

# ***User Requirements Specification***

Software solution for “Media Bazaar”  
GROUP 1

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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.  
Application is intended for employee management and shift scheduling. More information can be found in the "Project plan document. Software solution for Media Bazaar."
- 4) Team presents the product to the Client.
- 5) First phase of the project must be completed before March 25th.

## 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):**

*Please note: these are requirements for current phase. Later more features may be discussed and included to the document.*

ID	Name	Description	Priority
Administration side			
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

<b>FR-A-04</b>	View employee's details	User can view employee's details	
<b>FR-A-05</b>	Add employee	User can add new employee to the system <i>See "Appendix A" for information stored about employees</i>	<b>Must</b>
<b>FR-A-06</b>	Update employee	User can update employee information	<b>Must</b>
<b>FR-A-07</b>	Modify employee status	User can modify employee status (Not started yet, working, stopped)	<b>Must</b>
<b>FR-A-08</b>	View shift schedule	User can view overall work shift schedule for a selected period of time.	<b>Must</b>
<b>FR-A-9</b>	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 ( 23:00 – 7:00 )	<b>Must</b>
<b>FR-A-10</b>	Update employee's schedule	User can update information concerning employee's schedule.	<b>Must</b>
<b>FR-A-11</b>	Cancel employee's shift	User can cancel shift assignment for the employee	<b>Must</b>
<b>FR-A-12</b>	Add administrator	User can add new administrator to the system	<b>Should</b>
<b>FR-A-13</b>	Add manager	User can add new manager to the system	<b>Should</b>

ID	Name	Description	Priority
Management side			
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	<p>User can view statistical information.</p> <p><b><i>For a selected date :</i></b></p> <ul style="list-style-type: none"> <li>i) Total number of employees.</li> <li>ii) Total salary paid.</li> <li>iii) Total number of hours worked.</li> </ul> <p><b><i>For a selected time period :</i></b></p> <ul style="list-style-type: none"> <li>i) Average number of employees per work shift.</li> <li>ii) Total salary paid to all employees.</li> </ul>	Should

		iii) Average hourly wage per employee iv) Total number of hours worked by all employees. v) Average number of hours worked by an employee.	
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## Use cases

### 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 image shows a login form for 'Media Bazaar'. It is enclosed in a light gray border. At the top, the title 'Media Bazaar' is centered in a large, black, sans-serif font. Below the title, there are two input fields. The first is labeled 'First name' and the second is labeled 'Last name'. Both labels are in a small, black, sans-serif font. Each label is positioned to the left of its corresponding input field. The input fields are simple rectangular boxes with thin gray borders. At the bottom of the form, there is a single button labeled 'Log in'. The button is a wider rectangular box with a thin gray border and the text 'Log in' centered inside it.

Media Bazaar

First name

Last name

Log in

**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.



My Account Employees Calendar Accounts

Welcome, name

Current password:

New password:

Repeat password:

### 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.

My Account Employees Calendar Accounts

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

My Account
Employees
Schedule
Accounts

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.

First name

Last name

Country

City

Street  Number

Zip-code

Id

Email

Date of birth

Date of first working day

Shifts

Status

Hourly wage

Account number

Department

Role

Contract

*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. Administrator 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.

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

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

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

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

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”.

My Account Employees **Schedule** Accounts

Log out

Date

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Monday	Monday	Monday	Monday	Monday	Monday	Monday
Day	Day	Day	Day	Day	Day	Day
Night	Night	Night	Night	Night	Night	Night
Monday	Monday	Monday	Monday	Monday	Monday	Monday
Day	Day	Day	Day	Day	Day	Day
Night	Night	Night	Night	Night	Night	Night
Monday	Monday	Monday	Monday	Monday	Monday	Monday
Day	Day	Day	Day	Day	Day	Day
Night	Night	Night	Night	Night	Night	Night
Monday	Monday	Monday				
Day	Day	Day				
Night	Night	Night				

Previous week Next week Show

*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”.

All shop workers

Search

Search

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

Assign

Cancel

Assigned shop workers

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”.

The screenshot shows a web application interface for assigning shop workers. It is divided into two main sections: 'All shop workers' on the left and 'Assigned shop workers' on the right. In the 'All shop workers' section, there is a search bar with a 'Search' button. Below it is a table with two columns: 'Employee 1' and '0001'. The table contains six rows of data. In the 'Assigned shop workers' section, there is a similar table with two columns: 'Employee 1' and '0001'. The table contains two rows of data. Between the two tables, there are two buttons: 'Assign' and 'Cancel'. A red arrow points to the 'Cancel' button. At the bottom of the interface, there is a 'Done' button.

All shop workers	
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001
Employee 1	0001

Search

Assigned shop workers	
Employee 1	0001
Employee 1	0001

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

Actors: Administrator

Requirement(s): **FR-A-13, FR-A-14**

Main Success Scenario:

1. Administrator clicks on “Accounts”.
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

My Account Employees Schedule Accounts

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.



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 clicks on “Remove”.
4. System informs user that operation was successful.

The screenshot shows a web application interface for managing accounts. At the top right is a 'Log out' button. Below it is a navigation bar with tabs: 'My Account', 'Employees', 'Schedule', and 'Accounts' (which is selected). Below the navigation bar is a search bar with a 'Search' button. The main content area contains a table with the following columns: 'First name', 'Last name', 'Role', and 'Email'. The table has six rows of data, all with 'Name 1' and 'Surname 1' as names. The roles are 'Administrator', 'Administrator', 'Manager', 'Manager', 'Manager', and an empty row. The email addresses are 'adm@mediabazaar.com', 'adm@mediabazaar.com', 'manager@mediabazaar.com', 'manager@mediabazaar.com', 'manager@mediabazaar.com', and an empty row. To the right of the table are two buttons: 'Add' and 'Remove'. A red arrow points to the 'Remove' button.

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

**13) US-M-01: Manager views the statistical information**

Actors: Manager

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

Main Success Scenario:

1. Manager clicks on “Statistics”.
2. Manager chooses the indicator from the list.
3. Manager clicks on view.
4. Separate form representing a certain indicator is opened.

The image contains two wireframe diagrams illustrating the user interface for viewing statistical information.

The top diagram shows a navigation menu with four tabs: "My Account", "Employees", "Calendar", and "Statistics". The "Statistics" tab is selected. Below the menu, there is a section titled "List of indicator" containing a table with one row labeled "Indicator 1". To the right of this table is a "View" button.

The bottom diagram shows a detailed view of a specific indicator. It features a title "Name of indicator" at the top. Below the title is a large rectangular area labeled "Some numbers or graph". At the bottom of this area is a "Close" button.

*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:

<b><i>Functional requirement</i></b>	<b><i>Use case</i></b>
<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>

# 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.