Software solution for Media Bazaar

Project plan

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Group name: ISJS PROGRAMS

Members
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- Jessie van Nuenen
- Soleil Umwiza

Tutor
- Brice Guayrin
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Table of contents

1. Team

The name of our team is "ISJS programs" and consists of four members. The members of our team are Soleil Umwiza, Jessie van Nuenen, Saeed Ba Wazir and Ivan Sakal. The team representative or 'leader' is Jessie van Nuenen, Soleil Umwiza will be scheduling the meetings with the client. During the waterfall/first iteration, Jessie van Nuenen kept the agenda and minutes of meetings. However, this iteration will be kept by Soleil Umwiza, Saaed Ba Wazir will be the one scheduling the meetings with our tutor.
We consider our communication to be our strong hand, between stakeholders and us as well as our management and documenting skills.

1.1. Contact

For any questions, updates, or any other remarks you can always contact us via the email of our representative. Jessie her email address is jessie.vannuenen@student.fontys.nl.
The rest of the team can also be contacted through email, but we'd like the main communication to happen through our representative to keep everything in one place.
Most of us can also be contacted through MS Teams.

2. Client

Our client is Media Bazaar. It is a company that specializes in consumer electronics. The company is currently working towards opening its first store in Eindhoven and they are in need of a software solution for their current situation. We can contact our client via representative Aleyna Kartal. Aleyna is from the management department. We can contact her via her email, which is a.kartal@fontys.nl.

3. Current situation

The company Media Bazaar is a starting hardware company that does not have any stores yet. The mother company of Media Bazaar is Jupiter, they want to start up the new company as well-prepared as possible. The administration at Jupiter is not a good example to base Media Bazaar's new administrative system on. They currently do planning through online agendas and don't have a working digital system. Media Bazaar itself is just a starting company, so they also do not have a system yet.

For the first six weeks, our team has worked on a digital administrative system for Media Bazaar which they could start using. This means they have a basic employee management system in which they can view all their employees and their information, as well as updating and deleting them, and adding new employees.
There is also an option to view and update product information and some basic options for scheduling. This system is still a work in progress and is being improved.

Since then, another six weeks of work has been done, and the application used by Media Bazaar has been extended further to also support adding and deleting products as well as handling reshelve requests. Statistics about employees can also be viewed. Besides the application, there has also been created a website for employees to use to see their personal information and schedule. On top of this, both platforms have a basic notification system, meaning employees get notified when important things happen. There are still more features Media Bazaar will need to optimize this system, but it is a constant work in progress.
At this moment, the last functions are being added to this system. The system has had a lot of design updates to make it more user-friendly, making it easier to deal with for the employees. The notification function that was already present now also allows HR to send out announcements to certain employees, this way being able to easily share important information. Contract information is supported now, when adding or updating an employee to the system, there also has to be entered a start date, end date, and FTE. Altogether mediabazaar now has an easy-to-use application to manage all products and employees.

4. Problem Statement

Jupiter, the mother company of Media Bazaar, currently has no sufficient system to take care of the administration and management, everything is done manually. They use online agendas or Excel spreadsheets to keep track of work shifts, but that is causing them problems as it is too detailed, unreliable, and a lot of work. As of right now, Media Bazaar has these same means and thus will also encounter the same problems.

Media Bazaar does not have an automated system to deal with the depot and the stock performance. For example, the management team is not able to see statistics of the shop in one place and therefore has a difficult time managing things like sending reshelving requests and moving the stock from the warehouse to the shop.

5. Project Goal

Our goal for this project is to create and implement a software solution that meets Media Bazaar's requirements. Therefore we met with the representative of Media Bazaar to know what these requirements are. Taking that into consideration, our goal is to develop a system to help Media Bazaar to manage its shop, monitor its stocks, and deal with human resources in a timely manner.

The administration would be able to manage Human resources operations, they also will manage the depot, in addition to that they should be able to add a new department. The depot manager should be able to manage and buy the products. The management team should be able to view statistics related to the whole system and manage the departments. For the managers, they will see statistics about the employees that work under their management. Lastly, the employees would be able to log in to the website to have access to their information.

From the start of the implementation of our solution, as software developers, our target was to make our solution easy to use. Compared to our last deliverable, our next solution dwells on being more user-friendly for our users.

6. Deliverables

During and at the end of the project there are going to be multiple things we will have to deliver, this is a short list of some of these things.

Our final products to our client Media Bazaar
- Desktop application matching the requirements of Media Bazaar and solving the problems
- Website
- Agendas and the interview of the meetings with the client
- A user requirements specification document

The documents which will be delivered to our project tutor, these include:

- Project plan
- URS
- Process report
- Process peer review
- Notes on the Technical peer review
- An Activity diagram for our algorithm
- Agendas and minutes of every meeting with our tutor

7. Non-deliverables

8. Constraints

For our solution, there are a few constraints we have to keep in mind. The programming language we will use for our software solution is C# version 10.0. For the main software solution, we will be creating a Windows Form application, using Visual Studio 2022 For the framework we are going to use .Net 6. And for the website, we will be using the ASP.NET Core Razor Pages project.

For persistence and data storage we'll be using a database, MySQL to be precise. It's a well-established and fairly reliable DBMS.

For hosting the codebase that makes up the application and the website, we'll be using GitLab provided by our client (*Fontys University in this case*).

9. Planning

9.1 Waterfall

Every week we will have meetings with our tutor to discuss our process and ask for feedback. Workload will be spread out internally between all team members.

In the coming weeks, we will continue working on the second version of our project based on the feedback of our client. This time will be different than the last phase because we will meet our client again and present our solution before we send the final version.

The sub-deliverables of the coming weeks consist of the second version of our application, now including additional functional requirements, as well as the first version of our website for the employees of MediaBazaar. This phase will end in week 6.

Week 1

- Create a name and logo for our group - Create and submit the project plan - Interview client to determine functional requirements	
Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
First version of Project plan	23:59 Feb 18
Group logo	23:59 Feb 18

Week 2

Improve the project plan based on the given feedback
- Improve the project plan based on the given feedback - Create the User Requirements Specification document based on the client interview - Create our UML diagram

Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Final version of Project plan	23:59 Feb 25
First version of URS	23:59 Feb 25
UML digram	23:59 Feb 25

Week 3

- Improve the User Requirements Specification document based on given feedback - Start implementing the desktop application

Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Final version of URS	23:59 Mar 4

Week 4

- Design the database

- Create the database tables and connect the database to the application - Improve on the desktop application and extend functionalities	
Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Database	23:59 Mar 11

Week 5

- Continue to improve upon desktop application and database design if necessary - Test plan for our application and send binaries to client	
Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Test plan	23:59 Mar 18

Week 6

- Write process report - Tag the deliverables in GIT/Email - Present the first version of the app to our client	
Deliverables	
Desktop	
Deliverable	Deadline
First version	23:59 Mar 22
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Test report	23:59 Mar 22
Database diagram	23:59 Mar 22

9.2 First iteration

In the coming weeks, we will continue working on the project and based on the feedback of our client we will change the software solution.

The deliverables of the coming weeks consist of more features and updates based on our client feedback. This phase will end in week 9.

Week 7

- Meet the client for the second interview - Update documentation - Implement solutions based on the feedback	
Deliverables	
Desktop	
Deliverable	Deadline
Implementing client feedback	23:59 Apr 1
Website	
Deliverable	Deadline
N/A	N/A
General	
Deliverable	Deadline
Updated URS	23:59 Apr 1
Updated Project plan	23:59 Apr 1

Week 8

Meeting the mentor - Implement solutions based on the feedback - Start working on the first version of our website	
Deliverables	
Desktop	
Deliverable	Deadline
Adding product function	23:59 Apr 8
Delete product function	23:59 Apr 8
Website	
Deliverable	Deadline
Log in page	23:59 Apr 8
Create new password page	23:59 Apr 8
General	
Deliverable	Deadline
N/A	N/A

Week 9

- Meeting the mentor - Implement and test solution - Present current status to tutor - Reflect on current iteration and prepare for next iteration.	
Deliverables	
Desktop	
Deliverable	Deadline
N/A	N/A
Website	
Deliverable	Deadline
View Schedule per Employee page	23:59 Apr 15
Profile page	23:59 Apr 15
Adding styling	23:59 Apr 15
General	
Deliverable	Deadline
Process peer-review	23:59 Apr 12

9.3 Second iteration

In the coming weeks, we will continue working on the project and based on the feedback of our client we will change the software salutation.

The deliverables of the coming weeks consist of more features and updates based on our client feedback. This phase will end in week 13.

Week 10

- Meeting the mentor - Update URS - Update project plan - Implement solutions based on the feedback	
Deliverables	
Desktop	
Deliverable	Deadline
Updated desktop application	23:59 Apr 22
Website	
Deliverable	Deadline
Updated website	23:59 Apr 22
General	
Deliverable	Deadline
Updated URS	23:59 Apr 22
Updated project plan	23:59 Apr 22

Week 11

- Meeting the mentor - Reshelve functions - Work availability	
Deliverables	
Desktop	
Deliverable	Deadline
Reshelve functions	23:59 May 5
Work availability	23:59 May 5
Website	
Deliverable	Deadline
Work availability	23:59 May 8
General	
Deliverable	Deadline
N/A	N/A

Week 12

- Meeting the mentor - Present the software solution to the client - Contract functions	
Deliverables	
Desktop	
Deliverable	Deadline
Notification System	23:59 May 10
Website	
Deliverable	Deadline
Notification System	23:59 May 10
General	
Deliverable	Deadline
Second version	23:59 May 11

9.3 Third iteration

In the coming weeks, we are going to continue working on the solution and based on client's feedback we will continue to improve the solution.

The deliverables of the coming weeks consist of more features and updates based on client feedback. This phase will end in week 15.

Week 13

- Meeting the mentor - Update URS - Update project plan - Implement solutions based on the feedback	
Deliverables	
General	
Deliverable	Deadline
Updated URS	23:59 May 20
Updated project plan	23:59 May 20

Week 14

- Meeting the mentor - Unavailability functions	
Deliverables	
Desktop	
Deliverable	Deadline
Unavailability functions	23:59 May 30
Website	
Deliverable	Deadline
Unavailability functions	23:59 May 30

Week 15

- Meeting the mentor - Technical peer review - Automatic scheduling - Settings first version - Contract first version	

Deliverables	

Desktop	
Deliverable	Deadline
Automatic scheduling	23:59 Jun 3
Settings first version	23:59 Jun 3
Contract first version	23:59 May 31
Website	
Deliverable	Deadline
Automatic scheduling	23:59 Jun 3
General	
Deliverable	Deadline
Technical peer review	N/A

9.4 Fourth iteration

In the coming weeks, we are going to continue working on the solution and based on the client's feedback we will continue to improve the solution.

The deliverables of the coming weeks consist of more features and updates based on the client's feedback. This iteration will end in week 18, which is the last phase.

Week 16

- Meeting the mentor

Week 17

- Meeting the mentor - Client meeting - Automatic scheduling - Settings - Contract - Product statistics - Update URS - Update project plan - Implement solutions based on the feedback

Deliverables	
Desktop	

Deliverable	Deadline
Automatic scheduling	23:59 Jun 19
Settings first version	23:59 Jun 17
Contract first version	23:59 Jun 17
Product statistics	23:59 Jun 17
Website	
Deliverable	Deadline
Settings first version	23:59 Jun 17
Unavailability first version	23:59 Jun 17

Week 18

Deliverables	
- Meeting the mentor - Final presentation - Department management - Attendance management - Final version	

Deliverables	

Desktop	
Deliverable	Deadline
Attendance management	23:59 Jun 20
Department management	23:59 Jun 20
Website	
Deliverable	Deadline
Attendance management	23:59 Jun 20
General	
Deliverable	Deadline
Final version	23:59 Jun 22