Name: Andrew Kapp

Student Number: 2329108

Group Members: N/A

Project Type (animation, game, visual novel, website, comic etc.): Game

Project Name: Neon Trials

Description:

Neon Trials is a Dungeon Crawler/Roguelite that makes use of a fully procedurally generated dungeon to create unique levels for the player to run through. The game features a set of persistent stats that improve as the player performs actions related to the skills. The dungeon itself also reacts to a player’s growth which is measured by the number of runs they have completed; making the dungeon more difficult with each completed run.

Goals (paragraph form):

The goal is to challenge myself to build a technically advanced system that explores a balance between designer-built and procedurally generated content. I create rooms with enemies which the dungeon will then evaluate and choose whether to include in the next run.

This approach will inherently require some heavy design lifting and calculations to make the system autonomous.

I would like this project to become a strong portfolio piece that I can present and show to others as a testament to my skills as a developer, and to expand my current skill set with new and improved skills on as many fronts as time permits – how much can I learn from this process?

Goals (rubric form):

|  |  |
| --- | --- |
| Goal (Personal) | Weighting |
| Implement researched Algorithms and improve on sourced systems to match my needs. | 30 |
| Research and apply Game Design patterns found in Rogue-lites and action games to make a dungeon crawler experience. | 15 |
| Engage more with peers and the community to help with the development of the game | 5 |
| Total | 50% |

|  |  |
| --- | --- |
| Goal (Project) | Weighting |
| Procedurally Generated Dungeon using researched algorithms and design patterns. | 20 |
| Implementation of a run-to-run game loop where each run is different but consistent | 15 |
| Combat system with a degree of player freedom of choice. | 15 |
| Total | 50% |

Timeline:

|  |  |
| --- | --- |
| **Activity** | **Notes** |
| Dungeon Generation Engineering | Develop an autonomous dungeon generator on which to build the game. This may take upwards of 2 weeks to build completely but got an early start. |
| Character Controller and Combat System | Build a character controller capable of entering, exiting and partaking in combat encounters.  This will be the longest part of the development process due to the need for assets. This may take a month (4 weeks) to build.  - The main character asset has been drafted which will be used to animate and implement as a draft.   * Enemy assets will be sourced from Mixamo along with the animations to match. |
| First Playtest | An initial Playtest will be used to gauge the viability or need for the Dungeon to be expanded or for the focus to be shifted completely to gameplay. The changes will be implemented over the following two weeks. |
| Tweaking and Further Development | This is the period after the first playtest until the final submission and exhibition, this will include polish and playtesting. Following an iterative process as a reactive ideology is adapted until the project is submitted. |