

ASSIGNMENT #8

1. Question: Explain the kernel trick and its significance in SVM. Provide a real-life example, such as image classification, where the kernel trick is essential for transforming data into a higher-dimensional space to achieve better classification results.

Objective: Understand the kernel trick and its application in image classification.

2. Question: A social media platform wants to automatically classify content into different categories (e.g., news, sports, entertainment) using SVM. Explain how you would handle this multi-class classification problem using SVM. Discuss the strategies you would use for multi-class classification and how you would evaluate the performance of your model.

Objective: Implement multi-class classification with SVM in a social media content categorization context, exploring different strategies and evaluation methods.