SESSION PLAN	
Session Name	Machine learning: Logistic Regression

## **Learning Outcomes**

- Understand when to use Logistic Regression
- Know the concepts of odds, odds ratio and sigmoid function
- Build a linear regression model using sklearn
- Understand the different evaluation metrics for classification tasks

## **Prerequisites for the Student**

• Machine learning: Logistic Regression

## **Student Activities**

- Ask learners what they have learned from the concept? (10 min)
- Medium blog on Logistic Regression: (10 min)
  https://medium.com/data-science-group-iitr/logistic-regression-simplified-9b4efe801389
- Why linear regression is not good for classification? (10 min)
- Overview of Machine learning: Logistic Regression (60 min)
  - Sigmoid
  - Cost Function
  - Evaluation Metrics
- Practice problem on Machine learning: Logistic Regression
  - Refer the GitHub repo for problems (30 min)
- Quiz on Machine learning: Logistic Regression. (10 min)
- Code Along (125 min)
- Questions and Discussion on doubts AMA (30 min)

## **Next Session**

- Concept Improving your model with Feature Selection (30 min)
- Key topics to be highlighted highlight where they would need to spend more time and importance w.r.t Data Science.
  - o Feature Selection Importance
  - Different types of Feature Selection Methods
  - PCA