Contributions Report

Group 36

Friday 1st November 2019

Contribution Report

For the duration of Assignment 1, the production of a Design Document for our implementation of Chip's Challenge, our group worked well individually, and better as a group. Group 36 worked well together, although we faced challenges in the beginning. When first assigned groups, our group had a member who was not replying to any attempts we made to contact them. After a week, we finally resolved the case in that the 7th member of our group was actually in first year. Once resolved, this allowed our group to progress on as a 6-man group. In the remainder of the time allocated to our group, the entirety of the group worked well together and helped each other.

In our initial official meeting, we established that we wanted to create a full design document. This could then be cut down to meet the requirements which were requested in the A1 specification. By doing this, we would create a full description of the implementation which we wanted to use for our version of Chip's challenge. This meant that, although we may have had to work harder than other groups to achieve our end goal, every person individually would have a better understanding of the entire system, and would be able to work on each class, with knowledge of what it was doing and how it interacted with other classes.

Initially, the plan was to split the 6 people into two teams of 3, which would work on creating the CRC's, and the UML separately. Although this was the initial plan, it soon became clear that as a team we worked more efficiently when we were all in the same space, bouncing ideas off each other. As we progressed further, this method of working together and bouncing ideas off each other became prevalent in our work.

Each week, we held a team meeting, which was where we established work which had been done during the week prior, and what needed to be worked on further. Rather than distributing coins due to how much work had been done, we decided it would be more beneficial for the mentality of the team to distribute the coins evenly, then remove coins based on lack of input and effort. Through this method, and motivation to achieve a good grade, everyone in the group began to work hard. When a task was set to be complete, on every occasion the task was completed to a high standard. Due to this, each week we decided to evenly distribute the coins, thus creating an even spread.

We set out from an early stage, what needed to be completed early on, and what could be left until later. This allowed us to breakdown the tasks at hand. This allowed our team to manage time efficiently, and complete everything with time to spare. Because of this, we had created enough time to go through the entire document and find glaring errors.

Candidate classes and responsibilities

As we had decided to split into 2 teams, the team which undertook the creation of CRC's (Chuks, Angelo and Ioan) oversaw the creation of CRC's. Once created, these were then brought in-front of the remainder of the team, who helped to agree on some key decisions, and finalise the CRC's.

For all the produced CRC's, Chuks, Angelo and Ioan worked collaboratively to produce them, with the help and final input from Samuel, George and Blake.

Class diagrams

For the class diagrams, as we initially agreed to create a full design document, we began by creating hierarchies. This was done in the first meeting with the entire group, however from the point where we split into two teams, the UML team oversaw the creation of the class diagrams, which were then brought before the rest of the team and finalised.

The entire class diagram was a joint effort between Samuel, George and Blake, which then received help and input from Chuks, Angelo and Ioan at the end.

Hierarchy descriptions

The hierarchy was created in the very first meeting that we met. This is because we believed that having a hierarchy would help everyone immediately know how the system would work in terms of inheritance and super/sub classes. Throughout the course of assignment 1, the hierarchy was edited slightly to fit our needs, and as we realised that some edits could be made to improve the system.

The entire team worked on the hierarchy and agreed on the final diagram.

Level file format

The level file format we agreed was small enough that we could stave off until later in the project. Once we had predominantly finished the CRC's and class diagrams, we moved to finish the file which described the level file format. This was agreed upon as a team, however was mostly worked on by George.

The level file format was agreed upon by the group, however the final definition of the level file format was created by George.

Issues

Although predominantly we worked well as a team and no major issues arose, as such that is bound to happen with large projects, some did arise. However, these were all quickly resolved and had little to no effect on the outcome of our final document.

The wrong team

In the first meeting that happened as a group, we split ourselves into 2 groups, one which handle the UML class diagrams, and one which would handle the CRC's for the design document. As it was decided that we would produce the entire design document, we didn't have to worry immediately which classes we would be producing for the final hand-in. Even so, it was agreed that the CRC team would produce some CRC's before the UML team could begin work on the relationships between them.

When the first informal meeting between the CRC and UML team happened, halfway through the week, it was spotted that the CRC team had actually began creating UML, rather than class-responsibility-collaboration diagrams. This could have been a problem if the CRC and UML team had agreed to work separately and then converge in the middle, however as it had been agreed that the work would begin in canon, the error was spotted.

In order the resolve this, it was decided that the entire teams would be swapped. Whereas previously the UML team consisted of Chuks, Angelo and Ioan, the new UML team was Samuel, George and Blake. As it was spotted and resolved within the first week, this error didn't cause any problems within the dynamic of the team, and everyone was happy to switch teams and continue work on the opposite team.

Members

Chuks Ajeh

Chuks was a member of the CRC team, and thus had a heavy contribution into the creation of the Class-Responsibility-Collaboration diagrams which represented our system. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. Chuks also took on the role of taking minutes for the meeting which Samuel wasn't present.

> "After being reassigned from the UML sub-team to the CRC sub-team. We partitioned the classes amongst my partners in the sub-team, leaving me in charge of the following classes, Entity, Player, Enemy and Enemy Variations (Smart/Dumb Targeting, Wall Hugger and StraightLine). I outlined key points for the responsibilities and the collaborating classes whilst consulting and working with my sub-team teammates and the UML sub-team.
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> I conceptualised the player class with UML teammate Samuel Roach and Conceptualised the TokenDoor class working with Ioan Mazurca to outline responsibilities and collaborators for the class."

Angelo Balistoy

Angelo was a member of the CRC team, and thus had a heavy contribution into the creation of the Class-Responsibility-Collaboration diagrams which represented our system. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. Angelo contributed well when the final UML was brought in front of him, in spotting mistakes.

> "I was assigned to the CRC sub-team and worked on making CRCs on the Item, Equipment, FireBoots, Flippers, Key and Token Classes. I also helped double-check other CRCs and authored the Cell Class-Responsibility-Collaboration diagram to make sure everything matched and was easy to work with. I also contributed to the justification of a section of our class hierarchy while also contributing to the analysis/justification of the Smart Enemy and the algorithm behind its movement pattern."

George Carpenter

George was a member of the UML team, and thus had a heavy contribution into the creation of the original UML diagram for the cells section of the hierarchy. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. George also took on a leading role within the team, establishing conventions to follow as well as formatting all the final documents in LaTeX to maintain a professional standard.

> "For this project I took the role of the Boss Baby, in that I attempted to guide the project but not in any useful kind of way. However, in more general terms this project ran on entirely equal terms where each person both attended meetings and contributed actively throughout the week thus earning everyone consistent contribution scores.
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> Prior to the first week not much work had been done so we instead decided to set up sub groups which I feel helped a great deal towards the end of the project as everyone knew well in advance what work they would be assigned and would have to complete. Throughout the project these groups individually worked on their prospective tasks and brought their work to that weeks meetings in both our optional Wednesday catch up meeting and Friday officially minuted meetings."

Blake Davies

Blake was a member of the UML team, and thus had a heavy contribution into the creation of the UML diagram. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. Blake also worked on merging the two UML class diagrams for the cell hierarchy

and the entity hierarchy, so they became one large class diagram. This was useful in displaying the final system and how every class interacted.

> "Initially I was a part of the CRC team but it became apparent during the second meeting that as a team we had actually made UML diagrams instead we had to swap the teams which didn't cause too many issues as I was happy to work on either. Whilst Sam and George compiled the base UML diagrams for the Entity and Cell hierarchies it was my role to combine the two into a single full hierarchy UML diagram which was then contributed to by everyone and went through so many versions we gave up labeling them."

Ioan Mazurca

Ioan was a member of the CRC team, and thus had a heavy contribution into the creation of the Class-Responsibility-Collaboration diagrams which represented our system. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. Ioan also took control of handling the contribution forms and submitting them. This allowed everyone else on the team to not have to worry about handing in an extra form.

> "As there was no meeting prior to this stage, the first week of the assignment was spent in getting a thorough understanding of the functional specifications by taking notes, as well as learning all the concepts behind the UML Class Diagrams and the CRCs, in order to be able to complete the tasks that were about to be assigned in the following week.
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> In the second week, the project responsibilities were split into two sub-teams, UML and CRC, my role in this period of time being mostly to work on the CRC for the whole Cell hierarchy.
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> The third and final week for the assignment was spent in spotting each others mistakes in their work and finishing the documents for submission, thus, I analysed carefully the CRCs for the other hierarchy, as well as the attributes and behaviours written in the UML, and also if the relationship arrows between classes are drawn correspondingly."

Samuel Roach

Samuel was a member of the UML team, and thus had a heavy contribution into the creation of the original UML diagrams for the entities section of the hierarchy. They also, as with the rest of the group, had an involvement with the hierarchy and level file format. Samuel also took on the role on secretary. This meant that They took minutes on every meeting that They was present for (all except one), which They then formatted and sent to George for formatting.

> "Although I was initially assigned into the CRC team, I accidentally worked on the Class diagrams, leading to a swap in teams. Once sorted, I continued work on the Class diagram, where I led the development of Entity hierarchy within the class diagram. This meant that I had to work out which attributes and behaviours we had to consider within the entities, and how they interacted with each other.
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> Because we developed a very structured system, many of the classes purely inherited from their parent classes, making the development of the class diagrams significantly easier. When we came together to put the document together, I worked with Chuks Ajeh on the Player class, and we developed the methods and what attributes would be needed in order to make the player function as intended."