

## Individual Critical Appraisal

During the past 14 weeks, I feel that I have developed a lot and acquired new skills or improved my existing ones. It all started with the idea I had to create a serious game involving health and safety notions. It was a challenge to convince my team mates to accept it, but after filtering through their ideas and performing an analysis on each, we eliminated them one by one and I managed to demonstrate them that my idea would fit best the requirements for this module.

Having all agreed on the topic, we all started to work as a team. We already had the advantage of good chemistry in the team (because we worked together on previous projects and we knew our strengths) so we started to tackle difficult tasks with ease. We all played by our strengths. The beauty of working in this team was the fact that we always kept ourselves motivated when was needed most. There were times when I thought that this game is too challenging, but then we pulled ourselves together and we managed to deliver. Every one of us had setbacks and every one of us pushed formidably to recover. I took again the role of the team leader, but William also helped me when we were to assign tasks to each other.

I created the Presentation and I had their support to meet and rehearse for the delivery. Then we equally spilt the task of performing literature review and that was enough material for me to put the basis of the paper. I created an introduction, collected all their opinions, formatted them, and merged them in the report so they would be understandable, following a logic structure. I reviewed their work, some parts needed to be improved and they have. Before submitting the literature review, they also got to review the overall report and I considered their advice and applied their suggestion wherever it was necessary. This is a big change for me, as I used to be more authoritarian and now I became more flexible and adaptable. If before I always thought that MY was is the only right way, after the experience I had on my internship, I learned to listen more and to give other's opinions a chance as well.

While initially I did not like this task, as I thought that is a lot of work to do (and it was), in the end I found out that this was a nice task as I learned how to do research and how to identify some gaps in the existing literature. This was useful for me and will also help me on other modules.

Following the literature review I went on to work on the report and create the design for the game. To transmit my concept for a serious game and to help them visualise better what I wanted from this game, I created highly accurate 3d models (which took a while to do) and worked on how to import them in Unity. This was a new technology for me as well as using C# scripts to control game objects.

Once we had the base building, we took the incremental and iterative development approach and added features continuously on a weekly basis. I continued with the necessary 3d models for various scenarios, I contributed with some scripts for the game mechanics or improved existing ones, continued to come with ideas and suggestions for the game until the gold master was ready. Also, I created the videos which was a weird and time-demanding task. For each scenario, I had to create some text, then create audio from text and to record it and merge it to a video made in PowerPoint synchronising various animation effects until it looked like a reasonable video. There was another learning outcome here, as I found out how to convert and compress videos using virtualDub.

Until we got to the gold master, the game was tested after each merged pull request and various changes were implemented following the evaluation. Whenever was needed I had adapted the design from the report to match the state of the game.

Finally, I created the abstract, the discussion, conclusion and further development parts and polished the deliverables.

Overall, I'm happy that I could create a design for a serious game and helped implementing my ideas into a serious game. I like that our game is looking very good even compared to other games from previous work done in the serious games field. It's good to be able now to understand the difference between a serious game and other types of games and to know what makes a game... serious.

If I could change something to the way we got to the final product, I would change my initial design. Although the initial design had some good ideas, I found out that there was not enough time to implement those complex ideas. So, I would design a simpler version of the game.

Even though other members might feel that they could have done more in different areas, I believe that we managed to complete each other so the workload seemed balanced for each member. After all nobody was forced to do tasks they did not want. Any of us could choose their preferred tasks and that's what helped this project evolve this way. That's how I like to organise my teams: I let them play to their strengths.

To summarise:

- I learned to use a new programming language (C#)
- I learned to use Unity
- I learned how to create videos from text
- I improved my leadership, organising skills, teamwork
- I improved my reporting skills
- I learned about serious games and how to review previous work done
- I learned how to write a research paper

While I found the Engage Dashboard useful, it was only a refresher on my knowledge of using RESTful APIs to handle HTTP requests, so I did not learn too much from this; but that could be also because of the simplicity of the REST API.