

TA Management System – User Manual

Find the jar file at the following drive link:

<https://drive.google.com/file/d/1Sleb4qJMkYuBBz5-ndLg8gyt8jSOum2s/view?usp=sharing>

1. Overview

This is a full-stack web application packaged into a single executable `.jar` file using Java Spring Boot and React. The application allows department staff and TAs to manage proctoring duties, availability, and TA-student interactions.

No programming knowledge is required to run the application — just follow the steps below.

2. System Requirements

- Java 17 or later must be installed
- MySQL server must be installed and running
- A database named ``ta_management_system_db`` must exist
- User must know their MySQL username and password
- Works on Windows, macOS, and Linux

3. Step-by-Step Setup

3.1 Install Java 17

- Download Java 17 from <https://adoptium.net/>
- Verify installation with:
`java -version`

3.2 Install MySQL & Create Database

- Ensure MySQL is running
- Run the `excel_database_setup_script.sql` to create the database. It can be done via workbench or terminal.

3.3 Place the .jar File

Put ``ta_management_system.jar`` in an accessible folder.

3.4 Run the App (Based on OS)

Windows (Command Prompt):

```
set DB_USERNAME=root  
set DB_PASSWORD=your_password
```

```
java -jar ta_management_system.jar
```

macOS (Terminal):

```
DB_USERNAME=root DB_PASSWORD=your_password java -jar ta_management_system.jar
```

Linux (Terminal):

```
DB_USERNAME=root DB_PASSWORD=your_password java -jar ta_management_system.jar
```

3.5 Access the Web App

Go to <http://localhost:8080> in your browser.

4. Testing & Troubleshooting

Look for logs like:

```
Tomcat started on port 8080  
Started BackendApplication...
```

Common Issues:

- Access denied for user': Check DB credentials
- Port 8080 already in use': Make sure that no other application uses port 8080
- Java not recognized: Java not installed or not in PATH

5. Stopping the App

Press Ctrl + C in the terminal to shut it down.

6. Optional: Windows Launcher

Create a file named `run.bat` with the following content:

```
@echo off  
set DB_USERNAME=root  
set DB_PASSWORD=your_password  
java -jar ta_management_system.jar  
pause
```