L3- Multimedia and Game Development Coursework Feedback

Durham University

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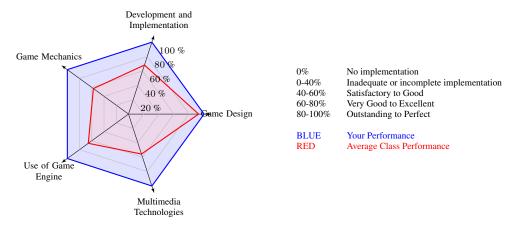
1. Individual feedback

| Requirement | Level of Achievement | Marks |
|--------------------|---|-----------|
| Video and Form | All submitted | 8/8 |
| Game Design | Game design and story matched the proposed theme | 5/5 |
| Development and | Outstanding and comprehensive core development ele- | 30 / 30 |
| Implementation | ments were included, such as the scene, objects, object | |
| | interactions and game flow | |
| Game Mechanics | Perfect game mechanics were implemented, covering | 30 / 30 |
| | highly complex game rules, game challenges and object | |
| | ability controls | |
| Use of Game Engine | Use of game engine features and external assets or li- | 12 / 12 |
| | braries was perfect, producing an extremely interesting | |
| | and complex game implementation | |
| Multimedia Tech. | Perfect support to advanced interaction / multimedia | 15 / 15 |
| | types & optimisation, producing a complex and ex- | |
| | tremely interesting game | |
| Total Marks | | 100 / 100 |

Note: The level of achievement is set based on the assessment criteria defined by the university's core regulations (pp.15-16).

Additional comments: N/A

The follow diagram visualises your performance on different aspects of the coursework. It gives you an intuitive understanding of which aspects you have done a better job or need improvement.



2. General feedback

I really enjoyed marking this coursework, which gave me a lot of fun. This part highlights essential concepts and good features to follow and gives comment on general deficiency based on all work received. They offer you a value-added learning experience by understanding how problems can be tackled in good ways and what issues have been easily overlooked in game development and implementation. Well done! You have done an excellent job in this work. Hope you enjoy doing this coursework and have made a significant improvement in understanding game development and related practical skills. More importantly, this coursework may become an asset for you to show off your ability in computer science to your friends, potential future employers or academic supervisors.

Game theme and design: I am very happy to see many extremely fun game designs, which are well matched with the proposed themes. Some were emerging, e.g., Boris is rushing for a party in No. 10 Downing Street. There were also many games involving very cute Peppa Pig characters. Seems that the most popular figures are Boris and Peppa Pig.

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Focus of the coursework: This is a game development and multimedia technologies assignment. Game programming is only part of the process as we have discussed in early lectures. Particularly, game development, which involves game mechanics and game economy design, is a critical factor for making a game replayable and success. Multimedia technologies are very huge topics themselves. In this module, we have focused many of the game-related techniques to learn and appreciate. It was found that a few number of students did not learn game development properly. Also, a significant number of students did not demonstrate proper learning outcomes in multimedia technologies.

Core development and Use of game engine: Most students have done a good job on this part. Over about 80% of students have chosen Unity for game implementation. The majority of students built their games on top of existing assets, particularly 2D spirits or 3D models, to make their games visually appealing and theme-matching. It was impressive that some students created their own models and produced attractive game modeling and scenes. On the other hand, there were a number submissions not quite reflecting their proposed game themes, due to the use of irrelevant or over-simplified models and scenes.

In most of the submissions, the ways of game flow and game interactions were remained the same throughout the game, except their difficulty might vary. For submissions with higher level of achievements, they generally provided a variety of interaction options (e.g., different types of weapons or abilities) for the game players to collect or to grow.

Game machinations: While most students have done a proper job, a few students have missed this part. This may be a reflection of their lack of engagement in the module. Game mechanics is the core part of a game. It is also a core part of learning outcome that you should demonstrate in a game development module. Without it, the implementation produced will literally be a piece of CG application with controllable / dynamic objects only.

Overall, only a few students demonstrated their proficiency in game economy, who could utilise positive and negative feedback loops to provide comprehensive control in game progression and game object growth. Specifically, game progression is a mechanism to dynamically adjust players in a proper flow zone according to their current abilities or the desired challenge levels. On the other hand, to implement serious controls in the ability adjustment of game players/NPCs, it should include the types and the growth/deterioration of abilities, but not just increasing the power level (or decreasing the life/health level) of a player. In many submissions, the design of game mechanism was rather straightforward, which focused on accumulating different types of resources for levelling up or completing certain milestones for moving game progression forward.

Good use of multimedia technologies: A significant number of students have not demonstrated the learning outcomes or utilised technologies from advanced interactions or multimedia types and optimisation, which were covered by Lectures 10-17. This might be related to the low lecture attendance or lack of engagement in relevant lectures, and that those students have not learned this part of the module properly.

In fact many remarkable technologies were covered in this part of lectures, including but not limited to Navmesh - for object tracking and navigation, 3D spatial sounds, GPU specific image compression, Internationalization (i18n) which is not limited to text but can cover sound clips, use of textures, models / spirits, and animations.

Finally, I hope that your experience in this coursework and my suggestions and feedback will help you understand multimedia and game development better and help you develop interests in this area.

- End of Feedback -

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