**Underground Game Specification**

This document specifies the game for the Scirra Underground Jam August/September 2015.

Summary

The purpose of the game is to efficiently mine an area through a serious of semi-autonomous robots. More robots can be purchased using the money raised.

Game space

The game takes place on a grid of indeterminate size each of which is 48 x 48 pixels (thus fits 13 x 20 squares in a 640 x 960 display). Each square represents an area of the ground. The top line of the grid is grass covered and cannot be mined. Initially a shaft of xxx depth is predug at the horizontal mid point of the area (from the top).

The following things can be part of the grid:

|  |  |  |
| --- | --- | --- |
| Code | Description | Description |
| 0 | C:\Construct2\Underground\Graphics\earth.png | Earth, with no coal in it. |
| 1-15 | C:\Users\Paul\AppData\Local\Microsoft\Windows\INetCache\Content.Word\coal7.png | Earth with increasing amounts of coal. |
| 16 | C:\Construct2\Underground\Graphics\empty.png | Empty space (horizontal tunnel or cavern) |
| 17-25 | C:\Construct2\Underground\Graphics\empty6.png | Empty space with mined coal, increasing. |
| 26 | C:\Construct2\Underground\Graphics\shaft.png | Vertically dug shaft. |
| 27 | C:\Construct2\Underground\Graphics\grass.png | Represents the top of the screen |
| 28 | C:\Construct2\Underground\Graphics\rock.png | Rock that cannot be dug through |
| 29 | C:\Construct2\Underground\Graphics\silver.png | Earth containing silver ore |
| 30 | C:\Construct2\Underground\Graphics\gold.png | Earth containing gold ore |
| 31 | C:\Construct2\Underground\Graphics\diamond.png | Earth containing diamonds |
| 32 | C:\Construct2\Underground\Graphics\rail.png | Open space with railway track |
| 33 | C:\Construct2\Underground\Graphics\block0.png | Open |
| 34 | C:\Construct2\Underground\Graphics\block1.png | Part open |
| 35 | C:\Construct2\Underground\Graphics\block2.png | Part open |
| 36 | C:\Construct2\Underground\Graphics\block3.png | Part open |
| 37 | C:\Construct2\Underground\Graphics\block4.png | Part open |
| 38 | C:\Construct2\Underground\Graphics\block5.png | Closed |

Coal occurs in clumps, Silver and Gold occur in horizontal groups. Diamond occurs singly.

Mapped on top of this is a ‘visibilty’ tilemap which allows unvisited parts of the mine to be hidden from view, which uses tiles 33 – 38.