

## Environment and installation

This is just simple app for storing information about specific book and reads information about the book. **Java 8** is used for service, **postgresql** for DB and build tool **Maven**. Application is tested with **apache maven** server.

First is needed to checkout project from github **git clone** <https://github.com/boksha85/library.git>

and run **mvn clean install** to install dependencies.

Next we need to create database with name **library** for user/password boksha/boksha.  
If different names are used for db and user/password then its needed updating **config.yml** file with those values.

After setting database we need to create table Book and add 10 records. For this is used **dropwizard-migration** feature. **migration.xml** contains information how table should look like, constraints for table and records that should be stored.

For creating table and storing records we need to run this command:

```
java -jar target/library-0.0.1-SNAPSHOT.jar db migrate config.yml
```

After this we can start our application with

```
java -jar target/library-0.0.1-SNAPSHOT.jar server config.yml
```

In browser we should run

**localhost:8080**

and we will be routed to **Home page**, which on load will call **/api/books/lastfive** to retrieve last five books stored

Front part is done in using **jquery, ajax, html and css**.

From header we can redirect to **Show all books**, which will show as all books from database

Then we have **Get Book**, where we can search book by title.

And **Add new book** from where we can store new book, if book is stored successfully we will be redirect to **Home page**.

## APIs, Validations and Testing

4 APIs are exposed:

**GET /api/books** – *returns all books from database*

**GET /api/books/lastfive** – *returns last five inserted records. This is used for home page*

**GET /api/books/get/{title}** – *returns all books that contains search parameter sent as title*

**POST /api/books/add/** - *store new record in database, in body we should send Book as json object.*

In project root folder in “postman” folder we have postman collections which can be imported in postman app for testing APIs.

Validations are done in front and back. Advice “**Never trust the client**” :)

All validations are covered with **Junit** tests.