## **Analysis of Brief**

## Design Brief

You are required to design, develop, and publish a video-game. The game <u>must</u> be 2D in nature but can extend to 2.5D like such existing games as Little Big Planet. The game <u>must</u> run on <u>Windows</u> Machines, but it would be beneficial for it to run on Apple Macs and Linux machines. The game <u>must use some sort of save file</u> in order to record the player's progress. The game <u>must also include accessibility options</u> and <u>be balanced</u> in such a way that it is <u>fun for all</u> players.

You must complete the development of the game alone, but are permitted to take on testers to garner feedback on how the game plays.

You may use any language or framework you deem to be suitable but you are <u>not permitted to</u> use an established games engine.

The game can be of any length but it is recommended to keep it simple. You may take inspiration from other indie games in this regard.

Neither microtransactions nor loot-boxes are permitted in the game but it must have some sort of progression system.

- A 2.5D game could have a 3D appearance but only play in one plane
- A 2.5D game could play across multiple planes but it must be a side-scroller
- The primary target is Windows machines as they are the most popular with PC gamers
- Save files could be written in JSON using Niels Lohmann's library, then encrypted somehow
- Accessibility options include: sound cues, colour palettes to make things more distinct for those with colour-blindness, subtitles if there's speech, gameplay options for those who are less dextrous or reactive e.g. slow motion
- Customisable controls would be beneficial too, IJKL are as valid as WASD
- Although I do know some people who can help, I will not ask them as the purpose of this project is to demonstrate **my** skills
- I know multiple persons willing to test my game without charge
- Development will be test-driven
- I will use C++ and either Vulkan or OpenGL purely because they are the ones I am most familiar with
- A game of any length could be an endless runner with procedurally generated content
- It might be better if levels were designed such that as the user plays them they learn how to control the character / game

- Some indie games I have in mind are Flappy Bird (endless) and Angry Birds (levels)
- Perhaps a timer could be added (that counts upwards) to be able to compare scores with friends
- A progression system might feature upgrades or cosmetics or both
- Perhaps it would be good to have translations for the game I have several contacts who are translators