

CM1005 Final Game Project Submission Commentary - Oct/25

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Word count: approximately 240 words.

Extensions

I implemented the platforms system as an extension, using the factory pattern. I wrote a `makePlatform()` function that creates platform objects with position, dimensions, speed, and boundary properties. I also made the platforms move left and right instead of staying still: to achieve this, I had to coordinate both the platform updating its own position in `drawPlatform()`, and the character being carried along by the platform in `checkPlatform()`. I placed some of the platforms bridging canyons and others leading up to floating collectables, for added challenges and the possibility of obtaining higher scores.

I'd also like to highlight how I adhered to best coding practices by splitting the code across **multiple files**, giving each game element its own script file and pulling shared constants and colours into a `variables/` directory for better separation of concerns.

Difficulties

The hardest part for me was getting collision detection right, especially after adding platforms. It was tricky to make the character land cleanly on a moving platform without clipping through or bouncing off, and it took a fair bit of tuning on the surface threshold and making sure the position update was in sync with the platform on each frame.

Skills Learnt and Practised

Although I have professional coding experience, this project exposed me to game development techniques and challenges I would not typically use at work, such as the collision handling mentioned above, along with coordinate transformations. But beyond the technical learnings, I was quite glad for the opportunity to exercise my

creative thinking (such as coming up with a theme and elements for the game), which is something I don't get to do as often as I'd like to.