Project Milestones – Ensemble Techniques

Criteria	Pts	Week	Topic
Part 1- 1 a. Read 'TelcomCustomer-Churn_1.csv' as a DataFrame and assign it to a variable	1.0 pts	Common part	Basic Data prep operations
Part 1- 1 b.Read 'TelcomCustomer-Churn_2.csv' as a DataFrame and assign it to a variable	1.0 pts	Common part	Basic Data prep operations
Part 1- 1 c.Merge both the DataFrames on key 'customerID' to form a single DataFrame	2.0 pts	Common part	Basic Data prep operations
Part 1- 1 d.Verify if all the columns are incorporated in the merged DataFrame by using simple comparisonOperator in Python	1.0 pts	Common part	Basic Data prep operations
Part 1- 2 a Impute missing/unexpected values in the DataFrame	2.0 pts	Common part	Basic Data prep operations
part 1- 2 b Make sure all the variables with continuous values are of 'Float' type	2.0 pts	Common part	Basic Data prep operations
Part 1- 2 c Create a function that will accept a DataFrame as input and return pie-charts for all theappropriate Categorical features. Clearly show percentage distribution in the pie-chart.	4.0 pts	Common part	Python functions
Part 1- 2 d.Share insights for Q2.c	2.0 pts	Common part	Basic Data prep operations
Part 1 - 2 e.Encode all the appropriate Categorical features with the best suitable approach	2.0 pts	Common part	Supervised Learning
Part 1- 2 f.Split the data into 80% train and 20% test.	1.0 pts	Common part	Supervised Learning
Part 1 - 2 g.Normalize/Standardize the data with the best suitable approach	2.0 pts	Common part	Basic Data prep operations
Part 1 - 3 a. Train a model using XGBoost. Also print best performing parameters along with train and test performance.	5.0 pts	Week 2	XGBoost
Part 1 - 3 b Improve performance of the XGBoost as much as possible. Also print best performing parameters along with train and test performance.	5.0 pts	Week 2	XGBoost
Part 2 - Build a machine learning workflow that will run autonomously with the csv file and return best performing model	30.0 pts	Week 2	Part of them are basic EDA and Python functions