

Group Project Reserve Plant Species

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End of Project Report

Group 10

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1 Introduction

The purpose of this document is to give a report of the final condition of group project. This document will contain an overview of the people that have worked in this group; how the project could have been improved and finally what we as a team have learned by going through this project.

1.1 Scope

The scope of this document is so show the condition of the final product and the process we have taken to get there.

1.2 Objectives

Our main objectives with this document are as follows:

- 1.2.1 Management Report
- 1.2.2 Historical Account of the Project
- 1.2.3 Final State of the Project
- 1.2.4 Performance of Each Team Member
- 1.2.5 Critical Evaluation of the Team and the Project

2 Management Report

Overall the whole software works without crashing; this means all the features which we have implemented work. The final submission was not complete to the given specifications due to a number of reasons. One problem we discovered during the acceptance testing was we did not properly understand the requirements which lead to some parts of the product being incomplete. Another problem the group faced was the race against time, especially during coding week as we lost quite a few members for various reasons.

There are a few things in the Android application that do not work. We did not have enough time to implement any error checking based on what the user has inputted. This means the user can insert the wrong data format and would not be informed about it. This leads to another issue which happens when we send the data. The problem happens when we send the date, this is because the website has a specific format which it looks for in the data sent to it and if the data does not match this format it is discarded. Even if data is discarded the user is not informed and that means the user is under the impression that everything went to plan and the data was sent properly. We were also unable to complete the sending of the pictures using the HTTPPOST. Another feature which we did not complete was allowing the user to pick a picture from the gallery. This was also because we did not have enough time to complete it. More details on those problems will be described in the *final state of the project*.

The website side of this project was pretty complete to the requirements except for some things which were not implemented as the reading of the requirements was flawed. The parts which were not implemented was when a user selects a specific plant species they should be able to see all the recordings for that plant. The other feature was ordering the sighting based on earliest to latest, this is because we thought we just had to sort them whereas they needed have a label indicating the first and last recordings.

The documents when first submitted achieved a good overall level. After attaining feedback we have decided to improve them this work was most carried out by the QA Manager and the Deputy QA Manager during Testing and Integration week. Some of this work was carried out by the team members that originally did the work.

The team faced a few difficulties but luckily they worked hard and managed to overcome these difficulties. The first difficulty faced was that one of our group members rarely turned up and never did work. We were instructed by the group manager to keep that member involved and so the group leader made sure to assign that member work but made sure there was always someone who was also assigned to the same task. The biggest difficulty we faced was the different levels of experience we had in the group. This difference was made clear during coding week when some members worked faster than others. The way the group dealt with this it that we gave small tasks for the slower members as they were able to do the research and spike coding of new idea which we were then able to know that an idea is feasible. Then the more experienced members would implement it in the final code. This meant that the slower members were still engaged and producing work for the final product.

3 Historical Account

There are six main events over the lifetime of the project. These events were role assignment, project plan, test specification, design specification, coding week, and the documentation. The group handled these situations fairly well and in an organised manner.

The first event the group had to overcome was the distribution of the roles. This was a fairly unorganised event as no one wanted to volunteer for any of the roles, but luckily the group manager stepped in and assigned people to the roles as a trial time which they can then refuse the role. Surprisingly the majority of the people kept their roles, and after that the group had structure. Once the group leader was settled in, they decided to structure the group into two teams one being the Java team and the other being the Web/Database team. Each team had a leader who would organise the teams and decide what the next steps are. Now that the project is done, it is fair to say that this kind of structure seemed to work pretty well.

The next event faced was the submission of the project plan. The task allocation for this part was made slightly easier as we had the two different teams and people had an idea of what they were interested in. The main struggle was getting the specifics worked out. This meant the group leader had to meet with the team leaders and discuss the tasks that had to be completed for the document by reading the document requirements. Once the tasks were identified they were then assigned to the group members and a deadline earlier to that of the document was decided in order to give time for the QA manager to put the document together and for the formal review.

The test specification was the next event that the group had to face. This event was completed in a slightly different to the previous one, because there were a lot less separate parts to it as it could be split into two main sections. Due to this fact each team was told to come up with ideas of things they believe could be tested, and bring them to the next meeting in table format. Doing this meant everyone had an idea of what the test document looked like and made the task on the QA slightly easier. Obviously some group members did not do the work they were assigned but luckily each group had at least a few who brought work, so to even out the work load the group leader arranged that the people who did not bring in work would collect the information and place them into two tables one for each team.

The final event before the end of the first semester was the design specification. The main problem the group faced when working on this event was that the university assignments began to be released and so they had less time to work on the group project. With this difficulty the group accepted that not much effort will be put into this document and so they were not anticipating a high mark on the feedback. In terms of the process that took place to assign the tasks it was pretty much identical to the way the project plan was done.

Coding week was the biggest and most challenging event the group faced as many events took place before and during that week. The first day of coding week the group had a meeting which the group leader used to figure out the tasks that lay ahead of the team for that week. By the end of that meeting every group member that was still attending was given a task for the day, at the end of each day the group leader would go check up on each group member to see how the work for the day went. After that the group leader assessed whether the workload was too much or too little for the

member and based on that the next day's task was allocated to get the best out of the group member. By the end of the week every working group member was doing work to their abilities.

The final event the group overcame was the final submission of the documents. By this time the group was pretty tired from all the past amount of work they have done, despite that they meet up to look at what things were needed to be submitted. Based on the results of that meeting the different tasks were allocated to the group members and a deadline earlier to that of the submission was set, in order to give the QA time to complete the documents.

4 Final state of the project

Despite working to our best abilities there are a few parts of this project which do not work and others which were not even implemented. This following section will describe which part of the program work and are believed to be accurate with the requirements, and also the opposite. We will try and include everything we know about but we might miss some out as they might not have been found.

The android application was a very big part of this project with many complicated areas. We managed to get it to communicate with the database sending it the information about the visit. The part of this feature that does not work is sending images, as that was not implemented in our code. We found a few bugs in our system just before the acceptance testing which are linked to the fact that the code which receives the sent data does some error checking. We noticed that sending more than one line of description is considered breaking the format and so it is rejected. We also discover that having the description empty such is possible as description is optional was considered incomplete by the database and so the recording is also rejected. We have one final bug when receiving data from the application which causes it to reject the recording, but currently all we know is that it happens in the SQL part of the code. We were able to discover that as we save logs of the sends which indicate if there was an error or not.

We were not able to update the reserves suggestion dynamically. We got so close to doing it as we actually managed to get the data from an XML file but using what we managed to read from that file the barrier which prevented us from completing it. We are still able to give suggested reserves, but that is mainly because we have hard coded a few into the application. Our application will try to send the data when there is no internet connection and act as if it has completed when in reality it didn't because we haven't implemented the code which will check to see if the data was sent. Allowing the user to pick a picture from the gallery was not implemented in our code. There is no adequate error checking and feedback to the user which means the user can input incorrect data into different text fields and they will not be informed.

Despite these not being completed we managed to get quite a lot completed. The Main feature is connecting and sending to the database. We managed to achieve a high quality user interface on the android application which made the process of recording information look aesthetically good and easy to use. The user can take pictures of the plant species and the scene, which the application will display for their review. Giving a user a choice to pick the reserve was also completed as part of an auto-suggestion when the user begins to enter some letters.

The websites was fairly complete except for two features which we misinterpreted from the specifications. The first feature was allowing the user to click of a plant species and get a list of all the recordings taken for it. The other feature is ordering the sightings stating which is the first and the last for a specific visit. We interpreted that as just simply sorting the sightings so that the newest is first and oldest last, rather than giving the tags stating the order of each.

5 Performance of each team member

Georgi Atanasov Atanasov: Georgi probably showed up to a maximum of five group meetings with the group manager and two internal meetings. We have always assigned him tasks to do but he never did them. Overall we rarely saw him and he hasn't contributed anything towards the group project. The group leader and Manager have agreed to give him a red card.

Alexandra Maguire: Alex was a very hard working group member; she was part of the web team. During the first semester she did all the work that was assigned to her with no fault and submitted it all by the deadline. She has attended the majority of the meetings, and when she missed a meeting she had a good reason for that. During the second semester, which was coding week she completed all the tasks assigned to her as well as doing extra work on documentation when she was free and felt the documents needed fixing. She was always willing to work and produced quality work throughout.

Silviu-Cristian Toba: Christi's role in the group was deputy QA as well as being part of the web team. Christi is hard working but the struggle with him was actually getting him to work. Overall he did all the work he was assigned in fairly good quality and the majority of it was by the deadline. Despite sometimes not working too hard when he was told about it, he tried to do extra work to help the QA manager when work was needed which was quite helpful because it meant getting the documents done earlier. During coding week he was assigned work from the QA manager and while talking to the QA manager it seemed like he did all the work assigned to him.

Awais Ahmed: Awais was part of the web team. While he struggled to get work done as he states he could not understand the task, this attitude was maintained through the whole project, overall the work would be done but not the highest standard. During coding the first day of coding week he was assigned to do the sorting for the website, but after a day's work he didn't seem to get much done. When the group leader checked to see what work he did, it seemed like he didn't even try as he did not set up anything to try some code out. This means he didn't get the existing website code to get the tables and nor did he try connecting with the database.

Peter Newbold: Peter the leader of the web team. He is a very hard working group member and made it his priority to get high quality work. He pretty much took control of the website and the database. He did all the work he was told to do as well as attending a big majority of the meetings. He was very good with communicating with the group leader giving him updates about the state of the web team and the product. The best thing about peter is that he happily did extra work when he was asked to by the group leader and was very patient as well. Overall he was a key contributor towards the completion of the product. During coding week peter worked of getting the website finalised making sure there were no errors in the website and fixing them as soon as they were found.

Christopher Malton: Chris was the QA manager for the project. He did a great job getting all the documents together and in good condition. He worked very hard throughout the lifetime of this project with his contributions being very clear and needed. He did A great job organising the minutes. Without his hard work it would not have been possible for the group to get the documents sorted as at times he worked late to complete the documents as some information was handed in late. Periodically the group leader had to send him home to sleep as he was determined to finish the work when he was clearly tired. Reluctantly he would leave but get back working the next morning. Overall he was a key member when it came to completing the project.

Jonathon Shire: Jon's role in this group was deputy group leader and was a member of the Java team. He was very helpful as the deputy leader as he gave great support to the group leader. He was very patient with the group leader at the start of the project while the leader was getting organised. The things he did as deputy were great because it gave the group leader confidence and support and filled in when the leader didn't have much to say or was slightly lost. As well as doing a great job as deputy leader he worked very hard on the Java team. He always produced great quality work even when it was extra work covering for the missed or poor work of other group members. During coding week Jon contributed lots of work for the android application and also gave a lot of mental support. Overall he is a great group member to have and he gave confidence and support for the whole team.

Nicholas Gray: Nick was part of the Java team. He is a hard working group member but lacked the high precision and quality in his work. Despite that he still made an effort to get the work done. During coding week he played a vital role in doing research and feasibility tests on the ideas that were going to be implemented in the application. His work saved lots of time on other members as he had done the research and the code to implement the different components was happy to explain his work.

Rhydian Jenkins: Rhydian was part of the Java team. He did the work he was supposed to do, and did at times doing extra work when it was needed. He went to many meetings, but he did miss quite a few meetings. During coding week he seemed to have disappeared which meant he didn't do much work for that week.

Andreas Hernandez Hauser: Andreas's role in the project was Architect and the leader of the Java team. He is definitely the hardest working member in this group completing all tasks to a very high quality and was always consistent with this work. He is a great group member to have as he works very hard and was very friendly towards the rest of the team. Without him the team would have been very far behind. The group leader is grateful to have a member like Andreas in the team as his contributions were definitely key to the completion of this project. During coding week he was one of the Android developers, working hard to get the application looking and working as good as it is. Overall he was a great person to have and work with.

Mohannad Zeido (Mo): Mohannad's role in the group was that of the Group/Project Leader. His tasks involved organising the group's distribution of workload, paperwork requirements, performance/catch-up meeting and other administrator duties up to the implementation week, within which he formed a more practical role in active programming. Mo stayed on top of the group's performance at all times, managing to successfully keep to most

deadlines (bar the prototype demo, which was marred by technical faults beyond his control) and in the couple of cases where it was warranted, punishing those who were not pulling their weight within the project.

6 Critical Evaluation of the Team and the Project

As a whole the group performed very well together with no arguments of disagreements between any of the group members. Although there was some hard times during the completion of this assignment the group as a whole put in the extra effort to get all the tasks done. There are a few things that could have been improved to make this project better.

The first improvement that we could have done is have a pre agreed document structure so that when group members do their separate work its all looks similar and that would make it easier to construct the end documents. Another improvement would be to get group members practising Android development so that when it comes to coding week the members have a good understanding doing the development. This was a thing our group struggled a lot with as the first day we had to pretty much crash learn android.

There could have been a few improvements made to make this project better. The first would be to teach Component diagrams in the lectures as they are very complicated and vague. This made it very hard to do them for the documents. Another thing would be updating the documents so that when the documents are read they can be easily followed and the hand in procedure is up to date and clear, rather than having to dig through emails to check on how to submit work. Another Thing would be keeping the group meetings with the group manager during the time between coding week and the document submission deadline because many people thought the work was done. This would allow the groups to stay focused and on track.

Working on software projects makes people aware of a lot of new things and challenges they never knew could be a problem. One example would be that the group has to cope with the different skill levels of the members in the group. This is because weaker members will need more time and less work than someone who was more experienced. Another example would be the fact that not everything goes to plan and so the leader should always have a plan B in case the first plan failed. Also the realisation of how important a group leader actually is, because we used to think that people would be able to organise themselves but now that we have gone through this process it is clear that this is not the case.