SMART COINS COUNTER SYSTEM .

MEMBERS

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“Our project is counting coins by using a camera to snap the image of coins and the output will be the total of price and the number of the coin by text and speech.”

coins
counter

MAIN FEATURES

01

Counting the Thai coins

1.1) No overlap

1.2) With some overlap

(DONE)

02

Calculating the values of coin

(DONE)

03

Real-time

(NOT DONE)

04

Voice Recognition (optional)

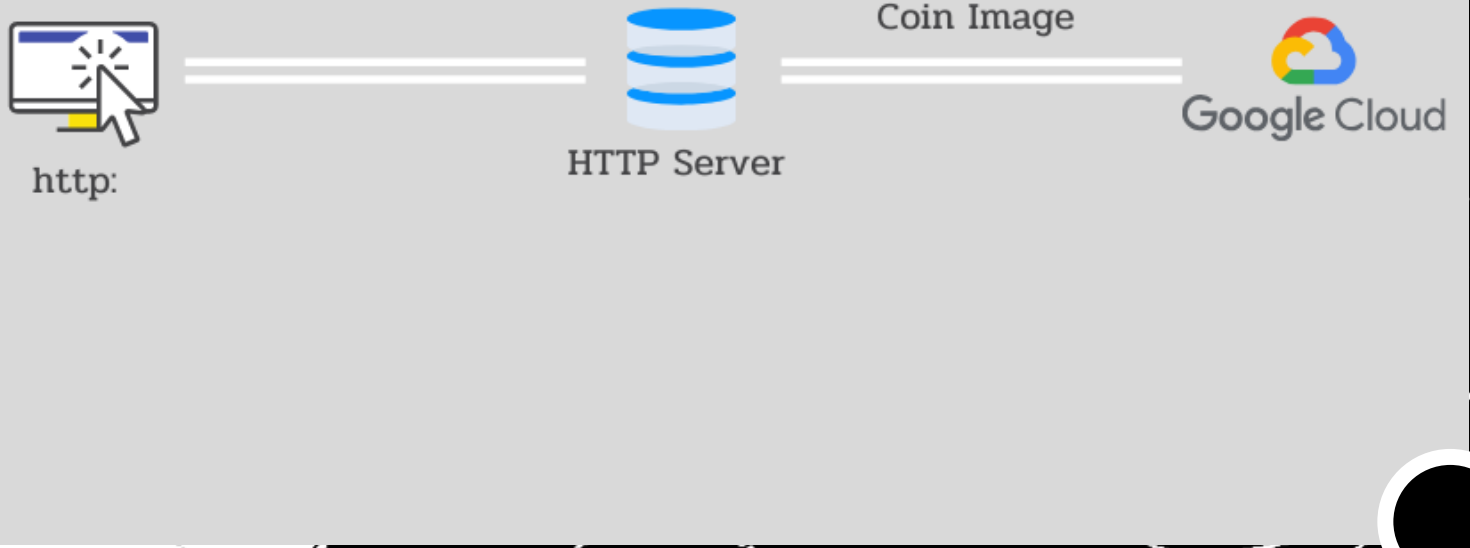
(DONE)

05

IoT vending machine (optional)

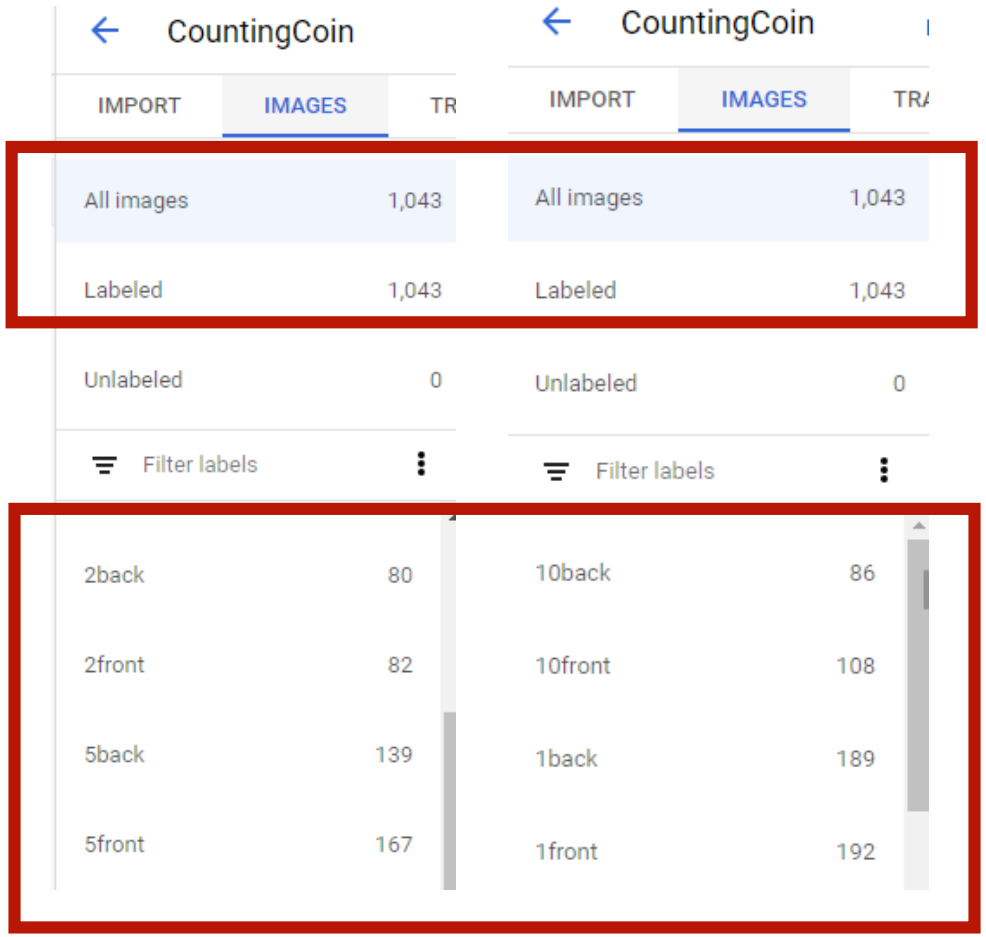
(NOT DONE)

SYSTEM ARCHITECTURE DIAGRAM

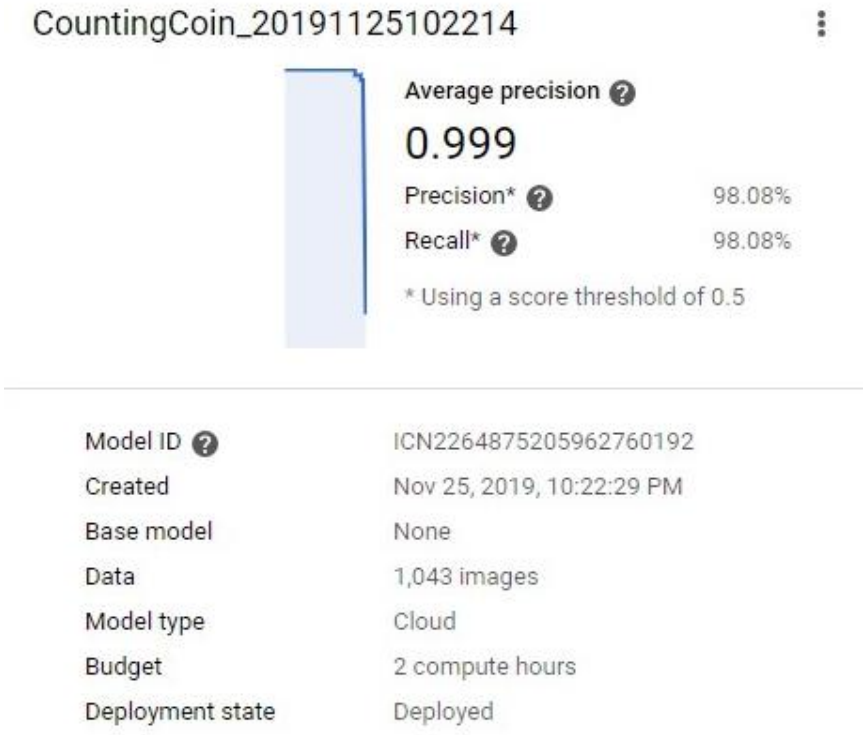


Google Cloud Platform

Dataset



Model



1back (tail) of King Rama 9 & 10
1front (head) of King Rama 9 & 10

5back (tail) of King Rama 9 & 10
5front (head) of King Rama 9 & 10

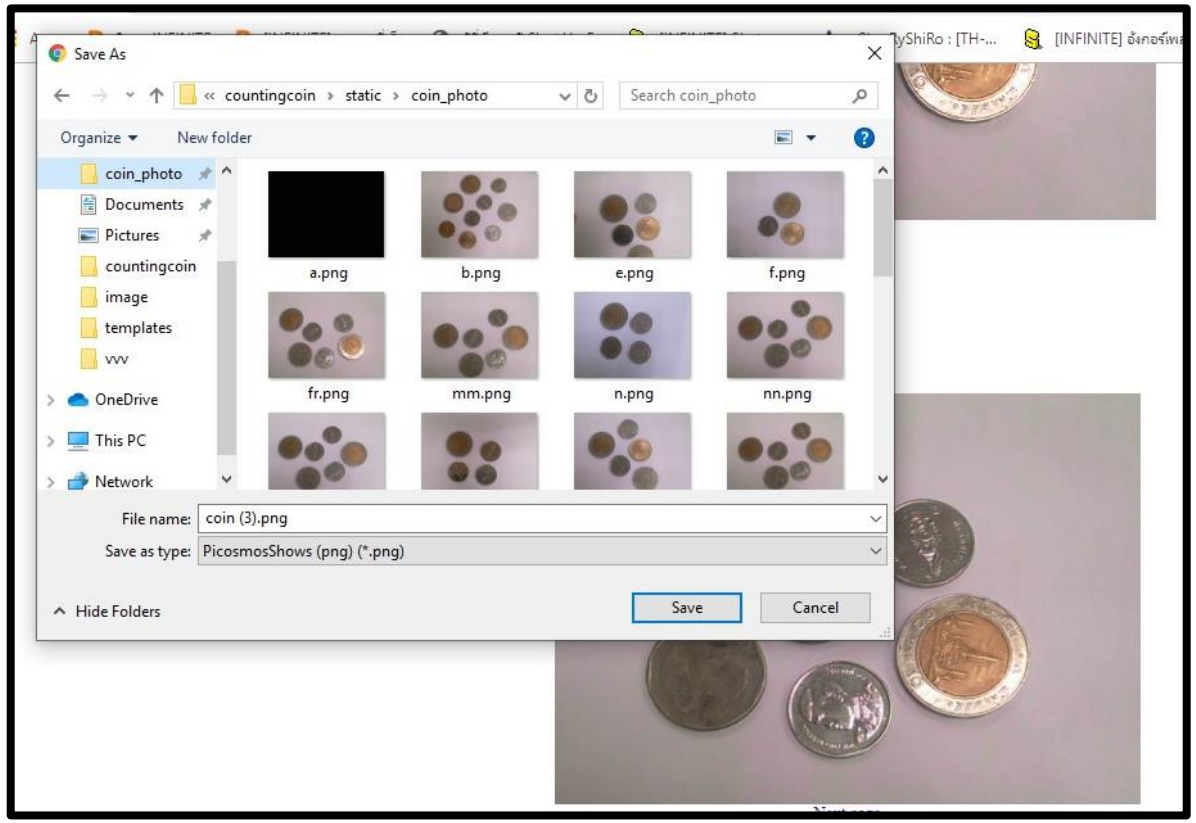
2back (tail) of King Rama 9 & 10
2front (head) of King Rama 9 & 10

10back (tail) of King Rama 9 & 10
10front (head) of King Rama 9 & 10

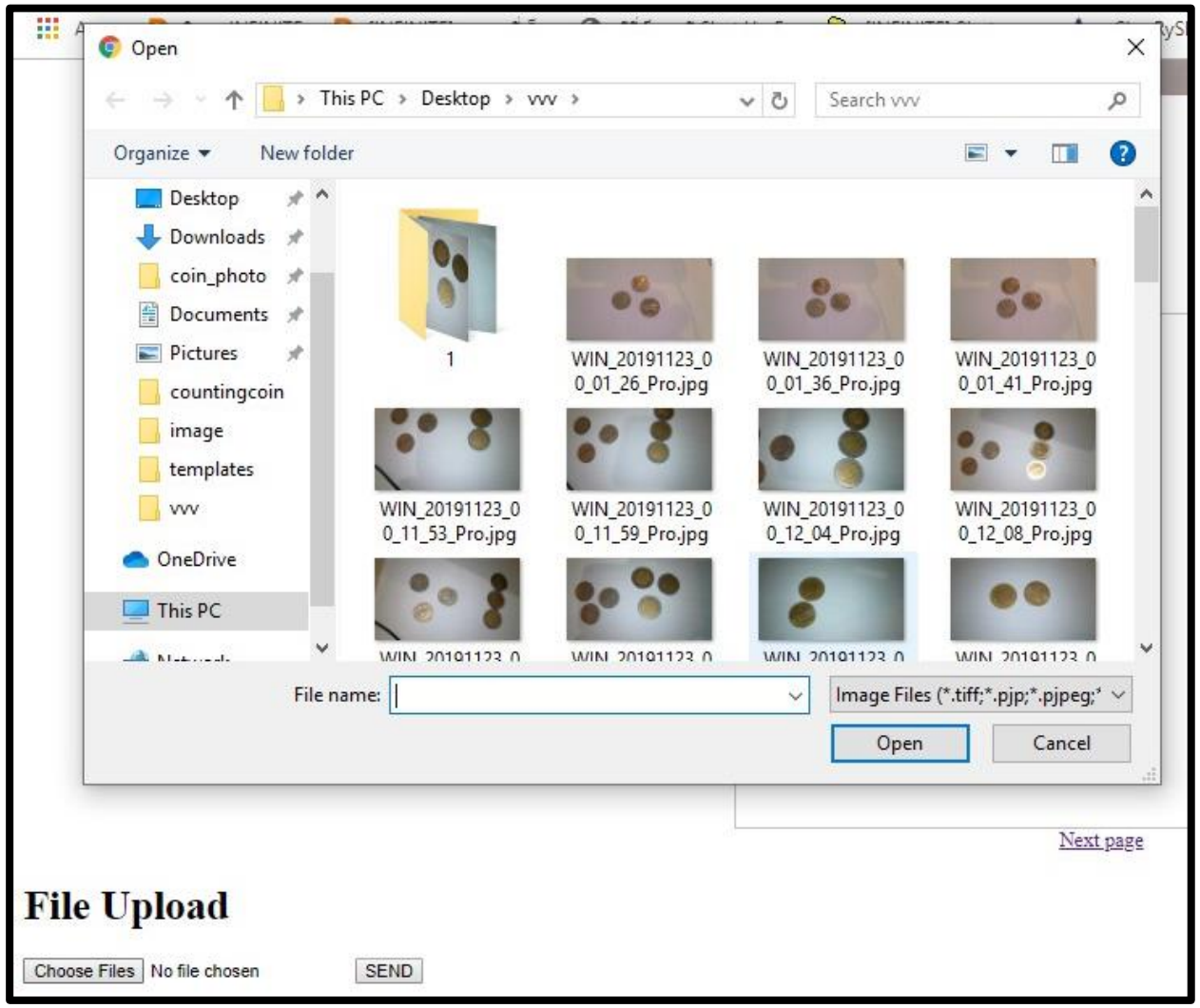
PROJECT GUI

01

02

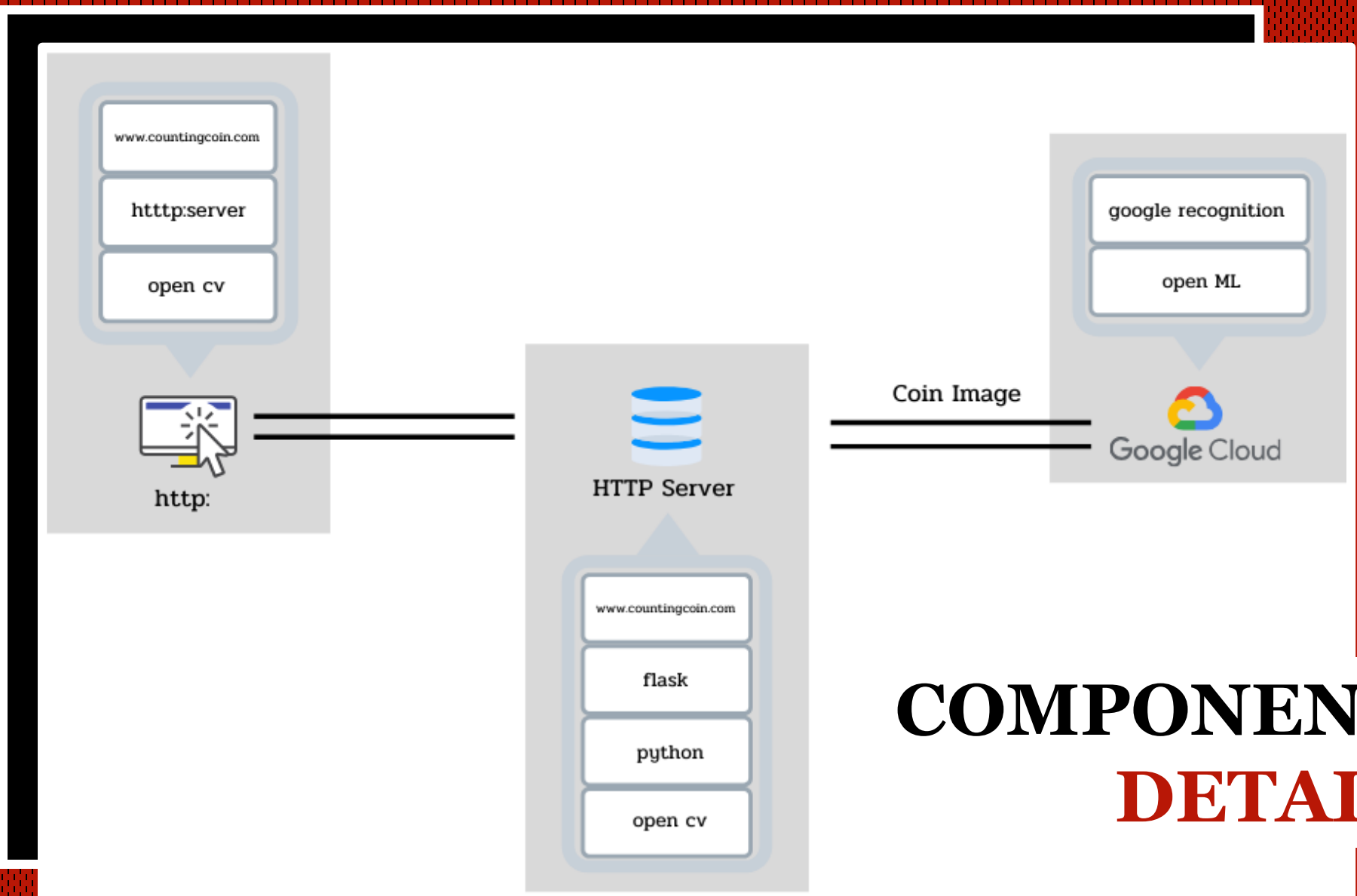


PROJECT
GUI



03

04



COMPONENTS DETAILS

NO NEED TO
SAVE FILE TO
THE DIRECTORY

OVERLAP

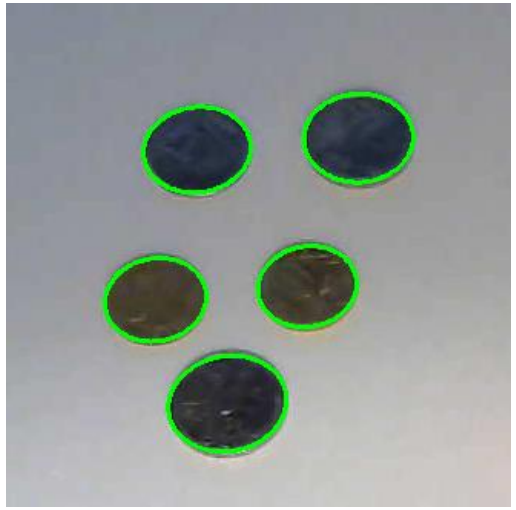
FUTURE IMPROVEMENT

REAL TIME

AUTO SPEAK

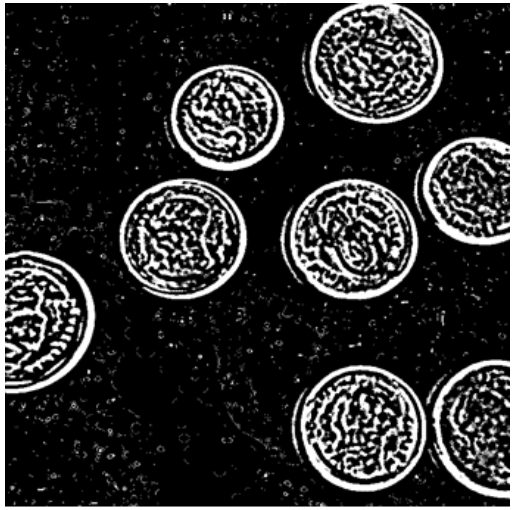
Image Segmentation

https://scikit-image.org/docs/dev/user_guide/tutorial_segmentation.html



Simple and effective coin segmentation using Python and OpenCV

http://blog.christianperone.com/2014/06/simple-and-effective-coin-segmentation-using-python-and-opencv/



Coin Segmentation : Python OpenCV

https://medium.com/@kongruksiamza/coin-secmentation-python-opencv-9c7a9537002c

Google Cloud

Google Cloud Platform

Camera and Video Control with HTML5

https://davidwalsh.name/browser-camera

Flask App routing

https://www.javatpoint.com/flask-app-routing

Detecting Circles in Images using OpenCV and Hough Circles

https://www.pyimagesearch.com/2014/07/21/detecting-circles-images-using-opencv-hough-circles/