| | |
|---|---|
| **Started on** | Thursday, 24 October 2024, 2:32 PM |
| **State** | Finished |
| **Completed on** | Thursday, 24 October 2024, 2:35 PM |
| **Time taken** | 2 mins 59 secs |
| **Marks** | 17.00/20.00 |
| **Grade** | **8.50** out of 10.00 (**85**%) |

Question 1

Correct

Mark 2.00 out of 2.00

Principal Component Analysis (PCA)...

- a. Transforms a large set of variables into a smaller set that contains most of the original information ✓
- b. Aims at finding components that minimize the variance of data
- c. Is an algorithm for item reduction
- d. Does not yield great results due to the curse of dimensionality

Your answer is correct.

Question 2

Correct

Mark 2.00 out of 2.00

When dealing with complex data, which one is NOT an example of Attribute Reduction?

- a. Slice
- b. Cut
- c. Project
- d. Zoom ✓

Your answer is correct.

Question 3

Correct

Mark 1.00 out of 1.00

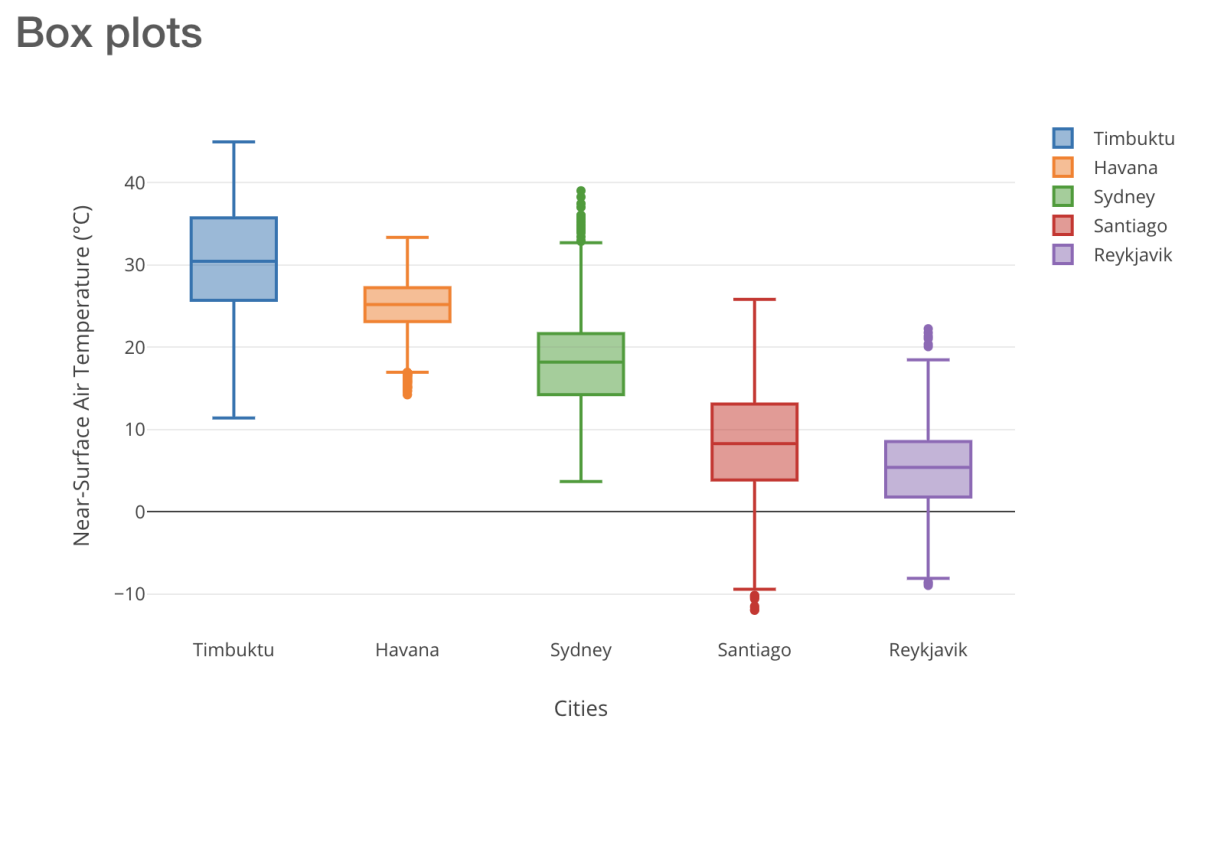
Attribute Aggregation...

a. Implies item clustering

b. Is related to dimensionality reduction ✓

c. Is related to dimensionality reduction but it is not at all related to the curse of dimensionality

d. Looks like this




Your answer is correct.

Question 4

Correct

Mark 2.00 out of 2.00

Heatmaps may be seen as an example of item aggregation.

Select one:

True ✓

False

Question 5

Correct

Mark 2.00 out of 2.00

Scenario 1: you make a batch of cookies, with 4 different colors (red, green, blue, yellow). You have 4 categories.

Scenario 2: you make a batch of cookies, with 4 different colors, 4 shapes, 4 sizes and 4 toppings. Now you have 4*4*4*4=256 categories.

....

and so on

...

So, when dealing with data that has a very large number of variables, you often are faced with...

- a. The curse of dimensionality ✓
- b. Zipf's Law
- c. TF-IDF
- d. Nielsen's Heuristics

Your answer is correct.

Question 6

Correct

Mark 1.00 out of 1.00

Projection may be seen as an example of attribute aggregation.

Select one:

- True ✓
- False

Question 7

Incorrect

Mark 0.00 out of 2.00

When dealing with complex data, which is NOT an example of Item Reduction?

- a. Constrained
- b. Pan/Translate ✗
- c. Slice
- d. Zoom

Your answer is incorrect.

Question 8

Correct

Mark 2.00 out of 2.00

Which is usually NOT an example of item aggregation?

- a. Clustering
- b. Histograms
- c. Scatterplots ✓
- d. Boxplots

Your answer is correct.

Question 9

Correct

Mark 1.00 out of 1.00

When evaluating utility in InfoVis...

- a. We must get user feedback to find out whether our Vis provides new insights on data ✓
- b. We must measure time, errors, etc.
- c. We will gather insights on efficiency and user satisfaction
- d. The think aloud protocol is not a good idea

Your answer is correct.

Question 10

Correct

Mark 2.00 out of 2.00

There are two main methods of interface evaluation...

- a. Empirical, which relies on predictive models, and analytical, which relies on users
- b. Analytical, which doesn't involve users, and empirical, which does. ✓
- c. Empirical, which relies on experts, and analytical, which relies on users
- d. Empirical, which doesn't involve users, and analytical, which does.

Your answer is correct.

Question 11

Correct

Mark 2.00 out of 2.00

Which is NOT a type of evaluation?

- a. Predictive Evaluation
- b. Zipf's Evaluation ✓
- c. Empirical Evaluation
- d. Heuristic Evaluation

Your answer is correct.

Question 12

Incorrect

Mark 0.00 out of 1.00

Does it make sense to use Predictive Evaluation in InfoVis?

- a. No. A technique justification should be used instead.
- b. Yes, but we should combine them with Usability + UX + Utility tests. ✗
- c. No. Utility tests are a good replacement.
- d. Yes, since it relies on experts. But specialized heuristics should be used instead of traditional Nielsen's heuristics.

Your answer is incorrect.