T-Stock Management System Java project.

Project author: https://github.com/TonaTony

This project is a simple Java project for a stock management system. This system includes a smooth GUI for users to perform different operations such as sign-up, login, stock item creation, stock item update, stock item deletion, user account update, item search, displaying stock data and a database to store user credentials and stock information. The system boasts features such as SQL injection prevention, user account security (a user cannot temper with another user account or user details, only their own) and more. SQL injection prevention is achieved by use of Prepared Statements while the user account security is achieved by using a tracker to detect logged-in user and ensure they can only use the user update option to update their own account only. The search option allows user not only to search for a specific item by entering its full name or full item code but also to search for a category of products with similar keywords or segments in their name or item code. Due to time limitation some options in the system namely: Purchases, Clients and Analytics & Reports are unavailable in this initial version because they haven't been added yet but will be added and available in subsequent versions. There is also a preview system as guest option to show a quick view of what the system looks like but without any functionality because login is required to access the system functionalities.

Project components and details:

The available project options are:

Option 1: An SFX (.exe) file to install/extract an executable (.exe) and its library to an installation/extraction folder of your choice to run the application from.

Option 2: A runnable JAR(.jar) file.

Option 3: The original NetBeans Java project folder (called TSMS).

Requirement to run/try the project:

1. The project option to run (option1, option2 or option3): The option you choose to run depends on your computer configurations and level of familiarity with Java projects.
   i.   Option 1: If you are unsure or unfamiliar with Java and Java projects. Simply run the installer.exe and choose where to install and run the application.
   ii.   Option 2: If you have JDK installed in your system and you are somewhat familiar with Java (Note: This project was made with JDK21).
   iii.   Option 3: If you are familiar with Java projects and how to handle them.

2. XAMPP: You have to download and install XAMPP if you don't have it already. Run XAMPP and start the Apache and the MySQL modules. It should be in default configurations to reduce risk of errors (localhost:3306, username is root, password is empty). Download link: https://www.apachefriends.org/

3. The Database file: Import the database file (called tsms_projectdb.sql) into XAMPP.

   Note: There are some dummy accounts (username and password) you can use to login but you can also create your own by signing-up.
   Dummy accounts:
   (username: jdoe, password: p123)
   (username: janedoe, password: j123)

How to run/try the project:

Step 1: Download project option you choose to run.

Step 2: Open XAMPP and start Apache and SQL modules.

Step 3: Import the database to XAMPP.

i. Open XAMPP and press start on Apache and SQL, then press admin in front of SQL.
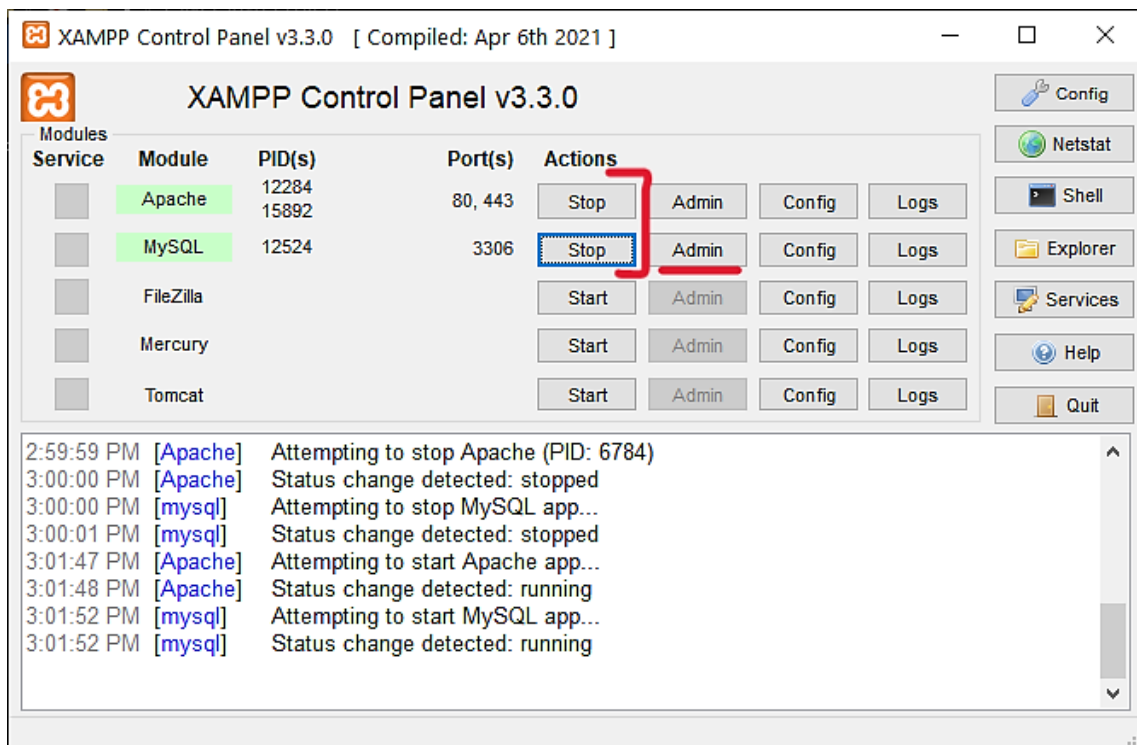
ii. In my phpMyAdmin(the server), click import then choose file.
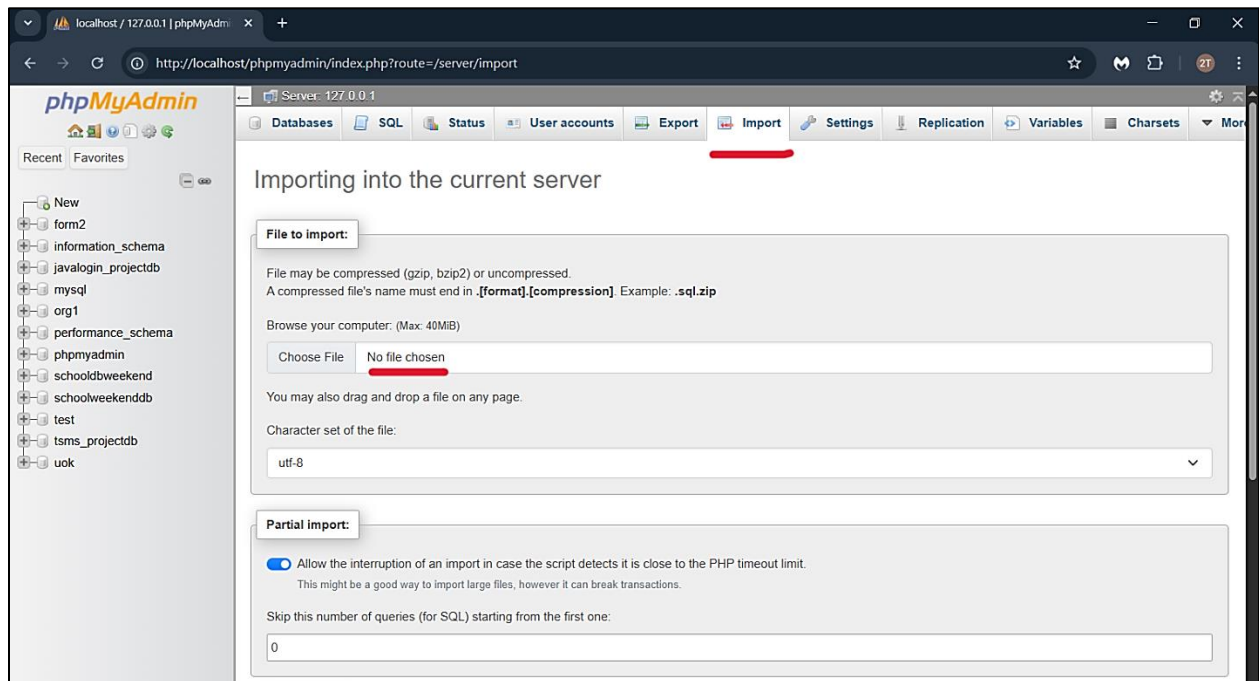
iii. Select the database and click open.
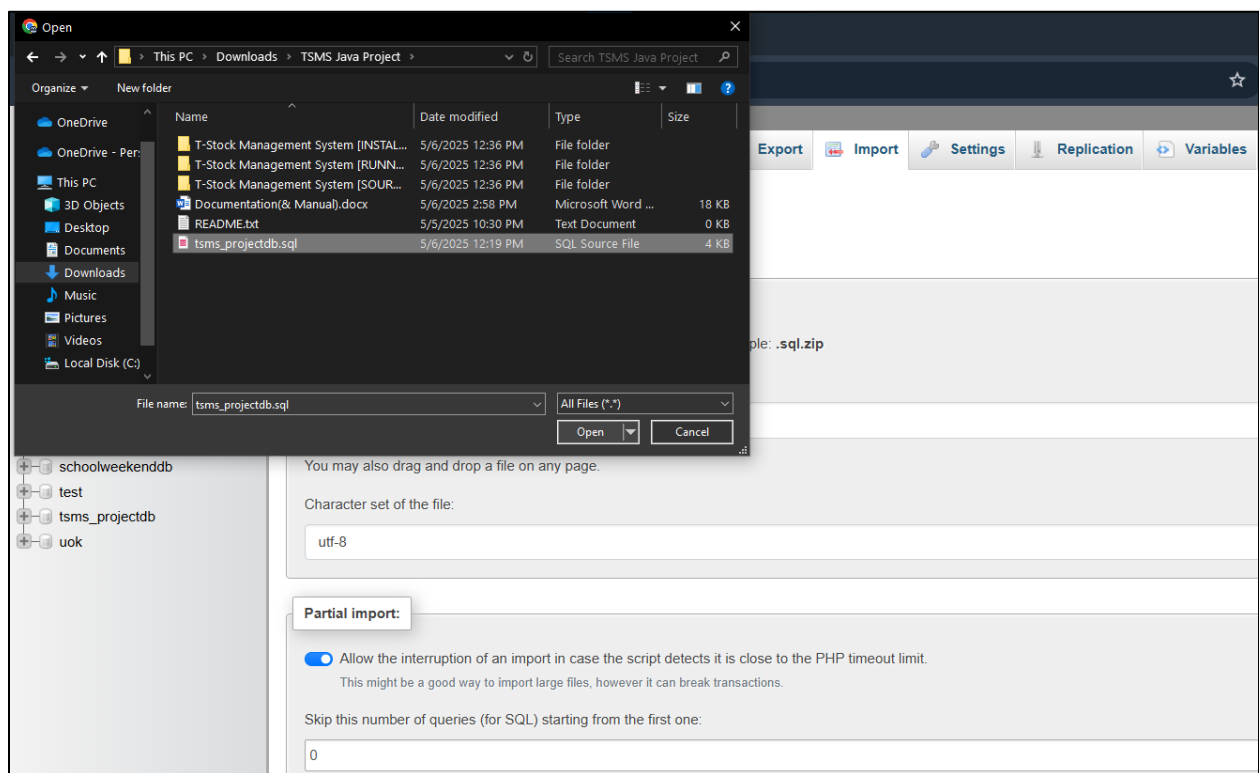
iv. Scroll down and click import.
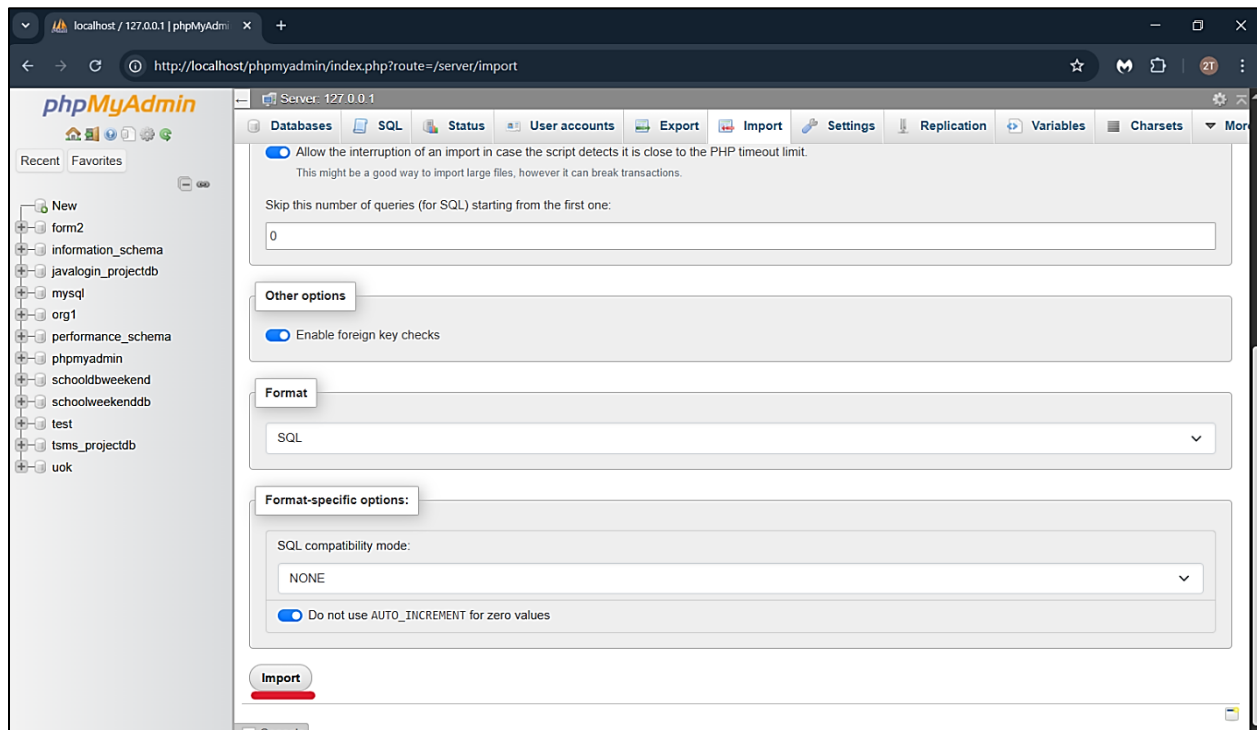
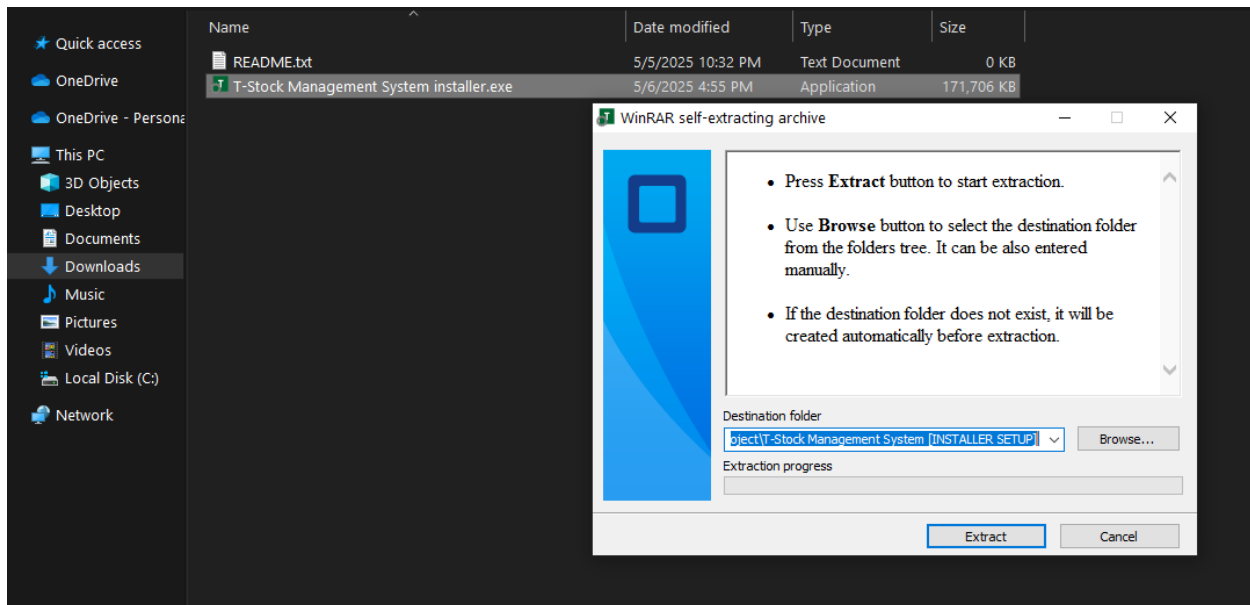**Step 4:** Run the application/project.

Option 1: An SFX (.exe) file to install/extract an executable (.exe) and its library to an installation/extraction folder of your choice to run the application from.
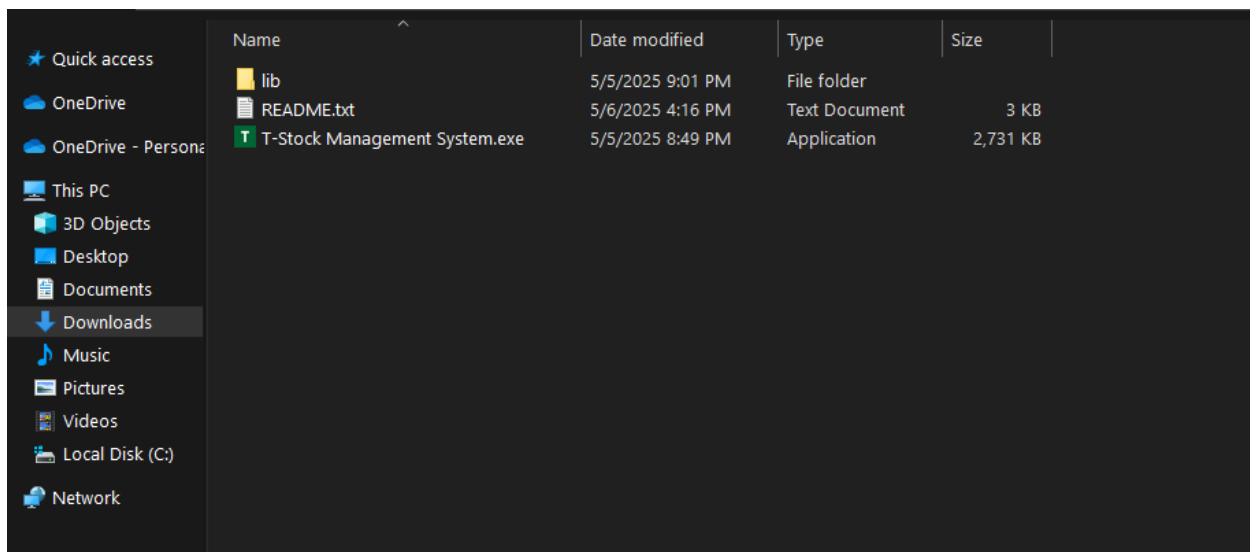
Instructions:

i.   Go to the installer setup folder.

ii.   Run the installer exe(the executable) then select where to extract the application to.

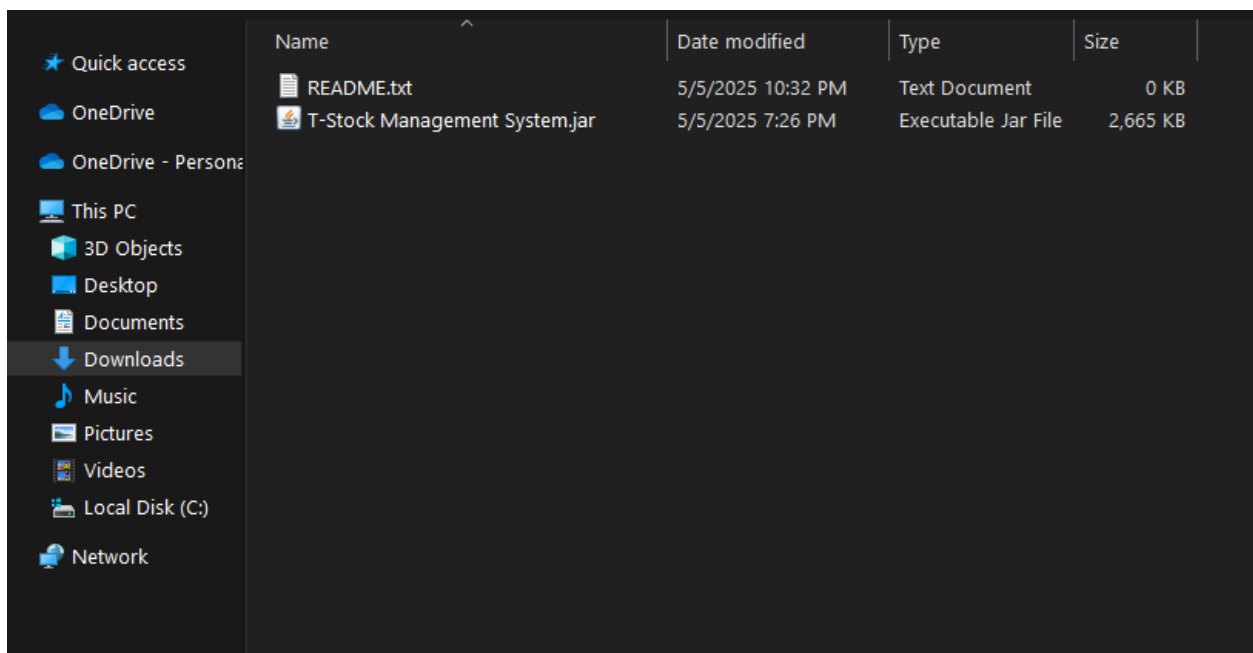iii.   In the extracted folder run the application and no not modify the lib folder.
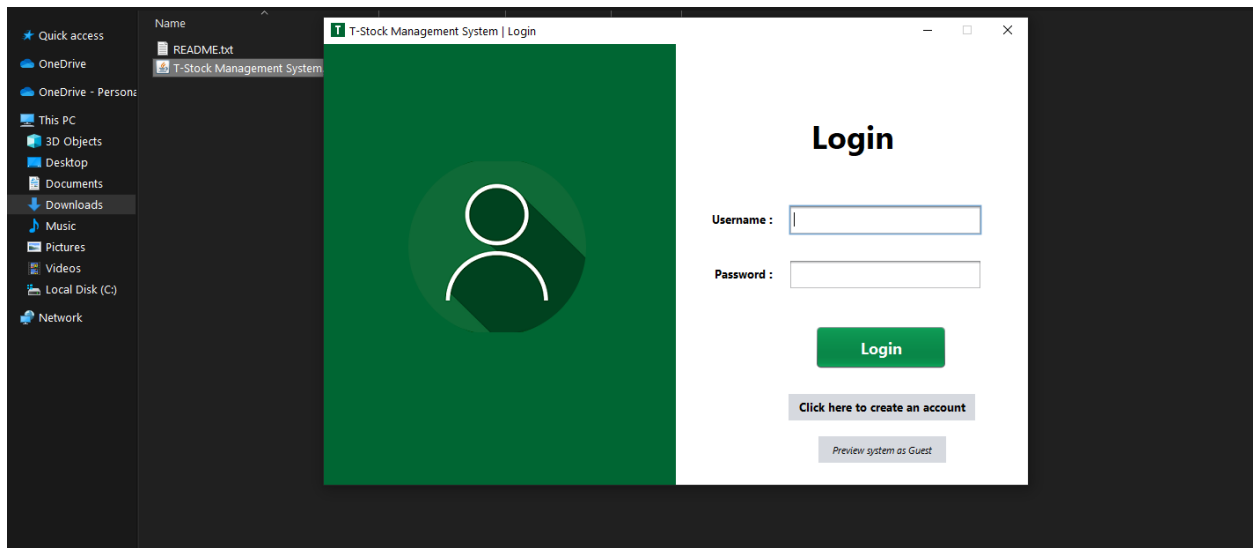
vi. The application will open.
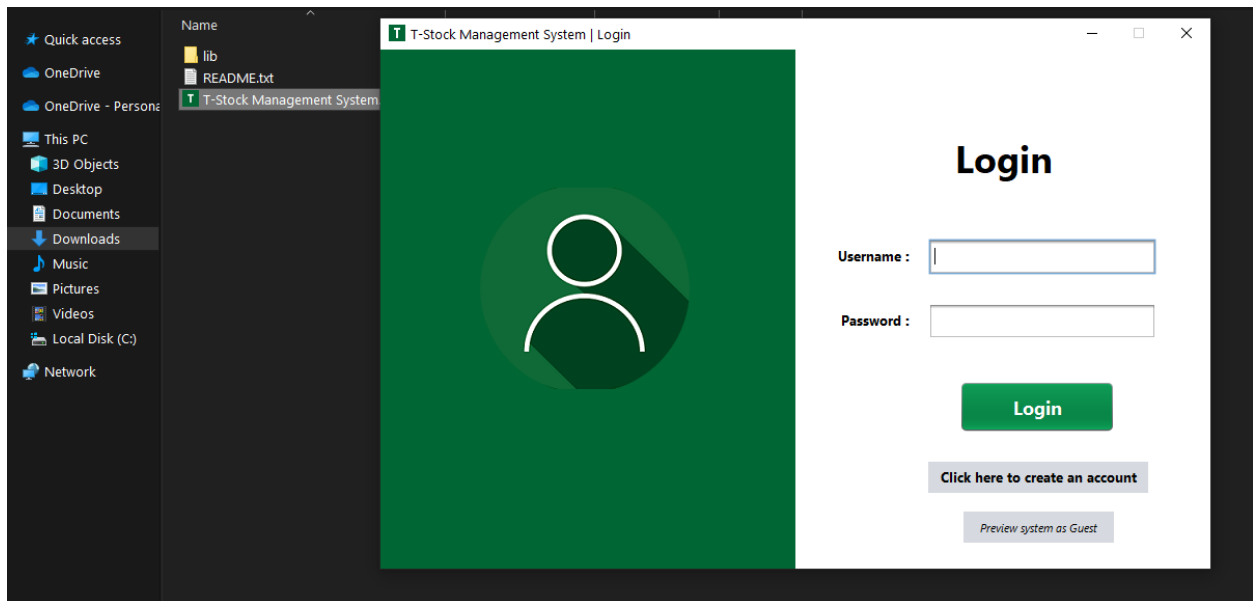
Option 2: A runnable JAR(.jar) file.
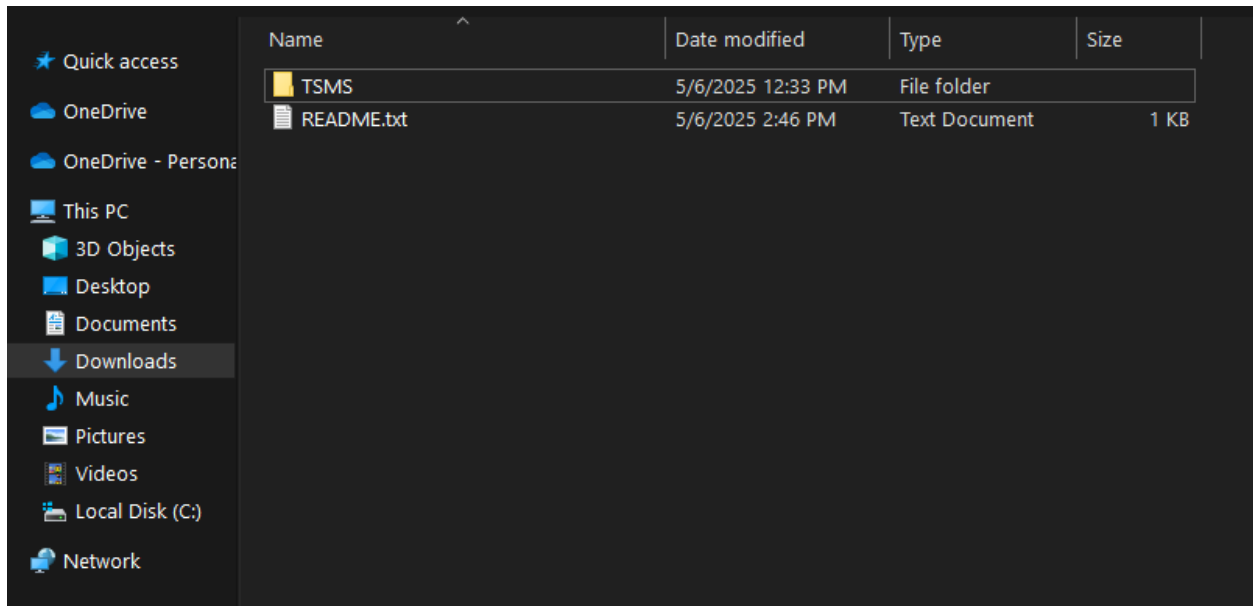
Instructions:

i.   Go to the executable JAR folder.

ii.   Run the JAR file.
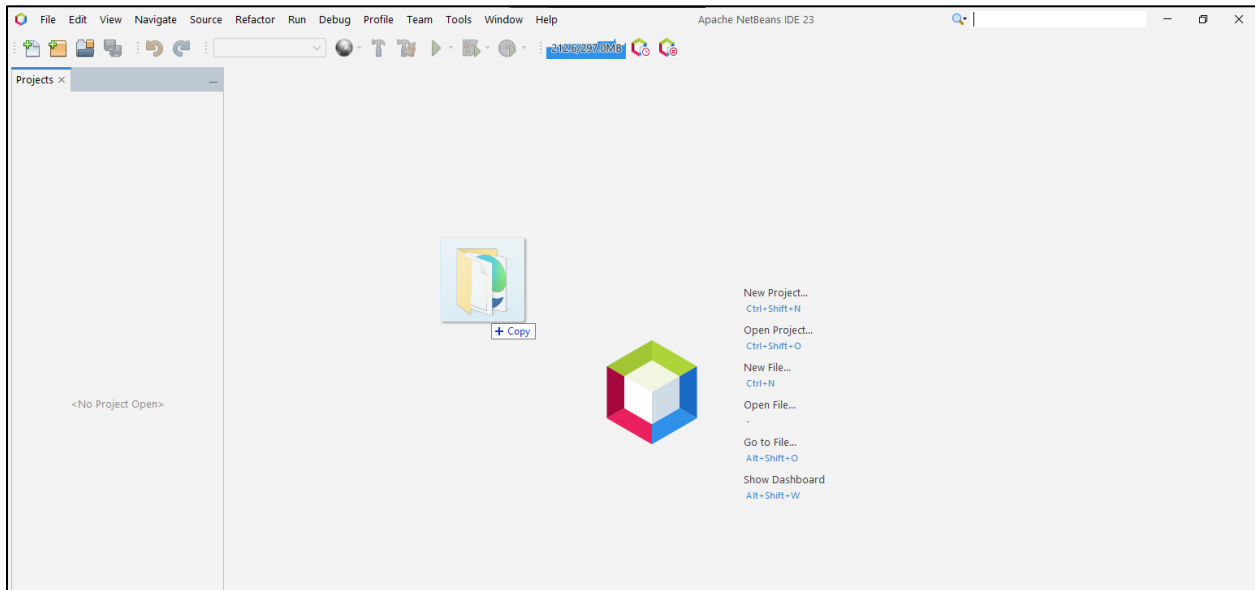

Option 3: The original NetBeans Java project folder (called TSMS).

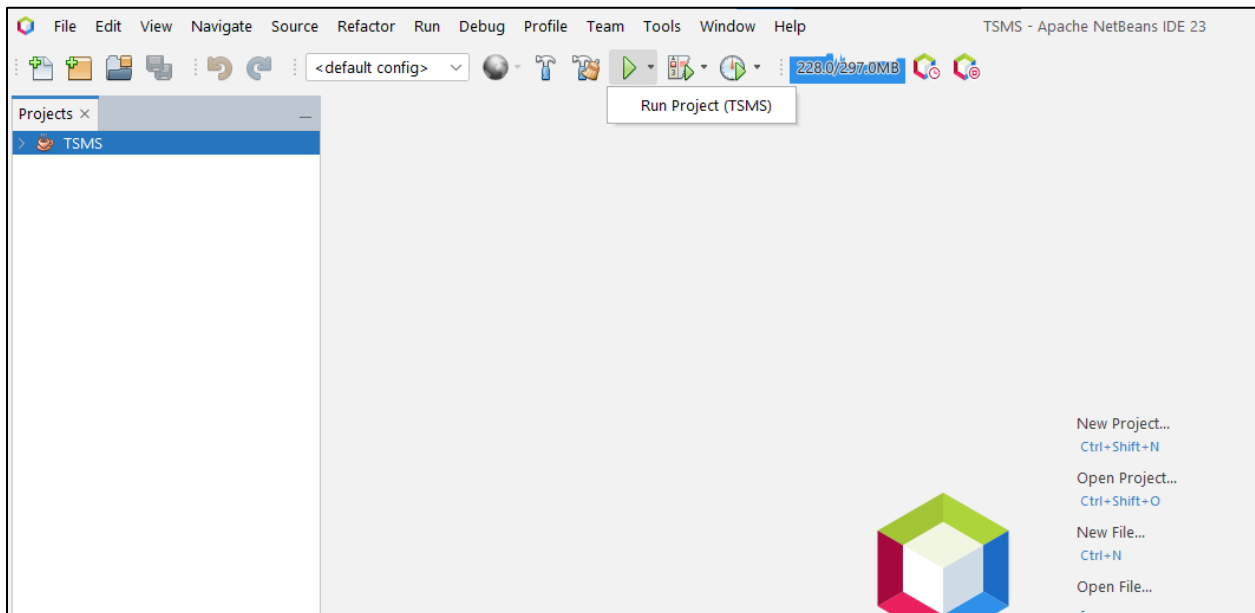**Instructions:**

i.   Go to the source code project folder.

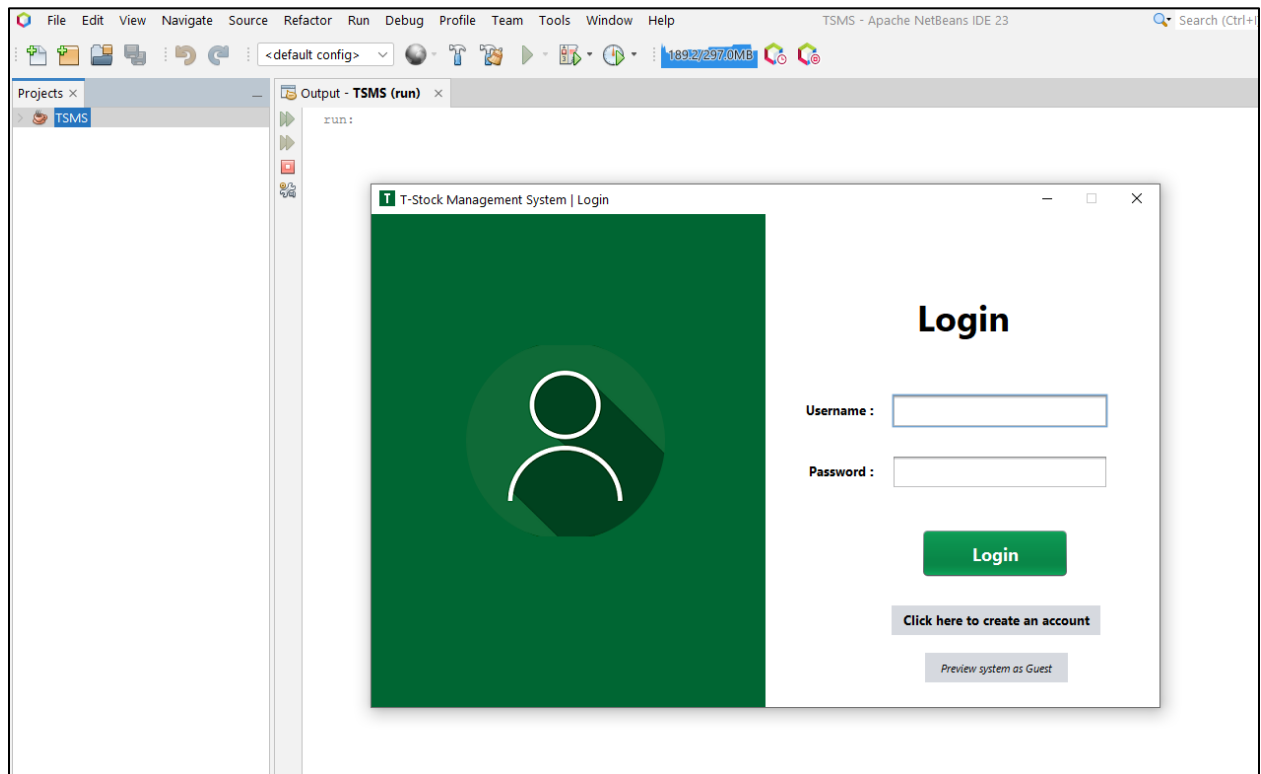ii.   Drag and drop the folder into NetBeans. For Eclipse go to open project from file system.

iii.   Run the project. If prompted to set the main class select LoginForm.java

iv.   The LoginForm will open.

Interact with the system and play around with the features.

End.

For questions or feedback: https://github.com/TonaTony