MetroBlade

Technical Design Document – MetroBrawl Engine (working title)

Overview:

MetroBrawl is a 2D smash like fighting action game. Requiring the players to use various moves and items in order to send their opponents out of the arena. The game is comprised of a number of game modes from free for all to team battle.

Features:

The game engine will support the following features:

* Fully fledged asset pipeline and creation system. Allowing assets to be imported easily and new game object types to be created with full high level customisability.
* A GUI based toolset such as a level editor and character creator.
* A canvas based GUI system.
* A large diverse selection of characters which can be changed and customised in the engine
* Up to 4 controllable players on screen at any one time.
* Advanced 2D sound which takes into account sound position and supports various DSP effects.
* Several on screen rendering effects.

Platform:

The Engine should by minimum support the following specifications:

Operating System – Windows 10 (and possibly Mac/Linux)

RAM - 1GB

Graphics – Intel Integrated Graphics 4000 with integrated vRAM

Processor – Get arcade machine specs.

High Level System Structure:

The system is based on the Manger managed design pattern.

Components:

Managers: