Assignment 2 - Tile base map editor

The project should be able to be opened in Visual studio 2019, compile and run.

For this assignment I chose to create one main window view with three additional views.

- **MainView:** The main view has mostly buttons.
    - Export: exports the currently active grid and tileset to a json file.
    - Import: import a json file with a grid and a tileset.
    - Grid layers. Currently not active.
    - Grid collisions: This shows which tiles that got collision set on them, when this is shown the user may not place tiles and most deactivate it to continue.
    - New grid: Creates a new grid with desired rows and columns.
    - Load tileset. Creates a tileset from an image, the user must input tilewidth and height.

- **GridView:** Here may the user place the tile that is selected on the right from the tileset. The left mouse button adds a tile and the right one removes a tile. When you start the application a default tileset is loaded, and this tileset has one tile(**plain grass**) that has manipulation of neighbour tiles.

- **TileView:** This view displays the currently active tile from the tileset, this is the tile that will be placed in the grid. The “Fill empty space” button fills every tile on the grid that has no images. The Collide checkbox enables collision on the tile to be placed. The layer checkbox is useful for placing more than one tile on the same gridtile. If the layer checkbox is checked the image will be placed on the bottom, this is useful for ground tiles. If it is unchecked then a tile can be placed upon another tile, and this is useful when the user wants to place objects or items.

- **TileEditorView:** The loaded tileset is displayed here. The user can select a tile to be placed in the grid.

The code is currently very messy and has no unit testing. So this will probably be what I get to work on next. I focused on getting things to work the way I wanted first, because I struggled a lot with getting real time results when selecting and placing tiles. The data was saved but didn't show in the grid. I had to use a lot of events and reloading of views and viewmodels to get it to work.