# Assignment 3 - MyAPIs

## ECE 4564

## November 1, 2018

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### 1 Rubric

- $\bullet~5~\mathrm{pts}$  No hard coded IP addr
- 5 pts Encapsulation (AuthDB, StorageDB, LED\_PWM)
- $\bullet$  20 pts Zeroconf
  - 10 pts Service Announcement/Registration
  - 10 pts Service Browser
- $\bullet~25~\mathrm{pts}$  Service Server
  - 10 pts HTTP Basic Authentication
  - 5 pts Auth data maintained in MongoDB database
  - 10 pts Service APIs
- $\bullet~20~\mathrm{pts}$  Storage Server
  - 15 pts Storage APIs
  - 5 pts Book data maintained in MongoDB database
- $\bullet~25~\mathrm{pts}$  LED Server
  - 15 pts LED APIs
  - 10 pts LED Manipulation

### 2 Guideline

### 2.1 Required Files

- StorageDB.py
- $\bullet$  led.py
- storage.py
- service.py
- AuthDB.py
- LED PWM.py

#### 2.2 Data Format

#### 2.2.1 User Entity

```
{
    'username': <USERNAME>,
    'password': <PASSWORD>
}
```

#### 2.2.2 Book Entity

Same as assignment 2

#### 2.3 API documentation

See api documentation.txt

#### 2.4 Cmd Parameters

- service.py python3 service.py
- storage.py python3 storage.py
- led.py python3 led.py

## 3 Run template bash file

#### 3.1 LED Manipulation

 $bash\ control\_led.sh\ {<} LED\ server\ IP{>}$ 

#### 3.1.1 Storage Server Testing

bash storage test.sh <Storage server IP>

#### 3.2 Service Server

#### 3.2.1 Add user

bash add  $% \left( -1\right) =-1$ user.sh $\left( -1\right) =-1$ u

## 3.2.2 Upload file

## ${\bf run~add\_user~first}$

bash upload-led.sh <Uploaded filename> <Service Server IP> bash upload-storage.sh <Uploaded filename> <Service Server IP>