

webapp-discussionforum

Use Flask to create a Web Service API for a discussion forum application.

To run program, make sure you install flask and BasicAuth:

```
pip3 install flask
pip3 install Flask-BasicAuth
```

To initialize the database doing the following:

```
export FLASK_APP=auth
flask init_db
```

API Calls

1. GET /forums

Curl call:

```
curl localhost:5000/forums
```

Response: Success 200 OK

```
[
  {
    "Id": 1,
    "forum_creator": "alice",
    "forum_name": "redis"
  },
  {
    "Id": 2,
    "forum_creator": "bob",
    "forum_name": "mongodb"
  },
  {
    "Id": 3,
    "forum_creator": "bob",
    "forum_name": "python"
  },
  {
    "Id": 4,
    "forum_creator": "bob",
    "forum_name": "flask"
  }
]
```

2. POST /forums

Curl call:

```
curl -v -u holly:password -d '{"forum_name":"HTML"}' -H "Content-Type: application/json" -X POST localhost:5000/forums
```

- Error: 409 for duplicate forum names
- Success: 201 forum created

3. GET /forums/

Curl call:

```
curl localhost:5000/forums/1
```

- Response: Success 200 OK
- Curl call:

```
[
  {
    "Id": 1,
    "creator": "bob",
    "timestamp": "Wed, 26 Sept 2018 16:58:23 GMT",
    "title": "Does anyone know how to start Redis ?"
  },
  {
    "Id": 2,
    "creator": "charlie",
    "timestamp": "Wed, 26 Sept 2018 16:58:23 GMT",
    "title": "Has anyone heard of Edis?"
  }
]
```

4. POST /forums/

Curl call:

```
curl -v -u holly:password -d '{"thread_title":"Do you love Redis?", "text": "I love it very much"}' -H "Content-Type: application/json" -X POST localhost:5000/forums/1
```

- Successful Response: 201 Created
- Success: Thread and Post Created
- Error: 404 Not Found

5. GET /forums//

Curl call:

```
curl localhost:5000/forums/1/1
```

- Response: Success 200 OK
- Curl call:

```
[
  {
    "author": "bob",
    "text": "I am having trouble connecting to Redis. Do you have any idea how
to do it?",
    "timestamp": "Wed, 26 Sept 2018 16:58:23 GMT"
  },
  {
    "author": "alice",
    "text": "I Think you can google it",
    "timestamp": "Wed, 26 Sept 2018 16:58:23 GMT"
  }
]
```

6. POST /forums/

Curl call:

```
curl -v -u holly:password -d '{"text":"You can go stackoverflow and post your
question"}' -H "Content-Type: application/json" -X POST localhost:5000/forums/1/1
```

- Successful Response: 201 Created
- Success: Post Created
- Error: 404 Not Found

7. POST /users

Curl call:

```
curl -v -d '{"username": "dungho", "password": "whatisthat"}' -H "Content-Type:
application/json" -X POST localhost:5000/users
```

- Successful Response: 201 Created
- Success: Account Created
- Error: 404 Not Found

8. PUT /users/

Curl call:

```
curl -v -u holly:password -d '{"password":"newpassword"}' -H "Content-Type: application/json" -X PUT localhost:5000/users/holly
```

- Successful Response: 201 Created
- Success: User password Changed
- Error: 404 Not Found Username does not exist.
- Error 2: 409 Conflict Username does not match the current authenticated user