AI Project Outline

## Scenario: **Face Recognition**

**What is the business problem that needs solving?**

Automating the surveillance system for the organization

**How can AI solve this problem?**

AI can help by recognizing the faces using model trained on existing employee base.

**What are tools/resources needed to implement the solution?**

Following tools may be require:

1. Python/Deep learning module like keras, tensorflow, pytorch etc. for training the model.
2. OpenCV for extracting face dimensions to train model
3. Cloud services like AWS, Azure etc. for deploying the model

**What ethical challenges might arise?**

1. Discrimination: Since trained models are not 100% accurate and depends on training data. There might be possibility of discrimination based on gender, racial etc.
2. Biometric: Since many technologies are using facial data for biometrics, If there is any chance of leaking such data then it may impact user privacy.

**What are some tactics for addressing these ethical challenges?**

1. In case of discrimination model should be trained on removing any such outliers which may cause gender, racial etc. kind of discrimination. Distribution of all the classes should be balanced to avoid any kind of discrimination
2. Storage of facial data should be encrypted properly.