

Tile Editor Grading

Grading Criteria

The following lists the overall value for each feature of the assignment as a positive value. It then lists the amount of points I will take away if a particular aspect of that feature is not met as a negative value. When grading I will not subtract more points than the feature is worth overall.

1. _____ **20 Points - Importing Tile Sets** - Your tile editor must be able to import a tile set and then adjust for its width and height in tiles as well as the size of an individual tile. Individual tile sizes will be limited to 16 x 16, 32 x 32, or 64 x 64. In order to determine if the settings match the given tile set you should render a grid on top of the tile set. Your application must then be able to construct a map using the given tile set.
 - a. **-5 Points** – Is the imported tile set not visible in the map window after the import dialog box closes?
 - b. **-5 Points** – Is the imported tile set not visible in the tile set window after the open file dialog box closes?
 - c. **-15 Points** – Can the program not adjust for width and height of the new tile set? This could be done with a couple of NumericUpDown controls somewhere in the application. If you wish to calculate these values from the width and height of the tile set bitmap and the size of an individual tile that is acceptable.
 - d. **-15 Points** – Can the program not adjust for tile size of the new tile set? Somewhere in the application I must be able to change the size of an individual tile. There will be 3 fixed sizes that I will use for testing: 16x16, 32x32 and 64x64. Changing this value should redraw the grids on both the map and the tile set. NumericUpDown controls might be used for this. Some people make the 3 values selectable through a ComboBox or a set RadioButtons. The control is up to you.
 - e. **-10 Points** – Are there no grid lines on the tile set?
 - f. **-10 Points** – Are there no grid lines on the map?
2. _____ **10 Points - Scrolling the Tile Set** - I will make the tile set window smaller than the tile set bitmap and it should scroll correctly and handle mouse input correctly when scrolled. Remember that the scrolling must work correctly even when new tile sets are imported!
 - a. **-10 Points** – Does the tile set render incorrectly when scrolled? The bitmaps should paint correctly after scrolling takes place.

- b. **-5 Points** – Do the grid lines render incorrectly when scrolled?
 - c. **-5 Points** – Do the scroll bars not appear and disappear when the window becomes smaller and larger than the tile set? The bars should only be visible when the window is smaller than the tile set.
 - d. **- 5 Points** – Can the user scroll past the right or bottom of the tile set? When the scroll bars are all the way to the right and bottom of the window the right and bottom of the tile set should be at the right and bottom of the window's client rectangle.
 - e. **-10 Points** – Does mouse input not take into account the scrolling? When the tile set has been scrolled mouse input should still selected the tile in which the user clicked.
3. _____ **15 Points - Resizing the Map** - I will attempt to create a map of a given size that you will not be informed of ahead of time. The map size can be anything between 5 x 5 and 40 x 40 tiles. The resizing should be accomplished with a couple of NumericUpDown controls somewhere in the application. When the map is resized maintain any tiles that are currently visible. Don't just set the new map back to its default tile.
- a. **-15 Points** – Map does not resize.
 - b. **-10 Points** – Map does not keep the currently visible tiles.
4. _____ **10 Points - Scrolling the Map** - I will make the map window smaller than the size of the map in pixels and scroll bars should allow you to scroll around the entire map. Once scrolled mouse clicks should place the currently selected tile in the correct location of the map.
- a. **-10 Points** – Does the map render incorrectly when scrolled? The bitmaps should paint correctly after scrolling takes place.
 - b. **-5 Points** – Do the grid lines render incorrectly when scrolled?
 - c. **-5 Points** – Do the scroll bars not appear and disappear when the window becomes smaller and larger than the map? The bars should only be visible when the window is smaller than the map.
 - d. **- 5 Points** – Can the user scroll past the right or bottom of the map? When the scroll bars are all the way to the right and bottom of the window the right and bottom of the map should be at the right and bottom of the window's client rectangle.
 - e. **-10 Points** – Does mouse input not take into account the scrolling? When the map has been scrolled mouse input should still change the tile in which the user clicked.

5. _____ **20 Points - Saving and Opening the Map** - I will then save the map to a file, resize the map, reset the tiles and attempt to open the saved file. When opening a map file the program should readjust the current map size to match the file it is reading. The saved file should be in text as described in the *TileEditorOverview.pdf*. Converting coordinate pairs to single digits is discussed in the *TileEditorMechanics.pdf*.
- a. **-10 Points** – If I can't verify that the saved file has the correct information which at a minimum should be the width and height of the map and the individual values for each tile in the map as an integer.
 - b. **-10 Points** – Can I not open the saved file?
 - c. **-5 Points** – Can I only open saved files the same size as the current map?
6. _____ **15 Points – A Modal Dialog or Modeless Tool Window** – Your application must contain either a modal dialog box or a tool window. The tool window could be used to display the tile set. A modal dialog might be used to change the map size, tile set size and tile size or any other options that are appropriate for your application.
7. _____ **5 Points – New Menu Item** – Your application should have a new menu item that resets the map to its default size and resets all tiles in the map to the default tile. It does not have to reset the tile set although that can be an option if you wish.
8. _____ **5 Points – Library Research** – Use the Fullsail Library research databases (online or in the library) to examine other publicly available Tile Editors, Map Editors or Level Editors for additional features that might be implemented in you editor. Please add a "Research.txt" file to your project solution and include the name, publisher and at least one additional feature you would like to include. The feature does not have to be fully implemented to receive this grade. The research is the important thing.