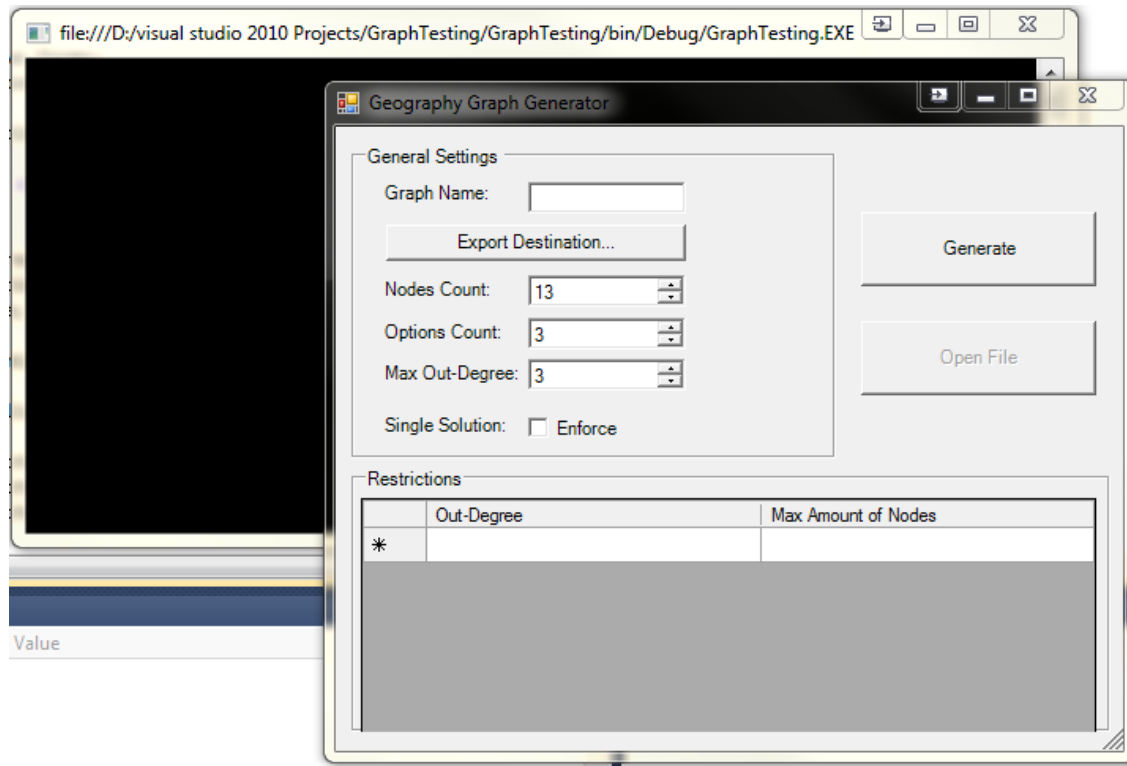


Graph Generator

In order to generate graphs for the geography game experiment start up the graph generator program and you will see the following screen:



Enter the following information:

- Graph name.
- Destination Folder.
- Nodes Count: The total amount of vertices in the graph.
- Options Count: The amount of options in this game (Equal to the start node out-degree).
- Maximum Out-Degree: The maximum out-degree in the graph.
- Single Solution (Yes/No): Make only one of the options in this graph a guarantee win.
- Restrictions:
 - Restrictions helps specifying and controlling the difficulty of the game (also affects the generation time).
 - Restrictions are of the form $\langle out_degree, max_amount \rangle$ that indicates that there will be **at most** max_amount nodes with the given out_degree .
 - **It is recommended to enforce zero nodes with out-degree of zero in order to make the graph harder to visualize.**

When all the necessary details have been filled you may click “Generate”, it will generate the graph into xml file (according to the GraphML Scheme) which you can view by clicking “Open File”.

In order to transfer this graph into the experiment you need to use [yEd](#) graph editor in order to draw the graph and export it.

When using yEd it is **important** to name the vertices as “n#” (f.e: “n3”, “n99”, “n21”), **Start node should be “n0”**.

Moreover, you need to open the xml file that was exported from yEd and look for the xml tag that describes the solution for this graph. (f.e: **<node id=“n4”>**) and add an attribute *win* = “*true*” to indicate that this is the solution. (f.e: **<node id=“n4” win=“true”>**).