INF283 | Introduction to Machine Learning
Project 1 Grading Rubric
Checked by: Adnan Niazi & Håkon Tjeldnes
Date: 09-Oct-2018

Student's name: Sindre F.
Points obtained by the student: 17 **/17 (max)**
(This is the number of points that counts towards the final grade)

Has the student passed the project: Yes
(You need at least 8.5 points to pass the project)

Is this the student's second attempt at this project: ☐ **Yes**

N.B.: Students who have failed the project on the first attempt have a chance to resubmit an improved version of their work. Resubmitted projects will be assessed using the same rubric as the original submission. To pass the project on the second attempt, the student should score at least 11 points on the rubric. However, all projects that pass on the second attempt will count only 8.5 points towards the final grade.

SUMMARY
Total points obtained in the project: 19

Question/criteria	Points obtained	Max. points
Question 1: Implement the ID3 algorithm from scratch	6.00	**06**
Question 2: Gini Index	1.00	**01**
Question 3: Pruning	4.00	**04**
Question 4: Classify edible and poisonous mushrooms	2.50	**2.5**
Question 5: Implementation comparison	0.50	**0.5**
Quality of the report	1.50	**1.5**
Quality/documentation of the code	1.50	**1.5**
Bonus for extraordinary work	2.00	**02**

Penalty for late submission	On time (0 points) ☐	1 day late (-4 points) ☐	2 days late (-8 points) ☐	3 days late (-12 points) ☐	4 days late (-16 points) ☐

Note: If a student obtains more than 17 points in the project because of the bonus, (s)he will still only get a maximum of 17 points. The bonus is there to compensate the student if (s)he has done an extraordinary job, but has suffered deduction in points in some part of the project due to some minor mistake.

Question 1 | Implement the ID3 algorithm from scratch (6.00 /6 points)

Has the student correctly implemented the logic for building the tree?	Yes, perfect! (2 points) ☑	Mostly, but there is some mistake in it (1.5 points) ☐	No (0.5 points) ☐	Didn't do it at all (0 points) ☐
Has the student correctly implemented Entropy?	Yes, perfect! (2 points) ☑	Mostly, but there is some mistake in it (1.5 points) ☐	No (0.5 points) ☐	Didn't do it at all (0 points) ☐
Has the student correctly implemented Information Gain?	Yes, perfect! (1 points) ☑	Mostly, but there is some mistake in it (0.75 points) ☐	No (0.25 points) ☐	Didn't do it at all (0 points) ☐
Has the student implemented the predictions using the decision tree correctly?	Yes, perfect! (1 points) ☑	Mostly, but there is some mistake in it (0.75 points) ☐	No (0.25 points) ☐	Didn't do it at all (0 points) ☐
Comments (if any) by the graders:				

Question 2 | Gini Index (1.00 /1 point)

Has the student correctly implemented Gini Index?	Yes, perfect! (1 points) ☑	Mostly, but there is some mistake in it (0.75 points) ☐	No (0.25 points) ☐	Didn't do it at all (0 points) ☐
Comments (if any) by the graders:				

Question 3 | Pruning (4.00 /4 points)

Has the student correctly implemented pruning correctly?	Yes, perfect! (4 points) ☑	Mostly, but there is some mistake in it (3 points) ☐	No (1 points) ☐	Didn't do it at all (0 points) ☐
Comments (if any) by the graders:				

Question 4: Classify edible and poisonous mushrooms (2.50 /2.5 points)

Has the student correctly cleaned the mushroom's dataset before using it?	Yes, perfect! (0.5 points) ☑	Mostly, but there is some mistake in it (0.25 points) ☐	Didn't do it at all (0 points) ☐
Is the tree working for this dataset ?	Yes, perfect! (0.5 points) ☑	Mostly, but there is some mistake in it (0.25 points) ☐	Didn't do it at all (0 points) ☐
Is model selection done correctly?	Yes, perfect! (1 points) ☑	Mostly, but there is some mistake in it (0.5 points) ☐	Didn't do it at all (0 points) ☐
Is model evaluated correctly?	Yes, perfect! (0.5 points) ☑	Mostly, but there is some mistake in it (0.25 points) ☐	Didn't do it at all (0 points) ☐
Comments (if any) by the graders:			

Question 5: Implementation comparison (0.50 /0.5 points)

Has the student compared his approach to existing algorithms?	Yes (0.25 points) ☑	No (0 points) ☐
Has the explained the results of the comparison in some detail?	Yes (0.25 points) ☑	No (0 points) ☐
Comments (if any) by the graders:		

Quality of the report (1.50 /1.5 points)

Do the approach and design choices make sense?	Yes, perfect! (1 point) ☑	Yes, but there is room for improvement (0.75 points) ☐	No (0.25 points) ☐
Has the student explained his approach and design choices clearly?	Yes, perfect! (0.5 points) ☑	Yes, but there is room for improvement (0.25 points) ☐	No (0 points) ☐
Comments (if any) by the graders:			

Quality/documentation of the code (1.50 /1.5 points)

Has the student documented the classes, functions, and methods properly?	Yes, perfect! (1 point) ☑	Yes, but some classes/functions/methods are lacking proper documentation (0.75 points) ☐	No (0.25 points) ☐	Didn't do it at all (0 points) ☐
Has the student used a consistent code style?	Yes, perfect! (0.5 points) ☑	Yes, but there is room for some improvement (0.25 points) ☐	No (0 points) ☐	
Comments (if any) by the graders:				

Bonus for extraordinary work (2.00 /2 points)

Has the student done something extraordinary and deserves a bonus	Yes (2 points) ☑	No (0 points) ☐
Comments (if any) by the graders:	- Bonus for model evaluation and discussion. - Write in English please.	
