SKILLCONNECT
Innovating Engineering!

# Week 2: Intermediate Challenge

**Agenda**: Learning & Implementing Basic Algorithms from Scratch

**Topics Covered:** KNN, KMeans, Regression

**Problem Statement**

Develop a Google Colab notebook with well documented code for the following topics. Each topic must be shown in a separate section using “text” cells in the colab.

Learn about what ML is, different types of ML, etc and write code from scratch in python for the following algorithms:

1. KNN Classification Algorithms
2. KMeans Clustering Algorithm
3. Linear Regression

**Resource Reference**

1. Machine Learning by Andrew Ng
2. Linear Regression on Boston Housing Dataset
3. https://github.com/shubham99bisht/Machine_Learning_Tutorials - Sample codes from scratch

**Dataset:** (Better if Choose your own dataset, we’ll get a variety of different projects)

1. General dataset link: http://archive.ics.uci.edu/ml/datasets.php
2. Use Iris dataset : http://archive.ics.uci.edu/ml/machine-learning-databases/iris/

NOTE: Knowledge in UI development is required for participating in Full Scale Projects.

*** Prefer using the “wget” command from within colab for testers to easily download your dataset.*