

17: Tietokantayhteys ja CRUD Nodella ja Expressillä

GET

- book taulun sisältö

The screenshot shows a web browser interface for a REST client. The URL bar shows `localhost:3000/book`. The method is set to `GET`. The response body is displayed in JSON format, showing an array of three book objects.

Key	Value	Description
Key	Value	Description

```
1 [
2   {
3     "id_book": 1,
4     "name": "PHP Basic",
5     "author": "Bob Jones",
6     "isbn": "123-456-789-111-x"
7   },
8   {
9     "id_book": 2,
10    "name": "Statistics",
11    "author": "Lisa Smith",
12    "isbn": "222-333-444-555-y"
13  },
14  {
15    "id_book": 3,
16    "name": "Math",
17    "author": "Matt Gale",
18    "isbn": "362-111-434-785-y"
19  },
20 ]
```

POST

- borrower tauluun uusi tietue

The screenshot shows a REST client interface with the URL `localhost:3000/borrower` and the method `POST`. The request body is set to `x-www-form-urlencoded`. The form data table contains the following entries:

Key	Value	Description
<input checked="" type="checkbox"/> fname	Thomas	
<input checked="" type="checkbox"/> lname	Mitchell	
<input checked="" type="checkbox"/> streetaddress	BookStreet 1	

The response status is `200 OK` with a time of `11 ms` and a size of `343 B`. The response body is shown in JSON format:

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 1,
5   "info": "",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 0
9 }
```

PUT

- huomasiin, että fname oli jäänyt tyhjäksi koodissa olleen kirjoitusvirheen takia (post ja update funktiossa fname oli pelkkä name), joten päivitän etunimet

The screenshot shows a REST client interface with the URL `localhost:3000/borrower/2` and the method `PUT`. The request body is set to `x-www-form-urlencoded`. The form data table contains the following entries:

Key	Value	Description
<input checked="" type="checkbox"/> fname	Lisa	
<input checked="" type="checkbox"/> lname	Jacobs	
<input checked="" type="checkbox"/> streetaddress	GardenStreet 11	

The response status is `200 OK` with a time of `13 ms` and a size of `383 B`. The response body is shown in JSON format:

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 0,
5   "info": "Rows matched: 1 Changed: 1 Warnings: 0",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 1
9 }
```

päivitetty tietue

HTTP localhost:3000/borrower/2

GET localhost:3000/borrower/2 Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

	Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/>	fname	Lisa			
<input checked="" type="checkbox"/>	lname	Jacobs			
<input checked="" type="checkbox"/>	streetaddress	GardenStreet 11			
	Key	Value	Description		

Body Cookies Headers (7) Test Results Status: 200 OK Time: 9 ms Size: 320 B Save as example

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "id_borrower": 2,
4     "fname": "Lisa",
5     "lname": "Jacobs",
6     "streetaddress": "GardenStreet 11"
7   }
8 ]
```

DELETE

- borrower taulu ennen poistoa

Body Cookies Headers (7) Test Results Status: 200 OK Time: 15 ms Size: 576 B

Pretty Raw Preview Visualize JSON

```
2 {
3   "id_borrower": 1,
4   "fname": "Thomas",
5   "lname": "Mitchell",
6   "streetaddress": "BookStreet 1"
7 },
8 {
9   "id_borrower": 2,
10  "fname": "Lisa",
11  "lname": "Jacobs",
12  "streetaddress": "GardenStreet 11"
13 },
14 {
15  "id_borrower": 3,
16  "fname": "Mary",
17  "lname": "Jacobs",
18  "streetaddress": "GardenStreet 11"
19 },
20 {
21  "id_borrower": 4,
22  "fname": "Johnny",
23  "lname": "Cesar",
24  "streetaddress": "GardenStreet 23"
25 }
26 ]
```

- ja poisto

HTTP localhost:3000/borrower/4

DELETE localhost:3000/borrower/4

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

Key	Value	Description	...	Bulk Edit
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Body Cookies Headers (7) Test Results Status: 200 OK Time: 12 ms Size: 343 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 0,
5   "info": "",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 0
9 }
```

- taulu poiston jälkeen

HTTP localhost:3000/borrower

GET localhost:3000/borrower

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

localhost:3000/borrower/1

none form-data x-www-form-urlencoded raw binary GraphQL

Key	Value	Description	...	Bulk Edit
-----	-------	-------------	-----	-----------

Body Cookies Headers (7) Test Results Status: 200 OK Time: 8 ms Size: 490 B Save as example

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "id_borrower": 1,
4     "fname": "Thomas",
5     "lname": "Mitchell",
6     "streetaddress": "BookStreet 1"
7   },
8   {
9     "id_borrower": 2,
10    "fname": "Lisa",
11    "lname": "Jacobs",
12    "streetaddress": "GardenStreet 11"
13  },
14  {
15    "id_borrower": 3,
16    "fname": "Mary",
17    "lname": "Jacobs",
18    "streetaddress": "GardenStreet 11"
19  }
20 ]
```