Fall 2022	Course Code:

Selected Topics 1: Neural Networks and Deep Learning

Maximum Marks: 100

Description:

The project is team based. Using the provided dataset, each team is tasked with training multiple (at least two) different CNN models on an image classification task.
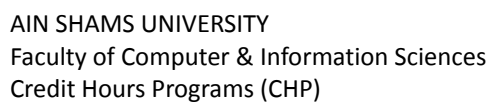
Project Requirements: -
1. Build multiple appropriate models (at least two) and understand each part of it (AlexNet, Inception, …)
2. Apply the appropriate data preparation steps. (Preprocessing and data augmentation)
3. Each team must submit their results on the project's Kaggle competition where part of their project grade will be dependent on their best accuracy achieved in the competition.
4. Deliver a detailed report of all data preparation steps, different trials, results and your conclusion from these trials.

Duration: ~ 2 weeks

Programming Code\Project marking criteria

Course Code:	_____	Course Name:	_____	Project Team ID	_____	Date:	_____

Student Name:	_____	Student ID:	_____

	A (89-100)				B (76-88)				C (67-75)				D (60-66)				F (0-59)			
	100	96	92	89	88	84	80	76	75	72	69	67	66	64	62	60	59	40	20	0
Relevance & implementation of Required Functions (46%)	● All required functions were implemented fully, they were relevant and structured to solve the task.				● Functions in program are correctly structured and implemented but there are few missing issues functions or minor deviations				● Some Functions in program are not correctly structured and implemented. ● There are some missing issues or major deviations				● Many functions are not correctly structured and implemented. ● There are many missing issues or major deviations				● Most of functions are incorrect ● There are major deviations in most of the implemented functions.			
Test Run and Testing Accuracy (22%)	● Model testing was applied successfully and the technique used achieved top percentile accuracy				● Model testing was applied successfully and the technique used achieved above average accuracy				● Model testing was applied successfully and the technique used achieved average accuracy				● There were minor syntax errors that were solved during discussion and/or the accuracy is very low				● There are major syntax errors such that the program doesn't run the test at all. No accuracy is provided			
Oral Discussion & Contribution (16%)	● The student clearly explained their contribution to the team's work or answered all questions asked correctly				● The student answered most of the questions correctly				● The student answered some of the questions correctly				● The student showed low understanding of the delivered project and was unable to answer most questions				● The student showed no understanding or contribution to the project			
Project Report (16%)	● The report covers all points required sufficiently				● The report missed a few minor required points or the point was insufficient				● The report missed a few major points				● The report missed many major points or was insufficient				● The report missed most of the required points or was not delivered			

1st marker Total	_____	1st marker Signature	_____	**ASU** Agreed Mark	_____

| **2nd Marker Total** | _____ | 2nd marker Signature | _____ | **UEL** Agreed Mark | _____ |

General Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

UEL Grading System	Agreed Mark Range	ASU Grading Scale	
% equivalent at UEL		% at ASU	Grade
95% and higher		97% and higher	A+
82% to less than 95%		93% to less than 97%	A
70% to less than 82%		89% to less than 93%	A-
66% to less than 70%		84% to less than 89%	B+
63% to less than 66%		80% to less than 84%	B
60% to less than 63%		76% to less than 80%	B-
56% to less than 60%		73% to less than 76%	C+
53% to less than 56%		70% to less than 73%	C
50% to less than 53%		67% to less than 70%	C-
45% to less than 50%		64% to less than 67%	D+
40% to less than 45%		60% to less than 64%	D
Less than 40%		Less than 60%	F