

SESSION PLAN DAY 1

Session Name

Introduction to DS and Getting Started with Python

Learning Outcomes

- Learn what Data Science truly is, sans the jargon.
- Ability to understand when Data Science is useful and when it isn't?
- Get a bird's eye view of the entire breadth of Machine Learning
- Map the journey from a learner to a complete Data Scientist
- Understand Python's data structures and be able to apply them.
- Know how variables work is able to manipulate them.
- Learn the use of different operators in Python.

Prerequisites for the Students

- Introduction to Data Science
- Getting started with Python concept

Student Activities

- Introduction
- Tell your views on Data Science?
- Difference between Data Science and Machine Learning.
- What do you know about the python language?
- Actively Listening
- Share experiences: Different source of Information
- Overview of Introduction to Data Science
 - What is Data Science?
 - What is not Data Science?
 - Different types of Machine Learning with real use cases
- Overview of Getting Started with Python
 - Variables in Python
 - Data Structures in Python
 - Membership and Identity operators
- Practice problems on variables, Data Structures and Membership and Identity Operators
 - Refer the GitHub repo for problems
- Quiz on Intro to data science and getting started with python.
- Questions and Discussion on doubts - AMA
- Code Along (refer the GitHub repo)

Next Session

- Concept - Handling Problem Flow with Python
- Key topics to be highlighted - highlight where they would need to spend more time and importance w.r.t Data Science.
 - Conditional Statements
 - Exception handling
 - The file I/O
 - Classes in Python
- Understanding the object-oriented programming paradigm would be a little bit challenging for non-programmers. Alert them to not get overwhelmed.