

INN Hotels - Problem Statement

Submission type	: File Upload	Due Date	: Oct 15, 8:30 AM	Total Marks	: 60
Available from	: Sep 29, 9:30 PM				
Your Marks	: 60/60				

Description

Scoring guide (Rubric) - INN Hotels Rubric

Evaluated

Criteria	Ratings	Points
Define the problem and perform an Exploratory Data Analysis - Problem definition - Univariate analysis - Bivariate analysis - Use appropriate visualizations to identify the patterns and insights - Key meaningful observations on individual variables and the relationship between variables	Problem definition, questions to be answered and Data background and contents have been mentioned. Also, univariate and bivariate analysis is very well performed. Key meaningful observations on individual variables and the relationship between variables were very well captured and commented. Good use of various visualisation to show key observations among variables.	12/12
Data Pre-processing Prepare the data for modelling: - Missing value Treatment (if needed) - Outlier Detection(treat, if needed) - Feature Engineering (if needed) - Data split	Key pre-processing steps were used to prepare the data for modelling. Comments used are also to the point. Feature Engineering, Outlier Treatment and Duplicate observations check was well conducted.	4/4
Model building - Logistic Regression - Build the Logistic Regression model using statsmodels library and comment on the model statistics - Check assumptions of Logistic Regression - Provide interpretations based on coefficients obtained from the logistic regression model - Comment on model performance	Properly created the model using the library along with comments. Model performance was very good with high accuracy value.	9/9
Model Performance evaluation and improvement - Logistic Regression - Try and improve the model performance by changing the classification threshold - Comment on model performance after changing the threshold	The model was thoroughly evaluated using key metrics.	6/6
Model building - Decision Tree - Build the model and comment on the model performance.	Properly created the model using the library along with comments. Model performance was very good with high recall value.	5/5
Model Performance evaluation and improvement - Decision Tree - Try and improve the model performance by pruning - Comment on model performance - Find the decision rules and check feature importance	The model was thoroughly evaluated using key metrics.	10/10
Actionable Insights & Recommendations - Compare decision tree and Logistic regression models - Conclude with the key takeaways for the business	Actionable Insights and Recommendations were well covered but could have talked about potential business benefits from improving the model.	6/6
Presentation / Notebook - Overall quality - Structure and flow - Crispness - Visual appeal - Conclusion and Business Recommendations OR - Structure and flow - Well commented code - Conclusion and Business Recommendations	Structured notebook with a logical flow and clean and well-commented code and easy to follow.	8/8

Points 60/60