Booking System

PROCESS REPORT

Semester Project - The Deer Alley Hotel

Booking System

Date: 14 December 2015

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Table of Contents

1. Group policy

All members created and decided to follow these rules:

1) I agree to meet up on a regular basis.
2) The time and place of meetings shall be agreed on by all group members.
3) If I am not able to come to a group meeting I will contact other group members.
4) We will discuss everything before we start.
5) We will spread the work equally between everybody.
6) I have to finish the work I am allotted to do on time and upload it to Dropbox.
7) I will communicate with others only in English.
8) If I get an idea how to do something differently, I will present it to the others.
9) I will be an active member of the group in all aspects.
10) I will write my code very clearly and understandably for others.
11) If I do not understand something I will ask other members for help.
12) I will help others with problems in assignments.

2. Swot analysis

Group analyses

Strengths	Weaknesses
• We do everything as a group • We have an interest in programming • We are creative, positive and motivated • Hardworking • Group work	• Writing reports • Easily distracted
Opportunities	**Threats**
• Learn how to create a real program in Java • Meet new people • Improve working in a group • Learn how to document software • Prove ourselves that we are able to finish a hard task before a deadline	• Sickness • Weather • Distance • Focus

Martin Tomko

Strengths	Weaknesses
• Interested in programming • Problem-solving • Experience with programming • Group work	• English language • Communication in team • Activity diagrams
Opportunities	**Threats**
• Improve team work skills • Learn how to write reports • Improve programming skills	• Illness • Weather

Atanas Latinov

Strengths	Weaknesses
• Enthusiastic about programming • Collaboration and knowledge sharing • Good writing skills • Diligent	• Sequence diagrams • Procrastination • Time management
Opportunities	**Threats**
• gain more knowledge about programming • enhance teamwork skills • go through the process of creating a software product from scratch	• Illness • Bad Weather

Daniel Hamarik

Strengths	Weaknesses
• Hard working • Logical thinking • Responsible • Interested in Java	• Communication with group members • Formal writing • Coding in a group • Making diagrams
Opportunities	**Threats**
• Improve my English • Learn how to work in a group • Improve programming skills • Learn how to analyse project	• Sickness • Misunderstanding

Stefan Stanchev Aleksiev

Strengths	Weaknesses
• Interested in programming • Creative ideas • Communication in team	• Solving problems • Writing reports and documentations • Activity diagrams
Opportunities	**Threats**
• Learn how to write reports • Improve programming skills • Learn how to solve problems	• Weather • Work

3. Consideration

3.1 Level of formality

Before we started writing our project and process reports, we had to make some decisions about how all the documentation will be written. There are 4 types of audiences: expert, semi expert, lay and mixed audience. The expert audience are the people with very deep knowledge of ICT especially programming, the semi-expert audience has a basic knowledge of ICT and the lay audience with only small or almost no knowledge of ICT. The last but not the least group is mixed audience with all types of people. After a long discussion we have chosen the mixed audience, it means that the main message of our project should be understandable for almost everybody, but on the other hand it includes special terms and expressions from programming. Because of this, our project is written in an informal style.

Target audience: mixed audience

Level of formality: informal style of writing

3.2 Preparation

Learning from these observations, our team figured that it could make a contribution to the ever-expanding world of IT business solutions by creating an intelligent, user-friendly and extremely stable booking application that can be easily utilized by a hotel for simple, lossless and secure storage of data. What naturally followed after this was the development cycle and the research and work behind it.

Observing the platforms and systems already developed and how they serve the user is a source of inspiration for every developer including ourselves. During the development process of the hotel system we sought inspiration from the software products we use on a daily basis and that surely helped us when making key decisions concerning not only the logic of the program but how the interaction between the user and the application is going to be and also the user interface. Our main goal during the whole time was to make a software product that satisfies our client’s requirements and also builds on top of them but without adding undesired additions or functionalities.

4. List of tasks

At the beginning we thought that splitting the work equally will be very hard because after looking through our Belbin profiles, we have come to the conclusion that in some departments we will excel but in others we may struggle because some of our roles overlap. It is also safe to say that there will be a certain deficit in skills which we have to face sooner or later. For example three of us are implementers which means that we will come to a point where there might be a conflict or we cannot divide our workload because each of us would want to follow his own plan. The positive overlapping case is the resource investigator one because it is always good to have more people who are good at finding accurate information. Apart from this, we can say that we have diverse roles which means that we will all benefit from interacting with each other as we are going to adapt new techniques and team working skills.

Martin Tomko:

- Requirements
- Project analysis
- Use Case diagram
- Main implementation
- Organizing meetings
- Project design
- Coordinator

Atanas Latinov:

- Requirements
- Use Case diagram
- Use Case descriptions
- Activity diagrams
- Sequence diagram
- GUI
- Java implementation
- Project report
- Grammar correction
- Presentation
- Presenting the group at meetings
- Checker
- Presenter

Daniel Hamarik:

- Requirements
- Project analysis
- Java implementation
- GUI
- Process report
- Monitor

Stefan Aleksiev:

- Requirements
- Use Case diagram
- UML diagrams
- Java implementation
- Recording ideas and supervision
- Time keeper

5. Conclusions of group meetings

Group meetings were a completely new experience for all of us but we definitely enjoyed them. We agreed on everyday meetings in Kamtjatka, because all of us live nearby. The conclusion of the group meetings is divided into three weeks due to some tasks being completed in more than one or two days. Because nobody from our team has further teamwork experience, we always discussed what and how we should proceed. We made clear which role holds which responsibilities and we started working on our project.

First week

Fortunately we had done all requirements, use case diagrams, use case descriptions, UML and activity diagrams before the project period. It helped us tremendously because we already had an idea about how the program will work and we knew which classes and methods we had to define. So the first thing we did was a discussion about the code and then we divided parts of the code. We also decided to work in pairs so we could always consult everything with somebody. Martin and Stefan were working on the basic classes such as Guest, Room, Date, etc. They implemented the basic fields, variables and methods that we knew that we will definitely need. Atanas and Daniel started to think about the GUI design, how the whole programme would look like. After they made some sketches on paper, they had an approximate image of the program. Then they started coding

the GUI class like the Main menu, the Booking form, the Check-in and edit form. At the end of the first week Martin and Stefan started with the more advanced methods, then we decided to save the Room and Booking array lists to binary files, having this type of saving is a big advantage because loading and saving objects is much easier. The second group started adding exception labels and button action listeners, so we could operate through windows. Also we started writing the first pages of the process report.

Second week

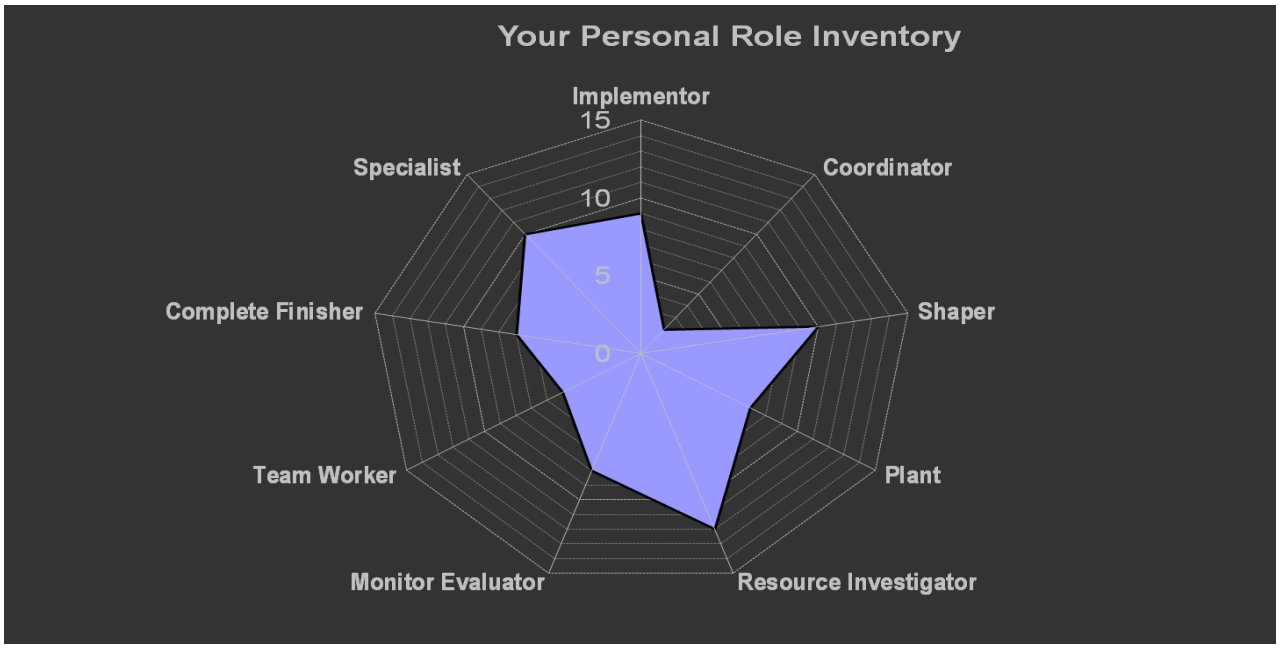
During the weekend we finished the tasks we had chosen. At the beginning of the second week we had a discussion about our progress and then we talked about what we want to do this week and what is our approximate plan for the third week. Martin worked on the Main class, which is responsible for the whole programme, he added the search bar and made it fully operational. The search bar in our project works with a name of guest, a room number and arrival-departure dates. Daniel along with Atanas focused on the possible exceptions in the program, they added labels and if-else statements to avoid wrong input or format of the information inputted by the users. In the middle of the second week we started to cooperate all together to connect all the classes. In our opinion this was the hardest part of the coding process but we did it successfully. When the program was running correctly, Martin focused on the booking, the check-in and all the button action listeners in the main class. Daniel with Atanas did Check-in and Check-out info GUI. As the week went on, we finished all things we talked about at its beginning. We started debugging our program, tried to avoid all exceptions and reduce all possible problems, which could occur by wrong input by the user. We continued with writing the process report.

Third week

During the third week we were mainly testing our system, looking for bugs, errors or mistakes and then we took our time to edit our code. Then we found out that it is possible to book and check-in a room for the same date. Martin created a few advanced methods to fix this problem and then we had a fully functioning hotel booking system. We started collecting all things like use cases, sequence diagrams and class diagrams for the project report. Then we commented the whole code, inserted the java doc and did some last editing on our code. We finished the process report and the user guideline.

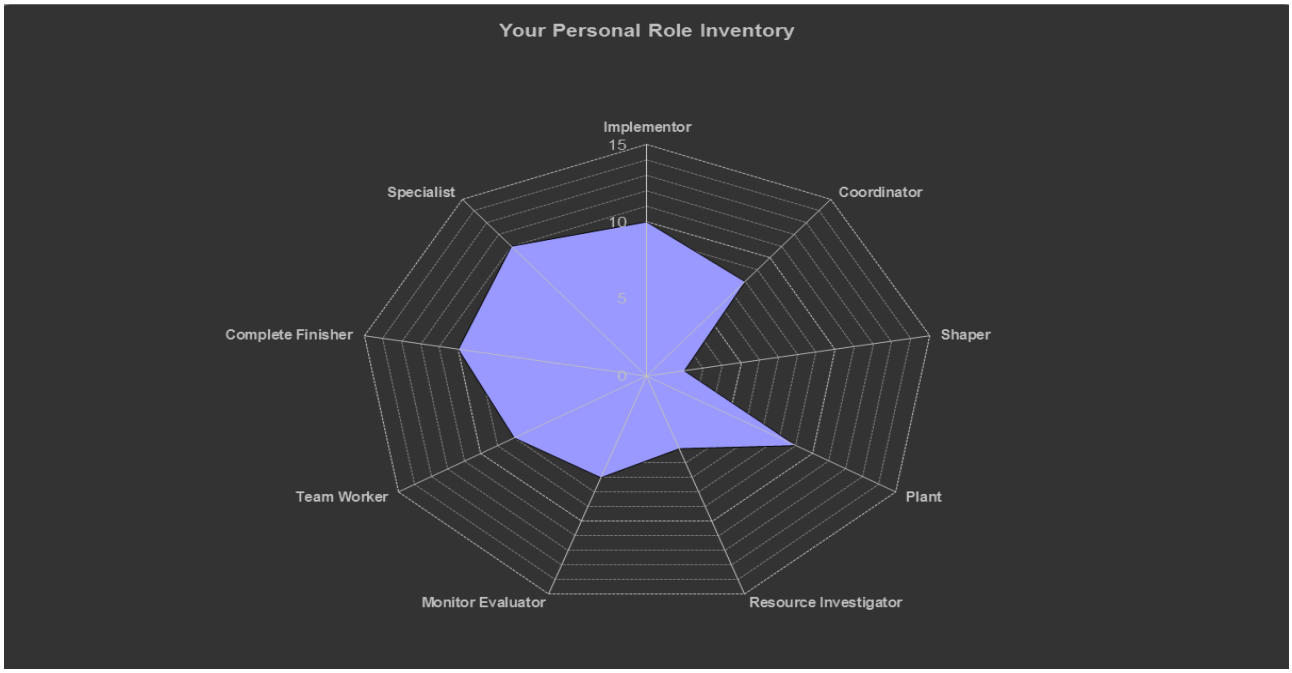
6. Group role definition

Martin Tomko:



As a **Specialist** I tried to do my best for each task or problem we were solving.
As a **Resource Investigator** I was working on the requirements.

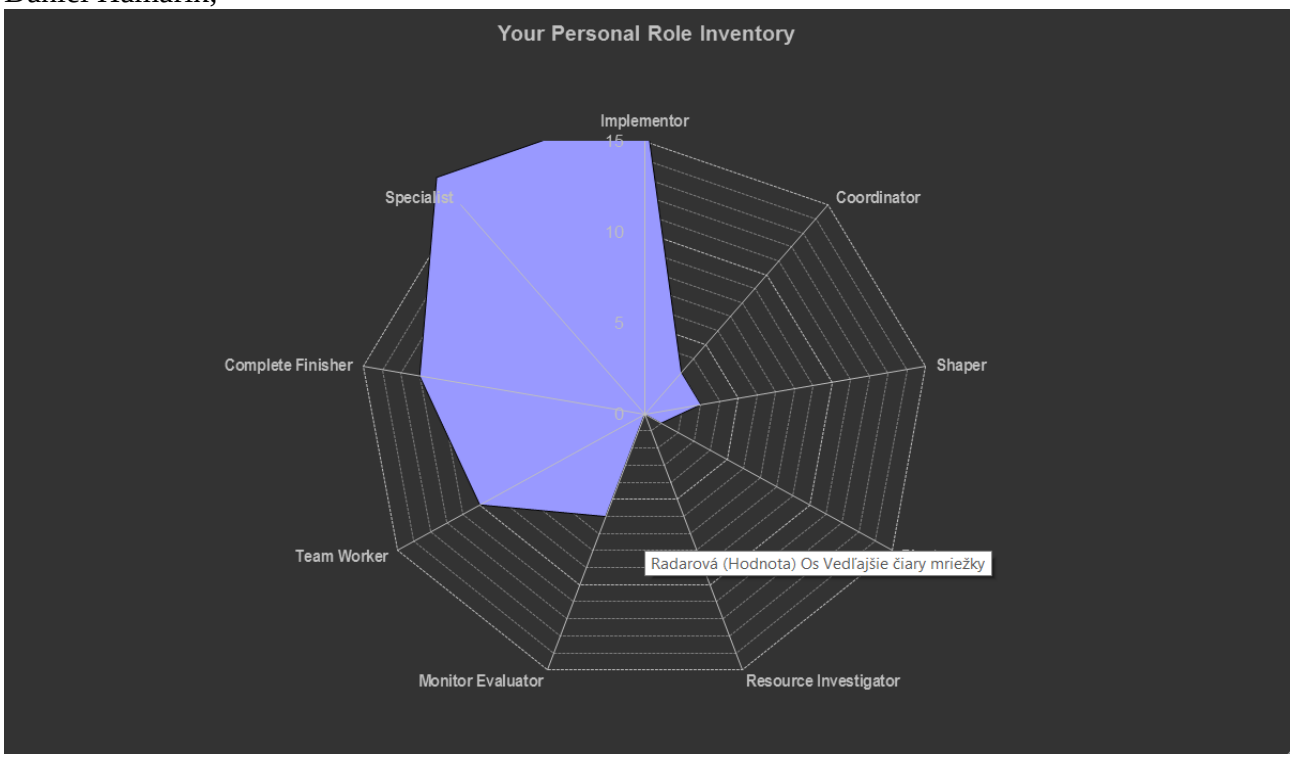
Atanas Latinov:



As a **Specialist** I try to use my ability to think logically which helps me in problem solving situations.

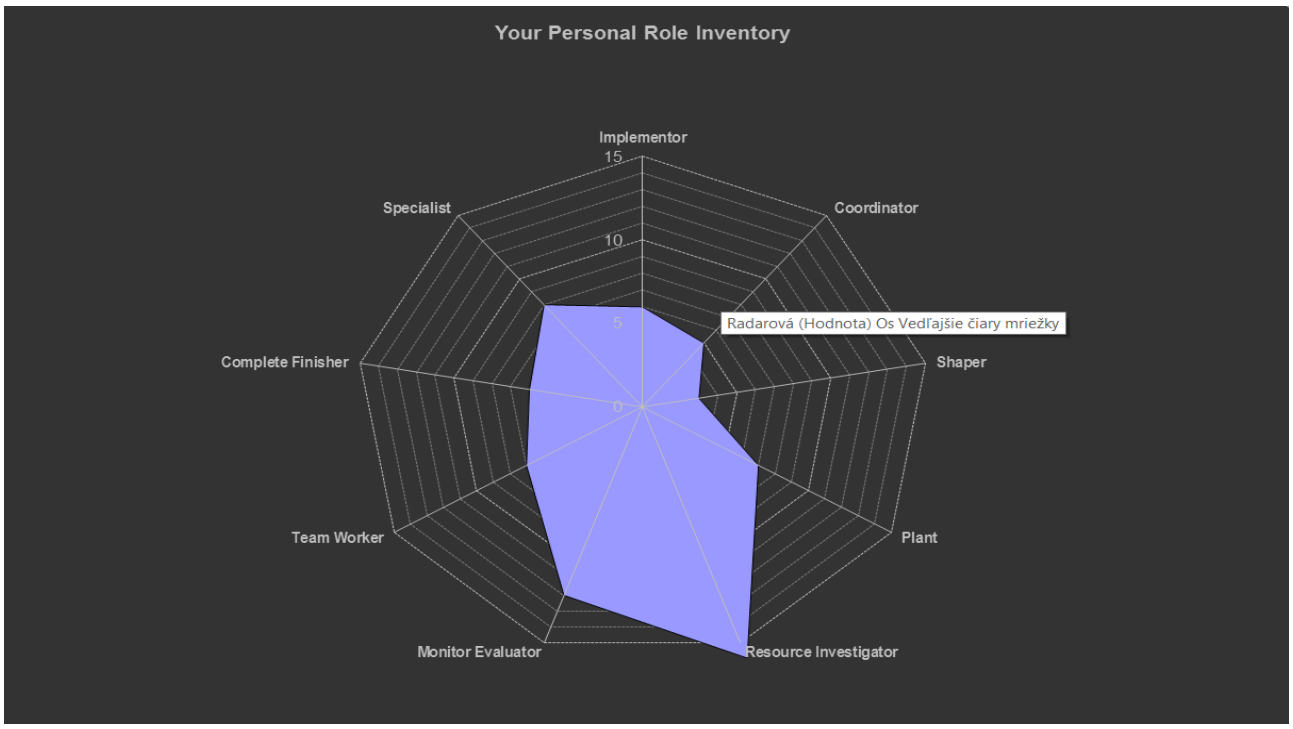
As a **Plant and Finisher** I tend not to give up until everything is fixed and correct.

Daniel Hamarik;



As a **Specialist** I tend to bring ideas to life and provide support to the rest of the team.
As an **Implementer** I mainly implement java code in out project.

Stefan Aleksiev:



As **Resource Investigator** I try to find solutions to discuss in our group and provide help.

7. Individual reflection

Martin Tomko:

The first time when I saw the project name, I was so excited because it was a fully functional program/system that we were about to make. First, there were a lot of question like how to make this and how to make that but with time ideas came. I like my team because everyone was trying to do his best. We began to meet in my apartment. We discussed some ideas etc. Later, when everyone knew what their job is we started to communicate primarily through the social networks. Now we know each other much better than at the beginning, also we have gained a lot of experience with programming and documentation of projects.

Atanas Latinov:

Upon seeing what the project was about and what we were supposed to create, I was eager to start. The idea of creating this program from scratch with no previous experience whatsoever was startling but at the same time more and more intriguing. After the first group meetings and discussions, I became more and more absorbed in the project and so did the others. Our approach towards it evolved gradually over time, until everyone knew what they were good at and started doing it. We were swift in our work, whenever there was a problem all of us tried to help and find its solution. This was the main strength that impressed me the most in our group. The sheer amount of time that was spent on explaining ideas and collaborating was just amazing and made me discover what the potential of a good team is and how much more work is done when there is a good team behind you, ready to assist you when possible. After each meeting I gained more and more experience and tried to apply it in our work. After finishing the project and seeing it in its entirety, I have come to realize how complex it is to create such a program and document it and I feel that I am more prepared than ever to face the next big challenge and be a valuable team member who is always ready to share the newly acquired skills and wisdom with my team.

Daniel Hamarik:

My personal reflection on the semester project is that I learned a lot of new stuff and spent a great time with my group. We created a fully working booking system based on real requirements which we deducted from the interview with the hotel owner. We organised our time very well so we didn’t have to hurry during the last days before the deadline. I enjoyed every meeting with my group, we had a lot of fun during this project period. I am very glad that we had to do this semester project because I learned a lot of new stuff, mainly how to cooperate between classes and how to write reports. In fact I have never worked in a group before, it was a whole new experience for me. At the beginning it was a bit confusing but after a few meetings I improved my communication skills and everything was fine. I am very satisfied with our program but if I could go back in time I would definitely change some details. First thing would be the structure of the classes in the whole project, add more classes so every class would have a responsibility for the methods inside and I would change the access to the methods and the fields. Next time we will create an even better project.

Stefan Aleksiev:

At the beginning, when I saw the name of the semester project I was so happy, because I thought it would be so hard to do it, but after a while the ideas just came up. At this semester group, I learnt a little bit from every one of these guys. I did not know them so good, but with time, the things between us got better. We did not have a lot of meetings, at the beginning we had meetings at Martin's apartment and at VIA UC, but then when we had the basics of the code, diagrams and etc. we just started to write in the social networks because it was easy for everyone. I really like all of these guys and I hope our last step of the project is perfect. I strongly believe that each of us after this project will be more confident and creative.

8. Blooms profiles

Martin Tomko:

Yellow colour: 3.9.2015 Red colour: 10.12.2015	Bloom's level	Keeping a portfolio	Reflecting on learning	System development	SCRUM	Java Programming	Object-oriented design and programming	UML	Web Programming	Database design	Written English	Spoken English	Team working	Sharing knowledge	Project planning	Presentation / exam skills
Excellent	6															
	5															
Good	4															
	3															
	2															
Basic	1															
No knowledge	0															

Atanas Latinov

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