REST SERVER API DOCUMENTATION

This is the API documentation.

RESOURCES

Resource: detections:

• <u>Description</u>:

Parameter	Description
mac_address	String, device mac_address
timestamps	List with all the timestamps of each detection
labels	List of labels, i.e. class id

• Example:

```
{
    'mac_address': '0xdca9047270e2',
    'timestamps': [1664630309530,1664630310567],
    'labels' : [4.0, 2.0],
}
```

Resource: encoded_zones:

• <u>Description</u>:

The encoded_zones is a python dictionary that maps the zones to device addresses. When a new device is used it is mandatory to update this dictionary, otherwise an error may occur.

Example:

```
encoded_zones = {
    'magallanes': ['0xdca9047270e2', '0x2744e0dc8c68'],
    'acevedo' : ['0x19f57bb40d93'],
    'rivera' : [],
    'templete' : []
}
```

ENDPOINTS

Endpoint: /zones

• GET/zones:

o <u>Description:</u> Retrieve the list of available zones in the Redis database.

o Path Parameters: N/A

Query Parameters: N/A

• Response Status Code: 200 – OK: Everything worked as expected.

Response Schema:

Parameter	Description
zones	List of strings, each string is a zone.

Response Schema:

```
'zones': ['z1', 'z2'] ,
}
```

Endpoint: /zone

• GET/zone/{zone}:

- <u>Description:</u> Retrieve detections of all the devices within the zone in the specified time range.
- o Path Parameters:

Parameter	Description
zone	string(required), the zone name

Query Parameters:

Parameter	Description
from	int (required), the start of the time range (timestamp in ms) in which to retrieve the detections
to	int (required), the end of the time range (timestamp in ms) in which to retrieve the detections.

- Response Status Code:
 - 200 OK: Everything worked as expected.
 - 400 Bad Request: missing Zone name.
 - 400 Bad Request: missing start time.
 - 400 Bad Request: missing end time.
 - 404 Not Found: Unregistered mac address for this zone is detected
- Response Schema:

Parameter	Description
zone	String, zone name
timestamps	List of list with all the timestamps of each device in the zone
labels	List of list, each value correspond to the class id detected by each device

o Response Schema:

```
'zone': 'acevedo',

'timestamps': [[1664630309530,1664630310567]]

'labels' : [[4.0, 2.0]],
}
```

• DELETE/zone/{zone}:

- o <u>Description:</u> Delete the timeseries associated to the device within the zone
- o Path Parameters:

Parameter	Description
zone	string(required), the zone name

Query Parameters: N/A

Response Status Code:

■ 200 - OK: Everything worked as expected

■ 400 - Bad Request: missing zone name

■ 404 - Not Found: invalid zone name

o Response Schema: N/A

Endpoint: /devices

• GET/devices:

o <u>Description:</u> Retrieve the list of available devices in the Redis database.

o Path Parameters: N/A

Query Parameters: N/A

• Response Status Code: 200 – OK: Everything worked as expected.

• Response Schema:

Parameter	Description
	List of strings, each string is a device mac_address.

• Response Schema:

```
{
    'mac_addresses': ['0xdca9047270e2', '0x19f57bb40d93'] ,
}
```

Endpoint: /device

• GET/device/{device}:

- o <u>Description:</u> Retrieve detections of the device in the specified time range.
- Path Parameters:

Parameter	Description
device	string(required), the device mac_address

Query Parameters:

Parameter	Description
from	int (required), the start of the time range (timestamp in ms) in which to retrieve the detections
to	int (required), the end of the time range (timestamp in ms) in which to retrieve the detections

Response Status Code:

- 200 OK: Everything worked as expected.
- 400 Bad Request: missing Device name.
- 400 Bad Request: missing start time.
- 400 Bad Request: missing end time.
- 404 Not Found: invalid mac_address.

• Response Schema:

Parameter	Description
zone	String, zone name
timestamps	List of int with all the timestamps of each detection
labels	List of float, each value correspond to the class id detected

o Response Schema:

```
{
    'device': '0xdca9047270e2',
    'timestamps': [1664630309530,1664630310567]
    'labels' : [4.0, 2.0],
}
```

• DELETE/device/{device}:

- Description: Delete the timeseries associated to the device.
- Path Parameters:

Parameter	Description
device	string(required), the device mac address

o Query Parameters: N/A

o Response Status Code:

■ 200 - OK: Everything worked as expected

■ 400 - Bad Request: missing devicename

■ 404 - Not Found: invalid devicename

o Response Schema: N/A