Links:

https://final-toddl.uw.r.appspot.com/users/userInfo

• will direct you to a login/signup, then redirect to user's JWT and sub

https://final-toddl.uw.r.appspot.com/users

• unprotected view of all users

Description:

There is a many-to-one relationship with respect to workout-to-exercise. There is a many-to-one relationship with respect to user-to-workout. The unique identifier for User is the 'sub' attribute (generated by req.oidc.user). When user logs in/signs up at first link above, they will be redirected to screen with their JWT and unique sub identifier.

Data Models:

User Entity:

Property	Data Type	Notes
Id	Integer	Id of user, automated by
		Datastore, DO NOT
		manipulate
Name	String	Determined by 'nickname' of
		req.oidc.user. Generally the
		part of the email before @
Workouts	Array	Contains all workout entities
		tied to this particular user.
		NOT REQUIRED
Sub	String	The unique sub of the user
Created	Date	When the user was
		created/first signed in to the
		app
Self	String	URL pointing to itself

Workout Entity:

Property	Data Type	Notes
Id	Integer	Id of workout, automated by
		Datastore, DO NOT
		manipulate
Name	String	Title of the workout
Group	String	The muscle group the
		workout will target

Owner	String	The name of the user that the
		workout is currently tied to
Exercises	Array	Contains all exercise entities
		tied to this particular
		workout. NOT REQUIRED
Self	String	URL pointing to itself

Exercise Entity:

Property	Data Type	Notes
Id	Integer	Id of exercise, automated by
		Datastore, DO NOT
		manipulate
Name	String	Name of the exercise
Sets	Integer	The number of sets for this
		exercise to be completed
Reps	Integer	The amount of repetitions for
		this exercise per set
Workout_id	Integer	The id of the workout that
		this exercise is currently tied
		to. NOT REQUIRED
Self	String	URL pointing to itself

POST Workout:

• Endpoint: /workout

• Request: must be in JSON (401 code in HTML)

```
{
    "name": "Day 5",
    "group": "Cardio"
}
```

• Response: JSON

• Server only accepts application/json

• A valid JWT is mandatory

Outcome	Status Code	Notes
Success	201 Created	Resource successfully created
Failure	401 Unauthorized	No JWT/invalid JWT
		provided in request. Response
		comes in HTML (generated
		by a middleware)

Failure	415 Unsupported File Type	Request did not send
		'Content-Type' of
		application/json
Failure	400 Bad Request	Request missing 'name' or
		'group' or both

Response Sample Success:

201 Created

```
{
    "id": "4871523420602368",
    "name": "Day 1",
    "group": "Chest",
    "owner": null,
    "exercises": [],
    "self": "http://final-toddl.uw.r.appspot.com/workout/4871523420602368"
}
```

Response Sample Failure:

401 Unauthorized

415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data."
}
```

400 Bad Request

```
{
    "Error": "The request object is missing name or group"
}
```

POST Exercise:

- Endpoint: /exercise
- Request in JSON

```
{
    "name": "Bicep Curls",
    "sets": 3,
    "reps": 15
}
```

- Response in JSON
- Server only accepts application/json
- No JWT required

Outcome	Status Code	Notes
Success	201 Created	Successfully created resource
Failure	400 Bad Request	Request missing name or sets
		or reps or some combination
		of all of them
Failure	415 Unsupported Media Type	Request did not send
		'Content-Type' of
		application/json

Response Sample Success:

201 Created

```
"id": "6204615636811776",
    "name": "Bicep Curls",
    "sets": 3,
    "reps": 15,
    "workout_id": null,
    "self": "http://final-toddl.uw.r.appspot.com/exercise/6204615636811776"
}
```

Response Sample Failure:

400 Bad Request

```
{
    "Error": "The request is missing the required attributes"
}
```

415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data."
}
```

GET Workout:

- Endpoint: /workout
- No request
- No path parameters
- Response in JSON
- Valid JWT required

Outcome	Status Code	Notes
Success	200 OK	Resources of user retrieved
Failure	401 Unauthorized	No JWT/invalid JWT
		provided (response in HTML,
		provided by middleware)

Response Sample Success:

200 OK

Response Sample Failure:

</html>

- Endpoint: /workout/:id
- No request
- Path parameter is the id of the desired workout
- Response in JSON
- Valid JWT required

Outcome	Status Code	Notes
Success	200 OK	Workout retrieved
Failure	404 Not Found	Workout with that id does not
		exist in database
Failure	401 Unauthorized	No JWT/invalid JWT
		provided (response in HTML,
		provided by middleware)
Failure	406 Not Acceptable	Client doesn't have Accept
		header at application/json

Response Sample Success:

200 OK

```
{
    "id": "4871523420602368",
    "name": "Day 1",
    "group": "Chest",
    "owner": null,
    "exercises": [],
    "self": "http://final-toddl.uw.r.appspot.com/workout/4871523420602368"
}
```

Response Sample Failure:

401 Unauthorized

404 Not Found

```
{
    "Error": "No workout with this workout_id exists"
}
```

406 Not Acceptable

```
{
    "Error": "Client doesn't accept application/json"
}
```

GET Exercise:

- Endpoint: /exercise
- No request
- No path parameters
- Response in JSON

Outcome	Status Code	Notes
Success	200 OK	Exercises retrieved

Sample Response Success:

200 OK

Endpoint: /exercise/:id

- No request
- Path parameter is the id of the desired exercise
- Response in JSON
- No JWT required

Outcome	Status Code	Notes
Success	200 OK	Exercise retrieved
Failure	404 Not Found	No exercise exists with the id
Failure	406 Not Acceptable	Client doesn't have Accept
	_	header to application/json

Response Sample Success:

200 OK

```
"id": "6204615636811776",
    "name": "Bicep Curls",
    "sets": 3,
    "reps": 15,
    "workout_id": null,
    "self": "http://final-toddl.uw.r.appspot.com/exercise/6204615636811776"
}
```

Response Sample Failure:

404 Not Found

```
{
    "Error": "No exercise with this exercise_id exists"
}
```

401 Not Acceptable

```
{
    "Error": "Client doesn't accept application/json"
}
```

GET User:

- Endpoint: /users
- No request
- No path parameters
- Response in JSON

Outcome	Status Code	Notes
Success	200 OK	All users signed into app

Sample Response Success:

- Endpoint: /users/userInfo
- This endpoint is where the user is redirected to after login/signup, their JWT and sub is displayed here

PUT Workout:

- Endpoint: /workout/:id
- Request in JSON
- Path parameter is id of workout that is desired to be updated
- Response in JSON
- Valid JWT is required

Outcome	Status Code	Notes
Success	200 OK	Successfully updated
		resource
Failure	400 Bad Request	Request body missing name
		or group or both
Failure	401 Unauthorized	No JWT/invalid JWT
		provided (response in HTML,
		generated by middleware)
Failure	404 Not Found	No workout with that id
		exists
Failure	415 Unsupported Media Type	Request not in
		application/json form

Sample Response Success:

```
{
    "id": "4871523420602368",
    "name": "Day 2",
    "group": "Back",
    "exercises": [],
    "self": "http://final-toddl.uw.r.appspot.com/workout/4871523420602368"
}
```

Sample Response Failure: 400 Bad Request

```
{
    "Error": "Attribute(s) missing"
}
```

401 Unauthorized

404 Not Found

```
{
    "Error": "No workout with this workout_id exists"
}
```

415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data."
}
```

PUT Exercise:

- Endpoint: /exercise/:id
- Request in JSON
- Path parameter is id of exercise desired to be updated
- Response in JSON
- No JWT required

Outcome	Status Code	Notes
Success	200 OK	Exercise successfully updated

Failure	400 Bad Request	Name, sets, reps or combo of
		all missing from request body
Failure	404 Not Found	No exercise with that id exists
Failure	415 Unsupported Media Type	Request not in
		application/json form

Sample Response Success:

200 OK

```
{
    "id": "6204615636811776",
    "name": "Incline Curls",
    "sets": 4,
    "reps": 10,
    "workout_id": null,
    "self": "http://final-toddl.uw.r.appspot.com/exercise/6204615636811776"
}
```

Sample Response Failure:

400 Bad Request

```
"Error": "Attribute(s) missing"
}
```

404 Not Found

```
"Error": "No exercise with this exercise_id exists"
}
```

415 Unsupported Media Type

```
{
    "Error": "Server only accepts application/json data."
}
```

PATCH Workout:

- Endpoint: /workout/:workout_id/exercise/:exercise_id
- NO REQUEST
- Path parameters are id of workout to be changed and id of exercise to add to workout
- Response in JSON
- Valid JWT required

Outcome	Status Code	Notes
Success	200 OK	Workout successfully
		updated

Failure	401 Unauthorized	No JWT/invalid JWT
		provided (response in HTML,
		provided by middleware)
Failure	403 Forbidden	Exercise is already tied to
		another workout
Failure	404 Not Found	Workout with that id doesn't
		exist or exercise with that id
		doesn't exist

Sample Request Success:

200 OK

```
"id": "5070729708044288",

"exercises": {
        "reps": 10,
        "sets": 4,
        "name": "Incline Curls",
        "self": "https://final-toddl.uw.r.appspot.com/exercise/5641665683390464",
        "id": "5641665683390464",
        "workout_id": "5070729708044288"
},
        "self": "http://final-toddl.uw.r.appspot.com/workout/5070729708044288"
}
```

Sample Request Failure:

401 Unauthorized

403 Forbidden

```
"Error": "This exercise already belongs to a workout"
}
```

404 Not Found

```
{
    "Error": "No workout with this workout_id exists"
}

{
    "Error": "No exercise with this exercise_id exists"
}
```

PATCH Exercise:

- Endpoint: /exercise/:id
- Request in JSON

```
"sets": 4,
"reps": 5
}
```

- Path parameter is id of exercise desired to be updated
- Response in JSON
- No JWT required

Outcome	Status Code	Notes
Success	200 OK	Exercise successfully updated
Failure	400 Bad Request	Sets or reps or both attributes
		missing from request
Failure	404 Not Found	Exercise with that id doesn't
		exist
Failure	415 Unsupported Media Type	Request not in
		application/json form

Sample Response Success:

```
{
    "id": "6204615636811776",
    "sets": 4,
    "reps": 5,
    "workout_id": "4871523420602368",
    "self": "http://final-toddl.uw.r.appspot.com/exercise/6204615636811776"
}
```

Sample Response Failure: 400 Bad Request

```
"Error": "Attribute(s) missing"
}
```

404 Not Found

```
{
    "Error": "No exercise with this exercise_id exists"
}
```

415 Unsupported Media Type

```
"Error": "Server only accepts application/json data."
}
```

PATCH User:

- Endpoint: /users/:user_id/workout/:workout_id
- NO REQUEST
- Path parameters are id of user and id of workout desired to be added to user
- Response in JSON
- Valid JWT required

Outcome	Status Code	Notes
Success	200 OK	Workout successfully added
		to user
Failure	401 Unauthorized	No JWT/invalid JWT
		provided (response in HTML,
		provided by middleware)
Failure	403 Forbidden	Workout already belongs to a
		user
Failure	404 Not Found	Workout with that id doesn't
		exist or user with that id
		doesn't exist

Sample Response Success:

```
{
   "id": "5929450034167808",
   "workouts": {
        "owner": "anewone",
```

Sample Response Failure:

401 Unauthorized

403 Forbidden

```
{
   "Error": "This workout already belongs to a user"
}
```

404 Not Found

```
{
    "Error": "No workout with this workout_id exists"
}

{
    "Error": "No user with that user_id exists"
}
```

DELETE Workout:

- Endpoint: /workout/:id
- No request
- Path parameter is id of workout desired to be deleted
- No response on success, JSON on failure
- Valid JWT required

Outcome	Status Code	Notes
Success	204 No Content	Successful deletion
Failure	401 Unauthorized	No JWT/invalid JWT provided (response in HTML, provided by middleware)
Failure	404 Not Found	Workout with that id doesn't exist

Sample Response Failure:

401 Unauthorized

404 Not Found

```
{
    "Error": "No workout with this workout_id exists"
}
```

DELETE Exercise:

- Endpoint: /exercise/:id
- No request
- Path parameter is id of exercise desired to be deleted
- No response on success, JSON on failure
- No JWT required

Outcome	Status Code	Notes
Success	204 No Content	Successful deletion
Failure	404 Not Found	Exercise with that id doesn't
		exist

Sample Response Failure:

404 Not Found

```
{
    "Error": "No exercise with this exercise_id exists"
}
```

405 Status Codes:

- A 405 status code (Method Not Allowed) is listed below for the endpoint and request
 - DELETE (/workout and /exercise)
 - PUT (/workout and /exercise)
 - o PATCH (/workout and /exercise)
- Sample Response Failure

```
"Error": "Server doesn't allow this request at this URL"
}
```