ASSIGNMENT #2

1. Explain the bias-variance trade-off in the context of model complexity. How does this trade-off influence the choice of model in a real-world ML application? Provide examples to support your explanation.
2. Imagine you are tasked with building an ML model to predict customer churn for a subscription-based service. Describe how you would handle the following aspects:

- Choosing the right type of ML algorithm.
- Addressing potential ethical issues.
- Managing overfitting and underfitting.
- Balancing the bias-variance trade-off.
- Ensuring the model generalizes well to unseen data.