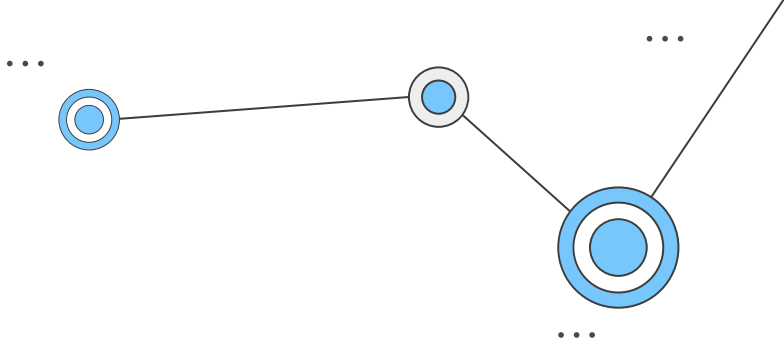


Crime Miner Video

Design Day Presentation

Requirements

Non-Functional Requirements

- User's should be able to login
- Accounts can save files
- Videos can be stored in folders to be parsed
- Videos of different formats can be accepted from the same folder
- Users can add guests to the case.

Functional Requirements

- Use AWS Rekognition
- Locate a given label
- use important meta variables, such as location.
- Trace the path of an individual giving percentage certainty.
- Trace the path of a vehicle giving percentage certainty.
- Mark every occurance of a label giving percentage certainty.
- Redact information from human view.

Business Requirements

Non-Functional Requirements

- The Video Processor(VP) should be able to account for Color and non-color video.
- The VP should account for different resolutions.
- The VP should account for different image ratios.
- The VP should be able to handle multiple video formats.
- The VP should be able to take large files.
- The VP should be able to handle folders with multiple video files.

Functional Requirements

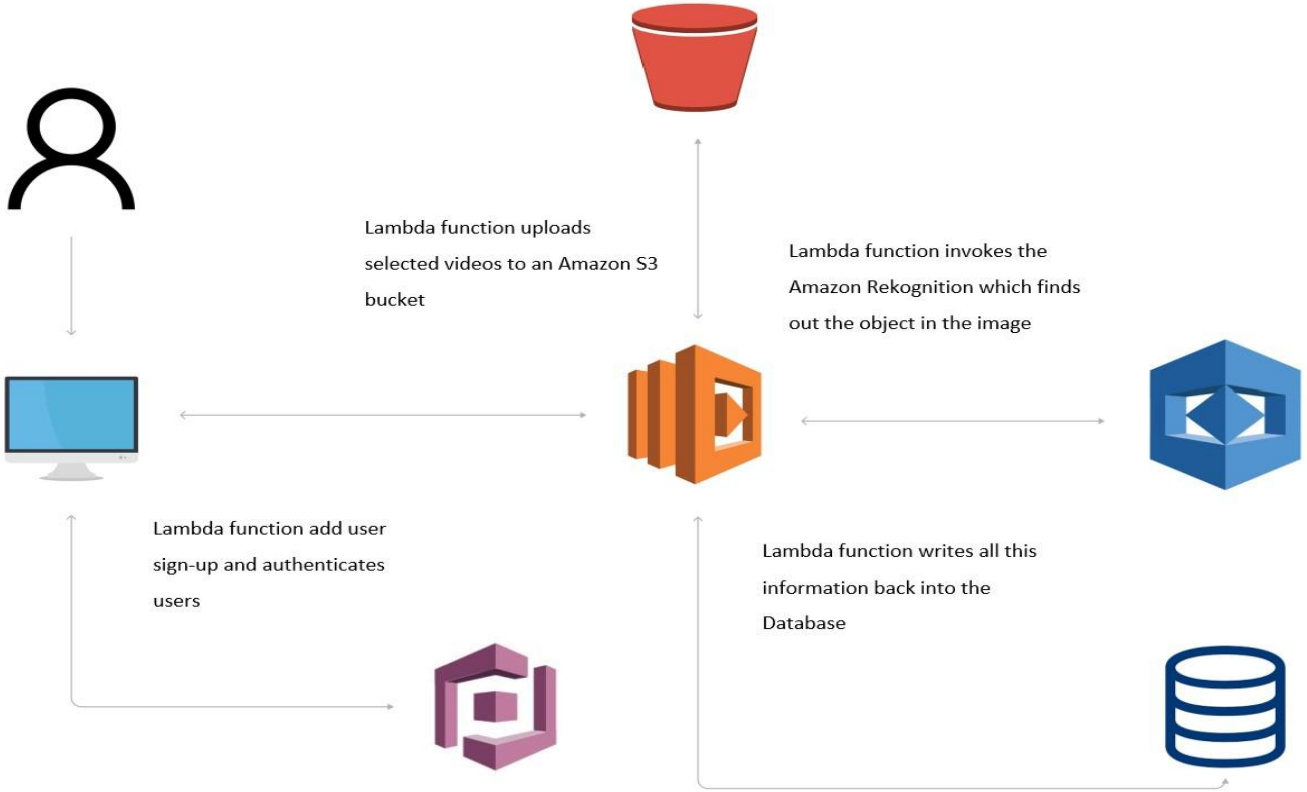
- The Video Processor (VP) should be able to locate a given label
- The VP should be able to use important meta variables for data gathering, such as location.
- The VP should be able to trace the path of an individual giving percentage certainty.
- The VP should be able to trace the path of a vehicle giving percentage certainty.
- The VP should be able to mark every occurance of a label giving percentage certainty.
- The VP should be able to redact information from human view.

Use Cases

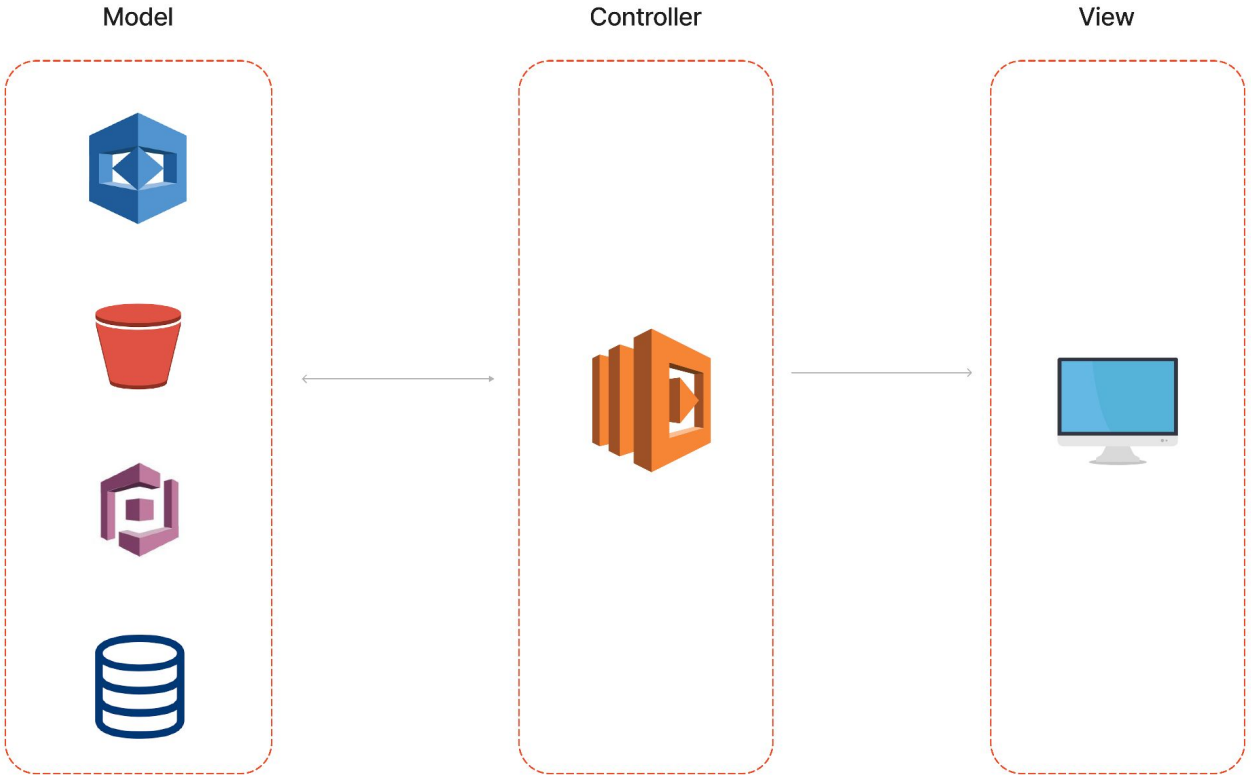
- **Login**
- **Create New Case**
- **Upload File to Case**
- **Create Case Report**

Law Enforcement Officer
Investigator that has too much video footage to manually analyze for a case

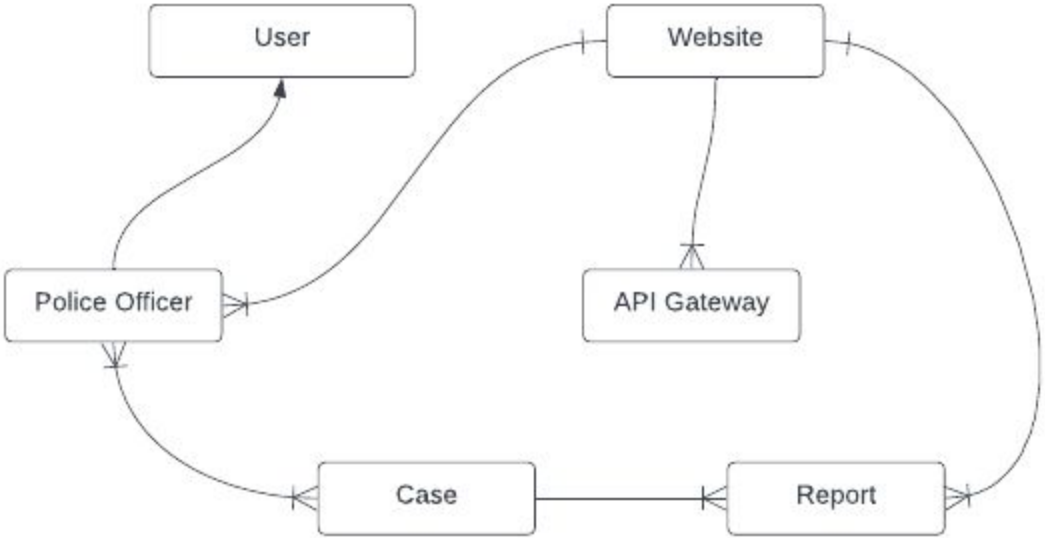
Architecture



Architecture



Domain Model



TechStack

Current Tech Stack:

Angular Typescript- Used for the frontend

Ionic-Works best with Angular

REST-An API

PostgreSQL-highly stable database management system,used as the primary data store or data warehouse for many web, mobile

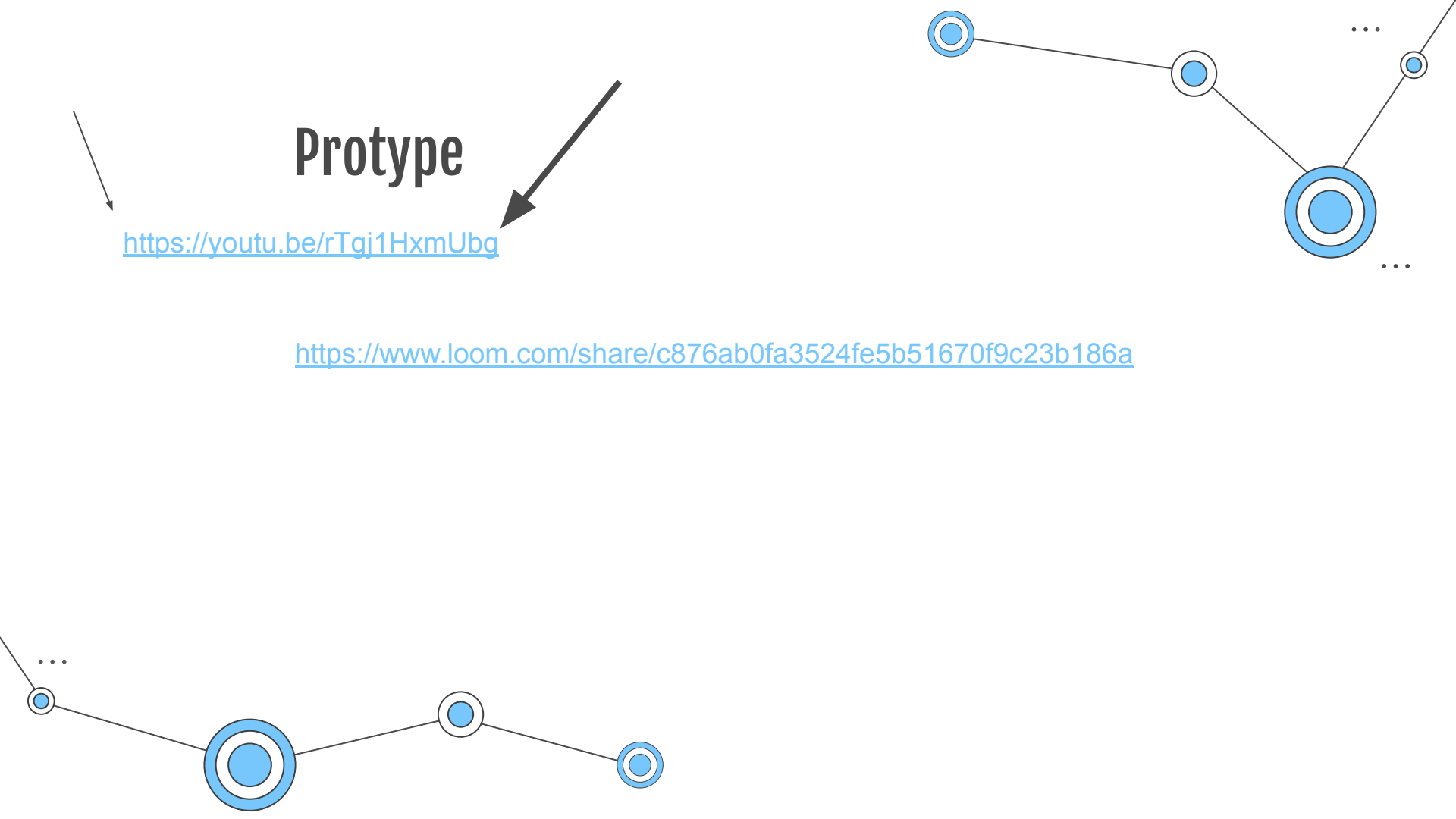
Node- server-side applications with access to the operating system, file system

Infrastructure and services are leveraging AWS, including S3, Cognito, API Manager, SQS, SNS, RDS, Lambdas, Amplify, and ML (e.g., transcription), among various others.

Protype

https://youtu.be/rTgj1HxmUbg

https://www.loom.com/share/c876ab0fa3524fe5b51670f9c23b186a



First Iteration Milestones/Features

Create Basic User Interface

- Login
- Dashboard
- New Case
- Edit/View Case
- Reports

Create Backend (PostgreSQL)

- Add PostgreSQL database to the application
- Integrate PostgreSQL with Upload File
- Automate metadata extraction from video

Set up Barebones Node.js

- Set up Node in the Github Repo
- Determine NodeJS packages to be used

Integrate Application with AWS Video Processing Product

- SPIKE: AWS Video Processing and PostgreSQL
- AWS Barebones Integration