

## Requirements:

- Visual studio 2017 or higher with visual C++
- Windows 64bit OS

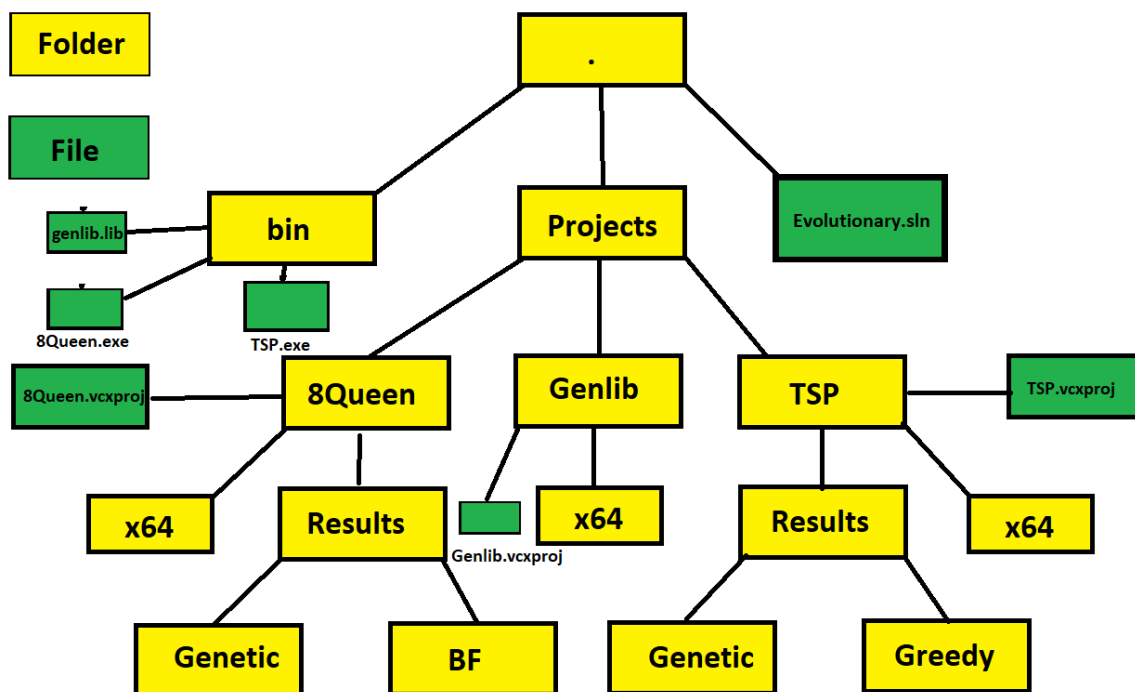
## Solution Design:

The solution contains 3 projects, all projects are in \$(SolutionDir)\Projects directory.

The 3 projects are: Genlib, 8Queen, and TSP. When compiling the solution, all the binaries from all the projects are outputted to \$(SolutionDir)\bin\\$(Platform)\\$(Configuration).

When Genlib project is compiled, a file Genlib.lib is created. This library is used by 8Queen and TSP projects. Genlib project contains the definition of Chromosome, and Genetic Model. The genetic model receives initialize, selection, crossover, mutation functions, and runs them.

When 8Queen project is compiled, Genlib.lib is linked, and 8Queen.exe is created. Same goes for TSP project.



### **How to build solution:**

1. Clone repository
  - GitHub url: <https://github.com/allenbronshtein/GeneticAlgorithms1>
  - SSH: <git@github.com:allenbronshtein/GeneticAlgorithms1.git>
2. Open visual studio, click File->Open->Project/solution.
3. Double click Evolutionary.sln
4. Set configuration to Release, and platform to x64.
5. Right click on solution icon and press build.

### **How to run project:**

The available projects for running are TSP and 8Queen. To choose who you want to run, simply right click the project you want to run and choose "Set as startup project".

After a startup project has been chosen, press F5 (or green run button) to run.

Results will be printed to \$(ProjectDir)\results

You can also active by click exe in bin directory, notice that results folder will be created in bin directory.

**If any issues appear or anything else is needed, please let me know:**  
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