# Level Editor

1. Make a separate tool program.
   1. Have it use your engine code as much as possible.
   2. Allow it to read and load any arbitrary FBX level file.
   3. Allow it to read and load your own level native data files (including navigation meshs, see below).
   4. Allow the user to navigate the scene placing and removing path nodes.
   5. Allow the user to select nodes
      1. [http://www.toymaker.info/Games/html/picking.html](https://owa.neumont.edu/owa/redir.aspx?C=ncTXr-wEbEei2mGEnUu_EhnMtqH_NNBIqwbX-CwogFkLT9pv_FhmB6Po93sP3qDHXjYoiz_vM6g.&URL=http%3a%2f%2fwww.toymaker.info%2fGames%2fhtml%2fpicking.html)
   6. Allow users to connect nodes.
      1. Connections are directed.
   7. Allow users to remove connections.
   8. Allow the user to automatically find unused path nodes.
   9. ~~Give the user an option to build the connections automatically.~~
      1. ~~Shoot rays against the collision mesh.~~
         1. ~~Where there are no collisions, make a bi-directed connection.~~
   10. Save the data to a compact native format for the game to consume.
2. Load your map and path data into your game.
3. Use the logic in the previous lab to have players path to random locations within the map.
   1. Maintain all of the features from the previous lab.