

## Model Development Phase Template

Date	21 June 2024
Team ID	739772
Project Title	Gem Valuation Revolution: Predicting Diamond Prices With Artificial Neural Networks
Maximum Marks	5 Marks

### Feature Selection Report Template

This template provides a structured approach to documenting the feature selection process for predicting diamond prices, ensuring clarity and justification for the chosen features in the

Feature	Description	Selected (Yes/No)	Reasoning
Carat Weight	Weight of the diamond in carats.	Yes	Carat weight has a significant impact on diamond prices.
Cut	Quality of the diamond's cut (e.g., Ideal, Premium).	Yes	Cut quality directly affects diamond brilliance and value.
Color	Color grade of the diamond (e.g., D, E, F).	Yes	Color grade influences the perceived purity and value of the diamond.
Clarity	Clarity grade indicating the presence of flaws (e.g., FL, IF, VVS1).	Yes	Clarity grade affects the diamond's brilliance and price.

development of predictive models. Adjust and customize the template as per specific project requirements and findings..

Dimensions	Length, width, and depth measurements of the diamond.	Yes	Physical dimensions contribute to diamond pricing models.
Fluorescence	Presence and intensity of fluorescence in the diamond.	Yes	Fluorescence impacts the perceived color and value of diamonds.
Certification	Diamond certification details (e.g., GIA, AGS).	Yes	Certification assures the quality and authenticity of the diamond.