

# Backend Documentation

Updated 12/04/2021

This backend service utilizes the Spring framework and will be used by our team to build application features.

## Requirements

- Spring
- Maven
- MySQL Community Workbench
- IDE

## Optional

- Postman (to test API requests/responses)
- cURL

## Database

This application will use MySQL for data storage.

It is recommend that developers use a combination of local and cloud databases for creating/testing features.

## Amazon Relational Database Service (RDS)

The Amazon RDS database is currently in production.

## Amazon Web Services (AWS)

The backend service for this project is currently in production is being hosted on AWS (see Slack for AWS documentation).

Backend service features are updated with each approved (and merged) pull request. You can expect to see these features in production with two hours.

## API Endpoints (*as of 12/04/2021*)

### GET endpoints

/get-users	Returns JSON array of all users
/get-bugs	Returns JSON array of all bugs

### POST endpoints

/register	Creates a new user
/authenticate	Authenticates user session
/create-bug	Inserts a bug into the database
/update-bug	Updates a single bug

\*See Slack for request and response requirements.

**NOTE:**

A value generator automatically increments when a user or bug entry is added to the database.

**Spring Security – User Authentication**

JSON Web Tokens (JWT) authentication will be used for user login and user sessions.

**IDE Setup**

For Spring to work with your local or cloud set up you must have the included properties file configured. This properties file uses a specific key/value pair and without it properly configured, the Spring application will not run.

Since this project is viewable by the public on Github, I decided to remove the values from the configuration file. I will provide configuration details to the team later this week.

Location of configuration file within the file hierarchy:

```
src → main → resources → application.properties
```

More information on application properties can be found here:

<https://docs.spring.io/spring-boot/docs/current/reference/html/application-properties.html>

**Cloning Repository**

After cloning, please make sure that that you create a separate working branch for yourself. Only approved work will be merged to the main branch.

**Code Changes**

If you have made changes on your branch that you would like merged to main, please issue a pull request.