SESSION PLAN	
Session Name	Introduction to Probability

Learning Outcomes

- Understand how to calculate the probability
- Learn how probability can be utilized in decision making
- Understand and differentiate between various probability distributions
- Apply principles of probability to answers questions on real data

Prerequisites for the Students

- Introduction to Probability - Go through the concept and solve the tasks and assessments.

Student Activities

- Discuss with the Mentor what you have learned.
- Overview of Introduction to Probability
    - Conditional Probability & Bayes Theorem
    - Probability Distributions
- How many ways are there to split 10 people into 2 teams so that they can play 5 on 5 basketball?
- One hundred people line up to board an aeroplane. Each has a boarding pass with an assigned seat. However, the first person to the board has lost his boarding pass and takes a random seat. After that, each person takes the assigned seat if it is unoccupied, and one of the unoccupied seats at random otherwise. What is the probability that the last person to board gets to sit in his assigned seat?
- Take weather data and perform probability operations on weather data in the classroom so that learners can understand how to convert a probability into coding.
- Practice problems on Conditional Probability & Bayes Theorem and Probability Distributions.
- Questions and Discussion on doubts - AMA

Next Session

- Concept - Making Inference from Data
- Key topics to be highlighted - highlight where they would need to spend more time and importance w.r.t Data Science.
    - Basics of inferential statistics
    - Central Limit Theorem
    - Confidence Intervals
    - Hypothesis Testing