Imager Application Prototype

Imager is an online platform which takes input of the image from a web based application then process that image and then gets the various details of that image such as followings

1. Face Detection

2. Facial Expression Detection

3. Object Detection in the image

Sequence Diagram

System Design Diagram

Flow Chart

Application Development Process

Front End

1. React App Takes the Image and Do check if uploading an image only

2. It should call an API getway endpoint to send the image to do the processing

3. React App should open a web socket connection with the API gateway to get notified of image processing.

Middle Tire

1. Node.js API will take the image and store it in a location

2. Node.js API will notify a python service about the new image uploaded

3. Node.js API will get notified by a service notifier about the image processing done

4. Node.js API send the updated image via web socket to the React UI

Back End

1. Python API will receive the image from the Node.js API

2. Python API will call OpenCV api to process the image

3. Python service will process the image based on the request sent by the node.js api

4. Python service will call the notifier service to queue to update about the image processing status

Queue

The choreography needs to be done either by Kafka or RabbitMQ