Groovify Web Application – Developer Manual

Groovify is a Java-based web application built with Spring Boot. It includes features for registration, login, logout, secure password hashing, and database integration. It uses Thymeleaf templates and CSS for a clean user interface.

This guide explains how to install, configure, and run the application.

1. System Requirements

* Java JDK 21.0.7 (we have not tested other versions)
Java JDK 21 Download
* Git version 2.48.1 (we have not tested other versions)
GIT Download
* MySQL 8.0.43 (we have not tested other versions)
Windows:
MySQL Download
Mac:
Within the command line, run the following commands.
Install MySQL:
brew install mysql
Start MySQL:
brew services start mysql
Secure installation (you will be prompted to set root password - keep track of this password!)
mysql_secure_installation
Test login credentials (you will be prompted to enter your root password that you set in the previous step):
mysql -u root -p

* Chrome web browser version 142.0.7444.134 (we have not tested other browsers or versions)
Google Chrome Web Browser Download

Optional

* IntelliJ IDEA IDE (did not test other IDEs)
IntelliJ IDEA IDE Download

Note: You can run our web application solely from the terminal.

2. Repository Setup

Step 1: Locate our GitHub repository.

https://github.com/jclaassen123/Groovify

Click the green Code button and copy the “https” link.

From the command line, navigate to your desired directory where you want our project to be located.

cd (your desired directory)

Then, run the “git clone” command and paste the https link after. Your command should look something like this:

git clone [https://github.com/jclaassen123/Groovify]

You have now cloned our repository!

3. Database Configuration

Step 1: Create the Database

CREATE DATABASE groovify;
USE groovify;

Step 2: Create Dedicated Groovify User

From the command line, create a new user called “groovify” with a password of “supersecret”.

CREATE USER 'groovify'@'%’localhost' IDENTIFIED BY 'supersecret';

GRANT ALL PRIVILEGES ON groovify. TO ‘groovify’@’localhost’;*

FLUSH PRIVILEGES;

Step 3: Import DDL File

mysql -u groovify -p groovify < your_path_to_groovify_clone/documentation/ddl/Groovify.ddl

Step 4: Verify Database Creation

Log in to MySQL under the groovify user (enter *supersecret* when prompted for your password).

mysql -u groovify -p

Check database information:

USE groovify;
SHOW tables;

Now, you should see the following output:

Tables_in_groovify

client
client_genre
genre
playlist
playlist_song
song

If that is the case, you are all good to go!

4. Running the Application

Start the application in the command line using the command:

./gradlew bootRun

Access the application at:

http://localhost:8080/

You have now successfully cloned, built, configured, and run the Groovify application. You can register and log in users, test the functionality, and it all handles errors. Groovify demonstrates secure and maintainable web development using Spring Boot, and allows users to explore copyright free music all for free!