User Requirements Specification

Software solution for "Media Bazaar" GROUP 1

Members: Bohdan Tymofieienko, Stelian Rumenov, Andreea

Sindrilaru, Andrei Sava.

Tutor: Pencheva, Sabina S.

Date: 11/03/2021

Version: 0.4

Table of contents

Agreements with client	3
Sides:	3
Agreements:	3
Functional requirements and prioritizing table	4
Use cases	8
Appendix A	23

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.

Pg. 3 Fontys ICT S2-S07

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	

Pg. 4 Fontys ICT S2-S07 2021

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 See "Appendix A" for information stored about employees	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	Must
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				
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. For a selected date: i) Total number of employees. ii) Total salary paid. iii) Total number of hours worked. For a selected time period: i) Average number of employees per work shift. ii) Total salary paid to all employees.	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. 	
S	

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.

Pg. 7 Fontys ICT S2-S07

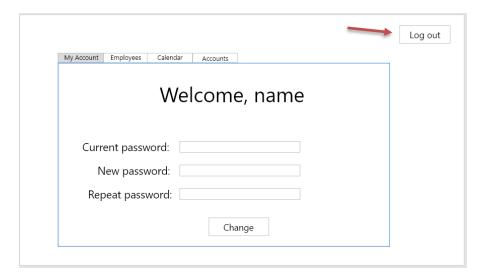


2) US-A-02: Administrator logs out

Actors: Administrator Requirement(s): *FR-A-02* Main Success Scenario:

1. Administrator clicks on "Log out".

2. Log in form is opened.



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:

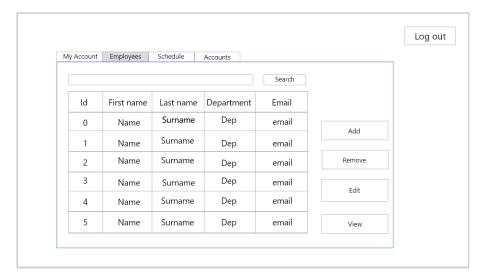
- 1. Field is empty
 - a. Notify user.
- 2. Current password is wrong.
 - a. Notify user.



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



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

Pg. 10

- 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	Email	Hourly wage
Last name	Date of birth	Account number
Country	Date of first working da	/ Department
City	Shifts	Role
Street	Number Status	Contract
Zip-code		
	Add emp	loyee
	N	

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.

Id	Hourly wage
Email	Account number
Date of birth	Department
Date of first working day	Role
Shifts	Contract
Status]
Edit	
	Date of birth Date of first working day Shifts Status

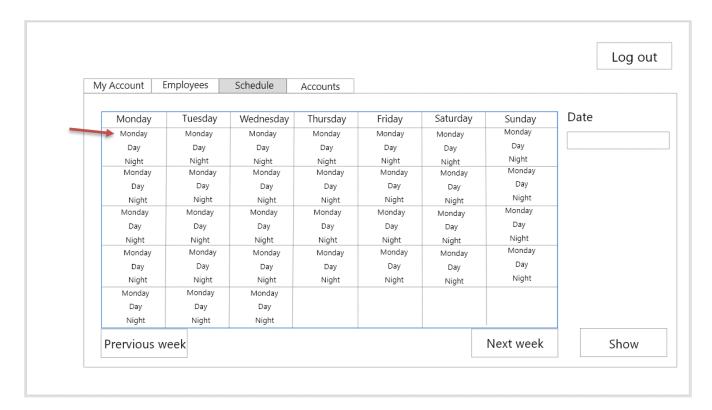
Please note: Only certain field may be modify. See "Appendix A" for more details.

Pg. 12

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".



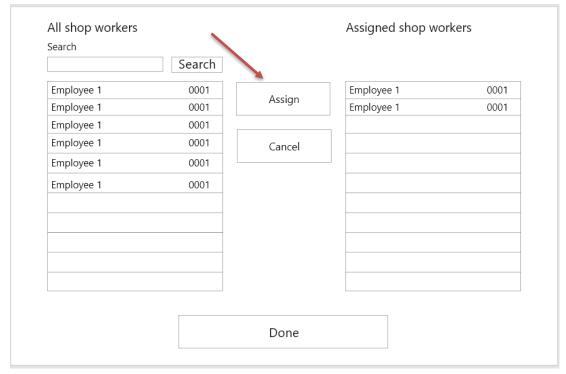
A label referenced by red arrow(See picture above) is a button. Clicking on it opens a separate window(See next page).

Pg. 13 Fontys ICT S2-S07

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".



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

Pg. 14 Fontys ICT S2-S07

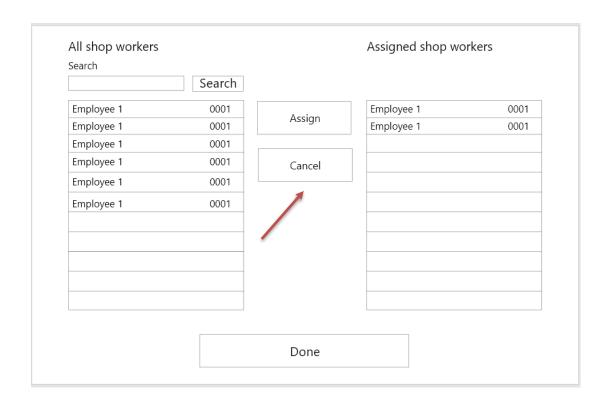
10) US-A-10: Administrator updates the schedule

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".



Pg. 15

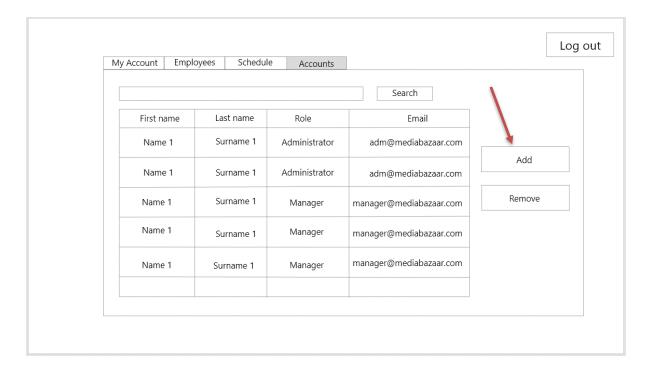
11) US-A-11: Administrator adds new user to the system

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".



See next page.



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.

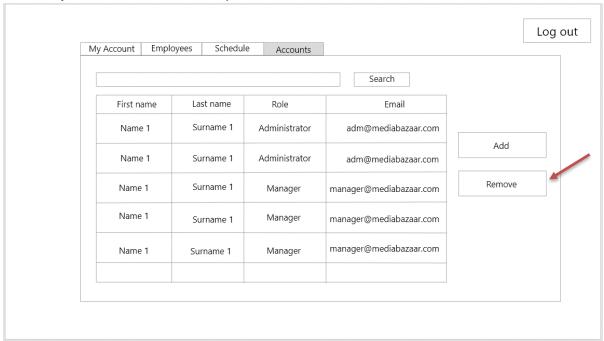
12) US-A-12: Administrator removes user from the system

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.

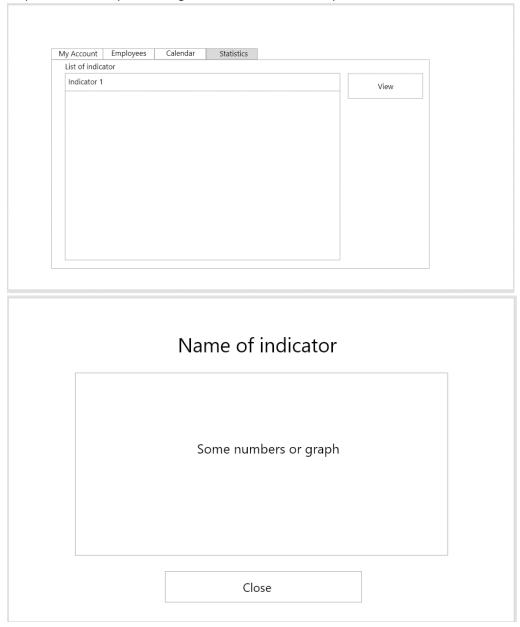


13) US-M-01: Manager views the statistical information

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.



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:

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

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
 - 32 working hours a week
 - 40 working hours a week
 - b. Availability for shifts

(Employee may indicate up to two(2) days as unavailable.)

Availability for nightshifts.