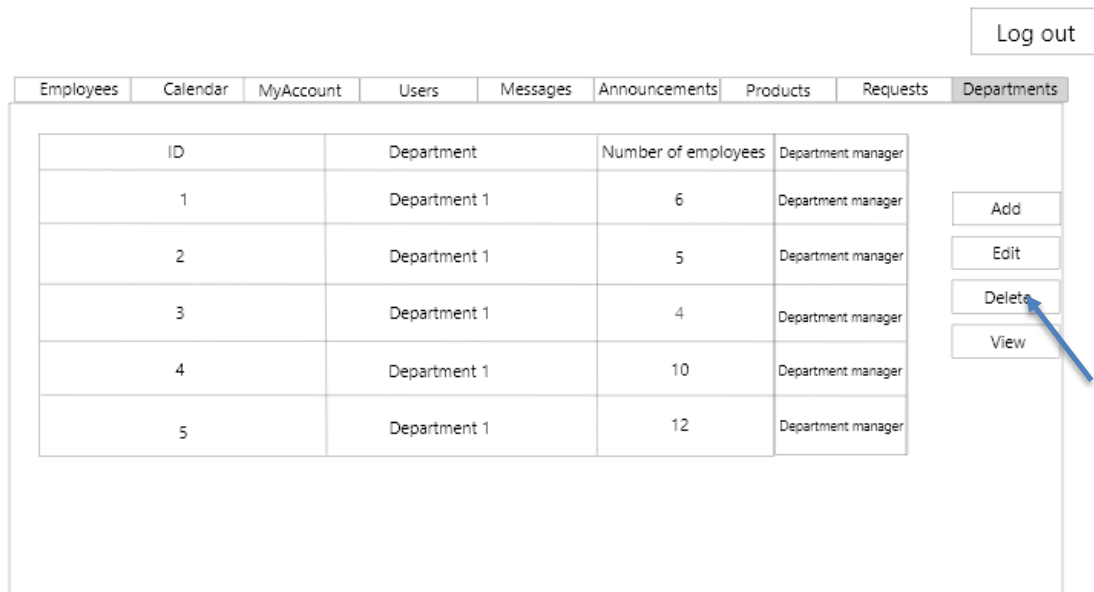
Actors: User as Administrator

Requirement(s): **FR-A-29**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “*Departments*” tab.
2. Administrator chooses a particular department from the list and clicks on it.
3. Administrator clicks on the “*Delete*” button
4. System notifies User the department was deleted successfully



30) US-A-30: User uses auto-scheduler

Actors: User as Administrator

Requirement(s): **FR-A-30**

Pre-condition: Administrator logged in successfully

Main Success Scenario:

1. Administrator clicks on “Calendar” tab.
2. Administrator clicks on “Auto-schedule” button.
3. “Auto-scheduler window pops up.
4. Administrator enter a date to schedule employees.
5. System notifies User that schedule was complete successfully

The screenshot shows a web application interface with a top navigation bar containing tabs: Employees, Calendar, MyAccount, Users, Messages, Announcements, Products, Requests, and Departments. The 'Calendar' tab is selected. Below the tabs is a calendar grid with columns for days of the week (Monday to Sunday) and rows for time slots (Morning, Day, Night). To the right of the calendar grid is a button labeled 'Auto-schedule'. A blue arrow points to this button. Below the calendar grid are buttons for 'Previous week' and 'Next week', and a label 'Employees checked-in today: label'. A small text note at the bottom says 'By double clicking this label a popup window with checked-in employees will appear'.

The screenshot shows a popup window titled 'Auto scheduler'. Inside the window, there is a section labeled 'Date' with the subtitle '(Auto-scheduler employees for a specific date)'. Below this is a text input field. At the bottom of the window is a button labeled 'Schedule'. A blue arrow points to this button.

31) **US-M-07: Manager views statistical information about employees**

Actors: User as Manager

Requirement(s): **FR-M-07**

Pre-condition: Manager logged in successfully

Main Success Scenario:

1. Manager clicks on “*Statistics*” tab.
2. Manager chooses the indicator from the list.
3. Manager clicks on “*Display*”.
4. Labels updates with the data.

Log out

My Account

Employees

Calendar

Statistics

Employees

Products

For a selected date:

Total employees : label

Total salary paid : label

Totally hours worked : label

Attendance rate: label

People present on {this.date} : label

For a selected time period:

Average employees per shift for period: label

Totally salary paid to employees for period: label

Average hourly wage for period: label

Total hours worked by employees: label

Attendance rate: label

People present on {this.date} : label

Save results

32) **US-M-07: Manager views statistical information about products**

Actors: User as Manager

Requirement(s): **FR-M-07**

Pre-condition: Manager logged in successfully

Main Success Scenario:

1. Manager clicks on “*Statistics*” tab.
2. Manager chooses the indicator from the list.
3. Manager clicks on “*Display*”.
4. Labels updates with the data.

The screenshot shows a web application interface for a manager. At the top right, there is a "Log out" button. Below it, a navigation bar contains four tabs: "My Account", "Employees", "Calendar", and "Statistics". The "Statistics" tab is currently selected. Underneath the navigation bar, there is a sub-navigation bar with three tabs: "Employees", "Products", and "Departments". The "Products" tab is selected. The main content area is titled "Product statistics" and contains a dropdown menu with a downward arrow. Below the dropdown is a "Display" button. Further down, there are three labels: "Average amount per purchase: label", "Total profit per product: label", and "Total sales per product: label". At the bottom left of the main content area, there is a "Save results" button.

33) **US-M-07: Manager views statistical information about department**

Actors: User as Manager

Requirement(s): **FR-M-07**

Pre-condition: Manager logged in successfully

Main Success Scenario:

1. Manager clicks on “*Statistics*” tab.
2. Manager chooses the indicator from the list.
3. Manager clicks on “*Display*”.
4. Labels updates with the data.

Log out

My AccountEmployeesCalendarStatistics

EmployeesProductsDepartments

Choose a department to see its statistics

for a select period

Display

Average salary per department: label

People per department: label

Display

Total sales per department: label

Total salaries paid per department: label

Save results

34) US-W-09: Employee checks-in for certain shift

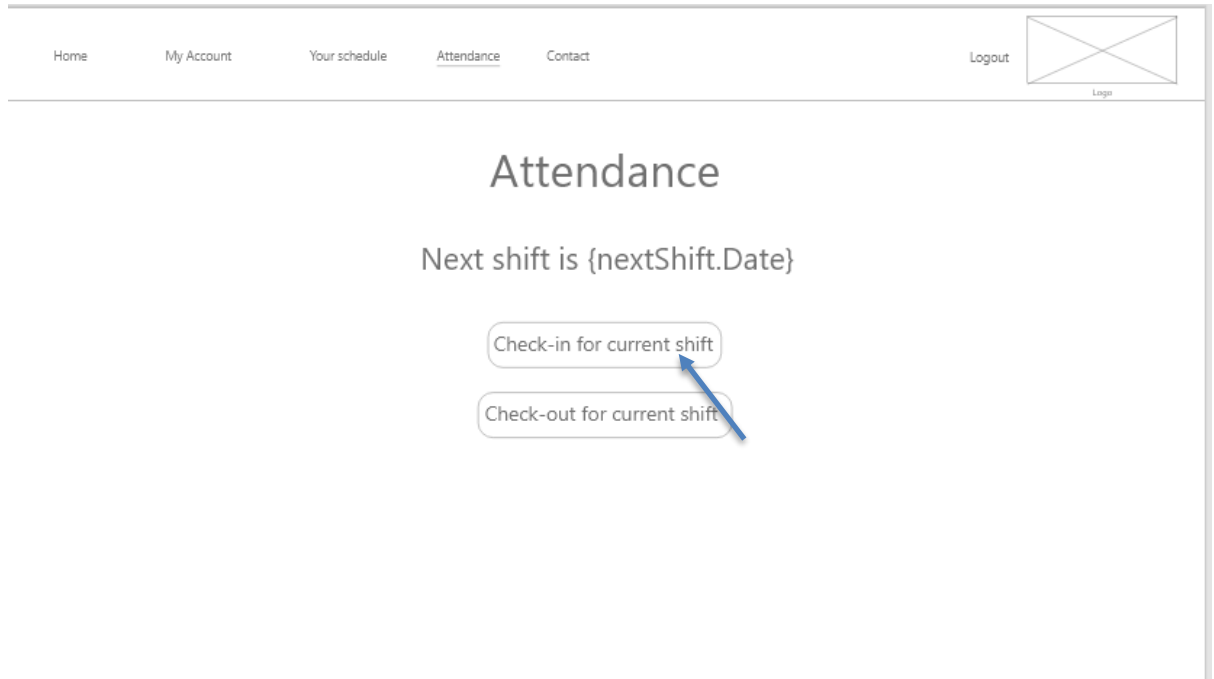
Actors: User as Employee

Requirement(s): **FR-E-14**

Pre-condition: Employee logged in successfully (website)

Main Success Scenario:

1. Employee clicks on “*Check-in*”.
2. System notifies User check-in was successful



35) US-W-09: Employee checks-out for certain shift

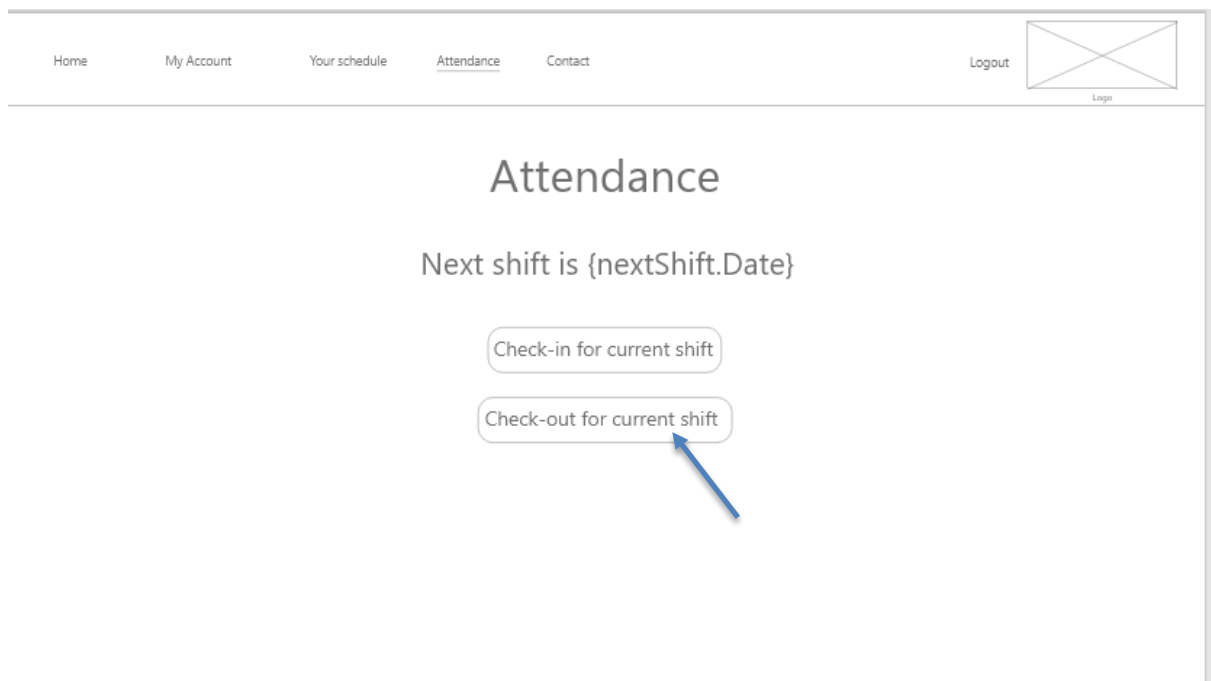
Actors: User as Employee

Requirement(s): **FR-E-15**

Pre-condition: Employee logged in successfully (website)

Main Success Scenario:

1. Employee clicks on “Check-out”.
2. System notifies User check-out was successful



*Please note: Use cases for manager's side functional requirements
FR-M-01 - FR-M-06 repeat use cases for administrator side functional
requirements. Hence, we made this table:*

<i>Functional requirement</i>	<i>Use case</i>
<i>FR-M-01</i>	<i>US-A-01</i>
<i>FR-M-02</i>	<i>US-A-02</i>
<i>FR-M-03</i>	<i>US-A-03</i>
<i>FR-M-04</i>	<i>US-A-04</i>
<i>FR-M-05</i>	<i>US-A-05</i>
<i>FR-M-06</i>	<i>US-A-08</i>

Use cases – Website

36) US-W-01: Employee logs in

Actors: Employee

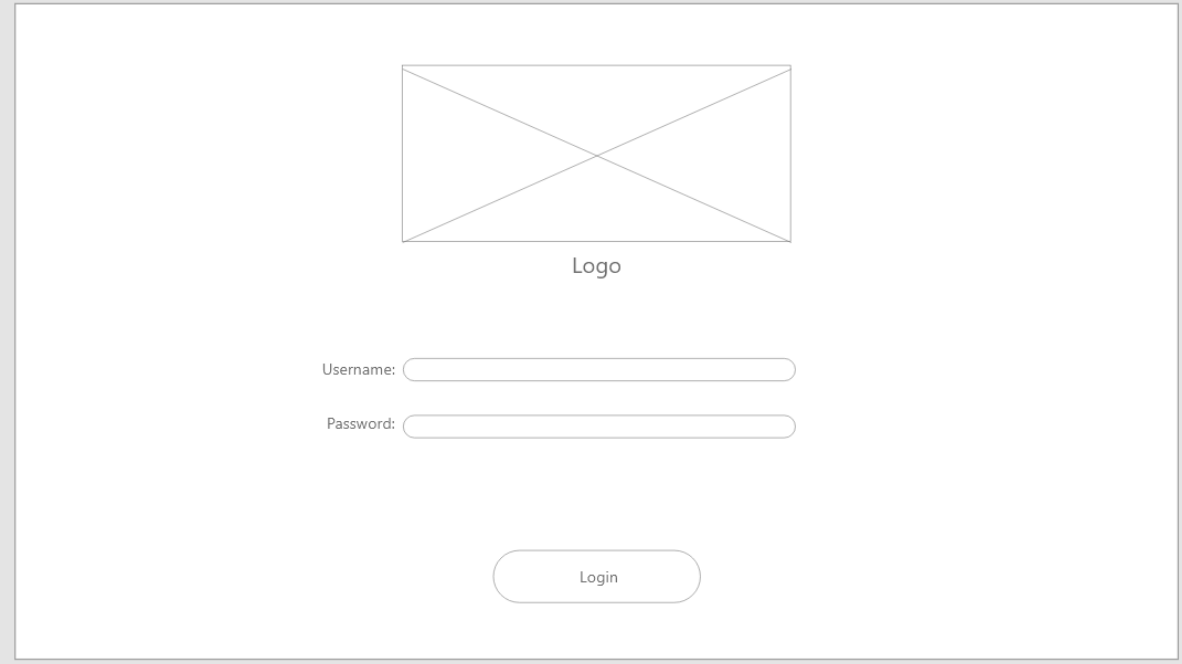
Requirement(s): **FR-E-01**

Main Success Scenario:

1. Employee is on login page
2. Employee inputs their username and password
3. Employee clicks the “Login” button
4. Employee is notified that they logged in successfully
5. Employee is redirected to home page

Extension:

1. Field is empty
 - a. Notify user.
2. Login is incorrect
 - a. Notify user.
3. Password is incorrect
 - a. Notify user.
4. Employee logs in first time
 - a. Show window to change password (mandatory).



37) US-W-02: Employee logs out

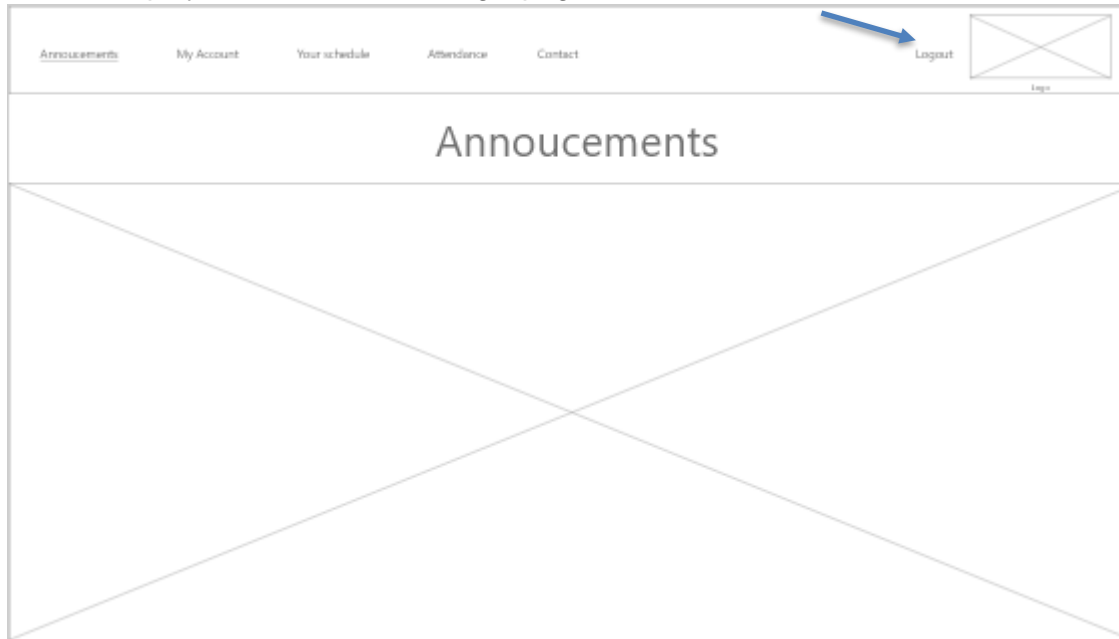
Actors: Employee

Requirement(s): **FR-E-02**

Main Success Scenario:

1. Employee clicks on “Log out” button

2. Employee is redirected to Login page



38) US-W-03: Employee changes password

Actors: Employee

Requirement(s): **FR-E-03**

Main Success Scenario:

1. Employee clicks on "My Account" button
2. Employee inserts current password
3. Employee inserts new password
4. Employee repeats new password
5. Employee clicks on the "Change password" button
6. System displays message that password was successfully changed

Extension:

1. Field is empty
 - a. Notify user.
2. Current password is wrong
 - a. Notify user.
3. New password and repeat password fields do not match
 - a. Notify user.

[Annoncements](#)[My Account](#)[Your schedule](#)[Contact](#)

Logout

Logo

Welcome, {name}!

First Name

Family Name

Street

Email

Date of birth

YYYY

MM

DD

Username

Password

Repeat Password

Account number

Days preference

Please mention in those
textboxes which days you cannot work

Night shifts

☐ Yes

☐ No

Confirm

39) US-W-04: Employee changes personal details

Actors: Employee

Requirement(s): **FR-E-04**

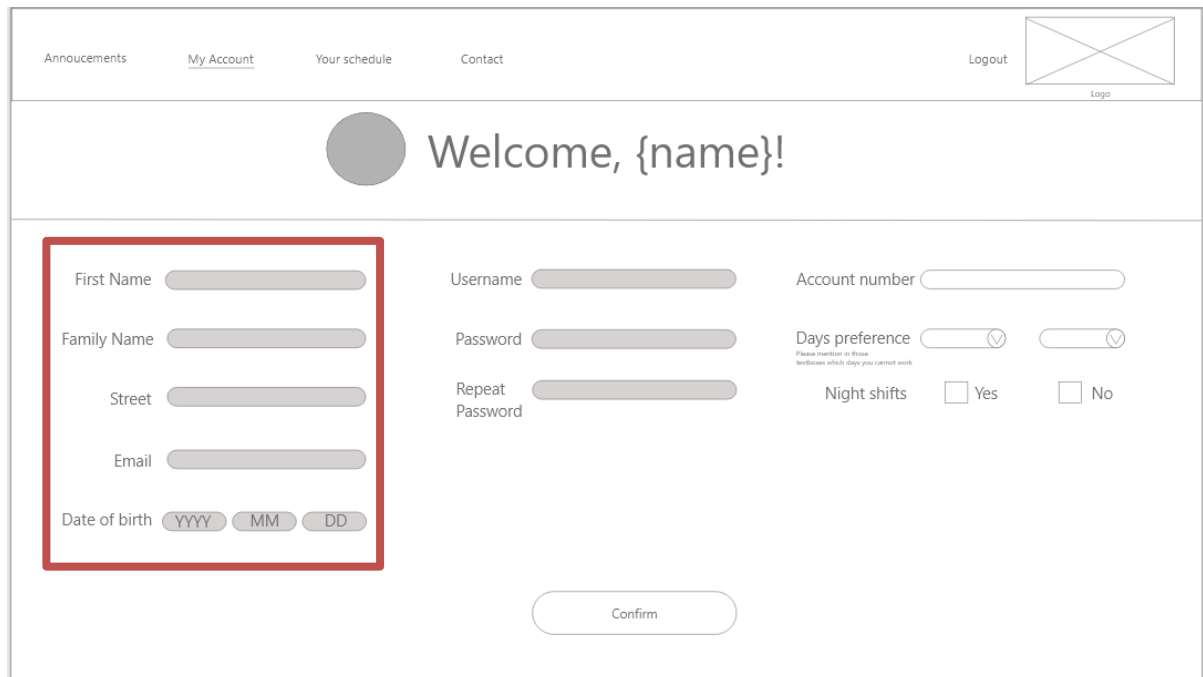
Main Success Scenario:

1. Employee clicks on "My account" button
2. Employee clicks on "Edit" button

3. Employee changes whichever fields they would like to change
4. Employee clicks on the “Save” button
5. Employee is notified they successfully updated their data

Extension:

1. Field is empty
 - a. Notify user.
2. Field is not in correct format
 - a. Notify user.



The image shows a user profile update form. At the top, there is a navigation bar with links: "Announcements", "My Account" (underlined), "Your schedule", and "Contact". On the right of the navigation bar is a "Logout" link and a placeholder for a logo. Below the navigation bar, a large grey circle is followed by the text "Welcome, {name}!". The main form area contains several input fields. On the left, a red rectangular box highlights the "First Name", "Family Name", "Street", "Email", and "Date of birth" fields. The "Date of birth" field consists of three separate input boxes labeled "YYYY", "MM", and "DD". To the right of the highlighted fields are the "Username", "Password", and "Repeat Password" fields. Further right are the "Account number" field, "Days preference" (with two dropdown menus), and "Night shifts" (with "Yes" and "No" checkboxes). At the bottom center of the form is a "Confirm" button.

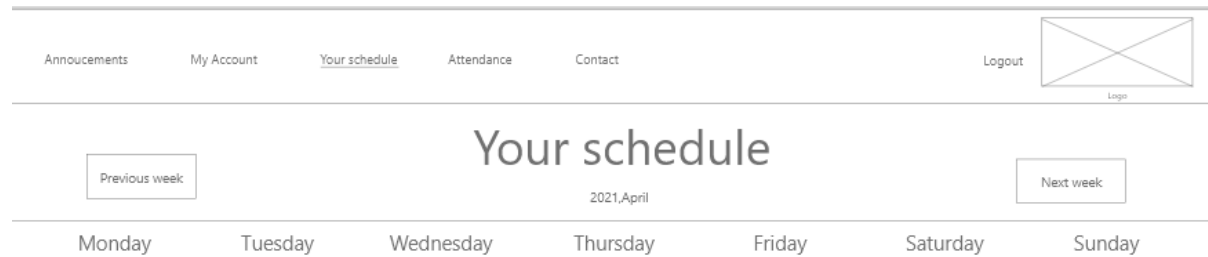
40) US-W-05: Employee views schedule

Actors: Employee

Requirement(s): **FR-E-05**

Main Success Scenario:

1. Employee clicks on the “Schedule” button
2. Employee is shown their schedule for this week



41) US-W-06: Employee sets a preference on schedule

Actors: Employee


Requirement(s): **FR-E-06**


Main Success Scenario:

1. Employee clicks on “My Account” button
2. Employee picks up to two days during which they cannot work or if they are unavailable for night shifts
3. Employees checks if he’s available for night shifts.
4. Employee clicks on the “Confirm” button

Extension:

1. Employee picks more than two days
 - a. Notify user.

[Announcements](#) [My Account](#) [Your schedule](#) [Attendance](#) [Contact](#) [Logout](#) 

 **Welcome, {name}!**

First Name <input type="text"/>	Username <input type="text"/>	Department <input type="text"/>
Family Name <input type="text"/>	Password <input type="text"/>	Account number <input type="text"/>
Street <input type="text"/>	Hourly wage <input type="text"/>	<div>Days preference <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <small>Please mention in these checkboxes which days you cannot work</small></div>
Email <input type="text"/>	Role <input type="text"/>	<div>Night shifts <input type="checkbox"/> Yes <input type="checkbox"/> No</div>
Date of birth <input type="text"/> <input type="text"/> <input type="text"/>	Contract <input type="text"/>	

42) US-W-07: Employee sends message to administrator

Actors: Employee


Requirement(s): **FR-E-07**

Main Success Scenario:

1. Employee clicks on “Contact Administrator” button
2. Employee inputs their message
3. Employee chooses their administrator
4. Employee clicks on the “Send” button

Extension:

1. Field is empty
 - a. Notify user.
2. No administrator chosen
 - a. Notify user.

[Home](#) [My Account](#) [Your schedule](#) [Attendance](#) [Contact](#) [Logout](#) 

Contact

Write your message...

Send

43) US-W-08: Employee views announcements

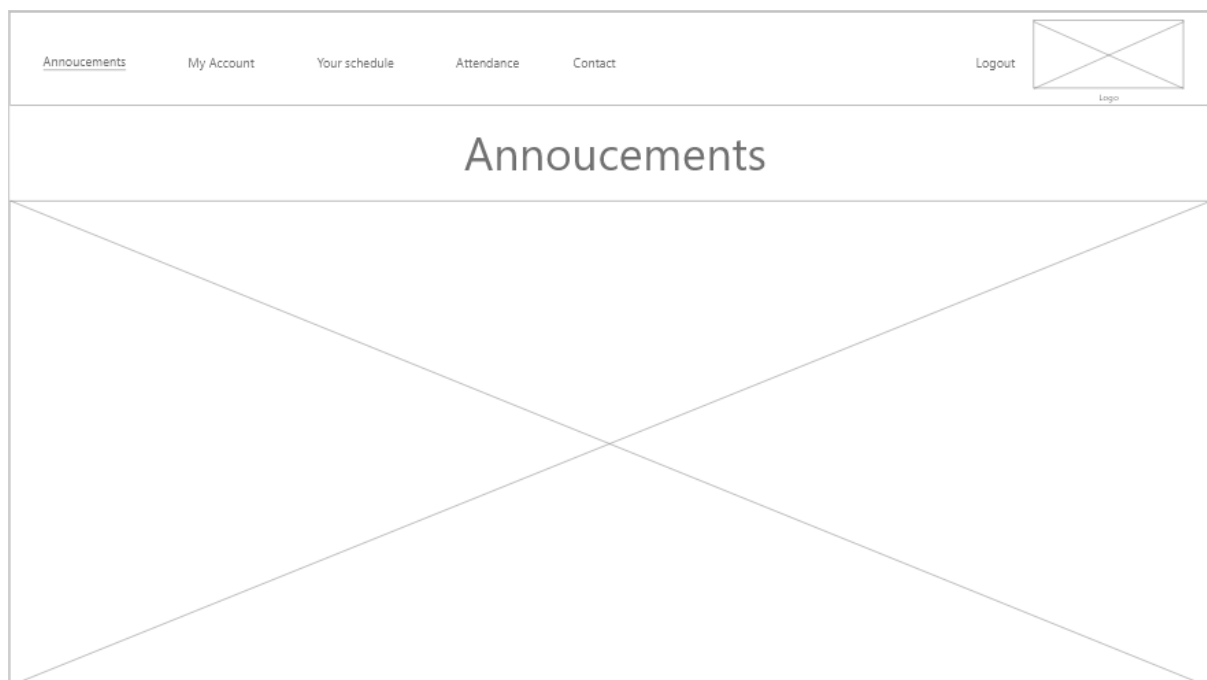
Actors: Employee

Requirement(s): **FR-E-08**

Pre-condition: Manager has proper credentials

Main Success Scenario:

1. Employee clicks on “Announcements” button
2. Employee is redirected to Announcement’s page and shown recent announcements



Mobile wireframes

Mobile wireframes with all the other ones can be found in our git repository via this link.

<https://git.fhict.nl/I454066/prj-cb07-group1/-/blob/master/Documentation/WebsiteMediaBazaar.pdf>

Appendix A

Here you may find the information concerning Media Bazaar employees that will be stored in the system.

1. First name
2. Family name
3. Address (street, street number, zip code, town, country)
4. E-mail address
5. Username
6. Password
7. Date of birth
8. Date of first working day
9. Hourly wage
10. Account number
11. Department(s)
12. Role
13. Photo
14. Kind of employee
 - a. Fixed term contract
 - i. 32 working hours a week
 - ii. 40 working hours a week
 - b. Availability for shifts
(Employee may indicate up to two(2) days as unavailable.)
 - i. Availability for nightshifts.

Appendix B

Here you may find the which records can and which cannot be changed.

Legenda:

Green – Can be changed by employee.

Blue – Can be changed by administrator.

Red – Cannot be changed at all.

1. First name
2. Family name
3. Address (street, street number, zip code, town, country)
4. E-mail address
5. Username
6. Password
7. Date of birth
8. Date of first working day
9. Hourly wage
10. Account number
11. Department(s)
12. Role
13. Photo
14. Kind of employee
 - a. Fixed term contract
 - i. 32 working hours a week
 - ii. 40 working hours a week
 - b. Availability for shifts
 - i. Employee may indicate up to two (2) days of week as unavailable.
 - ii. Availability for nightshifts.

Appendix C

Here you may find the information concerning Media Bazaar products that will be stored in the system.

1. Name
2. Cost price
3. Selling price
4. Size
 - a. Height.
 - b. Width.
 - c. Length.
 - d. Weight.
5. Department.
6. Restock threshold.

Revision table

v1.1: 11/04 Bohdan – Updated user requirements, table of contents, added updated wireframes to use cases and minor changes.

v1.2: 17/04 Andreea – Updated functional requirements based on tutor's feedback.

v1.3: 25/04 Bohdan – Add functional requirements for Iteration II. Added "Appendix C". Updated table of contents.

v1.4: 26/04 Stelian – Add use cases for functional requirements for Iteration II.

v1.5: 06/05 Stelian and Andreea – Update and edit based on tutor and client feedback

v1.6: 06/05 Stelian and Bohdan – Update functional requirements and use cases for Iteration III

v1.7: 05/06 Andreea – Update based on client feedback.