## Pipes – A 2D Tile Game Template

This game template is provided as is – if you want to suggest new features contact me at ryan@ryanwebb.com.

If you open the scene Main.unity, you will see several gameObjects:

Main Camera – no explanations needed here

**UI** – the container for the main menu. This is built using the Unity 4.6 GUI system and the list of levels will be populated at runtime.

**Game** – the container for the game view and all associated assets. In the inspector you can change each tile graphic that is used in the game.

You will noticed there are 2 arrays: **Tile Textures** and **Tile Behaviours**. These two arrays must be the same length, and each tile behaviour array entry corresponds to the graphic in the same index in tile textures. The way the tile behaviours work are to specify the direction that the pipe can accept water from and the direction it outputs it.

## **TILE BEHAVIOURS** - INPUT / OUTPUT VALUE



The two numbers are interchangeable so it doesn't matter which way round they go. For simplicity's sake I've stuck to the directional order used in CSS margins (0. Top / 1. Right / 2. Bottom / 3. Left) if you are familiar with it!

To create new levels they must be in the Resources/Maps/ folder, and they must have the correct name, for instance map1.txt. If you open one of the example map files you will see that the numbers correspond to the tiles in the tile textures & behaviours arrays, with one exception – "0" represents an empty space.

I hope this template helps you with your project. If you're stuck for ideas of ways to extend it, how about:

- Making a pipe that splits the water (1 input and 2 outputs)
- Change the graphics to show when a pipe has water flowing through it