RecipeDB Backend

Code Listing

C:\Users\rob\Documents\GitHub\RecipeDB\api\app.py

```
from flask import Flask, request
from flask cors import CORS
from functools import wraps
from config import SECRET KEY, MONGO, MONGO INDEXES
from jwt import decode
from pymongo import MongoClient, TEXT
from util import response
from auth import login, logout, register
from recipes import get recipe, search recipes, new recipe, delete recipe, get top recipes
from comments import get_recipe_comments, new_recipe_comment, update_recipe_comment, delete_recipe_comment
from bookmarks import get bookmarks, bookmark recipe, unbookmark recipe
app = Flask('RecipeDB')
CORS(app)
client = MongoClient(MONGO)
db = client.RecipeDB
blacklist = db.blacklist
user = None
for index in MONGO INDEXES:
    if index['name'] not in db.recipes.index_information():
        db.recipes.create index([(index['field'], TEXT)], name=index['name'], default language='english')
def jwt required(func):
    @wraps(func)
    def jwt_required_wrapper(*args, **kwargs):
        global user
        if 'x-access-token' in request.headers:
            token = request.headers['x-access-token']
```

```
if not token:
            return response(401, 'Token is missing')
        try:
            _user = decode(token, SECRET_KEY)
        except:
            return response(401, 'Token is invalid.')
        bl token = blacklist.find one({"token": token})
        if bl token is not None:
            return response(401, 'Token is invalid.')
        return func(*args, **kwargs)
    return jwt required wrapper
def jwt_optional(func):
    @wraps(func)
    def jwt optional wrapper(*args, **kwargs):
        global _user
        if 'x-access-token' in request.headers:
            token = request.headers['x-access-token']
        try:
            usr = decode(token, SECRET KEY)
            bl_token = blacklist.find_one({"token": token})
            if bl token is None:
                _user = usr
            return func(*args, **kwargs)
        except:
            return func(*args, **kwargs)
    return jwt optional wrapper
def admin required(func):
```

```
@wraps(func)
    def admin_required_wrapper(*args, **kwargs):
        token = request.headers['x-access-token']
        data = decode(token, SECRET_KEY)
        if data["admin"]:
            return func(*args, **kwargs)
        else:
            return response(401, 'Admin required')
    return admin_required_wrapper
@app.route('/login', methods=['POST'])
def app login():
    return login()
@app.route('/logout', methods=['POST'])
@jwt required
def app_logout():
    return logout()
@app.route('/register', methods=['POST'])
def app_register():
    return register()
@app.route('/recipes/top', methods=['GET'])
def app_get_top_recipes():
    return get top recipes()
@app.route('/recipes/search', methods=['GET'])
def app search recipes():
    return search_recipes()
```

```
@app.route('/recipe/<string: id>', methods=['GET'])
@jwt optional
def app get recipe( id):
   global user
    return get_recipe(_id, _user)
@app.route('/recipe/<string: id>', methods=['DELETE'])
@admin required
def app delete recipe( id):
    return delete recipe( id)
@app.route('/recipe/<string: id>/comments', methods=['GET'])
def app get recipe comments( id):
    return get recipe comments( id)
@app.route('/recipe/<string: id>/comments', methods=['POST'])
@jwt_required
def app new recipe comment( id):
    global user
    return new recipe comment( id, user)
@app.route('/recipe/<string: id>/comments', methods=['PUT'])
@jwt required
def app_update_recipe_comment( id):
    global user
    return update_recipe_comment(_id, _user)
@app.route('/recipe/<string:_id>/comments', methods=['DELETE'])
@jwt required
def app delete recipe comment( id):
    global _user
    return delete recipe comment( id, user[' id'])
```

```
@app.route('/recipe/<string:_id>/bookmark', methods=['POST'])
@jwt required
def app_bookmark_recipe(_id):
   global user
    return bookmark_recipe(_id, _user)
@app.route('/recipe/<string:_id>/bookmark', methods=['DELETE'])
@jwt_required
def app_unbookmark_recipe(_id):
    global _user
    return unbookmark_recipe(_id, _user)
@app.route('/bookmarks', methods=['GET'])
@jwt required
def app_get_bookmarks():
   global _user
    return get_bookmarks(_user['_id'])
@app.route('/recipes', methods=['POST'])
@admin required
def app_new_recipe():
    return new_recipe()
if __name__ == '__main__':
    app.run(debug=True)
```

C:\Users\rob\Documents\GitHub\RecipeDB\api\auth.py

```
from flask import request
from pymongo import MongoClient
from bcrypt import hashpw, gensalt, checkpw
from config import MONGO, SECRET KEY
from util import response
from datetime import datetime, timedelta
from jwt import encode
from json import dumps
client = MongoClient(MONGO)
db = client.RecipeDB
users = db.users
blacklist = db.blacklist
def login():
    form = request.form
    username = form['username']
    password = form['password']
    if username and password:
        user = users.find one({'username': username})
        if user is not None:
            if checkpw(bytes(password, 'UTF-8'), user['password']):
                exp = datetime.utcnow() + timedelta(hours=24)
                token = encode({
                    ' id': str(user[' id']),
                    'username': username,
                    'admin': user['admin'],
                    'exp': exp
                }, SECRET_KEY)
                exp clean = dumps(exp.isoformat())
                exp_clean = exp_clean[1:-1]
                return response(200, {
```

```
'id': str(user['_id']),
                    'username': username,
                    'name': user['name'],
                    'token': token.decode('UTF-8'),
                    'exp': exp clean,
                    'admin': user['admin']
                })
            else:
                return response(401, 'Incorrect password.')
        else:
            return response(401, 'Incorrect username.')
    return response(401, 'Authentication required.')
def logout():
    token = None
    if 'x-access-token' in request.headers:
        token = request.headers['x-access-token']
    if not token:
        return response(401, 'Token required.')
    blacklist.insert_one({'token': token})
    return response(200, 'Logout successful.')
def register():
    def is null(value):
        return len(value) == 0
    name = request.form['name']
    username = request.form['username']
    email = request.form['email']
    password = request.form['password']
```

```
if is null(name):
    return response(400, 'Name cannot be null.')
if is null(username):
    return response(400, 'Username cannot be null.')
if is null(email):
    return response(400, 'Email cannot be null.')
if is null(password):
    return response(400, 'Password cannot be null.')
elif len(password) < 8:</pre>
    return response(400, 'Password must be longer than 8 characters.')
user list = users.find({'username': username})
for u in user list:
    if u['username'] == username:
        return response(400, 'A user already exists with the username you provided.')
user = {
    'name': name,
    'email': email,
    'username': username.lower(),
    'password': hashpw(str(password).encode('UTF-8'), gensalt()),
    'admin': False,
    'bookmarks': []
users.insert one(user)
return response(200, 'Signup successful.')
```

C:\Users\rob\Documents\GitHub\RecipeDB\api\bookmarks.py

```
from pymongo import MongoClient
from config import MONGO
from bson import ObjectId
from util import response, trim
client = MongoClient(MONGO)
db = client.RecipeDB
recipes = db.recipes
users = db.users
def bookmark_recipe(_id, _user):
    user = users.find one({' id': ObjectId( user[' id'])}, {'bookmarks': 1})
    for bookmark in user['bookmarks']:
        if bookmark['recipeId'] == id:
            return response(202, 'This recipe is already in your bookmarks.')
    bookmark = {
        ' id': ObjectId(),
        'recipeId': id
    users.update one({' id': ObjectId( user[' id'])}, {'$push': {'bookmarks': bookmark}})
    return response(201, 'Bookmark added.')
def unbookmark_recipe(_id, _user):
    user = users.find_one({'_id': ObjectId(_user['_id'])}, {'bookmarks': 1})
    i = 0
    removed = False
    while i < len(user['bookmarks']):</pre>
        bookmark = user['bookmarks'][i]
        if str(bookmark['recipeId']) == id:
            users.update one({' id': ObjectId( user[' id'])}, {'$pull': {'bookmarks': {' id': bookmark[' id']}}})
            removed = True
        if i + 1 == len(user['bookmarks']):
```

```
if removed:
                return response(200, 'Bookmark removed.')
            else:
                return response(202, 'Not bookmarked.')
        i += 1
    return response(202, 'Recipe not bookmarked.')
def get_bookmarks(_id):
    result = users.find_one({'_id': ObjectId(_id)}, {'bookmarks': 1})
   bookmark list = []
   for bookmark in result['bookmarks']:
        r = recipes.find_one({'_id': ObjectId(bookmark['recipeId'])},
                             {'title': 1, 'desc': 1, 'rating': 1, 'calories': 1})
        if r is not None:
            r['_id'] = str(r['_id'])
            r['desc'] = trim(r['desc'], 160)
            bookmark_list.append(r)
        else:
            users.update_one({'_id': ObjectId(_id)}, {'$pull': {'bookmarks': {'_id': bookmark['_id']}}})
    return response(200, bookmark_list)
```

C:\Users\rob\Documents\GitHub\RecipeDB\api\comments.py

```
from flask import request
from pymongo import MongoClient
from config import MONGO
from bson import ObjectId
from datetime import datetime
from util import response
client = MongoClient(MONGO)
db = client.RecipeDB
recipes = db.recipes
def get recipe comments( id):
    result = recipes.find one({' id': ObjectId( id)}, {'comments': 1, ' id': 0})
    return data = []
    if result is not None:
       for comment in result['comments']:
            comment[' id'] = str(comment[' id'])
            return data.append(comment)
    return response(200, return data)
def new recipe comment( id, user):
    comment = {
        ' id': ObjectId(),
        'user id': user['_id'],
        'user_name': user['username'],
        'body': request.form['body'],
        'date': datetime.utcnow()
    recipes.update_one({'_id': ObjectId(_id)}, {'$push': {'comments': comment}})
    return get recipe comments( id)
def update_recipe_comment( id, user):
```

```
try:
        current comment = recipes.find one({'comments. id': ObjectId( id)}, {' id': 1, 'comments.$': 1})
        if user[' id'] != current comment['comments'][0]['user id']:
            return response(400, 'This is not your comment to update.')
    except:
        return response(400, 'No comment found.')
    updated comment = {
        'comments.$.user_id': current_comment['comments'][0]['user_id'],
        'comments.$.body': request.form['body'],
        'comments.$.date': datetime.utcnow()
   recipes.update one({'comments. id': ObjectId( id)}, {'$set': updated comment})
   return get recipe comments(current comment[' id'])
def delete recipe comment( id, user id):
    result = recipes.find_one({'comments._id': ObjectId(_id)}, {'comments.$': 1, '_id': 1})
    if result is not None:
       recipe id = str(result['_id'])
        result = result['comments']
       if len(result) == 1:
            result = result[0]
            if result['user id'] == user id:
                recipes.update_one({'_id': ObjectId(recipe_id)}, {'$pull': {'comments': {'_id': ObjectId(result['_id'])}}})
                return get recipe comments(recipe id)
            else:
                return response(403, 'This is not your comment to delete.')
    return response(404, 'No item found')
```

C:\Users\rob\Documents\GitHub\RecipeDB\api\config.py

C:\Users\rob\Documents\GitHub\RecipeDB\api\recipes.py

```
from flask import request
from pymongo import MongoClient
from config import ITEMS PER PAGE, MONGO, HEADERS
from bson import ObjectId
from random import shuffle, randrange
from bs4 import BeautifulSoup
from requests import get
from math import ceil
from util import response, trim
client = MongoClient(MONGO)
db = client.RecipeDB
recipes = db.recipes
users = db.users
def get recipe( id, user):
    recipe = recipes.find one({' id': ObjectId( id)}, {'comments': 0})
    if recipe is not None:
        recipe[' id'] = str(recipe[' id'])
        if user is not None:
            user = users.find_one({'_id': ObjectId(_user['_id'])}, {'bookmarks': 1})
            if user is not None:
                if len(user['bookmarks']) > 0:
                    for bookmark in user['bookmarks']:
                        if bookmark['recipeId'] == id:
                            recipe['bookmarked'] = True
                if recipe.get('bookmarked') is None:
                    recipe['bookmarked'] = False
        return response(200, recipe)
    else:
        return response(404, 'No recipe found')
```

unused endpoint

```
def get recipes():
    page num = 1
    if request.args.get('p'):
        page num = int(request.args.get('p'))
    start = ITEMS PER PAGE * (page num - 1)
    recipe list = []
    results = recipes.find({}, {'title': 1, 'desc': 1, 'rating': 1, 'calories': 1}).skip(start).limit(ITEMS PER PAGE)
    for recipe in results:
       recipe[' id'] = str(recipe[' id'])
        recipe['desc'] = trim(recipe['desc'], 160)
        recipe list.append(recipe)
   return response(200, recipe list)
def get top recipes():
   results = recipes.find({'rating': 5}, {'title': 1, 'desc': 1, 'rating': 1, 'calories': 1}).limit(100)
    recipe list = []
   for recipe in results:
       recipe[' id'] = str(recipe[' id'])
       recipe['desc'] = trim(recipe['desc'], 160)
        recipe list.append(recipe)
    shuffle(recipe list)
   return response(200, recipe_list[:6])
def search recipes():
   criteria = str(request.args.get('criteria'))
    if len(criteria) != 0:
        page num = 1
        if request.args.get('p'):
            page_num = int(request.args.get('p'))
       total = recipes.count documents({'title': {'$regex': criteria, "$options": "-i"}}, None)
        page count = ceil(total / ITEMS PER PAGE)
```

```
if page num > page count:
            page_num = page_count
        start = ITEMS PER PAGE * (page num - 1)
        if start < 0:
            start = 0
        recipe list = []
        for r in recipes.find({'title': {'$regex': criteria, "$options": "-i"}},
                              {'title': 1, 'desc': 1, 'rating': 1, 'calories': 1}).skip(start).limit(ITEMS PER PAGE):
            r[' id'] = str(r[' id'])
            r['desc'] = trim(r['desc'], 160)
            recipe list.append(r)
        return response(200, {
            'data': recipe list,
            'page': page num,
            'pageCount': page_count,
            'perPage': ITEMS PER PAGE,
            'total': total
       })
    else:
        return response(400, 'No search criteria provided.')
def new recipe():
   url = request.form['url']
   if 'bbcgoodfood.com' not in url:
       return response(400, 'Not a BBC link.')
    if url is not None:
       data = get(url, headers=HEADERS)
        soup = BeautifulSoup(data.content, 'html.parser')
        recipe = {
            'id': ObjectId(),
            'title': soup.find(class = 'recipe-header title').getText(),
            'desc': soup.find(class ='recipe-header description').getText(),
```

```
'comments': [],
            'rating': randrange(2, 5),
            'categories': []
        for i in soup.find(class ='nutrition'):
            label = i.find(class_='nutrition__label').getText()
            value = i.find(class ='nutrition value').getText().replace('g', '')
            if label == 'fat':
                recipe['fat'] = value
            elif label == 'protein':
                recipe['protein'] = value
            elif label == 'salt':
                # 5g salt = 2000mg sodium (* 400)
                recipe['sodium'] = round(float(value) * 400)
            elif label == 'kcal':
                recipe['calories'] = value
        ingredients = []
        for i in soup.find(class_='ingredients-list__group'):
            ingredients.append(i.getText())
        recipe['ingredients'] = ingredients
        directions = []
        for i in soup.find(class_='method__list'):
            directions.append(i.getText())
        recipe['directions'] = directions
        recipes.insert one(recipe)
        return response(200, {'inserted': str(recipe[' id'])})
    else:
        return response(400, 'No suitable url provided.')
def delete recipe( id):
    recipes.delete_one({'_id': ObjectId(_id)})
    return response(200, 'Recipe deleted.')
```

```
C:\Users\rob\Documents\GitHub\RecipeDB\api\util\ init .py
from flask import make response, jsonify
def response(status code, data):
    if isinstance(data, str):
        if 199 < status code < 300:
            data = {'message': data}
        else:
            data = {'error': data}
    return make response(jsonify(data), status code)
def trim(value, length):
    return (value[:length + 2] + '..') if len(value) > length else value
C:\Users\rob\Documents\GitHub\RecipeDB\api\util\data\createUsers.py
from pymongo import MongoClient
from bcrypt import hashpw, gensalt
client = MongoClient("mongodb://127.0.0.1:27017")
db = client.RecipeDB
users = db.users
data = [
    {
        'name': 'Rob Wilkie',
        'username': 'rob',
        'password': b'password1',
        'email': 'rob@wilkie.io',
        'bookmarks': [],
        'admin': True
   },
```

```
'name': 'Lola the Cat',
    'username': 'lola',
    'password': b'cat',
    'email': 'lola@wilkie.io',
    'bookmarks': [],
    'admin': False
  }
]

for new_user in data:
    new_user["password"] = hashpw(new_user["password"], gensalt())
    users.insert_one(new_user)
```

C:\Users\rob\Documents\GitHub\RecipeDB\api\util\data\importData.py

```
import ison
from pymongo import MongoClient
client = MongoClient('mongodb://127.0.0.1:27017')
db = client.RecipeDB
recipes = db.recipes
mongo data = []
with open('../../data/full format recipes.json') as file:
    content = json.load(file)
    di = True
    for recipe in content:
        desc = recipe.get('desc')
        calories = recipe.get('calories')
        fat = recipe.get('fat')
        protein = recipe.get('protein')
        sodium = recipe.get('sodium')
        if desc and sodium and fat and calories and protein:
            recipe['comments'] = []
            recipe['title'] = recipe.get('title').strip()
            if len(recipe['directions']) == 1:
                directions = recipe['directions'][0]
                recipe['directions'] = directions.split('. ')
            mongo_data.append(recipe)
recipes.insert many(mongo data)
print(f'{len(content) - len(mongo data)} items removed due to insufficient data.')
```

Endpoint Summary

POST / register

Registers a new user in the RecipeDB system.

POST /login

Logs user into RecipeDB system. Requires a valid username and password, returns a JWT for use in future API calls.

POST /logout

Logs user out of RecipeDB system, blacklists the given JWT; preventing further use of it.

GET /recipes/top

Gets 6 randomly selected recipes which have a rating of 5 (maximum).

GET /recipes/search

Searches recipes for any which title matches the given criteria.

POST /recipes

Adds a new recipe to the database, requires a valid bbcgoodfood.com recipe URL, scrapes the recipe and returns the ID of the inserted recipe.

GET /recipe/<id>

Gets a recipe by ID.

DELETE /recipe/<id>

Deletes a given recipe from the database by ID.

GET /recipe/<id>/comments

Gets all comments for a given recipe, by RECIPE ID.

POST /recipe/<id>/comments

Adds a new comment to a given recipe, by RECIPE ID. Returns updated list of comments for this recipe.

PUT /recipe/<id>/comments

Updates a comment on a given recipe, by COMMENT ID. Only updates comment if the comment belongs to the same user as the JWT used in this request. Returns updated list of comments for this recipe.

DELETE /recipe/<id>/comments

Deletes a comment on a given recipe, by COMMENT ID. Only deletes comment if the comment belongs to the same user as the JWT used in this request. Returns updated list of comments for this recipe.

GET /bookmarks

Gets a user's full list of bookmarks.

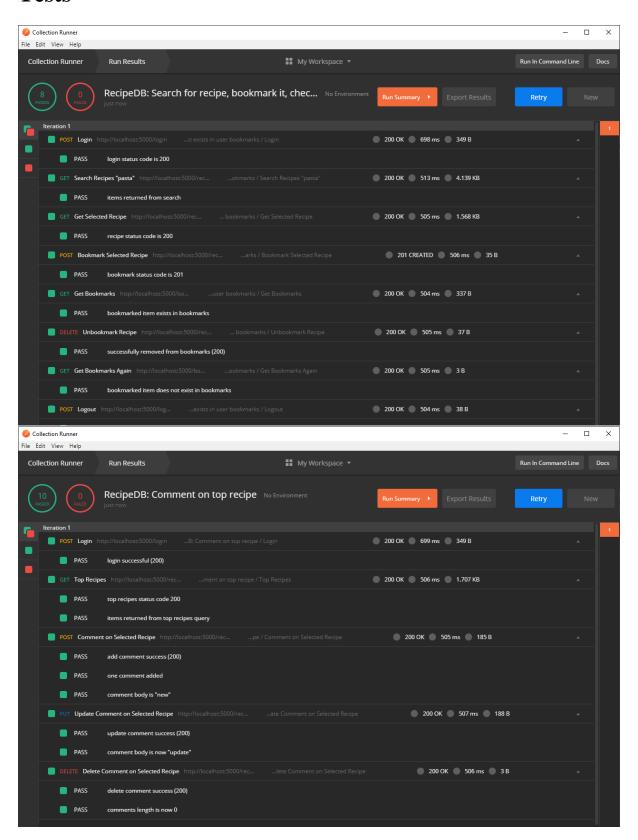
POST /recipe/<id>/bookmark

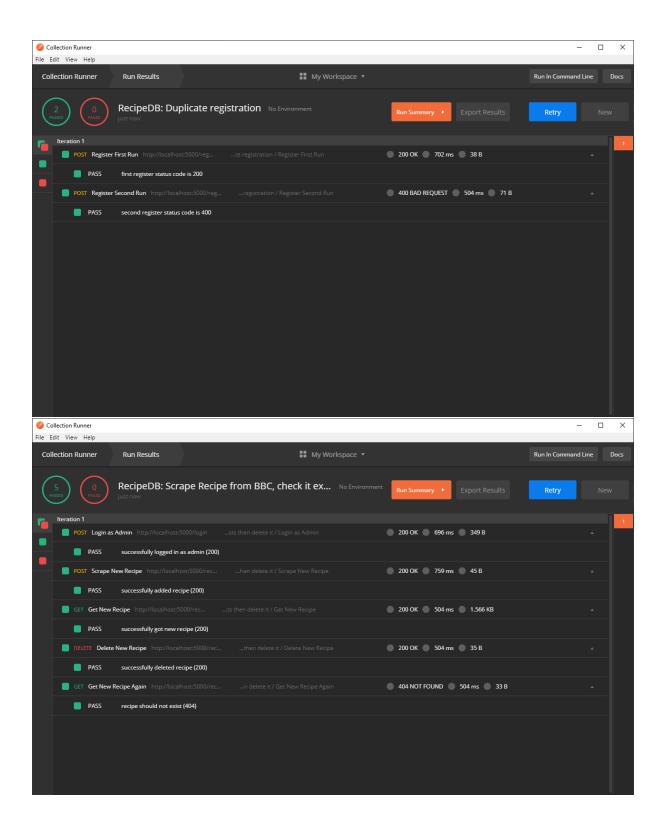
Adds a given recipe to a user's bookmarks.

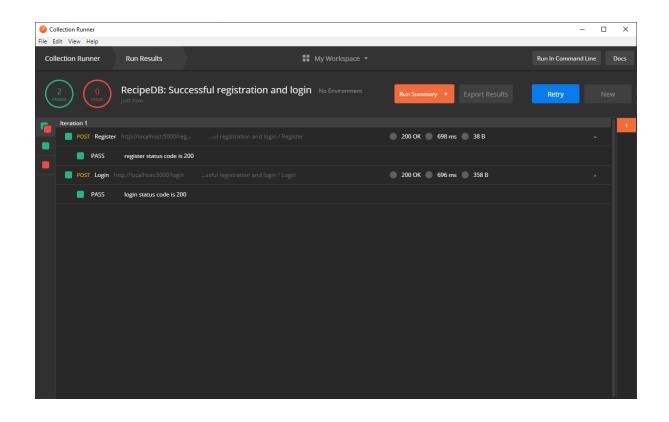
DELETE /recipe/<id>/bookmark

Removes a given recipe from a user's bookmarks.

Tests







API Summary

Full documentation available at:

https://documenter.getpostman.com/view/9830786/SWEDzZd5?version=latest

POST /login

http://localhost:5000/login

Logs user into RecipeDB system. Requires a valid username and password, returns a JWT for use in future API calls.

Headers

Content-Type	application/x-www-form-urlencoded
--------------	-----------------------------------

Body

urlencoded

username	rob
	User's username
password	password1
	User's password

Example Response200 OK

```
"admin": true,
    "exp": "2019-12-20T18:13:48.794088",
    "id": "5df419c2cf0d96d5a135acd2",
    "name": "Rob Wilkie",
    "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJfaWQiOiI1ZGY0MTljMmNmMGQ5NmQ1Y
TEzNWFjZDIiLCJ1c2VybmFtZSI6InJvYiIsImFkbWluIjp0cnV1LCJleHAiOjE1NzY4NjU2Mjh9.JEVVJv
jQqM8EjIlDt_ABjbkjBSkvMhMMz9xnO-609Zw",
    "username": "rob"
```

POST /register

http://localhost:5000/register

Registers a new user in the RecipeDB system, all fields are required.

Headers

Content-Type	application/x-www-form-urlencoded
--------------	-----------------------------------

Body

urlencoded

name	Rob Wilkie
	User's full name.
email	rob@wilkie.io
	User's email address.
username	wllkle
	User's username.
password	password1
	User's password, must be longer than 8 characters.

Example Response200 OK

```
"message": "Signup successful."
```

POST /logout

http://localhost:5000/logout

Logs user out of RecipeDB system, blacklists the given JWT; preventing further use of it.

Headers

```
x- eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJfaWQiOiI1ZGY0MTljMmNmMGQ5NmQ1YTEzNWFjZDIiL access- uiE_eHoUKmJw token User's current JWT.
```

Example Response200 OK

```
"message": "Logout successful."
```

GET /recipes/top

http://localhost:5000/recipes/top

Gets 6 randomly selected recipes which have a rating of 5 (maximum).

Example Response200 OK

```
"_id": "5dfb063572714fbb11f0fcf6",
    "calories": 399,
    "desc": "Charred to a crisp: Not a statement usually associated with salads, b
ut delicious nonetheless in this Mexican-inspired romaine number.",
    "rating": 5,
    "title": "Charred Romaine with Tomatillo Dressing"
},
    {
        " id": "5dfb063572714fbb11f0fcb3",
```

GET /recipes/search

http://localhost:5000/recipes/search?criteria=pizza

Searches recipes for any which title matches the given criteria.

Params

```
criteria pizza

Search criteria used to find matches in recipe titles.
```

Example Response200 OK

GET /recipe/<id>

http://localhost:5000/recipe/5dfbab3faecb1b082e88fe69

Gets a recipe by ID.

Headers

```
x-access-token {{token}}

Optional header, when present returns whether the recipe is bookmarked by the user.
```

Example Response200 OK

```
"_id": "5dfbab3faecb1b082e88fe69",
  "bookmarked": false,
  "calories": "445",
  "categories": [],
  "desc": "A Cajun-inspired rice pot recipe with spicy Spanish sausage, sweet pepp
ers and tomatoes",
  "directions": [
    "Heat 1 tbsp olive oil in a large frying pan with a lid and brown 2 chopped ch
icken breasts for 5-8 mins until golden.",
    "Remove and set aside. Tip in the 1 diced onion and cook for 3-4 mins until so
ft.",
    "Add 1 thinly sliced red pepper, 2 crushed garlic cloves, 75g sliced chorizo a
nd 1 tbsp Cajun seasoning, and cook for 5 mins more.",
```

DELETE /recipe/<id>

http://localhost:5000/recipe/5dfbab3faecb1b082e88fe69

Deletes a given recipe from the database by ID.

Headers

```
x-access-token {{admin_token}}

JWT of an admin-level user.

Example Response200 OK
```

```
Livample Response200 OR
```

```
"message": "Recipe deleted."
```

GET /recipe/<id>/comments

http://localhost:5000/recipe/5dfb063572714fbb11f11589/comments

Gets all comments for a given recipe, by RECIPE ID.

Example Response200 OK

```
"body": "This was great, everyone loved it.",
"date": "Thu, 19 Dec 2019 19:20:28 GMT",
"user_id": "5df419c2cf0d96d5a135acd2",
"user_name": "rob"
```

POST /recipe/<id>/comments

http://localhost:5000/recipe/5dfb063572714fbb11f11589/comments

Adds a new comment to a given recipe, by RECIPE ID. Returns updated list of comments for this recipe.

Headers

x-access-token	{{token}}
	JWT belonging to commenting user.
Content-Type	application/x-www-form-urlencoded

Body

urlencoded

bo	ody	Tasty!
		Comment string, must not be null or empty.

Example Response200 OK

```
"_id": "5dfbcd7cba7c69b9757b87b3",
"body": "This was great, everyone loved it.",
"date": "Thu, 19 Dec 2019 19:20:28 GMT",
"user_id": "5df419c2cf0d96d5a135acd2",
"user_name": "rob"
},
```

DELETE /recipe/<id>/comments

http://localhost:5000/recipe/5dfbcd7cba7c69b9757b87b3/comments

Deletes a comment on a given recipe, by COMMENT ID. Only deletes comment if the comment belongs to the same user as the JWT used in this request. Returns updated list of comments for this recipe.

Headers

```
x-access-token {{token}}

JWT belonging user deleting their comment.
```

Example Response200 OK

```
"_id": "5dfbd052ba7c69b9757b87b4",
  "body": "Tasty!",
  "date": "Thu, 19 Dec 2019 19:32:34 GMT",
  "user_id": "5df419c2cf0d96d5a135acd2",
  "user_name": "rob"
```

PUT /recipe/<id>/comments

http://localhost:5000/recipe/5dfbcd7cba7c69b9757b87b3/comments

Updates a comment on a given recipe, by COMMENT ID. Only updates comment if the comment belongs to the same user as the JWT used in this request. Returns updated list of comments for this recipe.

Headers

x-access-token	{{token}}
	JWT belonging user deleting their comment.
Content-Type	application/x-www-form-urlencoded

Body

urlencoded

```
body Really tasty!

Updated comment string, must not be null or empty.
```

Example Response200 OK

```
"_id": "5dfbd052ba7c69b9757b87b4",
"body": "Tasty!",
"date": "Thu, 19 Dec 2019 19:32:34 GMT",
```

```
"user_id": "5df419c2cf0d96d5a135acd2",
    "user_name": "rob"
}
```

POST /recipe/<id>/bookmark

http://localhost:5000/recipe/5dfb063572714fbb11f0fbd8/bookmark

Adds a given recipe to a user's bookmarks.

Headers

x-access-token	{{token}}
	JWT of user bookmarking the recipe.

Example Response201 CREATED

```
"message": "Bookmark added."
```

DELETE /recipe/<id>/bookmark

http://localhost:5000/recipe/5dfb063572714fbb11f0fbd8/bookmark

Removes a given recipe from a user's bookmarks.

Headers

x-access-token	{{token}}
	JWT of user removing the recipe from their bookmarks.

Example Response200 OK

```
"message": "Bookmark removed."
```

GET /bookmarks

http://localhost:5000/bookmarks

Gets a user's full list of bookmarks.

Headers

x-access-token	{{token}}
----------------	-----------

JWT belonging to user accessing their bookmarks.

Example Request/bookmarks

```
curl --location --request GET 'http://localhost:5000/bookmarks' \
--header 'x-access-token: {{token}}'
```

Example Response200 OK

```
"_id": "5dfb063572714fbb11f0fbd8",
    "calories": 687,
    "desc": "The yogurt helps tenderize the chicken; the garlic, ginger, and spice
s in the marinade infuse it with lots of flavor.",
    "rating": 5,
    "title": "Chicken Tikka Masala"
},
{
    "id": "5dfb063572714fbb11f108ce".
```

POST /recipes

http://localhost:5000/recipes

Adds a new recipe to the database, requires a valid bbcgoodfood.com recipe URL, scrapes the recipe and returns the ID of the inserted recipe.

Headers

x-access-token	{{token}}
	JWT belonging to user adding recipe to system, must be an admin.
Content-Type	application/x-www-form-urlencoded

Body

urlencoded

```
url https://www.bbcgoodfood.com/recipes/beef-vegetable-casserole

Valid URL for a bbcgoodfood.com recipe.
```

Example Response200 OK

```
"inserted": "5dfbd469ba7c69b9757b87b8"
```