

Project development phase

Sprint 3-Source code

Team ID	PNT2022TMID30704
Project Name	VirtualEye - Life Gaurd for Swimming Pools To Detect Active Drowning
Maximum Marks	4 Marks

```
[net]
# Testing
# batch=1
# subdivisions=1#
Training batch=64
subdivisions=16
width=608
height=608
channels=3
momentum=0.9
decay=0.0005
angle=0 saturation
= 1.5
exposure = 1.5
hue=.1
learning_rate=0.01
burn_in=1000
max_batches = 500200
policy=steps
steps=400000,450000
scales=.1,.1
[convolutional]
batch_normalize=1
filters=32
size=3
stride=1
```

```
pad=1
activation=leaky#
Downsample
[convolutional]
batch_normalize=1
filters=64
size=3
stride=2
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=32
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=64
size=3
stride=1
pad=1
activation=leaky[shortcut]
from=-3
activation=linear#
Downsample
[convolutional]
batch_normalize=1
filters=128
size=3
stride=2
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=64
```

size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=128
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=64
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=128
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear#
Downsample
[convolutional]
batch_normalize=1 filters=256 size=3
stride=2
pad=1

activation=leaky
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1

filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3stride=1 pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1

activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256

size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear#
Downsample
[convolutional]
batch_normalize=1
filters=512
size=3 stride=2pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1

activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1

filters=512 size=3
stride=1 pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1

activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear

[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear#
Downsample
[convolutional]
batch_normalize=1
filters=1024
size=3 stride=2 pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=1024 size=3
stride=1
pad=1

activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=1024 size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=1024 size=3
stride=1
pad=1 activation=leaky
[shortcut]
from=-3
activation=linear

```
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
filters=1024 size=3
stride=1
pad=1
activation=leaky
[shortcut]
from=-3
activation=linear
#####
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=1024
activation=leaky
[convolutional]
batch_normalize=1
filters=512
size=1
stride=1
```

pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=1024activation=leaky
[convolutional]
batch_normalize=1 filters=512
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=1024
activation=leaky
[convolutional]
size=1
stride=1
pad=1
filters=255
activation=linear
[yolo]
mask = 6,7,8
anchors = 10,13, 16,30,
156,198, 373,326
classes=80
num=9
jitter=.3
ignore_thresh = .7
truth_thresh = 1

```
random=1
[route]
layers = -4
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[upsample]
stride=2
[route]
layers = -1, 61
[convolutional]
33,23,
30,61,
62,45,
59,119,
116,90,batch_normalize=1 filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=512
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
```

```
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=512
activation=leaky
[convolutional]
batch_normalize=1
filters=256
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=512
activation=leaky
[convolutional]
size=1
stride=1
pad=1
filters=255
activation=linear
[yolo]
mask = 3,4,5anchors = 10,13, 16,30,
156,198, 373,326
classes=80
num=9
jitter=.3
ignore_thresh = .7
truth_thresh = 1
```



```
random=1
[route]
layers = -4
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[upsample]
stride=2
[route]
layers = -1, 36
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=256
activation=leaky
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
```

size=3
stride=1
33,23,
30,61,
62,45,
59,119,
116,90,pad=1
filters=256
activation=leaky
[convolutional]
batch_normalize=1
filters=128
size=1
stride=1
pad=1
activation=leaky
[convolutional]
batch_normalize=1
size=3
stride=1
pad=1
filters=256
activation=leaky
[convolutional]
size=1
stride=1
pad=1
filters=255
activation=linear
[yolo]
mask = 0,1,2
anchors = 10,13, 16,30,
156,198, 373,326
classes=80
num=9
jitter=.3
ignore_thresh = .7

```
truth_thresh = 1
random=1 33,23,
30,61,
62,45,
59,119,
116,90,
```