

# QA Training App – Deployment & Access Instructions

## 1. Purpose of This Document

This document provides step-by-step instructions to deploy and run the **QA Training App** locally.

Students are required to deploy the application, access the UI, and use the APIs (via Swagger) as part of their **testing and automation assignment**.

The application is already fully implemented. Students **must not modify application code**, only configure and run it.

## 2. System Prerequisites

Ensure the following software is installed on the machine before deployment:

- **Java JDK 21** (or compatible Java 21+ version)
- **MySQL 8.0**
- **Web Browser**
  - Google Chrome (recommended)

## 3. Deployment Artifacts Provided

The lecturer will provide the following files:

### 1. Executable JAR file

- Example:  
qa-training-app.jar

### 2. Application Properties File

- application.properties

## 4. Database Setup (MySQL)

### 4.1 Start MySQL Server

Ensure that the MySQL server is deployed and running.

## 4.2 Create Database

Login to MySQL using a database client or command line and execute:

```
CREATE DATABASE qa_training;
```

⚠ Tables will be created automatically when the application starts.  
No manual table creation is required.

## 5. Application Configuration

### 5.1 application.properties

Update the application.properties file as needed based on your local environment.

- If needed please change server port to different port  
`server.port=8080`
- If MySQL root username or password differs, update them accordingly.  
`spring.datasource.username=root`  
`spring.datasource.password=<root password>`
- If server port change update API Base URL port accordingly

```
api.base-url=http://localhost:8080
```

## 6. Run the Application

### 6.1 Navigate to JAR Location

Open a terminal or command prompt and navigate to the folder containing the JAR file:

```
cd <jar-file-location>
```

### 6.2 Start the Application

Run the following command:

```
java -jar qa-training-app.jar
```

### 6.3 Successful Startup Indicators

- Application starts on port **8080** or the port you have configured
- Hibernate automatically creates required tables in qa\_training database
- Console logs show Spring Boot startup completion

## 7. Accessing the Application

### 7.1 UI Access

Open a browser and navigate to:

<http://localhost:8080/ui/login>

This will open the **Login Page** of the QA Training App.

### 7.2 Swagger API Access

Swagger UI is available at:

<http://localhost:8080/swagger-ui/index.html>

Students must refer Swagger for: - API endpoints - Request/response formats - Error scenarios

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## 8. User Roles and Access Details

The application supports **two predefined user roles**.

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### 8.1 Admin User

**Role:** ROLE\_ADMIN

**Access Capabilities:** -

- Login to the application
- View Dashboard
- Add / Edit / Get / Delete Categories
- Add / Edit / Get / Delete Plants
- Perform Sales (Sell Plants)
- Delete Sales records

**Credentials:**

Field	Value
Username	admin

Password	admin123
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## 8.2 Test User (Normal User)

**Role:** ROLE\_USER

**Access Capabilities: -**

- Login to the application
- View Dashboard
- View Categories (read-only)
- View Plants (read-only)
- View Sales (read-only)

**Restrictions: -**

- Cannot add, edit, or delete Categories
- Cannot add, edit, or delete Plants
- Cannot perform Sales

**Credentials:**

Field	Value
Username	user
Password	user123

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## 9. Notes for Students

- Admin-only buttons (Add / Edit / Delete / Sell) are:
  - Hidden or disabled for normal users
- Unauthorized access attempts redirect to:
  - **403 – Access Denied page**
- The application is already implemented
- Students must not modify backend or UI code
- Swagger is the official API reference
- UI requirements are documented in the provided SRS document
- Focus of the assignment is:
  - Functional Testing

- UI Automation
- API Automation
- Bug Identification & Reporting

## 10. Troubleshooting

### Issue: Application does not start

- Verify Java version using:
  - `java -version`
- Ensure MySQL is running
- Confirm database `qa_training` exists

### Issue: Database connection error

- Check MySQL username/password
- Confirm MySQL port (default: 3306)

### Issue: Swagger not accessible

- Ensure application started successfully
- Check URL spelling
- Verify port 8080 is not blocked

## 11. Conclusion

This deployment setup ensures all students run the **same stable QA Training App environment**, allowing consistent **testing, automation, and assessment**.

This document should be distributed together with:

- Application JAR
- `application.properties`
- SRS (Requirements Document)
- Assignment Guideline