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

You can find it also in releases.

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
```