SMainstream Programme – Artificial Intelligence Dept.

EAs Term Group – Project (Cover Sheet)

Discussions Scheduled for Week 14 *(Saturday, May 11th, 2024)*.

- Print this cover sheet and attach it to a printed copy of the documentation.
- Please write all your names in Arabic & ensure your students' IDs are correct.
- Handwritten Signatures for the attendance of all team members should be filled in before the discussion.
- Please attend the discussion on time *(announced separately)*.

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Project Name: Particle Swarm Optimization (PSO) for University Timetable Scheduling

Team Number: 24

Team Information *(typed, not handwritten, except for the attendance signature)*:

	ID [Ordered by ID]	Full Name [In Arabic]	Attendance [Handwritten Signature]	Final Grade
1	20210970	مهاب محمد ربيع محمد		
2	20211042	ياسر شبير محمد شبير خالد		
3	20210526	عبدالرحمن محمد على دراز		
4	20210462	شهاب محمد احمد ابراهيم عربان		
5	20211076	يوسف سعيد جمعه الدمرداش		
6				
7				

Grading Criteria:

Common Criteria	Grade
1. Documentation	/MAX
2. Plotting and Comparing results	/MAX
3. Graphical User Interface	/MAX

Bonus	Grade
Investigating the effect of multiple (at least 2) initialisation approaches	/MAX
Investigating the effect of over-selection for large populations	/MAX
Educational visual interface	/MAX

Idea #					Comments
1	**Constraints Handling [/ MAX]**	**Objective Function [/ MAX]**	**Correct usage of Dataset [/ MAX]**	**Implementing Evolutionary Algorithm [/ MAX]**	
2	**5 Optimization Functions [/ MAX]**	**Genetic Algorithm [/ MAX]**	**Differential Evolution [/ MAX]**	**Analysis and Comparison [/ MAX]**	
3	**3 Optimization Functions [/ MAX]**	**Swarm Intelligence Alg. 1 [/ MAX]**	**Swarm Intelligence Alg. 2 [/ MAX]**	**Analysis and Comparison [/ MAX]**	
4 & 5	**Evolutionary Algorithm [/ MAX]**	**Coevolution [/ MAX]**	**Neural Network [/ MAX]**	**Correct Game Logic [/ MAX]**	
6	**Correct Usage of DataSet [/ MAX]**	**Particle Swarm Intelligence [/ MAX]**	**Simulated Annealing [/ MAX]**	**Analysis and Comparison [/ MAX]**	
7	**Constraints Handling [/ MAX]**	**Particle Swarm Intelligence [/ MAX]**	**Complexity of Timetable [/ MAX]**		

8	**Testing on Datasets [/ MAX]**	**Differential Evolution [/ MAX]**	**Neural Network Implementation [/ MAX]**	**Complexity of Neural Network Structure [/ MAX]**	