This project aims to create an automatic boarding process using computer vision services provided by Microsoft Azure.

There will be 4 data sources

- Boarding Pass
- ID
- Video Of The Passenger
- Baggage Photos

We will be using the Custom Form Recogniser service to extract flight details from the boarding pass. This data will be validated against the information extracted from the ID using Form Recogniser's Prebuild Models and flight manifest.

For identity verification, we will be using the video feed and passing it through the Azure Video Analyser service. The video analyser will extract the face information from the video feed, and this will be checked against the photo present in the ID. For extracting the photo from the ID, we will be using the Azure Face Service's detect face API.

Finally, we will be using the Custom Vision service to train a custom model on lighter images and use that model to validate if there are any lighters in the passenger's luggage.

Since the face identification and boarding pass validations are critical for business use cases. I will be targeting a confidence level of more than 90% for this application.