My Individual report

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Team organisation

First and foremost, before I further explain the topic of team organisation and what it meant for the groupwork that was done earlier I would need to provide a few key definitions. The definition of groupwork can be simply defined as the work done by a group in collaboration. Another word that I may use frequently would be team role. The exact definition of team role would be a tendency to behave, contribute and interrelate with others in a certain way. In this section I will also be talking about Belbin’s team role model and the Team development process Model.

The main theory behind Belbin’s team theory was that there are 9 roles that a certain group member will fall under in which each role will determine a team’s success. In which theory goes on further to explain the nine team roles and he categorised them into three groups: Action Oriented, People Oriented, and finally Thought Oriented. Now having said all this I will now compare the man ideas of this theory to my own experience as well as the group’s overall performance In terms of my group I strongly believe we had the right balance of the categories discussed above with each member have a unique set of strengths and weaknesses. This ultimately helped our cause significantly during this module as some group members were better suited to completing certain tasks. For example, I and two other members for the part A of the coursework was responsible for the functional and non-functional requirements listings as I had previous experience with it before in college. Another example of our group using our strengths to help us was one of our team members during the first part of the coursework already being familiar with how to construct Gantt charts as he had done it before in high school. As far as the different team roles I believe we had a range of different personalities which ultimately helped significantly as all the group members contributed in diverse ways. For example, during the brief few weeks of meetings with the group that I was assigned the roles and personalities started to become a lot more apparent in which how each group member would approach the work to be done. For example, there was one member who possessed traits similar to role of a specialist having worked with Gantt charts as well as having previous experience with languages such as python and Java which proved key in the second part of the coursework

The second theory that I will be discussing is the team development process model. This essentially means a way to interpret and make sense of the various stages groups pass through on their way to becoming an effective team. The model consists of 5 various stages that a group may go through to achieve a certain objective. The 5 stages are as follows: forming, storming, norming, performing, and (adjourning, dorming or mourning). In referring this model back to my groupwork experience although it was a positive one in which we were able to complete the work in time it came with a bit of obstacles. For example, as a group our hardest stage was the first part forming, this was mainly due to members having different outside commitments as well as finding the right time and place for all members to be present in a group meeting. This was also due to a few changes in the group, as I was transferred from a different group that I was on previously which took some time getting on the same page as the other group members. The second stage forming which essentially details the brainstorming part of group work in which it involved us as a group deciding on the different tasks. Although this was quite an unproductive phase as no actual work was done, in hindsight it was extremely necessary as It personally gave me an opportunity to meet with the other group members and to have a say in a few ideas that were proposed at that certain time. For example, one of the ideas that were proposed was the idea of doing the second part of the coursework in Java as two other students had previous experience of working with it. For the third stage norming, I believe that we worked well as a team after everyone knew their role and what was expected of them to do there was also quite a lot of team work involved during this process in which I and another member of the group was given the same task to do. The major benefit of this is that it greatly streamlined the process of completing the coursework as we had a few group members contributing to a single task. The next stage is performing, this is the stage in which it is stated that the group has reached peak effectiveness in terms of completing the coursework. Referring this stage back to my experience in the group, I believe we did achieve this as all group members were all informed about their task and completed their respective roles.

Now overall in evaluation with the two theories and my experience of working together during the module it would be fair to say that my group was able to meet all the requirements. Furthermore, in terms of expanding on the point I made it would be important to include that we found ways to overcome adversity such as one group member who was sick for a week. This problem was combatted by keeping that member informed about his tasks and monitoring the progress of that task given to him/her by creating a social media group.

Managing the software development process

Software development is the process of computer programming, documenting, testing, and bug fixing involved in creating and maintaining applications and frameworks resulting in a software product. In this section I will be evaluating my groups performance in a range of categories listed below.

Project management

In terms of the project management we could do this effectively to a certain degree however there was some ups and downs in terms of organising the work. In terms of planning the tasks assigned to each group member in my own group experience this wasn’t much of issue of us our meetings entailed us speaking about our strengthens and weakness. For example, in my own group I discussed to the group members about my weakness of programming in which I was new to python and Java at that time. Therefore, the solution was brought up that I would complete my task that I was given and then send it to other group members for possible feedback to improve my coding. In terms of the team organisation I strongly believe this was one of our best traits as each member in the group all had various other social media accounts which ultimately linked in to aiding the implementation phase of the coursework. For example, for my group we would send pictures of the coursework requirements as well as attach work onto the group chat so all group members can have a final look and comment on any possible changes. However, the main issue came from the controlling the day to day activities. There were a few meetings that had to be rescheduled/called off as some group members were not able to be present at that time. It was also difficult for me personally to balance out the group work as well as the work from the other modules due to outside commitments.

Risk management

Risk management ultimately refers to the forecasting and evaluation of financial risks together with the identification of procedures to avoid or minimize their impact. Due to our group being able to complete our objectives I believe that my group could overcome the potential risks that come our way. One of these was one group member who had a lot of outside commitments including a local football team, therefore our group worked around that by scheduling meetings at various times and posting the key points from the meeting if that certain member missed. One other main issue that was raised from our group was the lack of programming expertise as only two members were familiar with java and python having worked with them for a few years. The method we used to combat this problem was giving the other members small tasks in which after completion would be sent to them for feedback purposes.

In terms of the different techniques that we used such as use case diagrams class diagrams and test cases, in my opinion the use cases were the most beneficial method for our group. This is mainly due to the reason of aiding our group in developing the system in terms of what the tutor system needs to have to achieve its purpose. Therefore, it could also be classed as the most relevant of the other methods as a well-constructed use cases diagrams helped organise other tasks such as identifying who the system would need to cater to and what it should be able to perform. Out of the three techniques that I have mentioned above the least helpful was the test cases. This is due to the reason that test cases simply involved listed the steps that were needed to do a certain part, for example in my case was to show the list of students. I personally found this extremely tedious and unnecessary to do as my role in the coding part of the coursework was pretty straightforward and didn’t need much explanation on how it worked.

Your role in the team

In terms of the technical aspects I believe I had significant contributions to part A however I was a bit limited due to my lack of programming skills to be of much help for part B. Part A of the coursework involved the overall planning of the tutor system we had to build. My role involved making the functional and non-functional lists as well as working on the risk management part with another team member. If I would evaluate my own performance in terms developing the lists I would say that I done a excellent job in terms of identifying all the necessary requirements needed to make a tutor system. I was also responsible along with another team member in developing the risk management analysis. This role involved making a list of all potential risks that could affect our ability as a group to hand the coursework in on time, as well as contingencies to avoid it from occurring. For example, one of the potential risks that was identified was the risk of not being able to hand the coursework in on time. Therefore, the contingency plan of having regular meetings and communicating with all members of the group through social media was proposed to combat this potential issue.

Part B of the coursework involved the actual design of the tutor system in which all the group members would be required to use their programming knowledge to build the interactive tutor system. My group decided to use python to build the system in which each team member had a specific task to build one part of the system. My personal task was to make an interactive system that would search for students by their student ID using Tkinter. My role in this part of the coursework could be considered as less significant compared to the part I played in the first piece of coursework. This is mainly because at that point in time I wasn’t confident in my programming skills to take a large task as it would be above my capabilities at that present time. Part B also involved making separate test cases in which we would be using it for our group presentation. My role was to demonstrate and explain my code and how it works as well as providing an example of when a valid and invalid student ID was entered in the GUI system.

Quality criteria

Before I assess my role in the group showing consideration of me adhering to the overall quality of the final product I would first need to define it. The term quality refers to totality of features and characteristics of a product or service that bear on its ability to satisfy specified or implied needs. I will now provide a few examples of when I had demonstrated this by input into the group’s overall tasks.

One major example of when I had shown consideration for quality was during the part B of the coursework. When writing up my own part code I also made sure to adhere to invalid inputs such as a student Id that doesn’t exist or insufficient values being typed in to the system. This was achieved by using if statements to handle the event of a user typing in the wrong details, which would output an error message. Therefore, we can refer this example to McCall’s quality model in error tolerance in which this situation shows the method of exception handling being used.

Another example would be re-drafts as well as modifying my acceptance criteria more to be more relevant and to adhere to two main factors in McCall’s quality model of reliability and usability. For example, one of the acceptance criteria that was written was that the user should be able to easily use and understand how tutor system works implying that the code would need to well-structured and easily under stable. In terms of simplicity for the code as mentioned earlier I used if statements to ensure that others who may look at the code can see exactly what it intends to do.

The third example of when my input into the group’s overall activities helped adhere to the quality criteria involved accurately was during the listings of the risk management and risk identification part of section A. This is mainly referring to the many positives that came with developing contingency plans to ensure that the tasks were all done on time and ultimately the coursework being submitted. This therefore provides us the main benefit of flexibility in terms of dealing with any adversity that comes with the group ensuring that the final product is made at the supposed deadline for it.

Finally, the last example of where my input into the team’s activities would help with the project management would include

Top tips

One main tip that I would consider for future group activities in terms of my role and becoming more of an asset to the team, would be to improve my programming skills. I believe this really hampered my ability to play a more integral role in the second part of the coursework which involved making the interactive tutor system. Therefore, to combat this issue as it is an essential skill for my course I will start doing daily tasks with python to ensure that this isn’t an issue in the future. The improvement of my python skills would help in the development as well as easing the workload of the other group members allowing them to use that time to focus on other areas the group needs.

The second tip in relation to working in the team would be to communicate regularly with other members to make sure that everyone is on track regarding achieving their respective tasks. This could’ve been done by being more active in the group chat and even proposing the idea of meeting up outside of University at a location that is accessible to all such as the Cardiff central library. This would therefore help significantly in terms of achieving that aim in terms of better project management as well as improving my overall input into the team.