

Step 1 - Problem Definition and System Design

Problem Definition

Travelling is an important part of our daily life however it is time-consuming and requires time management to plan the boarding. What if there are automated boarding kiosk equipped with technology to make this whole experience faster?

Goal (What)

We will build an automated passenger boarding kiosk to assist with pre-flight boarding procedures. The automated system will showcase the power of computer vision in executing a wide variety of business processes within the context of airline boarding operations, specifically identity verification to board the flight and automated customer feedback collection.

Business Considerations (Why)

- Automation
- Use of technology to improve the pre-flight boarding experience
- On-the-go lifestyle

Technical Considerations (How)

Following are a few points to follow as technical considerations to start.

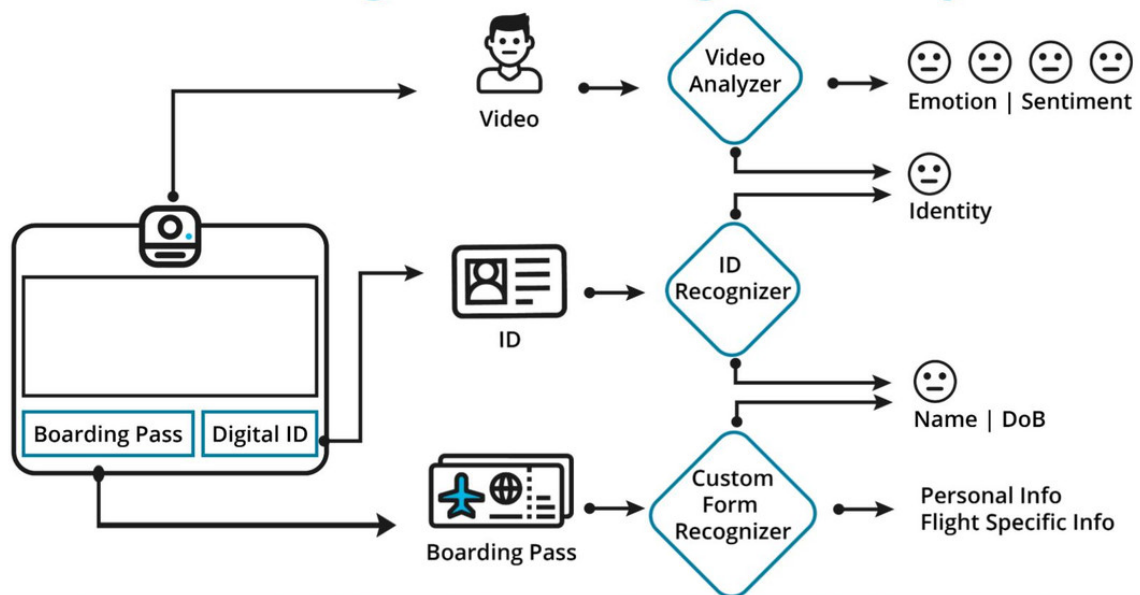
Azure Computer Vision, Face, and Form Recognizer services, along with few other cloud services such as Blob Storage.

Solution Strategy Walkthrough

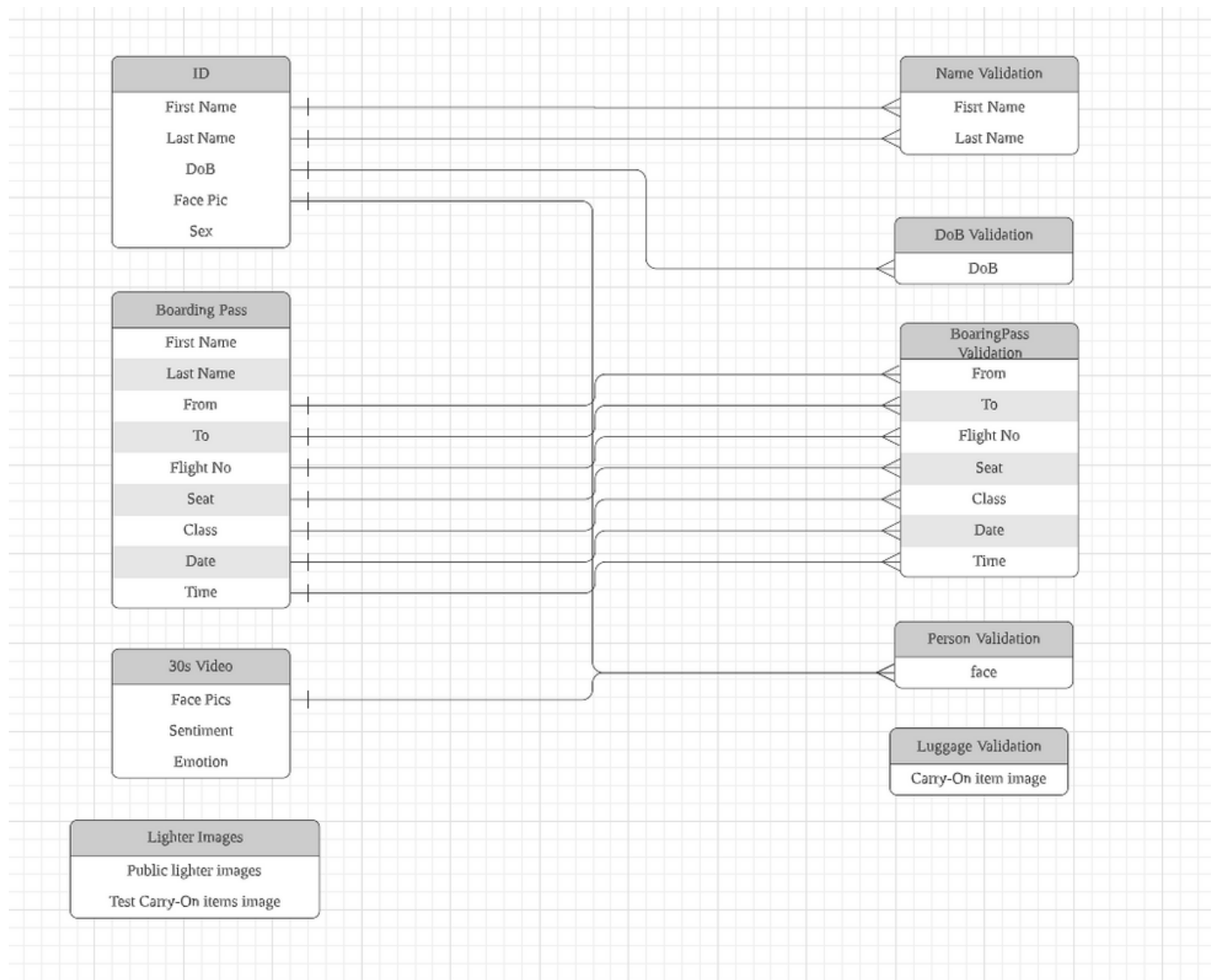
The system will extract information from identification cards and boarding passes. Face information are extracted from digital ID and a 30-second video to match a given passenger's face from. The same video will also be used to extract the passenger's emotions. Also it can detect if a passenger's carry-on

items include a lighter or not.

Automated Passenger Onboarding Kiosk Project Process



Data Flow for Data Validation



Azure Services Architecture

