An Academic Reference Manager

By:

- Daníel Ekaphan Valberg (danielv16@ru.is)
- Grétar Örn Hjartarson (gretarh17@ru.is)
- Jóel Snær Garcia (joelg18@ru.is)

How to Install and Run

Installation

Make sure you have NodeJS installed. This was written with version 12.9.0 but newer versions and older (tested on 10.15.3) works as well. Installing NodeJS includes npm, so you do not have to worry about that.

Whe NodeJS is installed, simply type in terminal/command line in root of the project to install all dependencies: '\$' indicates being run in terminal/cmd

```
$ npm install
```

Next, if you would like to run tests, you must also install Jest into global dependency in npm. You can do that by simply entering

```
$ npm install -g jest
```

Note: There are no setup required for Database, see design documentation for more information

Running

after installing packets you have the following chocies to run: '\$' indicates being run in terminal/cmd

- \$ npm test to run all tests, to run a specific file simply enter file name after e.g. \$ npm test
 \$ rc/db/statics/UserStatics.test.js, tests are run on test database collection
- \$ npm run test:coverage to run all tests and get coverage information, results are outputted into console but a more detailed version is outputted to /coverage, to see on browser open /coverage/lcov-report/index.html/, tests are run on test database collection
- \$ npm start to start in development environment, it is connected to a development database collection
- \$ npm run production to start in production environment, it is connected to a production database collection
- \$ npm run initDevData to initalize data into development database collection
- \$ npm run initProductionData to initialize data into production database collection

This will run the server on and listen on port 5000.

To run HTTP methods either run in the browser for GET methods or use either Postman to execute the requests or cURL.

The routes are accessible at localhost:5000 followed by any following routes.

Routes

Where '{publication_id}' and '{user_id} appears, replace to desired ID!

To enter authentication, you will have to enter the desired user type into the header in the "Authorization" field, user types are: "auth" and "auth", emit this for "anonymous" user type

Admin users has access to all the following routes

URI	HTTP Method	Permitted User Types	Service	Description
/publications	GET	All	Publications	Get information about all publications
/publications	POST	Admin	Publications	Add a publication
/publications/{publication_id}	GET	All	Publications	Get information about a specific publication (including borrowing history)
/publications/{publication_id}	DELETE	Admin	Publications	Delete a publication
/publications/{publication_id}	PUT	Admin	Publications	Update a publication
/users	GET	Admin	Users	Get information about all users
/users	POST	Admin	Users	Add a user
/users/{user_id}	GET	Admin	Users	Get information about a given user (e.g. borrowing history)
/users/{user_id}	DELETE	Admin	Users	Remove a user
/users/{user_id}	PUT	Admin	Users	Update a user
/users/{user_id}/publications	GET	Authenticated, Admin	Publications	Get information about the Publications a given user has on loan
/users/{user_id}/publications/{publication_id}	POST	Authenticated, Admin	Publications	Register a publication on loan

URI	HTTP Method	Permitted User Types	Service	Description
/users/{user_id}/publications/{publication_id}	DELETE	Authenticated, Admin	AutehPublications	Return a publication
/users/{user_id}/publications/{publication_id}	PUT	Admin	Publications	Update borrowing information
/users/{user_id}/reviews	GET	Authenticated, Admin	Reviews	Get reviews by a given user
/users/{user_id}/reviews/{publication_id}	GET	Authenticated, Admin	Reviews	Get user reviews for a given publication
/users/{user_id}/reviews/{publication_id}	POST	Authenticated, Admin	Reviews	Add a user review for a publication
/users/{user_id}/reviews/{publication_id}	DELETE	Authenticated, Admin	Reviews	Remove review
/users/{user_id}/reviews/{publication_id}	PUT	Authenticated, Admin	Reviews	Update publication review
/users/{user_id}/recommendation	GET	Authenticated, Admin	Recommendation	Get a recommendation for a given user
/publications/reviews	GET	All	Reviews	Get reviews for all Publications
/publications/{publication_id}/reviews	GET	All	Reviews	Get all reviews for a given publication
/publications/{publication_id}/reviews/{user_id}	GET	All	Reviews	Get a user's review for a publication
/publications/{publication_id}/reviews/{user_id}	PUT	Admin	Reviews	Update a user's review
/publications/{publication_id}/reviews/{user_id}	DELETE	Admin	Reviews	Remove a user's review

Queries

Queries can be done on the /users and /publications, the queries are LoanDate=YYYY-MM-DD and LoanDuration=N, where YYYY-MM-DD is Year, Month and Date respectively and N is a number. They work as following:

Route + Query	HTTP Method	Permitted User Types	Result contains
/users?LoanDate=YYYY- MM-DD	GET	Admin	Users information + list of publicaitons on loan
/users?LoanDuration=N	GET	Admin	Users information + list of publications on loan
/users?LoanDate=YYYY- MM-DD&LoanDuration=N	GET	Admin	Users information + list of publicaitons on loan
/publications? LoanDate=YYYY-MM-DD	GET	Authenticated + Admin	Authenticated users get only publications list, Admins get publications + users who loan them
/publications? LoanDuration=N	GET	Admin	Publications list + users who loaned them
/publications? LoanDate=YYYY-MM-DD	GET	Admin	Publications list + users who loaned them

Hashing used:

MAKE SURE YOU RUN HASHING BEFORE NPM INSTALL!

hashing is saved into shasum.txt in the root folder.

```
find . -iname "*.js" | shasum -a 256 > shasum.txt
find . -iname "*.json" | shasum -a 256 >> shasum.txt
```