

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](#)

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

To get started with MySQL, please refer to the following link. This will walk you through how to log in with the root user, as well as provide info on some basic MySQL commands.

[Getting Started with MySQL](#)

Step 1: Create Dedicated Groovify User

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

```
CREATE USER 'groovify'@'localhost' IDENTIFIED BY 'supersecret';
CREATE USER 'groovify'@'%' IDENTIFIED BY 'supersecret';
GRANT ALL PRIVILEGES ON groovify.* TO 'groovify'@'localhost' WITH GRANT OPTION;
GRANT ALL PRIVILEGES ON groovify.* TO 'groovify'@'%' WITH GRANT OPTION;
```

Step 2: Create the Database

```
mysql -u groovify -p
```

(enter in supersecret for the password)

```
CREATE DATABASE groovify;
```

Step 3: Verify Database Creation

Check database information:

```
USE groovify;
SHOW tables;
```

Now, you should see the following output:

```
mysql> show tables;
+-----+
| Tables_in_groovify |
+-----+
| client
| client_genre
| client_seq
| genre
| genre_seq
| playlist
| playlist_seq
| playlist_song
| song
| song_seq
+-----+
10 rows in set (0.01 sec)
```

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

exit

4. Running the Application

Navigate to the directory that the application is located in. Start the application in the command line using the command:

`./gradlew bootRun`

If this command is working properly, you should see something like this:

```
2025-11-23 13:22:03,840 - [INFO] - from com.groovify.GroovifyApplication in restartedMain
Started GroovifyApplication in 18.201 seconds (process running for 19.375)

<=====--> 80% EXECUTING [31s]
> :bootRun
█
```

Now, you can 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!