Goskills

Python Data Science Mistakes to Avoid

GoSkills online course syllabus

Skill level
Beginner

Lessons
24

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Pre-requisites
No prior experience needed

Video duration
43m

Estimated study time
47m 36s

Instructor
Lavanya Vijayan

Introduction

1   Avoiding common Python mistakes

2   Getting the most from this course
After watching this video, you will know what background knowledge would be beneficial to have before starting this course.

Avoid Mistakes in Coding Practices

3   Not writing comments
One of the most common mistakes when programming is not writing comments along the way.

4   Not organizing your directory
Another common mistake when working with data is not organizing your directory into categories, which causes clutter and confusion.

5   Not testing
As you make changes to your code, it is important to consistently test to ensure that your code does not break.

6   Not sharing data referenced in code
If you share your code with a project partner, but you do not share the data you referenced, there is not much they can do.

7   Hardcoding inaccessible paths
If you hardcode paths that others do not have access to, they cannot run your code and will have to manually change paths.

8 Name clashing with Python Standard Library

A common mistake that can occur when programming is name clashing with modules from the Python Standard Library.

9 Not importing relevant libraries and modules

A common mistake that can come up when using modules and libraries is not importing them first.

10 Naming vaguely

A programming mistake you want to avoid is naming things vaguely.

Avoid Mistakes in Structuring Code

11 Modifying a list while iterating over it

Another common mistake in programming is modifying a list while iterating over it.

12 Using for loops instead of vectorized functions

For loops are great, but there are times when for loops are too slow.

13 Using class variables vs. instance variables

A common mistake to avoid when using object oriented programming is incorrectly using class variables instead of instance variables.

14 Calling functions before defining

A mistake that can come up when programming is calling functions before defining them.

15 Creating circular dependencies

When you're programming, it's important to avoid the mistake of creating circular dependencies.

Avoid Mistakes in Handling Data

16 Not choosing the right data structure

When working with data, a common mistake is choosing the wrong data structures.

17 Skimming data

Another common mistake that data scientists should avoid is skimming data.

18 Not using the right visualization type

When creating visualizations of your data, it is easy to get caught up on the aesthetic.

19 Not addressing outliers

A mistake that data scientists should avoid is not addressing outliers in data.

20 Not updating your dataset

Another mistake to avoid when working with data is not updating your dataset properly.

21 Not cleaning data

A common mistake that can occur when working with data is not cleaning your data, which can be problematic.

Avoid Mistakes in Machine Learning

22 Using features that will be unavailable later

A common mistake in machine learning is choosing features that will not be available in the future.

23 Using redundant features

Another mistake to avoid in machine learning is using redundant features, which affects your model's performance.

Conclusion

24 Next Steps

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