“Media Bazaar” iteration report

ICT & Software Engineering - Semester 2

Class: S2-CB-01

Group: 4

Group „BulCari“ members:

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# Introduction

Below are described all the tasks and work done for each iteration. They are separated in weeks. Every point holds the name of the group member who did the task.

The tasks we did can be summarized into:

* Adding functionalities – Moderate risk
* Creating and managing classes – Substantial risk
* Creating GUI – Trivial risk
* Work regarding the database – Substantial risk
* Refactoring the code – Moderate risk
* Refactoring the GUI – Trivial risk
* Creating and updating documents – Trivial risk

Average hours distribution for each member: 40h/per week.

# First iteration

# Week 7:

* Refactoring the code. Reducing some of the user controls. - Tony
* Creation of the employee statistics. – Veronika
* Creation of database tables and implementing the database connection in the project. – Stela
* Updating the UML diagram. – Stela & Veronika
* Viewing employee full info & employee history. – Stoycho

# Week 8:

* Updating the URS document. – Tony
* Refactoring the product display code. – Tony
* Adding a form for viewing the product information. – Tony
* Finishing the GUI of the employee statistics. – Veronika
* Creating employee statistics for showing total hours worked & average hours worked. – Veronika
* Updating the store worker schedule. – Stela
* Making of the GUI for the product for stock workers. – Tony
* Creation of GUI and classes for the department. – Tony
* Adding contract start date to the employee class. – Stoycho
* Creating the contract history. – Stoycho
* Refactoring of the employee statistics’ queries. Statistics made to show up faster. – Veronika
* Added department functionalities. – Tony
* Creation of employee utilization for the individual employee statistics. – Veronika
* Refactoring employee statistics – showing statistics for a week. – Veronika
* Refactoring of the database and manager classes. – Stoycho
* Refactoring of the user controls. – Tony

# Week 9:

* Peer review.
* Updating the UML diagram. Adding the database mediator classes. – Stoycho & Tony
* Adding the department manager to the department functionalities. – Tony
* Refactoring the department GUI, refactoring the queries for the department functionalities. – Tony
* Optimization of the database queries. – Stoycho & Tony
* Reducing the code in the product & department classes. – Tony
* Reducing the code in the employee class. – Stoycho
* Added/Refactored functionality for adding and viewing an employee. – Stoycho
* Creation of the design of the contract history form. – Stoycho
* Refactoring the queries for the employee statistics. – Veronika
* Work on the functionality for editing employee’s information. – Stoycho
* Viewing schedule per week GUI. – Stela
* Publishing a first version of the application.

Second iteration

# Week 10:

* Refactoring the code for avoiding duplicates of shifts and refactoring the queries for the schedule. – Stela
* Displaying the scheduled for work employees. – Stela
* Refactoring the functionality for creating a department. – Tony
* Creating restrictions to assigning shifts. – Stela
* Creating a cashier employee. – Stoycho
* Assigning managers to departments. – Tony
* Creating the cashier app & separating the classes in folder. – Stoycho
* Starting the website. – Stela & Veronika
* Built the design, created a profile page and added a log in page & functionality for the website. – Veronika
* Refactoring the department class. – Tony
* Assign department manager to a department & assign product category to department. – Tony

# Week 11:

* Display schedule on the website & adding authorization to the schedule. – Stela
* Availability marking on the website. – Stela
* Updating the Project Plan and the URS document. – Stela

# Week 12:

* Added edit information functionality to the website. – Veronika
* Added an alert on the website for changing the password after the first log in. – Veronika
* Refactoring the code for the emp statistics. – Veronika
* Creating the presentation for week 12. – Stela
* Refactoring the code for the website. – Veronika

Third iteration

# Week 13:

* Update the URS document. – Tony
* Creating a demo for the cashier app. - Stoycho
* Refactoring the code in the product classes & added the functionality for adding products to a department. – Tony

# Week 14:

* Added functionality for the cashier app – filtering products by department, category & subcategory. – Stoycho
* Connected scanner to the cashier app. Filtering execute order in progress. – Stoycho
* Creating an activity diagram for the restock requests. – Veronika
* Creating an activity diagram for the automatic scheduling. – Stela
* Creating the GUI for the restock requests. Added tables for the restock products request and the supplier products requests to the database. - Veronika

# Week 15:

* Cashier app DAL transaction. – Stoycho
* Working on the GUI & functionalities for the restock requests for the stock workers. – Veronika
* Created a functionality for sending supplier product requests for the stock workers. – Veronika
* Added store worker access & store worker account to the application. – Veronika
* Created the GUI for creating restock requests for the store worker. – Veronika
* Refactoring the code for the availability marking in the website. – Stela
* Refactoring of the GUI and CRUD for the departments. – Tony
* Added status icons and logout message to the cashier app. – Stoycho
* Refactoring the GUI of the cashier app. – Stoycho

Forth iteration

# Week 16:

* Added a functionality for accepting & denying holiday requests & displaying the holidays in the employee schedule. – Stela
* Created the functionality for viewing & deleting holiday requests. – Stela
* Created a functionality, GUI & queries for receiving stock by stock workers. – Veronika
* Created the GUI for reviewing of the supplier requests by the stock manager. – Veronika
* Refactoring the code for the website. – Stela

# Week 17:

* Refactoring the code for the cashier app. – Stoycho
* Refactoring the GUI, queries & functionality of the product statistics. – Veronika
* Added multiple functionalities for the department manager. – Tony
* Added the functionality for updating the minimum amount of stock in store – for the store worker’s account. – Veronika
* Viewing information of the product supplier & added functionality for sending emails to the product suppliers. – Veronika
* Refactoring the contract history code. – Stoycho
* Added department employee statistics queries. – Veronika
* Created the GUI for the department statistics. – Veronika
* Added classes needed for the automatic schedule. – Stela
* Filtering the employee statistics & department employee statistics by employee position & employee contract. – Veronika

# Week 18:

* Created the algorithm for the automatic scheduling. – Stela
* Created functionality for modifying already created schedule – removing & assigning employees, changing the maximum assignable employees per shift. – Stela
* Created products’ statistics for ten most sold products - quantity and ten most profitable products. – Veronika
* Started the unit testing.
* Created a second database for the testing. – Stoycho & Veronika
* Implemented the test database connection & refactoring the code around the database implementation. – Stoycho

# Self-reflection

# Stoycho:

When we started with the second semester, I was nervous, because I knew nobody. After forming the group and the work began, everything came to its place. My biggest problem with this project was that we were taking new material every week and i had to fracture old code with new design patterns. I am happy with the group we formed because everyone had his own functionalities to implement, and we did our best. Of course, from time to time we did not understand each other but we always figure solution to our problem.

# Tony:

In this iteration I had a lot of help from my teammates for example how to restructure a department table in MySQL and understanding how some method works/ implemented from their classes. I also got motivated by my team mate to keep improving my code and push myself to work on the project. Seeing them have something each week to show gets me inspire to do the same.

# Stela:

Working on the project the whole semester made us go through some coding and personal obstacles but also we learned a lot about programming and ourselves. For me, working in a bigger team that I was used to was challenging and miscommunication in our team was the main factor. However, I think that we found a way of better communication and learned how to listen to each other so that we can ease the process of working. Also, being able to apply what we are learning in OOD lectures on the project and developing a real life working situation thought me more than the lectures themselves. Although sometimes I was feeling overworked and wasn’t able to divide my time properly between the project and the other subjects, I think that I and also the team at all did a great job and manage to deliver what we were asked and what we promised at the beginning of each iteration.

# Veronika:

What I can say that went well for me was learning new OOD methods and skills. I didn’t have any experience with the php language, but after makina while I got really into it. This was hard though because I couldn’t just put a breakpoint somewhere in the code and debug it. I really liked every challenge this semester. The statistics were overwhelming because the code may be written correctly but most of the times the information that was generated was not correct. It was hard to see if the data coming from the database is the exact one I was needing but at the end everything was worth it.