

# CNT5517 Mobile Computing: Lab 3 - Metronome Thing Implementation Using Raspberry Pi

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## Server setup

1. In the folder part1, there is a file called app.py. This is the HTTP REST server. This also holds a bl.py file which holds the logic of our server.

2. Install the following dependencies using pip

```
pip install Flask Flask_CORS
```

3. Run the app.py file using

```
python3 app.py
```

On single terminal interfaces (like the Rpi), you can use

```
nohup python3 app.py &
```

which will not block the ongoing terminal session and allow you to run the RPi code as well.

4. Make sure db.json file is not empty. This holds the values of BPM. The default state is:

```
{"current": 0, "min": 0, "max": 0}
```

5. Copy the server URL, which should show up in the terminal window.

6. Paste this URL in the *BASE\_SERVER\_URL* of the Raspberry Pi code as well as the webpage code.

## Webpage setup

1. Simply open the HTML file in a browser.
2. Make sure the base server URL is updated from the process above.

## RPi setup

1. Install the following dependencies using pip

```
pip install requests
```

2. Run the file *raspi.py* in the Raspberry Pi console.

3. Make sure the base server URL is updated from the process above.

## Connections

