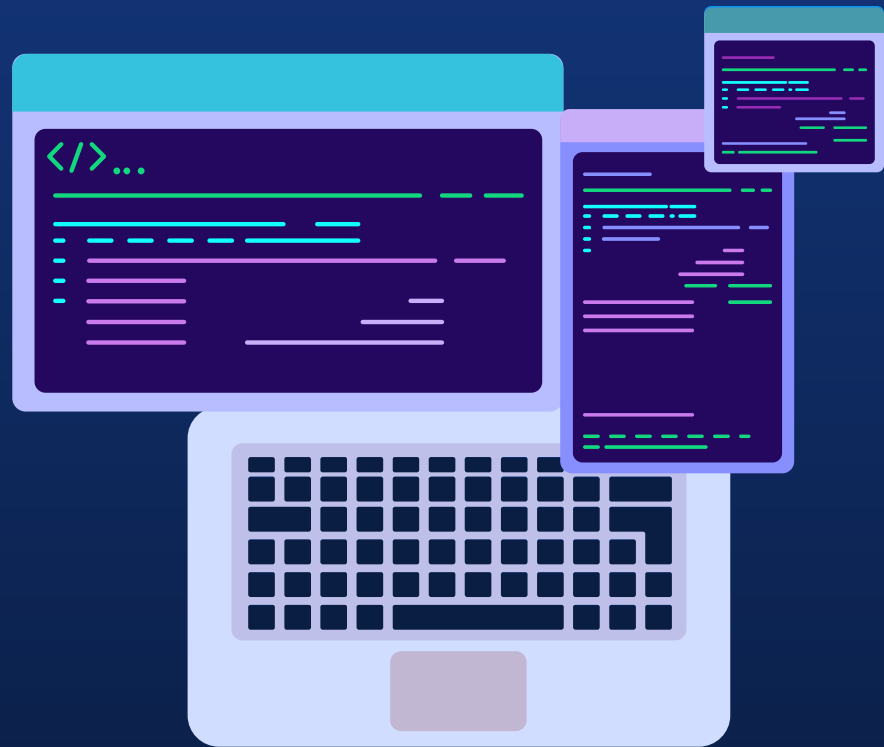


# KARUNA

A facial recognition  
application





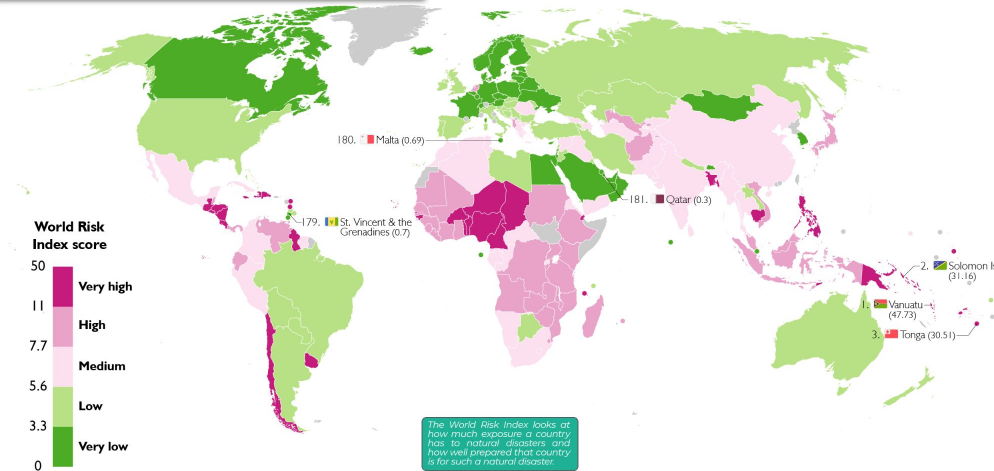
*KARUNA*  
*Compassion in action*

Karuna typically translates as "compassion" in English and is a concept used in the spiritual paths of Hinduism & Buddhism.

A Sanskrit word, meaning "to do" or "to make," indicating an action-based form of compassion. Karuna is the doing of something to alleviate suffering.

## Natural disaster risk

Landgeist.com @Land\_geist @Landgeist



- 432 natural disasters occurred in 2021
- Considerably higher than the average of 357 annual natural disasters for 2001-2020
- These disasters accounted for 10,492 deaths

# PROBLEM VS SOLUTION



## PROBLEM

Connecting individuals,  
even if they are  
separated by a great  
distance, following a  
natural disaster



## SOLUTION

A mobile application that  
employs face  
recognition to link  
displaced persons

# PROJECT OVERVIEW



## MOBILE APP

Most common and durable devices



## FACIAL RECOGNITION

Ease & accuracy for the matching process



## SEARCH FUNCTION

Search without a photo & save searches



# PROJECT PLANNING & DEVELOPMENT

Project Initiation

Communication and Coding Tools

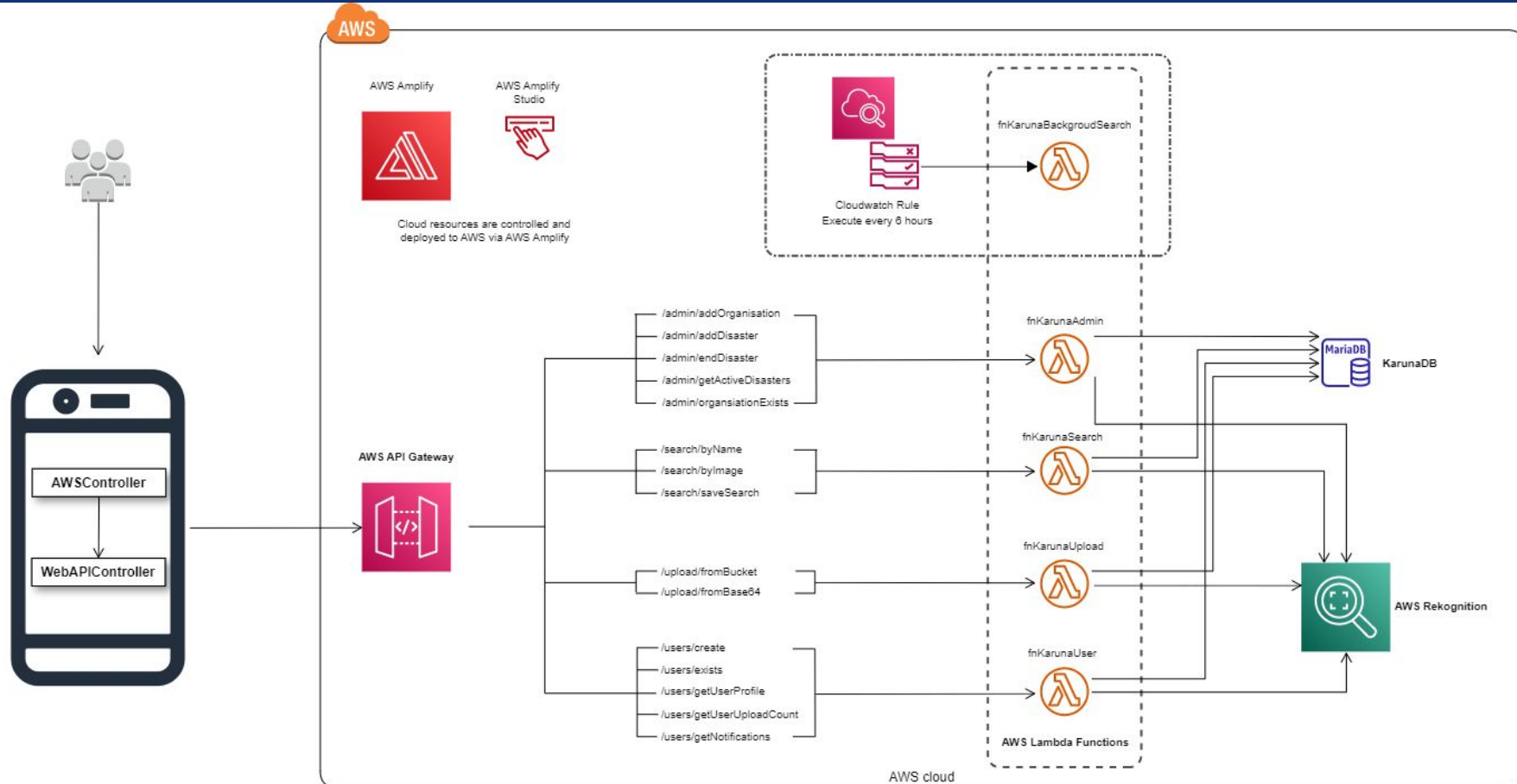
Proof of Concept

Requirements Gathering

Application Architecture



# Karuna Architecture





# Demonstration





# Demonstration Activities

## Search



Demonstration of a search where a person exists in the database



## Saved Search

Demonstration of a search where a person does not exist in the database allowing save

## Upload



Demonstration of an upload via picture upload and camera



## Background Search

Demonstration of the background search after an upload has added a person who has an active saved search



# TESTING

TESTNG PHASE 1	TESTING PHASE 2	TESTING PHASE 3	TESTING PHASE 4
Creation of a Master Test Plan	UAT & Unit and Integration Testing	UAT & Beta Testing	Final UAT
LCOM	LCAM	IOCM	PRM



# REFLECTION

1

Challenges

2

Team members worked well together

3

Upskilling was completed well

4

Only one proposed function was not implemented

5

Project objectives were met

# SUMMARY