

Project Plan 2021



CB03 – Group 5

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1. Client

Our client for this project is Matthijs Kuipers representing “Media Bazaar”. Media bazaar is a hardware store, about to open their first store in Eindhoven. They are a child company of Jupiter and want to be as prepared as possible before opening their store in Eindhoven. We are able to contact our client via Mail (Matthijs.kuipers@fontys.nl) or MS Teams. MS Teams is the preferred option, since all discussion and information can then be found at the same location. In MS teams we will use the group channel created for our project group. This group will also be used for our meetings every other week. The meetings will be scheduled using Outlook, after discussing an appropriate timeslot (via MS Teams).

2. Team

The person who represents our group is Maarten Hormes. It is possible to contact this person via Mail or MS Teams. MS Teams is the preferred option, since all discussion and information can then be found at the same location. Maarten represents our group called “LAMN Software”, composed by him, Nikola, Alessandro and Luca. If needed, the group members can be contacted by email (see table 1). We have a meeting with our tutor Brice Guayrin twice a week via MS Teams to discuss our progress and our plan for the week.

Table 1. Contact information

Contact information	
Name	E-mail
Maarten Hormes	maarten.hormes@student.fontys.nl
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3. Current situation

Media Bazaar is a new hardware store that is opening their first shop in Eindhoven. Media Bazaar is using a manual way to keep up administration and stock. They fill out everything about stock and employees on paper. They have a lot of different forms used all over the store.

4. Problem description

Our client Media Bazaar contacted us with a request to make a software solution that can help them manage various aspects of their hardware shop. The main issue they are facing now is with administration, therefore solving this particular problem will be our main priority. The problems Media Bazaar is facing regarding administration are troubles with managing employees and stock. At this point our client is doing everything by hand on paper, making it very inefficient to do and they do not have any tool/system to support this work. Since there is nothing yet they only have a system in mind, that still needs to be designed and implemented.

5. Project goal

Our project attempts to create a software solution able to respond to all the requests made by the client. They would like to receive a software solution/tool that makes them able to schedule employees’ work shifts, preferably automated scheduling of shifts. A second feature for this software would be to CRUD (create, read, update and delete) employees. They also want to be able to manage their depot so that they have an overview of their stock. The client also mentioned that they would

like to see statistics about both employees and stock. We are aiming to deliver a software solution that will meet all our client's requirements but at the same time will be simple to use and reliable.

6. Deliverables

- HR tool (desktop application) to create, read, update and delete employees.
- Same tool (desktop application) for create, read, update and delete schedules and work shifts for employees.
- Management tool to view information about employees (same as HR tool) and general statistics.
- System for stock management. Which includes CRUD functionalities, selling and ordering stock.
- Website for employees to view schedules, read/update their personal information, set schedule preferences and request holidays (sick leaves).

7. Non-deliverables

- Tracking employee attendance will not be implemented (Possibility to add this feature when time permits).

8. Constraints

Some constraints of the project include:

- The use of the programming language C# for the windows application.
- The use of HTML, CSS and PHP for the website.
- The use of databases.
- Remote working will be preferred at the beginning because the COVID-19 rules don't allow the group to meet physically to work together. Plus, two members are currently in other countries. We schedule meetings as a group via WhatsApp and meet on Discord. All of us feel comfortable working only online, however, as soon as the coronavirus measures allow us, we will also meet in person to work on the project.

9. Phasing

We plan to split our workload between all the members of the group with specific deadlines and ask periodically feedbacks from the client. Once every 2 weeks there will be a meeting with our client. During these meetings we will show the progress that we have made to see if we are still on track with our schedule and to see if we are still delivering what our client expects from us.

Week 1

Orientation:

This first week of the project will consist of setting the foundation of the project. We have to finalize our company name and logo, arrange our first meeting with the client and hand in our first version of the project plan.

To be delivered:

- Create name and logo.
- Conduct interview with client.
- Hand in first draft of project plan.

To be completed by 14 February 2021.

Week 2

Creating a design:

Week 2 will be the week to start coming up with a design for our application. We will be working on the GUI, namely by making the wireframes for the desktop application. Besides the GUI we will also be making the technical design. We will do this by creating the URS, which will consist of Use Cases and User requirements. It specifies what the user expects the software to be able to do. These will be supported by UML case diagrams, which will later be used to create our UML class diagrams.

To be delivered:

- Improve project plan based on feedback.
- Make Wireframes.
- Create URS (User Requirements Specifications).

To be completed by 28 February 2021.

Week 3

Finish design and start implementation:

During this week our focus will be on finishing the design made last week, and starting to implement the design into our software solution. Based on the feedback we receive about our URS and wireframes will be able to finish our design like our clients wants it. The last part of the design will be started this week, the database. While the design is made and the database is created we can start the implementation (if needed we can use fake data till the database is ready).

To be delivered:

- Improve URS and wireframes based on feedback from client/tutor.
- Make UML class diagram based on UML case diagram.
- Create database design and implement it.
- Start with CRUD operations implementation for employees.

To be completed by 7 March 2021.

Week 4

Continue implementation:

Week 4 will consist of implementing our design into the application, since we finished the design the week before. During this week we will deliver the HR side of the desktop application and an almost (if not completely) finished database. We will also start working on the stock system during this week. During our weekly meetings we can track our progress with our client/tutor and make adjustments based on feedback.

To be delivered:

- (Almost) Finished database.
- Finish HR side of the application (see bullet point 1 and 2 from deliverables).
- Start with stock application.

To be completed by 14 March 2021.

Week 5

Testing:

During week 5 we will deliver the management side of the application and the stock application. We will finalize the implementation of our software solution. We will also create a test plan based on a workshop and send it to our peers. During this week we will also review our peers' software solution and create a test report.

To be delivered:

- Create test plan and send it to peers.
- Finish management side of the application (see bullet point 3 from deliverables).
- Finish software solution.

To be completed by 21 March 2021.

Week 6

Project delivery:

During this week 6 we will deliver the final version of the project. We will do this on GIT. Then, we will prepare a presentation of our product for our client.

To be delivered:

- Deliver final version of our software solution on GIT.
- Present final version of our software solution to our client.

To be completed by 28 March 2021.

Week 7:**Update documentation:**

During week 7 we will start to update all the documents to the first iterative phase. Besides updating all files, we will improve the software solution to include all the feedback we got from the client during the demo meeting in week 6.

To be delivered:

- Updated URS and Project Plan
- Software solution with feedback from client implemented.

To be completed by 4 April 2021.

Week 8:**Begin website implementation:**

During week 8 we will keep working on the feedback the client gave us during the presentation. Furthermore, we will start creating the Media Bazaar's website.

To be delivered:

- Software solution with feedback from client implemented.
- Website implementation.

To be completed by 11 April 2021.

Week 9:**Present deliverables:**

During week 9 we will continue implementing the website. During that week we will also conduct the process peer review.

To be delivered:

- Updated software solution based on client's feedback.
- Website with schedules.

To be completed by 18 April 2021.

Week 10:

Kick-off iteration 2:

During the last week of iteration 1, we updated all our files and made a new work division to get ready for iteration 2. Week 10 will be used to start with iteration 2.

To be delivered:

- Updated URS and Project Plan
- New work division iteration 2.
- Implement requesting change of employees' personal information on the website.
- Add additional personal information to the desktop application.
- Implement notifications for stock that goes under minimum required stock.

To be completed by 25 April 2021.

Week 11:

Keep working on iteration 2:

During week 11 we will keep working on the website and on the feedback the client gave us during the presentation in week 8. We will also take some time to prepare the meeting in week 12, where we once again will present our work to our client.

To be delivered:

- Implement accepting and denying employees' request to change personal information in desktop application.
- Desktop application extended with feedback given by the client.
- Add working hours to schedule page.
- Start with unit testing.

To be completed by 2 May 2021.

Week 12:

Present deliverables:

During week 12 we will finish all the deliverables and deliver them to GIT. During this week we will also present our software solution to our client and tutor.

To be delivered:

- Continue with unit testing.
- Finish all the deliverables for iteration 2 and deliver on GIT.
- Present software solution to client and tutor.

To be completed by 9 May 2021.

Week 13:

Intermediate presentation and kick-off iteration 3:

On week 13 we presented our intermediate version of the application to the client. We updated the documentation and split the work between the members of the group. Since we are still waiting for a meeting with our client, we will start to implement some small changes that we got as feedback from the presentation.

To be delivered:

- New version of updated URS and Project Plan for iteration 3.
- New work division iteration 3.

To be completed by 23 May 2021.

Week 14:

Keep working on iteration 3:

Since we had the presentation only last week, this week we will meet with our client again. During this meeting we will propose some new requirements and the planning for the current iteration. After this meeting we can finalize the documentation for iteration 3. After finishing the documentation we can fully focus on the implementation.

To be delivered:

- Updated documentation.
- Updated schedule view in C# app to improve the UX (color indicators, showing names, etc).
- First version of stock selling and revenue statistics in C# app.
- Updated DB for employees to no longer accept null values.
- Update contract hours to have a max of 40h?
- Add address details for employees (C# app, website and base).
- Add additional personal details to the website. Employees will be able to request change of those details. (address,)

To be completed by 30 May 2021.

Week 15:

Present deliverables:

During week 15 we will finish all the deliverables of this iteration and deliver them to GIT.

To be delivered:

- Finish all the deliverables for iteration 3 and deliver on GIT.
- Present software solution to client and tutor to start preparation for the last iteration.
- Technical peer review.

To be completed by 6 June 2021.

Week 16:

Client meeting and kick-off iteration 4:

During week 16 showed our progress to the client and then asked for feedbacks and tips.

To be delivered:

- Update the documentation.
- Update implementation of automatic scheduling to include contract hours and randomization in shift filling for C# app.
- Implement POS system to better support the selling page (C# app).
- Starting implement employee's preferences and sickness/holidays in website.

To be completed by 13 June 2021.

Week 17:

Present deliverables:

During week 17 we will finish all our deliverables.

To be delivered:

- Finish automatic scheduling for C# app.
- Finish employee schedule preferences (including sick and holidays) on the website.
- Finish POS system in C# app.

To be completed by 20 June 2021.

Week 18:

Finishing the project (final week):

Week 18 will be used to finish up the application and to prepare for our final presentation. The deliverables will be very general since we need to finish everything in this week.

To be delivered:

- Finish all the deliverables for iteration 4 and deliver final versions of app and website on GIT.
- Present software solution to client and tutor to finish the last iteration.

To be completed by 27 June 2021.

10. Version history

Date	Author of modification	Modified content
20/04/21	Nikola	Deliverables in week 10-12
20/05/21	Maarten, Alessandro, Luca	Deliverables in week 13-15, overall deliverables.
25/05/21	Nikola, Maarten, Luca	Updated deliverables week 13-15 to be clearer and easier to differentiate between C# app and website
08/06/21	Alessandro, Maarten	Updated deliverables for the last iteration. Added the planning of the last 3 weeks.
15/06/21	Maarten	Specified per deliverable whether is for the C# app or website. Changed name of selling process.