DataScienceEcosystem

August 19, 2025

Add your code below following the instructions given in the course

1 Data Science Tools and Ecosystem

1.1 Introduction

In this notebook, data science tools and ecosystem are summarised.

1.2 Data Science Languages

Some of the popular languages that Data Scientists use are:

1. Python
2. R
3. SQL
4. Julia
5. Scala

1.3 Data Science Libraries

Some of the commonly used libraries used by data scientist include:

1. Pandas
2. NumPy
3. Matplotlib
4. Scikit-learn
5. TensorFlow

1.4 Data Science Tools

Data science Tools
Jupyter Notebook
RStudio
Apache Zeppelin

1.5 Arithmetic Expression Examples

In this section, we will explore examples of arithmetic expressions. These expressions can be used to perform basic mathematical operations such as addition, subtraction, multiplication, and division.

1.6 Below are some examples of arithmetic expressions:

```
[6]: # Evaluate the arithmetic expression
     result = (3*4)+5
     result
```

[6]: 17

```
[7]: # This will convert 200 minutes to hours by dividing by 60

     minutes = 200
     hours = minutes/60
     hours
```

[7]: 3.3333333333333335

1.7 Objectives:

This notebook covers the following objectives: - List popular languages used in data science - Identify commonly used libraries fo Data Science - Explore development environment tools for Data Science - Demonstrate basic arithmetic expressions in Python - Convert units (e.g., minutes to hours) using python

1.8 Author

Michael Sikalas

[ ]: