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Coursework 1

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When it came to initial thoughts and approaches to the project, the group threw a couple ideas at the wall to see what stuck, floating the idea of Chess and other grid type games to satisfy the necessary requirements. However we eventually came to the conclusion of grafting together two popular grid based games – Snake and Pac-man – into an entirely new horrific amalgamation that is entirely original in scope and concept. Ironing out the details in a word document passed between group members, the team came together to quite like the novel concept and challenge in implementing the idea. Taking the crucial components of Snake – such as the score, the controllable snake, the grid upon which it is played – and the enemy variety alongside the maze introduced by Pac-man, we combined those features into the now newly dubbed “Snake-Man”. Whilst yet to receive our grading, the group as a whole is confident in the capability of the program, uniqueness of the concept, and most importantly, enjoyed the implementation of the assignment. On that note, the group also believes that “Snake-Man” sufficiently meets the needs of the outlined specification, even excelling in some areas. Using a GitHub repository to centralise our game development, and a Discord to discuss the finer details, coordinate in coding matters, and build a team bond, proving its immense worth in light of repeated struggles with the seemingly suffocating environment of Visual Studio. Alongside this, we did manage to at least meet up once in person, to work collaboratively on finishing the project, even if this meeting occurred days from the deadline. In terms of initial draft, it proved to be incredibly time consuming and inefficient, as it yielded the desired result but required quite ugly implementation, however through revisions, a lot of tearing down of code, and building up from the base again, we were able to produce an at least, moderately enjoyable gameplay loop. The design approach of having conceptual or boilerplate code, followed by later collaborative revisions maintained a steady advance in development of the assignment.

Splitting development of the various components of “Snake-Man” between the three of us, we all contributed in a parallel yet synchronous manner, meeting requirement after requirement, with even the Recommended Extensions and Further Extensions sections of the marking checklist providing new ideas, allowing the collective creativity of each group member to flourish when it came to both backend coding structures alongside frontend graphics, sound effects and objects.

Whilst thoroughly enjoying development as a process, there were a series of major issues encountered along the way that required the aforementioned reconstruction approach. Critical points of anguish were ensuring the movement of the Snake aligned with the grid, the receiving of input from the arrow keys, creation of the grid array of objects, alongside implementation of the enemy AI so that it actually reasonably proved a challenge.

Pulling it quite close to the finish line, as we were still in very active development days from the deadline, we did a large group collaborative coding session alongside final further connecting of the disparate parts – with an additional internal commentary spree in areas that were lacking – ensuring we even had a final project to hand in.

Thoroughly believing in the capability of the project and concept – despite our gripes with the software – we do believe that it has yielded a satisfactory result, and an enjoyable experience. Future additions to the program were floated, with the additional grafting of Bomberman-style bomb mechanics if the Snake or enemy manages to perish, and even the prospect of a moving background, had time allowed it.