

# Abdallah Nawras

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## Portfolio\_Final\_Project

### UI

Home page: <https://final-project-dot-hw3-an.uc.r.appspot.com>

Login and get token: <https://final-project-dot-hw3-an.uc.r.appspot.com/login>

Create user: <https://final-project-dot-hw3-an.uc.r.appspot.com/signup>

NOTE: the home page will redirect to login page if user is not logged in

### Data Models

#### Boat:

- Name: string
- Length: string
- Type: string
- Owner: string

All data fields all required (except owner, the api will handle it)

Sample json payload to create:

```
{
  "name": "test",
  "length": "20",
  "type": "sale boat"
}
```

#### Load:

- weight : string
- Content: string
- Delivery\_date: string
- boat\_id : string

All data fields are required (except boat\_id)

Sample json payload to create:

```
{
  "weight": "10",
  "content": "fish",
  "delivery_date": "2020-10-5"
}
```

#### User:

- Username: string
- Password: string

### Relationships

- Boat and Load has one-to-many relationship (a load has only one boat, boat has multiple loads)
- Boat and User has one-to-many relationship (a boat has only one user, user has multiple boats)
- Username is used as unique identifier for the user
- When making request, only supply the JWT, everything else is handled by the API

## API Endpoints

### Users(Public):

- **[GET] /users** => returns list of users, codes: [200, 405, 401]

Sample response:

```
{
  "count": 3,
  "limit": 5,
  "next": "",
  "previous": "",
  "results": [
    {
      "id": "5728315943944192",
      "name": "user",
      "password":
"sha256$siI5vIUGv$56e3172453b199fa08c47a66a3af70f342caa46126f056c3f4371b92c
88aab8a"
    },
    {
      "id": "5734159817375744",
      "name": "test",
      "password":
"sha256$Nf1aOB9t$2df364ad896ed4f56cc5cb08b2c9effe8c91d6f1aa2d41af1bfe889f7
258a655"
    },
    {
      "id": "5737003958140928",
      "name": "admin",
      "password":
"sha256$LD9Y3uc9$eb1be25bf95823d5f5a1990e002a68a88d6596cc1af3b2c42cba9c9fa
5607455"
    }
  ]
}
```

```
],  
  "start": 1  
}
```

### Boats(Protected)

- **[POST] /boats** => creates a boat, codes: [201, 400, 401, 405, 406]

payload :

```
{  
  "name": "test",  
  "length": "20",  
  "type": "sale boat"  
}
```

Response:

```
{  
  "id": "5768223068782592",  
  "name": "test",  
  "type": "sale boat",  
  "length": "20",  
  "owner": "test",  
  "loads": null,  
  "self": "http://localhost:5000/boats/5768223068782592"  
}
```

- **[GET] /boats** => get all boats for logged in user, codes: [200, 401, 403, 405]

Response:

```
{  
  "count": 9,  
  "limit": 5,  
  "next": "/boats?start=6&limit=5",  
  "previous": "",  
  "results": [  
    {  
      "id": "5184813602439168",  
      "name": "test",  
      "type": "sale boat",  
      "length": "20",  
    }  
  ]  
}
```

```
    "owner": "test",
    "loads": null,
    "self": "http://localhost:5000/boats/5184813602439168"
  },
  {
    "id": "5203205155717120",
    "name": "test",
    "type": "sale boat",
    "length": "20",
    "owner": "test",
    "loads": null,
    "self": "http://localhost:5000/boats/5203205155717120"
  },
  {
    "id": "5674591867371520",
    "name": "test",
    "type": "sale boat",
    "length": "20",
    "owner": "test",
    "loads": null,
    "self": "http://localhost:5000/boats/5674591867371520"
  },
  {
    "id": "5694955355897856",
    "name": "test",
    "type": "sale boat",
    "length": "20",
    "owner": "test",
    "loads": null,
    "self": "http://localhost:5000/boats/5694955355897856"
  },
  {
    "id": "5726177821982720",
    "name": "test",
    "type": "sale boat",
    "length": "20",
    "owner": "test",
```

```

        "loads": null,
        "self": "http://localhost:5000/boats/5726177821982720"
    }
],
"start": 1
}

```

- **[GET] /boats/{id}** => get one boat for logged in user, codes:[200, 401, 403, 404, 405]

Response:

```

{
  "id": "5695708787113984",
  "name": "test",
  "type": "sale boat",
  "length": "20",
  "owner": "test",
  "loads": [],
  "self": "http://localhost:5000/boats/5695708787113984"
}

```

- **[PATCH] /boats/{id}** => patch boat, codes: [200, 401, 403, 404, 405, 406]

Payload:

```

{
  "name": "patched",
  "length": 20,
  "type": "sale boat"
}

```

Response:

```

{
  "id": "5695708787113984",
  "name": "patched",
  "type": "sale boat",
  "length": "20",
  "owner": "test",
  "loads": [],
  "self": "http://localhost:5000/boats/5695708787113984"
}

```

- **[DELETE] /boats/{id}** => deleted a boat, codes: [204, 403, 404, 401, 405]

Response: None

### Loads(protected)

- **[POST] /loads** => creates a load, codes: [201, 400, 401, 405, 406]

Payload:

```
{
  "weight": "10",
  "content": "fish",
  "delivery_date": "2020-10-5"
}
```

Response:

```
{
  "id": "5756247156457472",
  "weight": 10,
  "content": "fish",
  "delivery_date": "2020-10-5",
  "boat_id": null,
  "self": "http://localhost:5000/loads/5756247156457472"
}
```

- **[GET] /loads/{id}** => gets one load, codes [200, 401, 403, 404, 405]

Response: same as above

- **[GET] /loads** => get list of loads, codes[200, 401, 405]

Response:

```
{
  "count": 2,
  "limit": 5,
  "next": "",
  "previous": "",
  "results": [
    {
      "id": "5651072089587712",
      "weight": 10,
```

```
        "content": "fish",
        "delivery_date": "2020-10-5",
        "boat_id": null,
        "self": "http://localhost:5000/loads/5651072089587712"
    },
    {
        "id": "5661864209940480",
        "weight": 10,
        "content": "fish",
        "delivery_date": "2020-10-5",
        "boat_id": null,
        "self": "http://localhost:5000/loads/5661864209940480"
    }
],
"start": 1
}
```

- **[PATCH] /loads/{id}** => updates a load, codes: [200, 401, 403, 405, 404, 406]

Payload:

```
{
  "weight": "10",
  "content": "patched",
  "delivery_date": "2020-10-5"
}
```

Response:

```
{
  "id": "5723707007827968",
  "weight": 10,
  "content": "patched",
  "delivery_date": "2020-10-5",
  "boat_id": null,
  "self": "http://localhost:5000/loads/5723707007827968"
}
```

- **[DELETE] /loads/{id}** => deletes a load, codes: [204, 401, 403, 404, 405]

Response: none

### Relationships(protected)

- **[PUT] /loads/{id}/boats/{id}** => assigns a load to a boat, codes: [200, 401, 403, 404, 405]

Response:

```
{
  "id": "5723502418067456",
  "weight": 10,
  "content": "fish",
  "delivery_date": "2020-10-5",
  "boat_id": "5757464578359296",
  "self": "http://localhost:5000/loads/5723502418067456"
}
```

**NOTE:** when getting the boat now, loads are associated with it

```
{
  "id": "5757464578359296",
  "name": "test",
  "type": "sale boat",
  "length": "20",
  "owner": "test",
  "loads": [
    "5723502418067456"
  ],
  "self": "http://localhost:5000/boats/5757464578359296"
}
```



- **[DELETE]** /loads/{id}/boats/{id} => unassign load from boat, codes: [200, 401, 403, 404, 405]

Response:

```
{
  "id": "5723502418067456",
  "weight": 10,
  "content": "fish",
  "delivery_date": "2020-10-5",
  "boat_id": null,
  "self": "http://localhost:5000/loads/5723502418067456"
}
```