Alpha Presentation
Badge Image Validation Tool

The Capstone Experience

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Project Overview

- Validates employee badge image against requirements
- Saves time for new hires and verification team
  - Instant feedback on proposed badge photos using machine learning
  - Accelerates new employee onboarding at Amazon
- Decreases invalid images sent to verification team
System Architecture

Web Application
- React
- HTML
- CSS
- JS
- Node

AWS Cloud Services
- Amplify
- API Gateway
- Lambda
- Rekognition
- S3 Bucket
Photo Requirements Examples

- This photo is an example of an acceptable badge photo that meets all of the requirements. Note that daily religious attire is acceptable.

- This photo does not pass the requirement for no shadows in the background and therefore is an unacceptable badge photo.

- This photo does not pass the requirement that the person must be centered in the photo and therefore is an unacceptable badge photo.
Acceptable Image Upload

Welcome new hires! We look forward to seeing your contributions to the team!

Badge Photo Requirements

- Look straight into the camera
- Include the top of your head to mid-chest
- Photo is properly exposed with no shadows
- Background of the photo should be white
- Avoid sunglasses
- Avoid caps and hats
- Avoid tilting your head up
- Avoid cropping from a larger image
- Avoid full-length images
- Avoid taking a photograph of another photograph

*Daily religious attire is acceptable
Welcome new hires! We look forward to seeing your contributions to the team!

**Badge Photo Requirements**

- Look straight into the camera
- Include the top of your head to mid-chest
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Badge Photo Requirements

- Look straight into the camera
- Head to mid-chest
- With no shadows
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What’s left to do?

- Establish continuous API Gateway connectivity, eliminating the need for redeployment before each usage.
- Test and train our model to consistently yield confidence levels of 95 or higher.
- Map each requirement to its respective custom label.
- Identify the most efficient approach to leverage the existing detect labels model and our custom labels model effectively.
Questions?