Installation Manual

Software Development

Saint Mary’s University 2021

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[Year]

# Installation Manual

## Requirements:

Python 3, libraries required can be found in req.txt. Use “pip install -r req.txt” to get all libraries used

## Local host:

To run our app on local host simply use run python3 app.py in the terminal

## Server hosting:

To host the app, go into the conf/app.yaml file and edit the IP address from 0.0.0.0 to current ip   
 or pass in a command line argument I.e: “python3 app.py --ip 0.0.0.0” Same thing apply to  
 which port to use passthrough --port $portNumber

## Editing files:

Almost all variables can be edited through config file in the conf folder.

## Audio:

All audio files can be found in the static/audio folder but ensure naming conventions match the config file or it could break object detection audio.

## Creating a new page:

To create a new page, you must create a new method in the app.py file, use the conf/app.ymal html section to state the name of the html file you are rendering and   
use routes to pass through how that page would be reached ie: website.com/$route  
After which you would return render template as shown in other methods

## HTTPS:

You must own a signed certificate, and you can use ssl\_context to pass the certificate through however there are a few methods of doing this chose one that best fits your needs

## Production Release:

I recommend reading [Deploy to Production — Flask Documentation](https://flask.palletsprojects.com/en/2.0.x/tutorial/deploy/) and choose what fits your use case best.

## Using Graphics cards:

By default the object detection runs on CPU, to change this go into conf/app.py and switch device to “cuda:0” the 0 represents which GPU so if you are using multiple gpu change this value for the one you want to use. For non-cuda GPUs, look for pytorch support for non-cuda gpus.

## Images:

All Images are hosted can be found at the static/photo directory