Walls and Holes

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Brought to you with pleasure from: **The 3D Map Tool Team**

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Project Release Plan

Walls and Holes

- Brief outline:
  - Presently, making a 3D map for a video game or otherwise is a big ordeal, requiring a lot of high level skills. With *Walls and Holes*, we hope to change that.
- High level goals:
  - Be able to block out a 2D map with a tile grid, and automatically have it converted into a usable 3D map. The 3D map to be generated will be viewable in an in app view. Be able to create (or import) custom materials, and have them applied to prespecified tiles. Have access to intuitive tools to assist in the creation and editing of a map.

Project Release Plan - User Stories

Walls and Holes

Sprint 1:

13 - As a level designer, I want to be able to assign cells of a grid to different tile presets

13 - As a map maker, I want to be able to turn the 2D tile map into a 3D map

3 - As a 3D modeler, I want the program to export the terrain mesh to file formats that can be read by standard 3D modeling programs so that I can refine them with my own tools

8 - As a level designer, I want to see the 3D view of the map that I am making so that I don't have to export it to visualize it

Project Release Plan   -   User Stories

Walls and Holes

Sprint 2:

3 - As a user I should not have to specify anything extra for the map to blend tiles together properly

5 - As a user, I should be able to save and load a tile map

5 - As a level designer, I want to be able to create custom tile presets

8 - As a level designer, I want to be able to use a variety of tools to be able to more quickly edit a map

5 - As a level designer, I want to be able to use intuitive selection abilities

5 - As a level designer, I should be able to define custom materials

3 - As an artist, I should be able to import materials

2 - As a user, I want the program to export tile definition files and map files separately

Project Release Plan   -   User Stories

Walls and Holes

Sprint 3:

3 - As a user, I want to be able to use several different tile definition sheets with a single map

2 - As a 3D modeler, I don't want there to be any redundancies in the mesh

5 - As a level designer, I should be able to assign a default material for each of the several sides of a tile type

8 - As a level designer, I should be able to change the thickness / height of a tile.

1 - As a game designer i should be able to set the scale of the map output

8 - As a 3D modeler, I should be able to subdivide the output mesh in any way along grid edges so that I can split a large level into several parts

5 - As a level designer, I should be able to change the position of the tile's model inside the tile's grid location

Walls and Holes

A user will define several types of tiles (such as floor, wall, water, ect). They will then be able to draw the tiles onto a 2D grid, to define a map. The map will then be converted into a 3D mesh which can be exported as a <name>.obj. At a higher level, the user will have the option to create and apply materials to the generated model to add more visual detail.

Walls and Holes

There is a lot of complexity involved with the 2D -> 3D conversion.

A large amount of work is needed to build the full featured interface we want.

There are many user stories to get to in what may end up being a short amount of time.

Project Release Plan   -   Technologies

Walls and Holes

The project will use the application framework Qt.

Written in C++.

The graphics api openGl will be used to render generated meshes in app.

Qt Creator will be used as our IDE.