R E P O R T
Software solution for Media Bazaar

ICT & Software Engineering - Semester 2
Class: S2-CB-01
Group: 4
Group „BulCari" members:

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Week One

Work for the week:

On week one we got introduced to the problem and the idea of the project itself. The first thing that we had to do was to create a team that was going to work on the project. We created a group of four and uploaded our group on canvas under number 4. We called ourselves "BulCari" and came up with a logo for our team. The next thing in our to do list was to create a GIT repository (https://git.fhict.nl/I467491/s-cb-s2-cmk-group-4.git) .

After we had done the administrative part our next job was to fully read and understand the problem presented to us. Before giving a start to our project we first had to make a project plan. We made a schedule, distributed the tasks to the group members, and set the deadlines for every deliverable. We made a draft of the project plan and presented it to our teacher. After the consultation, the group members gathered and came up with a better project plan. In the end of the week, we had a meeting with our client. We had to come up with questions and interview him. We came up with a logo for the application.

By the end of the week (12/02/2021) we have done all the work in the project plan for week one. We are satisfied with the work we have done, and we look forward to the next week.

Week Two

Work for the week:

This week we had to complete the user requirements specifications. We updated the project plan. After we had written down the client agreements, we were ready to start working on the fontional requirements and the use cases. We decided on making sketches and wireframes for the application. We put everything in a "URS document" and uploaded it in our git repository. We started creating the UML diagram for the application. By the end of this week, we had clearer vision of the application and what it would look like.

By the end of the week (26/02/2021) we have done all the work in the project plan for week one. We are satisfied with the work we have done, and we look forward to the next week.

Week Three

Work for the week:

This week we further updated the project plan and kept on working on the URS document. After the tutor feedback we added more use cases and fixed the format of the document. We send the client an email with some questions to further understand the client's view for the application.

We began creating the real application. We did the GUI. We used forms for the different user profiles (store/stock/department manager, HR, stock worker) and user controls for the different pages for the certain profile. Every user has buttons for every page and "My account" page. There is a log out functionality for every user. The HR user has "Manage employee's profiles" page – for viewing employees, adding new to the system, and changing employee's contract. The Department manager has "Schedule" page – for assigning and viewing the schedule. The Stock manager has "Schedule" page - still in progress and "Product" page - for showing all products in the system and adding new. The Store manager has "Stock Statistics" and "Employee Statistics" page – for viewing statistics about stock and employees. The Stock manager has "Product data" page – for showing all the products in the system and "Restock Request" page – still in progress.

Week Four

Work for the week:

This week we started the implementation of the application. We started with creating different classes for the different users. Later, we decided to have only one class for all employees and to have an enumeration for the different types of employees. We used enumeration for the different types of contract too. We created a class named "ManageEmployees" for managing all the other classes and for communicating with the forms. We created classes for "Schedule" and "Shift". They are involved with the making of the schedule. There is one enumeration supporting the classes – "ShiftType" – for the four different types of shifts.

We made the log in page. Created couple of users with different log in credentials who were created in the start of the program so that the log in functionality works. We displayed the information of the logged user in his/her profile page.

Later this week we decided to include database in our application. We added one more class for managing the connection with the database – called "DatabaseMediator".

Week Five

Work for the week:

This week we began transferring all the information from the application to the database. We made the log in functionality directly connected to the database. We added more functionalities to the application. We created pages for adding employees, removing employees, and changing employee's contracts. We had some trouble with the queries and the format of the dates, but we fixed it.

After two weeks of brainstorming ways to best implement the assigning of shifts in the application we were finally ready and added the functionalities for assigning and viewing shifts.

We added the page for the employee statistic, which shows information about the hours worked and hourly wages of the employees per time unit for the date the user had chosen. If the user does not choose a date – the system selects today's date.

We asked our client for some more information regarding the "product" section of the application. Based on his answer we created pages and functionalities for viewing the product data, adding product, removing product and product statistics – showing the the total revenue of each product and total profit of each product.

At this point we connected everything to the database.

Week Six

Work for the week:

This week we focused on finishing all functionalities and adding final touches to the application. We added a change-password button to every user's account page. This button opens another form for changing the user's password. After that we started testing everything and finding possible mistakes in our code.

After that we focused on finishing the documentation around the project and creating the presentation for the 10min showing of the application.

Personal reflection:
- o What went well.

Stoycho: In my point of view the design went well. We separated the employees in a way with which every user can easily see their accessibility in the application. Also, we restrict the input of incorrect information, for example the users cannot accidently create a product.

Tony: How everything is working currently in the application, the functionality of each user. And that there was a good communication with each group member. Everyone is willing to help each other.

Veronika: In my opinion we all expressed out ideas and combined them into our project plan. I think we did everything we wanted to do. We had group meetings couple of times a week besides the tutor meetings. We assigned tasks for every member and worked on task individually for

about 60% of the time, the other 40% we worked together on some issues and functionalities.

Stela: Most of the things went well. We succeeded in delivering everything that was promised.

o What didn't go well.

Stoycho: I think that for our first talk with the client we did not prepare the right questions. This waste us time for writing extra questions and waiting for his response.

Tony: How the product statistic came out. It didn't have all the feature that we've planned.

Veronika: In my opinion we did not get the most out of the tutor meetings and we didn't ask the right questions. That's why we were a bit late with certain things and didn't fully understand the structure of certain documents – like the URS and the Project plan.

Stela: The distribution of my time for the project and the other subjects was not arranged well. I spent more time on the project and underestimated the other subjects, which lead to some stress and doing tasks last minute.

o Why didn't it go well?

Stoycho: In our questions for the client, we avoided asking basic questions, because we thought that the answer is too obvious, but it was not.

Tony: How the product statistic came out. It didn't have all the feature that we've planned.

Veronika: That's a mistake on our part because we didn't dig deep enough to understand what the tutor had to say and that's why we were one step behind for some of the things.

Stela: Because a lot of the information needed to do the project was unclear, I was overthinking it and I was unsure if we would manage to deliver what was needed.

- o What would you do different next time?

Stoycho: Next time we will ask the client more general questions. The second thing I want to focus is the time management, so I work equally in the first day and in the last day of the project.

Tony: Because we don't have a way to track the amount of sold items. I was too much of hard head to ask someone for help on it.

Veronika: Next time I would pay more attention to the tutor meetings and the feedback the tutor gives. I would also spend more time working on the document side of the project.

Stela: I will plan my time better and separate it equally through all subjects. I learned that there is not only one right way of doing things and the fact that something about the project is unclear should not scary me because in this way I will learn how to structure my applications in a way that is easily editable in case of needed changes.