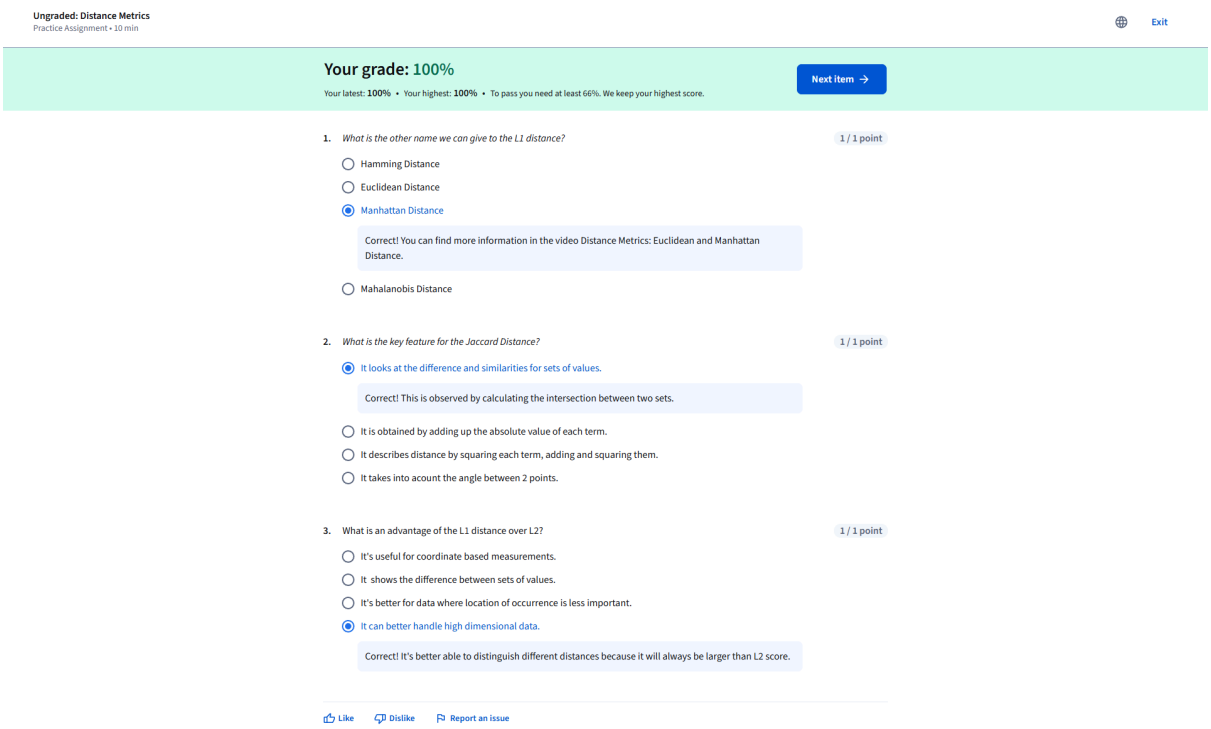
Ungraded: Distance Metrics



Ungraded: Distance Metrics
Practice Assignment • 10 min

Exit

Your grade: 100%

Your latest: 100% • Your highest: 100% • To pass you need at least 66%. We keep your highest score.

Next item →

1. *What is the other name we can give to the L1 distance?* 1 / 1 point

- Hamming Distance
- Euclidean Distance
- Manhattan Distance

Correct! You can find more information in the video Distance Metrics: Euclidean and Manhattan Distance.

- Mahalanobis Distance

2. *What is the key feature for the Jaccard Distance?* 1 / 1 point

- It looks at the difference and similarities for sets of values.

Correct! This is observed by calculating the intersection between two sets.

- It is obtained by adding up the absolute value of each term.
- It describes distance by squaring each term, adding and squaring them.
- It takes into acount the angle between 2 points.

3. What is an advantage of the L1 distance over L2? 1 / 1 point

- It's useful for coordinate based measurements.
- It shows the difference between sets of values.
- It's better for data where location of occurrence is less important.
- It can better handle high dimensional data.

Correct! It's better able to distinguish different distances because it will always be larger than L2 score.

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Graded: Module 2 Quiz

Your grade: 80%

Your latest: **80%** • Your highest: **80%** • To pass you need at least 60%. We keep your highest score.

Next item →

1. *What is the other name we can give to the L2 distance?* 1 / 1 point

- ○ Mahalanobis Distance
- ○ Manhattan Distance
- ◉ Euclidean Distance
- ○ Hamming Distance

Correct
Correct! You can find more information in the video Distance Metrics: Euclidean and Manhattan Distance.

2. *Which of the following statements is a business case for the use of the Manhattan distance (L1)?* 1 point

- ○ We use it in business cases where the dimensionality is unknown.
- ◉ We use it in business cases with outliers.
- ○ We use it in business cases where there is very high dimensionality.
- ○ We use it in business cases where there is low dimensionality.

Incorrect
Incorrect. Please review the video Distance Metrics: Euclidean and Manhattan Distance.

3. *What is the key feature for the Cosine Distance?* 1 / 1 point

- ○ It is not sensitive to the size of the data set.
- ◉ The Cosine Distance, which takes into acount the angle between 2 points.
- ○ The size of the curve.
- ○ It is sensitive to the size of the data set.

Correct
Correct! This metric gives us the cosine of the angle between vectors, define by each point. You can find more information in the video Distance Metrics: Cosine and Jaccard Distance.

4. *The following statement is an example of a business case where we can use the Cosine Distance?* 1 / 1 point

- ○ Cosine is useful for coordinate based measurements.
- ○ Cosine distance is less sensitive to the curse of dimensionality
- ○ Cosine distance is more sensitive to the curse of dimensionality
- ◉ Cosine is better for data such as text where location of occurrence is less important.

Correct
Correct! You can find more information in the video Distance Metrics: Cosine and Jaccard Distance.

5. *Which distance metric is useful when we have text documents and we want to group similar topics together?* 1 / 1 point

- ○ Mahalanobis Distance
- ○ Manhattan Distance
- ◉ Jaccard
- ○ Euclidean

Correct
Correct! You can find more information in the video Distance Metrics: Cosine and Jaccard Distance.