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~~SESSION: 1&2~~ AI ON AWS

DAY1 : AI ON AWS WORKSHOP

- Amazon Rekognition

Amazon Rekognition

win cmd
pip install boto3

App → web cam
L py
L click photo
L → upload photo
L S3
L → rek ---→

PY opencv-python → webcam

#

```
import cv2
cap = cv2.VideoCapture(0)
ret, photo = cap.read()
myphoto = "gaurav.jpg"
cv2.imwrite(myphoto, photo)
cap.release
```

#

```
import boto3
```

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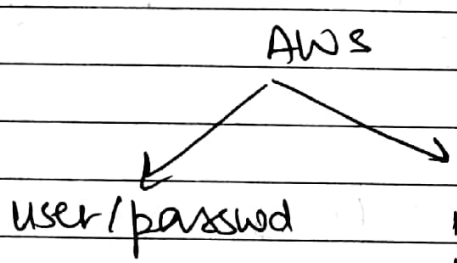
region = "us-east-1"
bucket = "aionawsws"

s3 = boto3.resource('s3') upimage="file.jpg"
s3.Bucket(bucket).upload_file(myphoto, upimage 'file.jpg')
~~upimage = "file.jpg"~~




```
rek = boto3.client('rekognition', region)
response=rek.detect_labels(
        Image={
            'S3Object':{
                'Bucket': bucket,
                'Name': upimage,
                }
            },
        MaxLabels=2,
        MinConfidence=90
        )
response
```

response['Labels'][0]['Name']

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response = rek.detect_faces(
Image = {
'S3Object': {
'Bucket': aionawsmy
'Name': upimage
}
},
Attributes = ['ALL']
)

response

Amazon Polly
Le Text to Speech

# import boto3
po = boto3.client('polly')
po.synthesize_speech(Text = "_____",
OutputFormat = 'mp3',
VoiceId = 'Joanna')

res['AudioStream']
Le This variable contains audio
file = open('myaudio.mp3', 'wb')
Le Creates a file
file.write(res['AudioStream'].read())
file.close()

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```
import IPython
IPython.display.Audio("myaudio.mp3")
```

CamScanner

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DAY-2 AI ON AWS WORKSHOP

- NLP: Natural Language Program
  - Chat Bots

Amazon Lex

- Build Voice & Text chatbots
- Alexa also uses Lex.
- Custom bot

- mybot: name
- Lang: Eng(US)
- O/p voice: Joanna
- Session timeout: 2 min
- Sentiment analysis: NO
- COPPA: NO

⊕ Create intent

- Utterances: What we speak.
- Prompts: Questions asked to user.
- Slot: Data the user must provide to complete the intent.
- Intent: A particular goal.

- Visit country
- Utterance: can you tell me about {country}
- Slot:
  - name: country
  - slot type: AMAZON.Country
  - prompt: tell me country name?
- Fulfilment: AWS Lambda fn.

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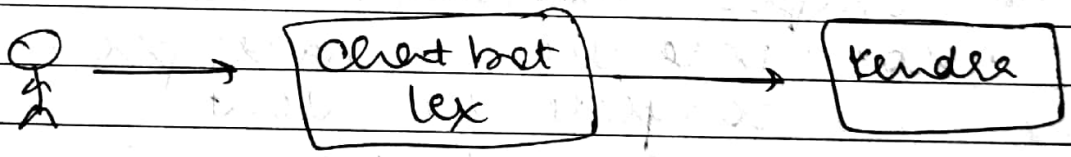
- bot name: bitcoin
- Lang: English (US) (same as last))
- Add indent: FindBitcoinPrice
- Utterance: What is the price of bitcoin on data
  - AWS lambda fn
    - fn name: myLexFun1
    - Py: 3.8

Amazon Kendra
- enterprise level searching engine

#

PROJECT.



URL in doc.

~~Boto3~~

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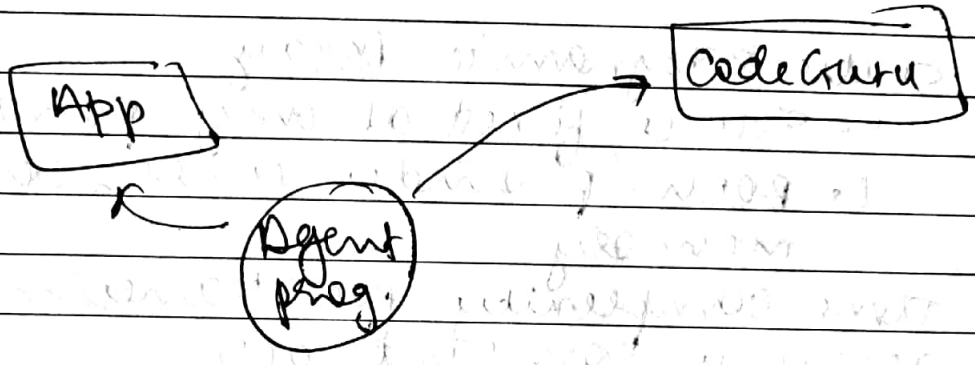
Amazon CodeGuru
- Improve app quality & performance with ML.
- Get Started:
  - CodeGuru profiler
    - name : mypgl
    - Platform : Other
      - > Create



pip install codeguru_profiler_agent
——————
- and that will send the feedback to codeguru.

Amazon Transcribe
- Automatic speech recognition
- speech to TEXT

npm install --global local

Amazon Comprehend
- NLP & Text analysis