

COMP120 Contract

As part of your contract with the publisher, *Ninja Nyan Play Lab*, you will be developing original intellectual property in the form of a codebase and tools to support the development of a platformer. To this end, they are requesting the following:

Contract #1 - Platformer Tile Generator

A tool that will generate textures for various different types of tile that could be conceivable to have in a platformer. There needs to be an allowance to specify variations through a set of attributes (e.g., soil-dry, wet, charred; foliage-spring, autumn, summer, winter; etc.).

Contract #2 - Platformer Level Generator

A tool that will take a level size and other attributes and generate a tile map to represent a 2d side-scrolling platformer. A tile set will be fed into this tool and it is imagined that any or all of these tiles could be used to generate the map. There should be clearly identifiable features of the level such as pitfalls, shrines, wells, water, pools, and so on; befitting of a historical-fantasy setting.

Contract #3 - Platformer Entity Generator

Various creatures will occupy the world, and so the ability to create many different types of items and enemies using various components is desired. These units should be saved to a new png file for use in the game.

Contract #4 - Platformer Entity Reskinning

To enable better re-use of assets, a tool which reskins in-game items and monsters devised by the dungeon entity. You will have to remove a colour and then add a new colour. There are four types (representing qualities) represented by a set of colours. For example: red, green, blue and yellow. Each unit of these teams will have to be saved in a new png file.

Contract #5 - Colour Blindness User Interface Analysis Tool

1-in-12 men and 1-in-200 women in the world suffer some form of colour blindness. Your studio lead has asked you to create a tool which takes in a screenshot of your game and then displays the image as if viewed by someone with a form of colour blindness. They would like you to save an image to file for every type of colour blindness so that the UI designer can adjust the colours of the in game UI.