## **RESTful Beer/Brewery API**

### **Overall Description:**

This API allows access to a database that holds information on breweries and beers. Beers are sold at breweries and users own breweries. Beer can only be added/removed from breweries if the user owns the brewery. The same goes for edit and delete functionality of breweries. Anyone can view information on beer or breweries.

### **BASE URL**

All requests can be made to this base url: https://finalproject-224219.appspot.com

### <u>USERS</u>

#### **GET** /users

- Gets a list of users.
- Response is an array of user's emails.
- i 1 [{"email":"harrisri@baz.com"},{"email":"harrisri@test.com"}]
- 200 status code returned on success

# **POST** /users

- Creates a user
- Requires a JSON body of a username/password

```
"username": "harrisri@test.com",
"password": "abc123@!"
```

- If password is not sufficiently complex, it will fail
- Example response:

```
1 - {
           "email": "harrisri@baz.com",
   3
          "email_verified": false,
           "updated_at": "2018-12-04T01:04:57.094Z",
          "picture": "https://s.gravatar.com/avatar/0c58222f0ec0c04f0c3fcccee26b4c4f?s=480&r=pg&d
              =https%3A%2F%2Fcdn.auth0.com%2Favatars%2Fha.png",
          "user_id": "auth0|5c05d2b911bf6d2f2ce0e3d3",
   6
           "identities": [
   8 -
                   "connection": "Username-Password-Authentication",
  9
                   "user_id": "5c05d2b911bf6d2f2ce0e3d3",
"provider": "auth0",
  10
  11
                   "isSocial": false
 14
          ],
"created_at": "2018-12-04T01:04:57.094Z"
  15
16 }
```

### POST /users/login

- Allows the user to 'login' and receive an id\_token. This token is needed for many operations.
- Requires username/password JSON body

```
[{
    "username": "harrisri@test.com",
    "password": "abc123@!"
}
```

Example response:

```
"access_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6IlF6a3pSRFJFTXprNVFVTTVNa1U1UlRkRFFqZ3hNRGsyTnpjeFJVT
     - ESS_COKEN: - GYSDEXICUTAVIQIEESINGEEDISSUZIINIISIMEDZETGIEGUSDSKESTIXDHWYYTTWALUUUTKKEFQZSHWAQSYHDJEFSYT
TJOAKIGTTBAQKS6ZEJSGQJ9
.eyJpc3MiOiJodHRwczovL2ZpbmFscHJvamVjdC0yMjQyMTkuYXV0aDAuY29tLyIsInN1YiI6ImF1dGgwfDVjMDQ3ZmM3NTYxNjg5MzEwNzY2Y
     WJkOSIsImF1ZCI6WyJodHRwczovL2ZpbmFscHJvamVjdC0yMjQyMTkuYXV0aDAuY29tL2FwaS92Mi8ilCJodHRwczovL2ZpbmFscHJvamVjdC0
yMjQyMTkuYXV0aDAuY29tL3VzZXJpbmZvIl0sImlhdCI6MTU0Mzg4NTMyMSwiZXhwIjoxNTQzOTcxNzIxLCJhenAi0iJ6TElLdkV4NndTcU10R
     TF5NFIzSlRpV3VkMmhkNnN0UyIsInNjb3Blljoib3BlbmlkIHByb2ZpbGUgZW1haWwgYWRkcmVzcyBwaG9uZSByZWFkOmN1cnJlbnRfdXNlciB
     1cGRhdGU6Y3VycmVudF91c2VyX21ldGFkYXRhIGRlbGV02TpjdXJyZW50X3VzZXJfbWV0YWRhdGEgY3J1YXRlOmM1cnJlbnRfdXN1cl9+ZXRhZ
GF0YSBjcmVhdGU6Y3VycmVudF91c2VyX2RldmljZV9jcmVkZW50aWFscyBkZWxldGU6Y3VycmVudF91c2VyX2RldmljZV9jcmVkZW50aWFscyB
1cGRhdGU6Y3VycmVudF91c2VyX2lkZW50aXRpZXMiLCJndHkiOiJwYXNzd29yZCJ9.UdzU
     -4gBe_v8ZhHrvJi7RB55ZN7\VNkQSVkU9Ym2f80Wu3sTAguwH2pTN2TS21d5ZKsQPi1ILqk3gM_HeI-2Ejt0ly4MM8RQSRUeghGb0Rxpq
-gv3nniJbcxtIMGQMM2MlQznJYQNs1zxa0ZMXG8uRx2tTGiC4Vyeb-5-TvRare0ky1u4
      -h23ZCuIqhopCkC86G4mC66QHG4TpTTlsopCzsuLLxipEpofd2sPEweC
     -AOWrqFC7_Q_xsGcH18AopUlcw1k1okpbK09ISJ9L5mtvb9o11xzfXli090J21qp1-RX8nchkR_l5Xg-Gm0lid008eH34Co-fnqJL7ZxNAhkg"
"id_token": "eyJ0eXAi0iJKV1QiLCJhbGci0iJSUzI1NiIsImtpZCI6IlF6a3pSRFJFTXprNVFVTTVNa1U1UlRkRFFqZ3hNRGsyTnpjeFJVTTJ0a
     RmNkbiShdXRoMCSjb20lMkZhdmF0YXJzJTJGGGEucGSnTiwidXBkYXRLZF9hdCT6fjzhMTgtMTTtMDRGMDIGMDEuNDc3WiIsImVtYVIStj
oiaGFycmlzcmlAdGVzdCSjb20iLCJlbWFpbF92ZXJpZmllZCIGdHJ1ZSwiaXNzIjoiaHR0cHM6Ly9maWShbHByb2plY3QtMjI0MjE5LmF1dGgw
LmNvbS8iLCJzdWIi0iJhdXRoMHw1YzA0NZZjNzUZMTY4OTMxMDc2NmFiZDkiLCJhdWQi0iJ6TE1LdkV4NndTcU10RTF5NFIzSlRpV3VkMmhkNn
     JífsyMis9XRBFj-44eVIbWyDrpYvZ5ok7rv8bxM49tf6nHIx55AJM-DK9NVoGzELANJfFNs9XjfTQ", "scope": "openid profile email address phone read:current_user update:current_user_metadata delete
     :current_user_metadata create:current_user_metadata create:current_user_device_credentials delete
:current_user_device_credentials update:current_user_identities",
"expires_in": 86400,
"token_type": "Bearer'
```

### **DELETE /users/:username**

- Deletes a user
- Requires an id token for the user for whom is to be deleted
  - o ex: Greg can only delete Greg. Chris cannot delete Greg.

#### PUT /users/:username

- Change the users password.
  - Requires sufficient password complexity, else it will fail.
- Expects JSON body with the new password.

```
1 * []
2     "password":"newPassword"
3     ]
```

 Requires an id\_token for the username in the url. Only that user can change their own password. Beer objects contain the below properties:

- Name
- Type
- alcoholPercentage

#### **GET** /beer

- Gets a paginated (limit 5) list of beers.
- 'total number of beers' holds the total number of beers in the collection
- 'beers' holds an array of beer objects.
- 'next' holds a url for more beer objects (if more than 5 in the database)
- All beers have self links
- Able to send back application/json or text/html
- Every other type is rejected with a 406 code.
- Example response (JSON):

```
"beer": [
    {
         "alcoholPercentage": 4.6,
         "name": "Lagunitas IPA",
"type": "IPA",
"id": "5178081291534336",
         "self": "http://localhost:8080/beer/5178081291534336"
    },
         "type": "IPA",
         "alcoholPercentage": 4.6,
        "name": "Lagunitas IPA",
"id": "5651124426113024",
"self": "http://localhost:8080/beer/5651124426113024"
    },
         "alcoholPercentage": 4.6,
         "name": "Lagunitas IPA", "type": "IPA",
         "id": "5656058538229760",
         "self": "http://localhost:8080/beer/5656058538229760"
    },
         "alcoholPercentage": 4.6,
         "name": "Lagunitas IPA",
"type": "IPA",
         "id": "5734055144325120",
         "self": "http://localhost:8080/beer/5734055144325120"
    },
         "alcoholPercentage": 4.6,
         "name": "Lagunitas IPA", "type": "IPA",
         "id": "5741031244955648",
         "self": "http://localhost:8080/beer/5741031244955648"
],
.
"next": "http://localhost:8080/beer?cursor=CjASKmoVbX5maW5hbHByb2plY3QtMjI0MjE5chELEgRCZWVyGICAgICArpkKDBgAIAA=",
"total_number_of_beers": 7
```

### **GET /beer/:beerID**

Gets information on a single beer

- Able to send back application/json or text/html
- Every other type is rejected with a 406 code.
- Example response (JSON):

### POST /beer

- Post a new beer
- Expects JSON body with below attributes. Any other attributes are ignored.

```
"name": "Lagunitas IPA",
   "type":"IPA",
   "alcoholPercentage": 4.6
}
```

• Response contains id of newly created beer

```
i 1 { "id": 5734055144325120 }
```

### PUT /beer/:beerID

- Edit a beer's properties
- Expects JSON body with below attributes. Any other attributes are ignored.

```
"name": "Lagunitas IPA",
  "type":"IPA",
  "alcoholPercentage": 4.6
}
```

- All previous properties will be overwritten with the properties in the JSON body.
- On success, 303 status code is returned and Location header contains url to the updated beer.

```
Body Cookies Headers (5) Test Results Status: 303 See Other

X-Powered-By → Express

Location → http://localhost:8080/beer/5734055144325120
```

### **DELETE /beer/:beerID**

- Deletes a beer
- 204 returned on successful delete.

### **BREWERIES**

Brewery objects contain the below properties:

- Name
- Location
- Year Founded
- Owner
- Beer (list of beer sold at brewery)

#### **GET** /breweries

- Gets a paginated (limit 5) list of breweries.
- Anyone can view.
- 'total\_number\_of\_breweries' holds the total number of breweries in the collection
- 'breweries' holds an array of brewery objects.
- 'next' holds a url for more brewery objects (if more than 5 in the database)
- All breweries have self links
- Able to send back application/json or text/html
- Every other type is rejected with a 406 code.
- Example response (JSON):

### **GET /breweries/:breweryID**

- Gets information on a single brewery
- Able to send back application/json or text/html

- Every other type is rejected with a 406 code.
- Example response (JSON):

```
1 - {
2     "beer": [],
3     "owner": "harrisri@test.com",
4     "name": "Lagunitas",
5     "yearFounded": "1999",
6     "location": "Petaluma, CA",
7     "id": "5672330625810432",
8     "self": "http://localhost:8080/breweries/5672330625810432"
9 }
```

#### **POST /breweries**

- Post a new brewery to the database
- Requires an id token from /users/login
- Only accepts application/json. Other types will be ignored and a 415 status sent.
- Expects JSON body with below properties. Note that beer is not included. If included, it will be ignored. Beer needs to be added with PUT /breweries/:breweryID/beer/:beerID (below)

```
Owner property will be populated with the provided id_token

"name": "Lagunitas",
"yearFounded":"1999",
"location": "Petaluma, CA"

"The state of the provided id_token id_tok
```

Response holds ID of newly created brewery.

```
i 1 { "id": 5654645158445056 }
```

204 sent on success, and location header populated with url of new brewery.

### PUT /breweries/:breweryID

- Edit a brewery
- Requires an id token from /users/login
  - id\_token must match owner of brewery. Else, the operation will be canceled and a 403 is sent.
- Only accepts application/ison. Other types will be ignored and a 415 status sent.
- Expects JSON body with any of the brewery properties. ID will never be changed.

• 303 status code is sent on success, and Location header is populated with url of updated brewery.

```
        Body
        Cookies
        Headers (5)
        Test Results
        Status: 303 See Other

        X.Powered-By → Express
        Location → http://localhost:8080/breweries/5882274280407040
        Image: Cookies of the cookies o
```

### **DELETE /breweries/:breweryID**

- Delete a brewery
- Requires an id\_token from /users/login
  - o id\_token must match owner of brewery. Else, the operation will be canceled and a 403 is sent.
- 204 is sent on successful delete.

# PUT /breweries/:breweryID/beer/:beerID

- Adds a beer to the brewery
- Requires an id\_token from /users/login
  - o id\_token must match owner of brewery. Else, the operation will be canceled and a 403 is sent.
- Beer must not belong to another brewery, else 403 is sent.
- 303 is sent on success and Location header is populated with url of brewery

# DELETE /breweries/:breweryID/beer/:beerID

- Removes a beer from the brewery
- Requires an id token from /users/login
  - o id\_token must match owner of brewery. Else, the operation will be canceled and a 403 is sent.
- Beer must be in the brewery, else 403 is sent.
- 303 is sent on success and Location header is populated with url of brewery