## hyperparameter tuning documentation

Project overview:-Scam or fraud detection in online payments is critical for financial institutions, ecommerce platforms, and payment processors. These systems often rely on machine learning algorithms to identify suspicious activities, including:

- •Unusual transaction patterns.
- •Transactions that deviate from user behavior.
- •Transactions involving risky locations or payment methods.

Every machine learning algorithm has parameters that control its behavior. Some of these are learned from the data during training (like model weights), while others, called **hyperparameters**, are set before training. Hyperparameters are crucial in shaping how a model performs.