2021

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PRJ-CB07 – Group02 – version 2.1

6/17/2021

Project Plan

A picture containing company name

Description automatically generated

REVISION HISTORY

|  |  |
| --- | --- |
| Version | Changes |
| 0.1 | -Initial version |
| 0.2 | - Revision history added  - The contact person of our team added  -Updating 2.1 The client and 3.2 Company’s problems parts.  -Updating PROJECT OBJECTIVES  -Updating Constrains and phasing parts |
| 0.3 | -Updating project goals  -Fixing small details |
| 1.0 | -Updating project objectives  -Updating phasing |
| 1.1 | -Updating Our client  -Updating Project objectives  -Updating phasing |
| 1.2 | -Updated Project Objectives  -Updating Constraints  -Updating Phasing |
| 2.0 | -Updated Project Objectives  -Updating Constraints  -Updating Phasing  -Updating 3.2.Company’s problem |
| 2.1 | - Updated Project Objectives  -Updating Constraints  -Updating Phasing |

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# 1.Software Developers Team

This team is made by a group of four Fontys University students who are aiming to help Media Bazaar company to manage their administration issues by using software solution, willing to ease their work in administration system.

## 1.1. Our Rule

Every week the role of the leader of the team will be switched to another member of the group, where the leader of the group is the one who is responsible of the progress that will be made in his week and for making meetings with the tutor or the client.

The order of the team leader:

1. Rawan Alhabsi.
2. Stanislav Petkov.
3. Hristo Tanchev.
4. Biser Yusufi.

### 1.2. How can you contact us? Via Fontys E-mail.

* Habsi, Rawan R.H.M. (email: [r.alalhabsi@student.fontys.nl](mailto:r.alalhabsi@student.fontys.nl))
* Petkov, Stanislav S.G. (email: [s.petkov@student.fontys.nl](mailto:s.petkov@student.fontys.nl) )
* Tanchev, Hristo H. (email: [h.tanchev@student.fontys.nl](mailto:h.tanchev@student.fontys.nl) )
* Yusufi, Biser B.M. (email: [b.yusufi@student.fontys.nl](mailto:b.yusufi@student.fontys.nl) )

### 1.3. The contact person of our team

* Petkov, Stanislav S.G. (email: [s.petkov@student.fontys.nl](mailto:s.petkov@student.fontys.nl) )

# 2. Our Client

## 2.1. The Client

* Fontys University Professor: Postma, Andre A (email: [a.postma@fontys.nl](mailto:a.postma@fontys.nl) )

Our client represents Media Bazaar company that are planning to open a new store in Eindhoven. This company is searching for a group of Software developers to help them managing their administration system to be able to track their employees and stock, also managing their work shift scheduling and department management. Furthermore, creating a website for their employees.

### 2.2. How can wecontact our client?

Our team is going to arrange meetings with the client when necessary, in order to get feedback or any further information, also to inform of any progress that will be done or when it turns to a serious problem within the system in order to find a solution.

The client will be informed about the meetings via an email.

# 3.Current Situation

## 3.1. How are we going to work?

Due to the current situation and with respect of Corona rules, our team is going to work via online by using Microsoft teams to communicate with the group members and scheduling meetings.

Gitlab also will be used to submit several documentations and the progress of the application and website that we will work on.

## 3.2. Company’s Problem

Media Bazaar is facing some problems with their way in managing their administration system, where they need a system to help them tracking their employees and the stock. Furthermore, viewing the statistics of employees, departments, their salaries and stock to the company management, also a website for their employees to be able to see their work shifts for the week. Addition to that, they face some difficulties in assigning work shifts by calendar /excel sheets and they need to be able to assign shifts automatically and manage the store by departments.

## PROJECT OBJECTIVES

## 4.1. Problems

Our project consists of three phases and this covers first, second phases and first iteration of last phase only:

main objective is to deliver an application and a website that will help Media Bazaar in solving the following problems:

* Managers don’t have a registry of fired people, a way to know why an employee has been fired or what is the reason for quitting.
* Managers can’t keep track of their employees. They don’t know who is really working for the company, when the employees are working.
* Managers don’t have a clean view over attendance and work hours of their employees
* Administrators can’t assign work shifts properly. They need something like calendar containing scheduled working hours. They do not want to be google calendar.
* Administrators don’t have a way to easily promote/demote a person
* Administrators need a way to easily renew an employee’s working contract
* The company needs a database to store the credentials of its employees and information about their work (First name, last name, gender, birth date, birthplace, nationality, languages, BSN number, home address, FTI, work start date, work position, last day of work, total amount of salary paid, attendance rate, average wage, total number of hours worked).Furthermore, information about the products in the stock (name, cost price, selling price, number of products in stock, maximum capacity, threshold ,size and number of sold products)and department (name ,manager)
* Employees cannot edit their personal information (such as their first name, family name, Address, email address, username, password, date of birth, photo)
* Employees cannot indicate if they are available for night shift.
* Employees cannot indicate if they are available for work shifts in weekdays.
* Employees don’t know when they have a work shift.
* Administrators cannot assign new products to the stock.
* Administrators cannot edit product’s information.
* Administrator cannot view all available products in the stock.
* Administrators cannot remove products.
* Cashiers cannot sell products.
* Administrators cannot send restock requests to depot workers.
* Depot workers cannot accept or reject restock requests.
* Depot workers cannot view the restock requests.
* Administrators cannot view all departments.
* Administrators cannot add new department.
* Administrators cannot remove department.
* Administrators cannot edit department name/manager.
* Administrators cannot view employees per department.
* Administrators cannot view products per department.
* Administrators cannot assign employee to department.
* Administrators cannot assign product to department.
* Employees cannot check-in or check-out for the attendance.
* Administrators can’t assign work shifts automatically.
* Employees cannot inform the administrator in case they are sick, in order to be replaced by another employees.

## 4.2. Project Deliverables and Non-Deliverables

## # Deliverables

### 4.2.1. First phase

* A Windows Forms Application connected to a Database, which resolves the problems specified above
* A project plan
* URS
* Process report
* Presentation of the product
* Agendas and minutes of every meeting
* Test plan for our own project
* Test report for the other group’s system

### 4.2.2. First iteration of second phase

* Updated versions of URS and Project Plan documents
* Agendas and minutes of every meeting
* A website for Media Bazaar’s employees
* Process peer-review

### 4.2.3. Second iteration of second phase

* Updated versions of URS and Project Plan documents
* Agendas and minutes of every meeting
* Updated version of Media Bazaar system
* Process peer-review

### 4.2.4. Third iteration of third phase

* Updated versions of URS and Project Plan documents
* Agendas and minutes of every meeting
* Updated version of Media Bazaar system
* Updated version of website
* Technical peer reviews

### 4.2.5. Fourth iteration of third phase

* Final versions of URS and Project Plan documents
* Process report
* Process peer-review
* Agendas and minutes of every meeting
* Final version of Media Bazaar system
* Final version of website
* UML Diagram

## # Non-Deliverables

* Dutch version of documentation

Our end goal is to fully meet the client’s requirements, in case something can’t be achieved in the given time period, we will do further negotiations with our client and discuss the priorities.

## . Project Approach

During this project, we used the “Waterfall” methodology, “Iterative” methodology of the second phase and “Polishing” of third phase, where a project is completed in distinct stages and small parts are released before the actual end of the project. A big plan is made up front and then executed in a linear fashion, hoping there won’t be any changes in the plan.

## . Project goals

The goals of this projects are satisfying our client by bringing him a working application by his requirements on time and a website for his employees.

The C# application will have four types of users: administrators, a manager, cashiers and depot workers, who will be able to execute actions like sending and answering requests or viewing specific subsets of data based on their role in the company.

Administrators will be able to add or remove users from the system, as well as set and cancel work shifts for the employees. Moreover, administrators will be able to add or edit or remove products from the stock and view all products that are available. Addition to that, administrators will be able to add/remove/edit department, viewing all departments, viewing employees/Products by departments and assigning employees to work shifts automatically.

The company will be able to see individual employees (data) through the system.

The manager will be able to view various statistics about the employees like attendance rate, average wage, total number of hours worked, etc. Furthermore, viewing several statistics about stock such as how many items of a certain product, how much money earned with a product in a certain time period, etc.

Cashiers will be able to refresh list of products, search for a product by name, specify the quantity, view the prices and sell products.

Depot workers will be able to view all restock requests and accept or reject the request.

Employees would be able to see their work shifts and personal information, also they can edit their information and choose 2 days maximum not to work on (also if the employee cannot work at night, it can be indicated through the website) but this is only for employees with Full/Part time contract.

The stock items information will be viewed through the program which will help with the management of the products.

A website where the employees will be able to edit some of their personal information and view their schedule. Also to check-in , check-out and call in sick.

## Constraints

* There is no budget for this project
* There are hard deadlines – 26.03.2021 (for the final version of the administration system), 12.05.2021 (delivery of second application about stock and department management), 18.06.2021 (for the complete software), 19.04.2021 (for the website), 07.06.2021 (for implementing automated scheduler) and 20.06.2021 ( for handing in the final versions of website and system).
* C# language will be used for developing a Windows Forms Application
* HTML, CSS, PHP and JavaScript languages will be utilized for the development of a website
* Additional hardware is not required
* A final product will contain:

- an application for employee administration, work shift scheduling, department management and stock management

- an application for viewing various statistics about employees, stock and departments

- a website for the employees to check out their schedule and edit some of their personal data. Moreover, to check-in, check-out and indicating in case of sick.

## Phasing

Our plan is to conduct this project in three phases, the following plan below is related to the first phase, second phase and third phase.

1. Development of an application for employee management and work shift scheduling
   1. Documentation (8.02.2021 – 28.02.2021)

-During this period we will plan out the project, write down our project plan and URS document and deliver them to our client.

* 1. Implementation (01.03.2021 – 21.03.2021)

-In this period we will create the application and improve it based on feedback and testing results.

* 1. Presentation (22.03.2021 – 26.03.2021)

-The last stage of the development will be the delivery and presentation of the final version of the application to our client.

2. A website for Media Bazaar’s employees.

2.1 Updated documentation (31.03.2021 – 04.04.2021)

- During this period we are going to update the Project Plan and the URS documents.

2.2 Implementation (04.04.2021 – 18.04.2021)

- In this period, we are going to create a website for employees and submit deliverables.

1. Development of an application for product management and for new users (cashiers and depot workers)
   1. Updated documentation, implementation and presentation (19.04.2021-09.05.2021)

* In this period, we implemented the product management and added two forms (for cashiers and depot workers), also will be delivering the presentation and updated versions of URS and Project plan documents.

1. Development of an application for department management and a website (check-in and check-out for the attendance of employees)
   1. Updated documentation, implementation (30.05.2021-06.06.2021)

* In this period, we implemented the department management, automated scheduler and the check-in and check-out functionality in website, also added some statistics for manager. We will deliver them with updated versions of URS and Project plan documents.

1. Development and polishing of an application and the website (implementing call in sick functionality for employees)
   1. Updated documentation, implementation (13.06.2021-20.06.2021)

* In this period, we continue working with the functionalities that are not working as required, implementing the call in sick feature, updated the work shifts scheduling and added color meanings on some parts of the system.

Way of working

We want to organize meetings with our client preferably every week to show him our progress and get his feedback. This will allow us to improve the quality of the application and website to ensure that we meet his requirements.