[**Assignment 1 Genetic Algorithm**](https://online.ittralee.ie/webapps/assignment/uploadAssignment?content_id=_314022_1&course_id=_13976_1&group_id=&mode=cpview) **Due Friday 14th Feb**

This assignment requires you to analyse the efficiency of the Genetic Algorithm we created over the last 2 weeks.

* Submit (or share) your Jupyter Notebook, before closing date
* 2 parts outlined below
* Marking as per Rubric
* This assignment counts for30% of your overall grade

**Part 1.**

* Vary the parameters (only) and document the effects on the efficiency of the algorithm
* Find the optimal solution
* Comment on the process

**Part 2.**

* Alter the algorithm through code to improve efficiency
* Document the process
* Find optimal solution.

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| **Presentation and Commentary Part 1** | Points:  **30**(30.00%)  Analysis of performance, with graphs and data for differing parameters.  Comments on the results.  Marks for substance of the "science or methodology",  presentation of results and commentary. |
| **Coding Part 1** | Points:  **10**(10.00%)  Code used in developing testing suites |
| **Solutions Part 1** | Points:  **10**(10.00%)  How well does the optimal solution perform? |
| **Presentation and Commentary Part 2** | Points:  **10**(10.00%)  Marks for the "documentation" or "recording" of the improvements (or lack of) in efficiency  of the algorithm on completion of code modifications. |
| **Coding Part 2** | Points:  **30**(30.00%)  Code quality and functionality as outlined in the assignment brief/classes |
| **Solutions 2** | Points:  **10**(10.00%)  How well does the optimal solution perform? |