Week 4 Quiz

Due Feb 15 at 11:59pm **Points** 12 **Questions** 3
Available after Feb 9 at 12am **Time Limit** 25 Minutes **Allowed Attempts** 2

Instructions

instructions.png Instructions

This quiz consists of three questions. To be successful with the module quizzes, it's important to read the assigned chapters, practice exercises, and complete the interactive activities. Keep the following in mind:

- **Attempts:** You will have two attempts for this quiz with your highest score being recorded in the grade book.
- **Timing:** You will need to complete each of your attempts in one sitting, and you are allotted 25 minutes to complete each attempt.
- **Answers:** You may review your answer choices and compare them to the correct answers after your final attempt.

To start, click the "**Take the Quiz**" button. When finished, click the "**Submit Quiz**" button.

Technical Support Technical Support

Need help using Canvas Quizzes? If so, please review the following guide: **Canvas Student Guide - Quizzes (https://community.canvaslms.com/docs/DOC-10701#jive_content_id_Quizzes)**

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	less than 1 minute	12 out of 12

Attempt	Time	Score

Score for this attempt: **12** out of 12
Submitted Feb 9 at 1:02pm
This attempt took less than 1 minute.

Question 1

4 / 4 pts

Which of the following is NOT true regarding decision trees?

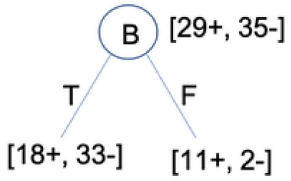
Correct!

- (selected) Decision trees can only be used for classification problems.
- All decision trees make a complete space of finite discrete-valued functions.
- A decision tree represents a disjunction of conjunctions of constraints on the attribute values of instances.
- Decision trees can be used for both classification and regression.

Question 2

4 / 4 pts

Assume a training data set S has 29 positive instances and 35 negative instances. Attribute B has two values: T and F. There are 51 training instances with B = T, out of which 18 are positive and 33 are negative; for the case of B = F, there are 13 instances, out of which 11 are positive and 2 are negative. What is the entropy of set S (i.e., H(S))?



Correct!

- (selected) 0.993
- 0.912
- 0.974
- 0.825

Question 3

4 / 4 pts

In Question 2, what is the information gain of attribute B?

- 0.936

Correct!

- (selected) 0.121
- 0.385
- 0.219

Quiz Score: **12** out of 12