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CPSC 449 Project – 2

## REST API for each service

### User Service

#### 1. Create User

- **URL endpoint** = /createUser
- **Method** = Post
- **Description** = API to registers a new user account
- **Request** = {  
    "username": "peter",  
    "email": "peterpan@yahoo.com",  
    "password": "peter12345"  
}
- **Response** = {  
    "username": "peter",  
    "email": "peterpan@yahoo.com",  
    "password": "peter12345"  
}
- **HTTP status codes** = 201 – Created, 409 – Resource conflict, 400 - Bad Request, 500 – Internal server error

#### 2. Authenticate User

- **URL Endpoint** = /authenticateUser
- **Method** = Post
- **Description** = API for authentication to from the username and password.
- **Request** = {  
    "username": "peter"  
    "password": "peter12345"  
}
- **Response** = “Login Successful!”  
**HTTP status codes** = 200 – Okay, 401 – Unauthorized Login, 500 – Internal Server Error

### 3. Add Follower

- **URL Endpoint** = /addFollower
- **Method** = Post
- **Description** = API to start following a new user.
- **Request** = {  
    "username": "tom",  
    "usernameToFollow": "stan"}  
• **Response** = {  
    "username": "tom",  
    "usernameToFollow": "stan"  
}  
• **HTTP status codes** = 200 – Okay, 500 – Internal server error

### 4. Remove Follower

- **URL Endpoint** = /removeFollower
- **Method** = Post
- **Description** = API to stop following a user.
- **Request** = {  
    "username": "stan",  
    "usernameToFollow": "jake"  
}  
• **Response** = “Record Deleted!”  
• **HTTP status codes** = 200 – Okay, 404 – Not Found, 500 – Internal server error

## Timelines Service

### 1. Get User Timeline

- **URL endpoint** = /getUserTimeline
- **Method** = Post
- **Description** = API to get all recent tweets from a user.
- **Request** = {  
    "username": "peter"  
}

- **Response** = [
  - [
    - "peter",
    - "blog23",
    - "2020-10-03 20:15:58.290501"

- **HTTP status codes** = 200 – Okay, 404 – Not Found, 500 – Internal server error

## 2. Get Public Timeline

- **URL Endpoint** = /getPublicTimeline
- **Method** = Get
- **Description** = API for Returns recent tweets from all users.
- **Response** = {

```
[
  [
    "peter",
    "Flask blog 1!!",
    "2020-10-08 16:12:06.662371"
  ],
  [
    "tom",
    "Python blog 1!!",
    "2020-10-08 16:11:56.449666"
  ],
  [
    "rohan",
    "Microservices blog 1!!",
    "2020-10-08 16:11:37.355295"
  ],
  [
    "jake",
    "web backend blog 10!!",
    "2020-10-08 15:00:23.281452"
  ]
]
```

- **HTTP status codes** = 200 – Okay, 500 – Internal server error

### 3. Get Home Timeline

- **URL Endpoint** = /getHomeTimeline
- **Method** = Post
- **Description** = API to returns recent tweets from all users that this user follows.
- **Request** = {  
    "username": "peter"  
}
- **Response** = [  
    [  
        "stan",  
        "blog15",  
        "2020-10-06 20:22:58.290501"  
    ],  
    [  
        "stan",  
        "blog14",  
        "2020-10-06 20:16:58.290501"  
    ],  
    [  
        "rohan",  
        "blog19",  
        "2020-10-06 20:12:58.290501"  
    ]  
]
- **HTTP status codes** = 200 – Okay, 404– Not Found, 500 – Internal server error

### 4. Post Tweet

- **URL Endpoint** = / postTweet
- **Method** = Post
- **Description** = API to post a new tweet.
- **Request** = {  
    "username": "peter",  
    "post": "Flask blog 1!!"  
}

- **Response** = {  
    "post": "Flask blog 1!!",  
    "timestamp": "Thu, 08 Oct 2020 16:12:06 GMT",  
    "username": "peter"  
}
- **HTTP status codes** = 200 – Okay, 500 – Internal server error