

# USER GUIDE

## REQUIREMENTS

### RECOMMENDED BROWSERS

Supports the following Web Browsers:

- Microsoft Edge 39 and above
- Firefox 53 and 52 ESR and above
- Google Chrome Version 59 and above

### Environment Setup

- Java Runtime Environment (JRE)
- Apache Tomcat 8.5.4 (Server)
- MySQL Server 5.6 + MySQL Workbench GUI + JDBC Connector (DB)
- Initialize MySQL tables
- Deploy Project WAR File (Compiled Source)
- Start the Tomcat Service

# INSTALLATION

## 1. Java SE Runtime Environment

### a. Download and Install JRE

<https://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>

Java SE Runtime Environment 8u212		
You must accept the <a href="#">Oracle Technology Network License Agreement for Oracle Java SE</a> to download this software.		
<input type="radio"/> Accept License Agreement <input checked="" type="radio"/> Decline License Agreement		
Product / File Description	File Size	Download
Linux x86	71.22 MB	<a href="#">jre-8u212-linux-i586.rpm</a>
Linux x86	86.97 MB	<a href="#">jre-8u212-linux-i586.tar.gz</a>
Linux x64	68 MB	<a href="#">jre-8u212-linux-x64.rpm</a>
Linux x64	83.82 MB	<a href="#">jre-8u212-linux-x64.tar.gz</a>
Mac OS X x64	79.36 MB	<a href="#">jre-8u212-macosx-x64.dmg</a>
Mac OS X x64	70.93 MB	<a href="#">jre-8u212-macosx-x64.tar.gz</a>
Solaris SPARC 64-bit	46.1 MB	<a href="#">jre-8u212-solaris-sparcv9.tar.gz</a>
Solaris x64	43.39 MB	<a href="#">jre-8u212-solaris-x64.tar.gz</a>
Windows x86 Online	1.95 MB	<a href="#">jre-8u212-windows-i586-iftw.exe</a>
Windows x86 Offline	66.37 MB	<a href="#">jre-8u212-windows-i586.exe</a>
Windows x86	68.79 MB	<a href="#">jre-8u212-windows-i586.tar.gz</a>
Windows x64	75.98 MB	<a href="#">jre-8u212-windows-x64.exe</a>
Windows x64	75.05 MB	<a href="#">jre-8u212-windows-x64.tar.gz</a>

## 2. Apache Tomcat

### a. Download Apache Tomcat 8.5.4

<https://tomcat.apache.org/download-80.cgi>

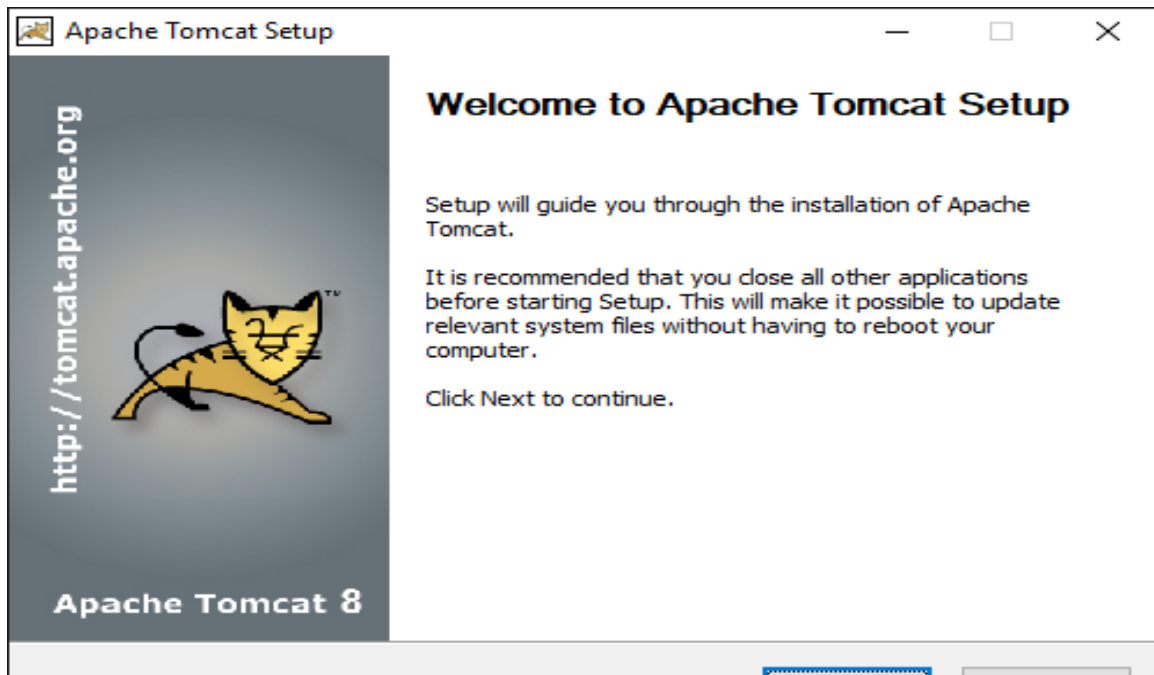
8.5.40

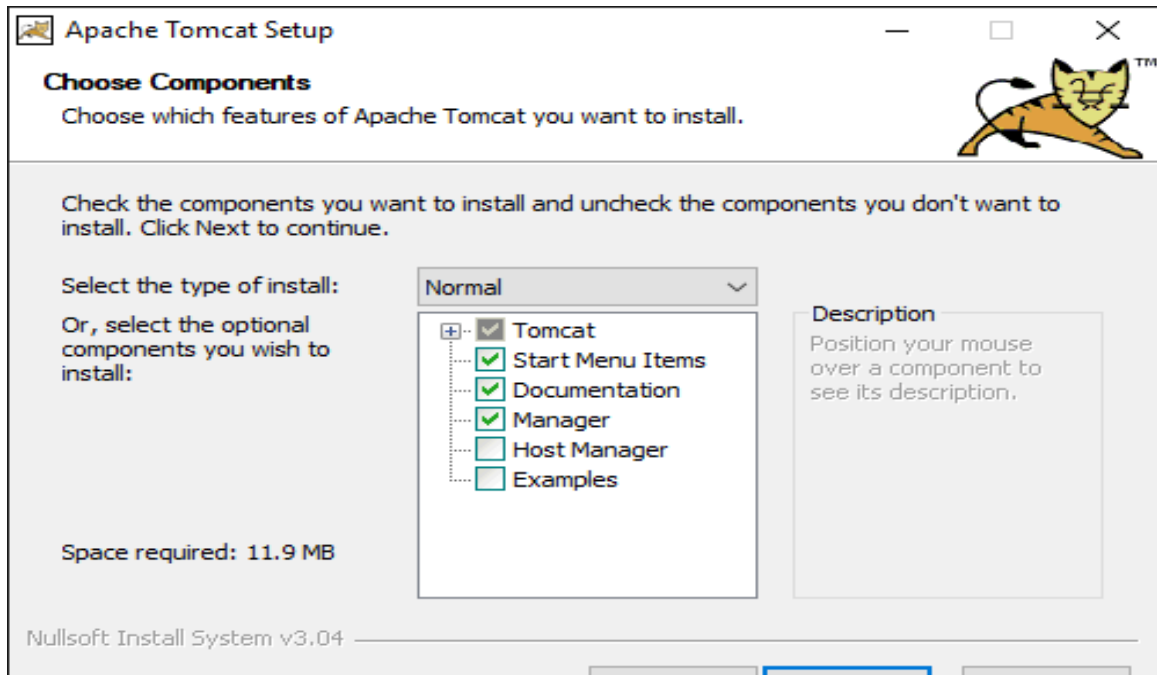
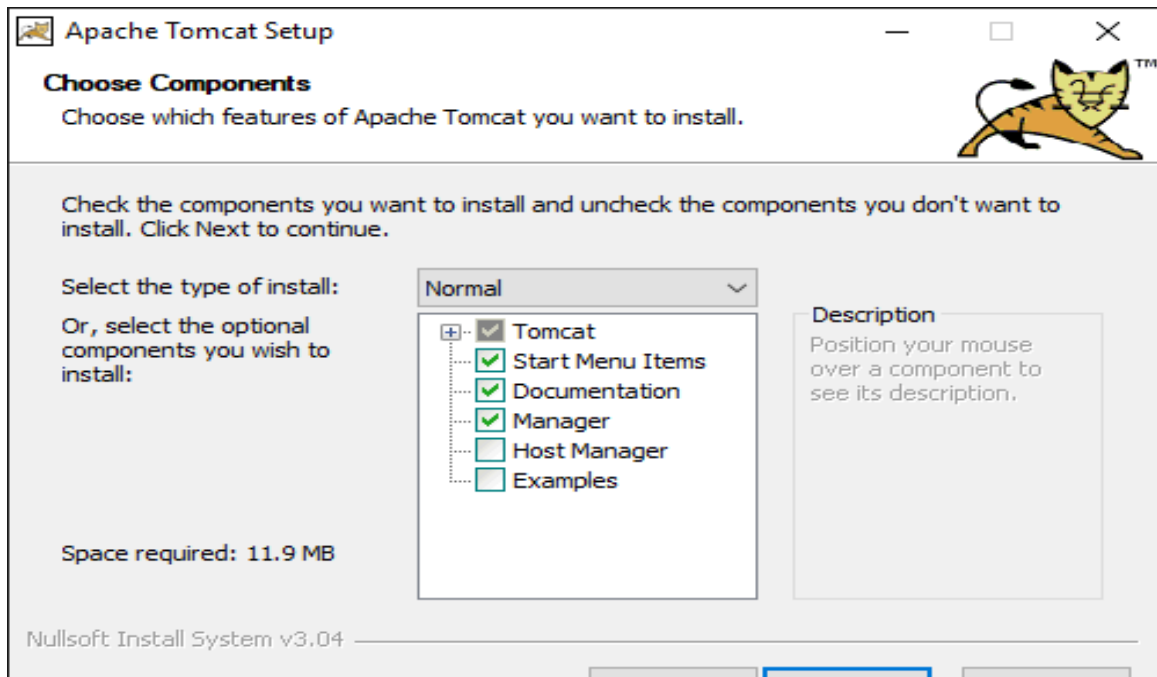
Please see the [README](#) file for packaging information. It explains what every distribution contains.

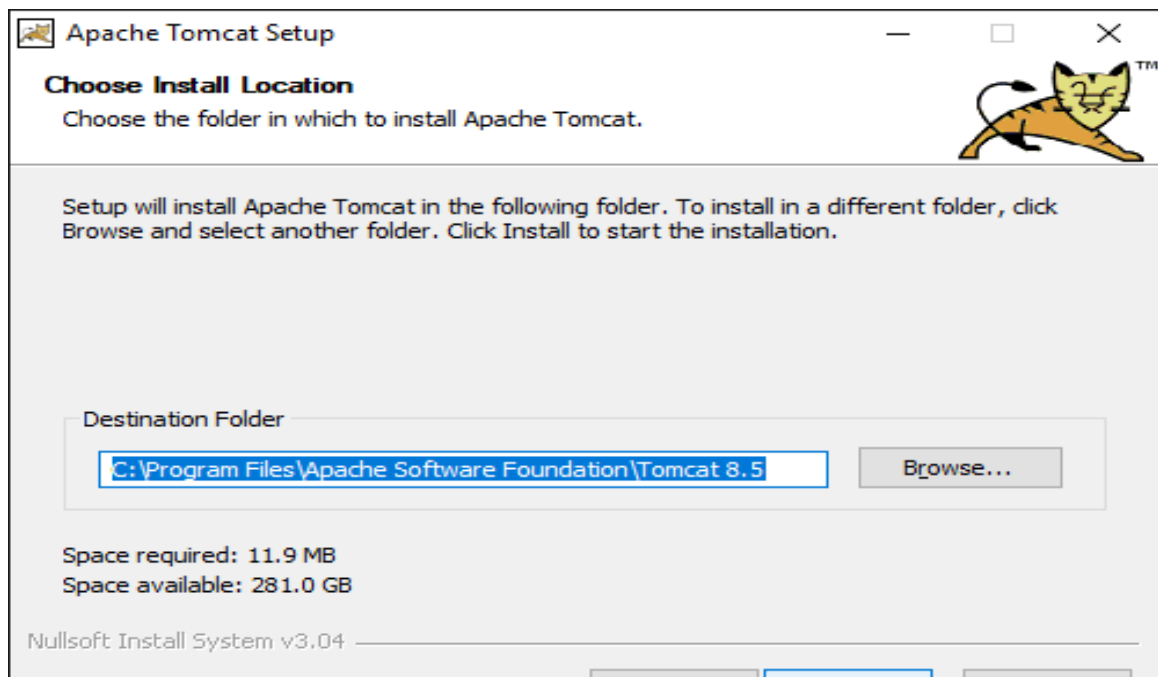
#### Binary Distributions

- Core:
  - [zip](#) ([pgp](#), [sha512](#))
  - [tar.gz](#) ([pgp](#), [sha512](#))
  - [32-bit Windows zip](#) ([pgp](#), [sha512](#))
  - [64-bit Windows zip](#) ([pgp](#), [sha512](#))
  - [32-bit/64-bit Windows Service Installer](#) ([pgp](#), [sha512](#))
- Full documentation:
  - [tar.gz](#) ([pgp](#), [sha512](#))
- Deployer:
  - [zip](#) ([pgp](#), [sha512](#))
  - [tar.gz](#) ([pgp](#), [sha512](#))
- Extras:
  - [JMX Remote jar](#) ([pgp](#), [sha512](#))
  - [Web services jar](#) ([pgp](#), [sha512](#))
- Embedded:
  - [tar.gz](#) ([pgp](#), [sha512](#))
  - [zip](#) ([pgp](#), [sha512](#))

### b. Run the Installation







### 3. MySQL 5.6

#### a. Download MySQL 5.6

<https://dev.mysql.com/downloads/windows/installer/8.0.html>

**Generally Available (GA) Releases**

**MySQL Installer 5.6.43**

Select Version:  


5.6.43

Select Operating System:  

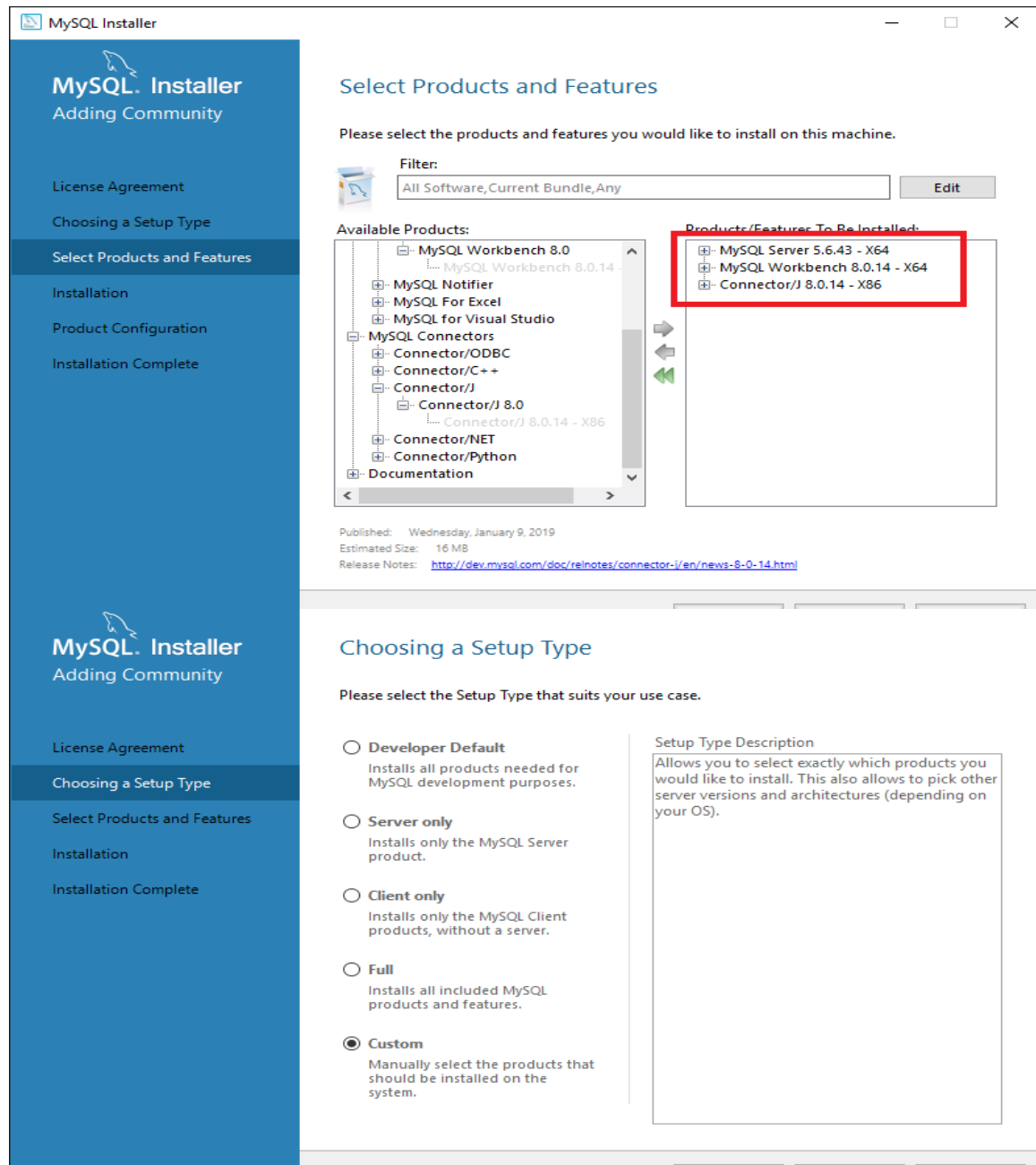
Microsoft Windows

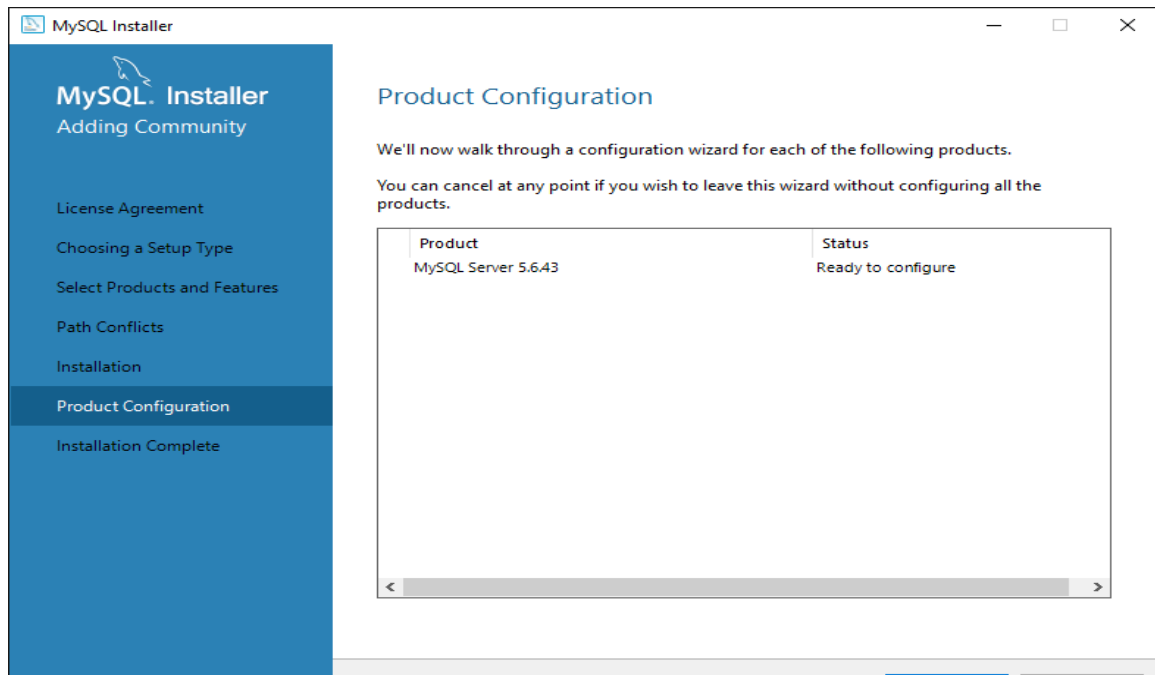
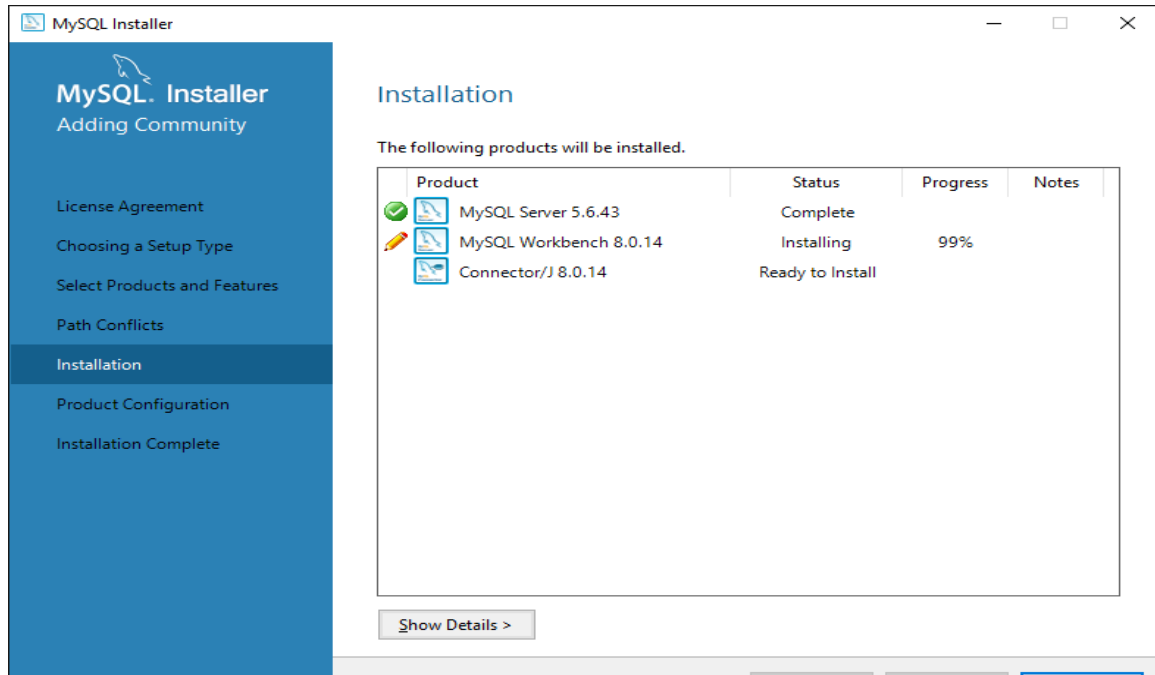
Looking for the latest GA version?

<b>Windows (x86, 32-bit), MSI Installer</b> (mysql-installer-web-community-5.6.43.0.msi)	5.6.43	16.4M	<a href="#">Download</a>
MD5: cc354519d96761b926f92c92c5597233   <a href="#">Signature</a>			
<b>Windows (x86, 32-bit), MSI Installer</b> (mysql-installer-community-5.6.43.0.msi)	5.6.43	238.8M	<a href="#">Download</a>
MD5: b637680a724eb62f6a33aad297ada26f   <a href="#">Signature</a>			

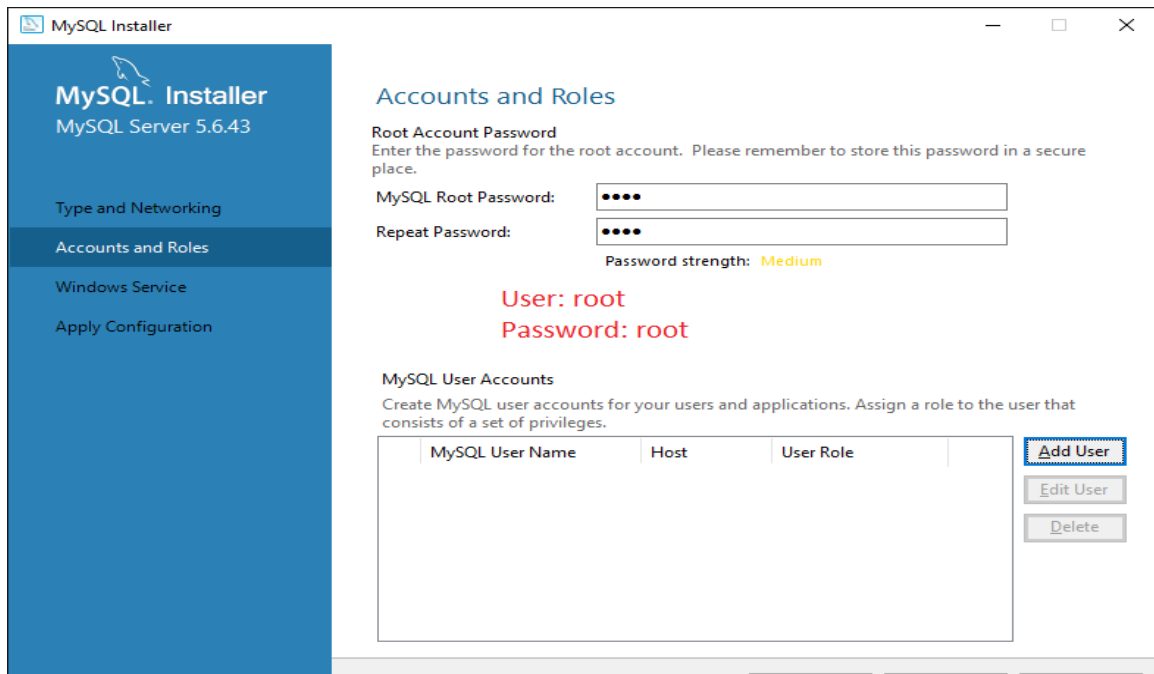
 We suggest that you use the [MD5 checksums](#) and [GnuPG signatures](#) to verify the integrity of the packages you download.

## b. Run the Installation









The screenshot shows the 'Accounts and Roles' step of the MySQL Installer. The left sidebar has 'Accounts and Roles' selected. The main area is titled 'Accounts and Roles' and contains a section for 'Root Account Password'. It prompts the user to enter a password for the root account and repeat it. The password strength is shown as 'Medium'. Below this, there is a section for 'MySQL User Accounts' with a table to create new users. The table has columns for 'MySQL User Name', 'Host', and 'User Role'. To the right of the table are buttons for 'Add User', 'Edit User', and 'Delete'.

MySQL Installer

MySQL Server 5.6.43

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

### Accounts and Roles

Root Account Password

Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password:

Repeat Password:

Password strength: **Medium**

**User: root**  
**Password: root**

MySQL User Accounts

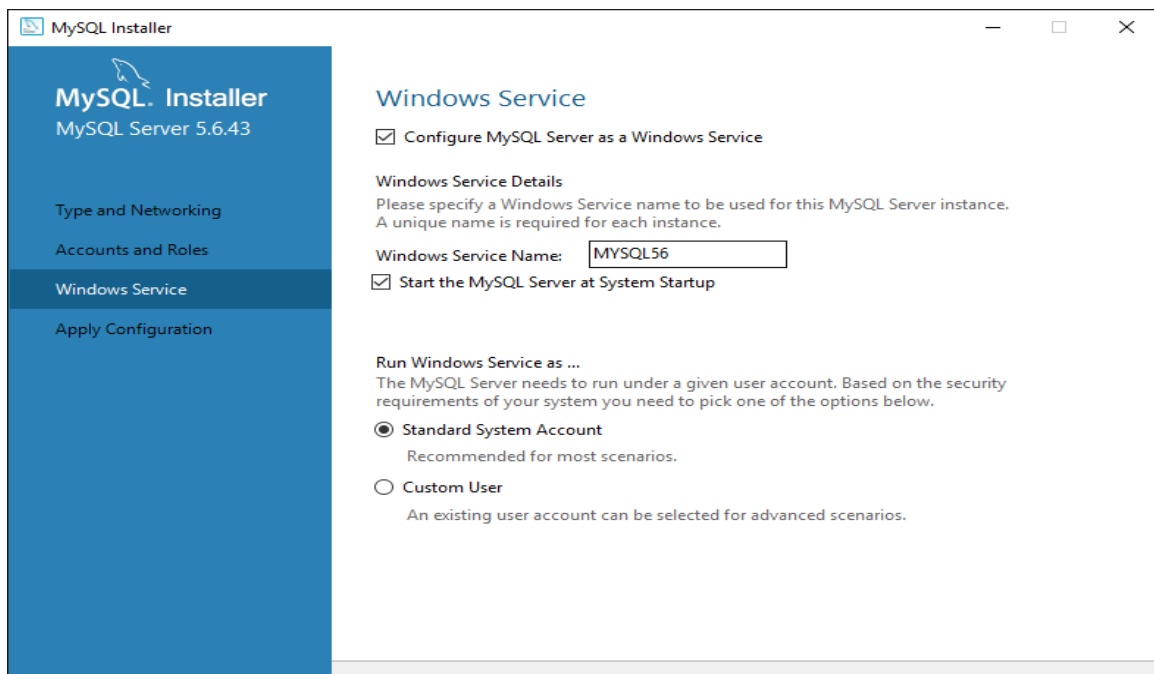
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

MySQL User Name	Host	User Role
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**Add User**

Edit User

Delete



The screenshot shows the 'Windows Service' step of the MySQL Installer. The left sidebar has 'Windows Service' selected. The main area is titled 'Windows Service' and contains a checkbox to 'Configure MySQL Server as a Windows Service'. Below this, there is a section for 'Windows Service Details' where the user can specify a Windows Service name. The 'Start the MySQL Server at System Startup' checkbox is also checked. At the bottom, there is a section for 'Run Windows Service as ...' with two options: 'Standard System Account' (selected) and 'Custom User'.

MySQL Installer

MySQL Server 5.6.43

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

### Windows Service

☒ Configure MySQL Server as a Windows Service

Windows Service Details

Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.

Windows Service Name:

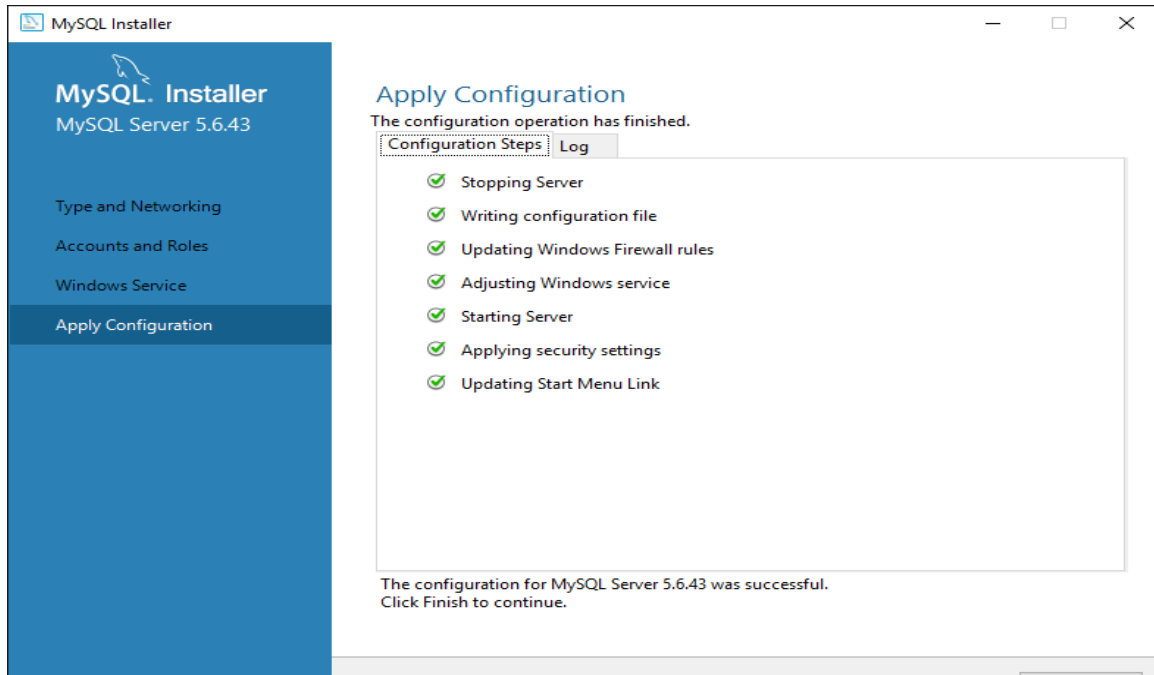
☒ Start the MySQL Server at System Startup

Run Windows Service as ...

The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.

☒ **Standard System Account**  
Recommended for most scenarios.

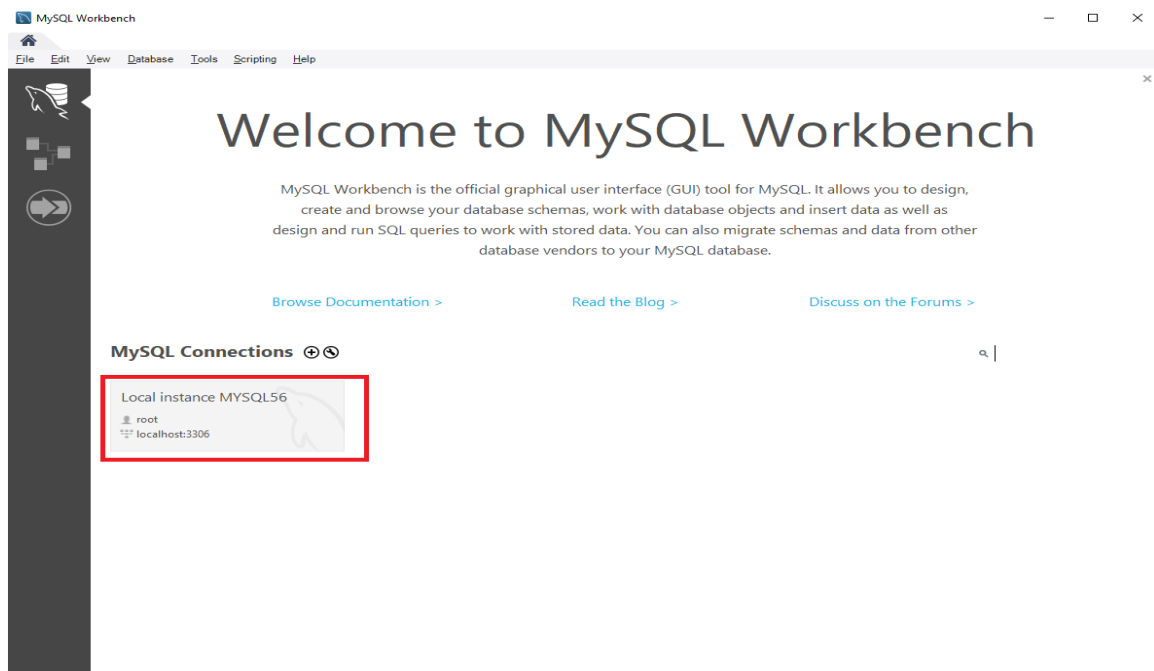
☐ Custom User  
An existing user account can be selected for advanced scenarios.



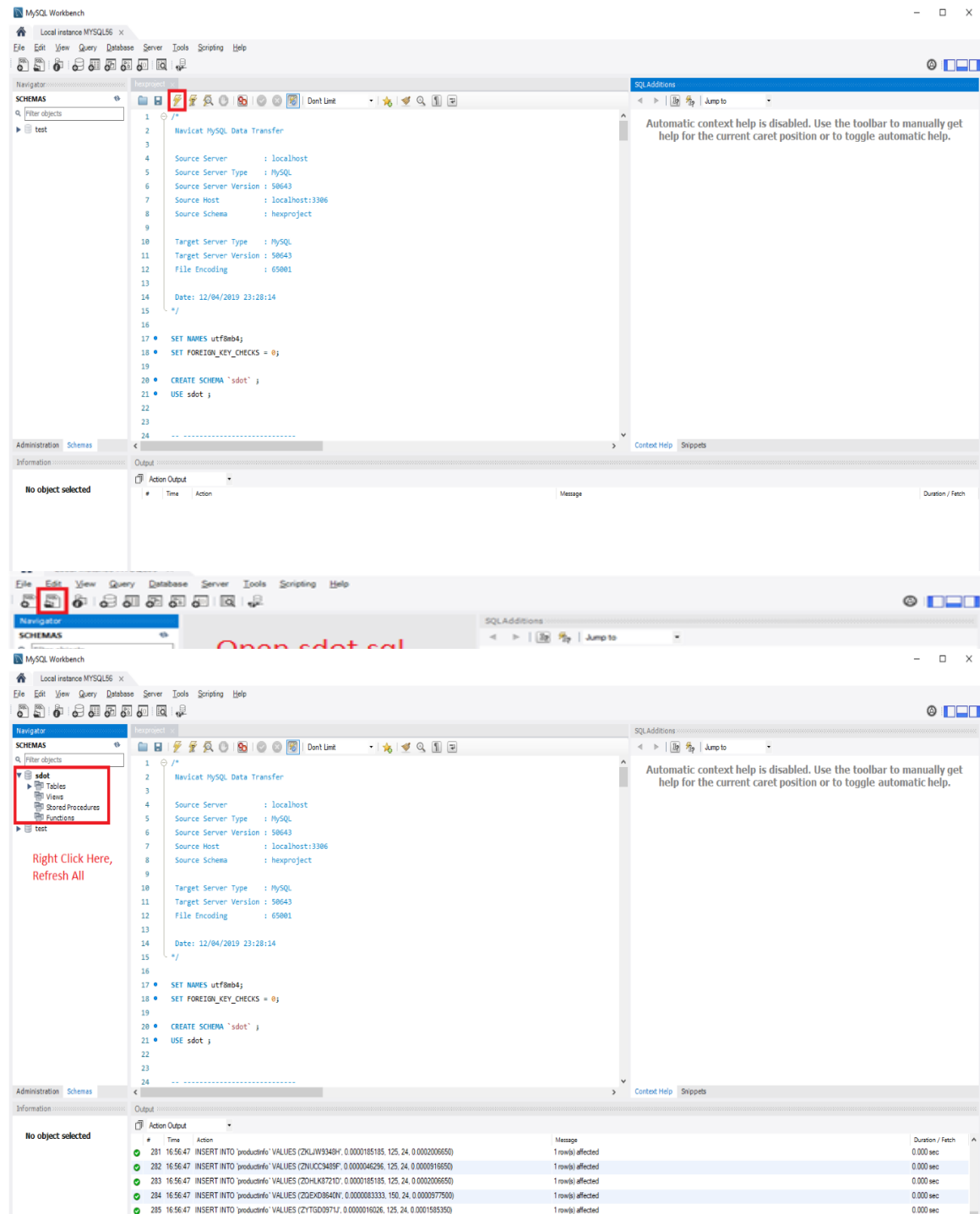
#### 4. Initialize the DB Tables

##### a. Open MySQL Workbench and SQL script

[https://github.com/teamHexMtech/IRS-RS-2019-03-09-IS01PT-GRP-Hex-Sdot\\_Scheduling\\_and\\_Dispatch\\_Optimization\\_Tool/blob/master/Miscellaneous/sdot.sql](https://github.com/teamHexMtech/IRS-RS-2019-03-09-IS01PT-GRP-Hex-Sdot_Scheduling_and_Dispatch_Optimization_Tool/blob/master/Miscellaneous/sdot.sql)



## b. Execute the Script



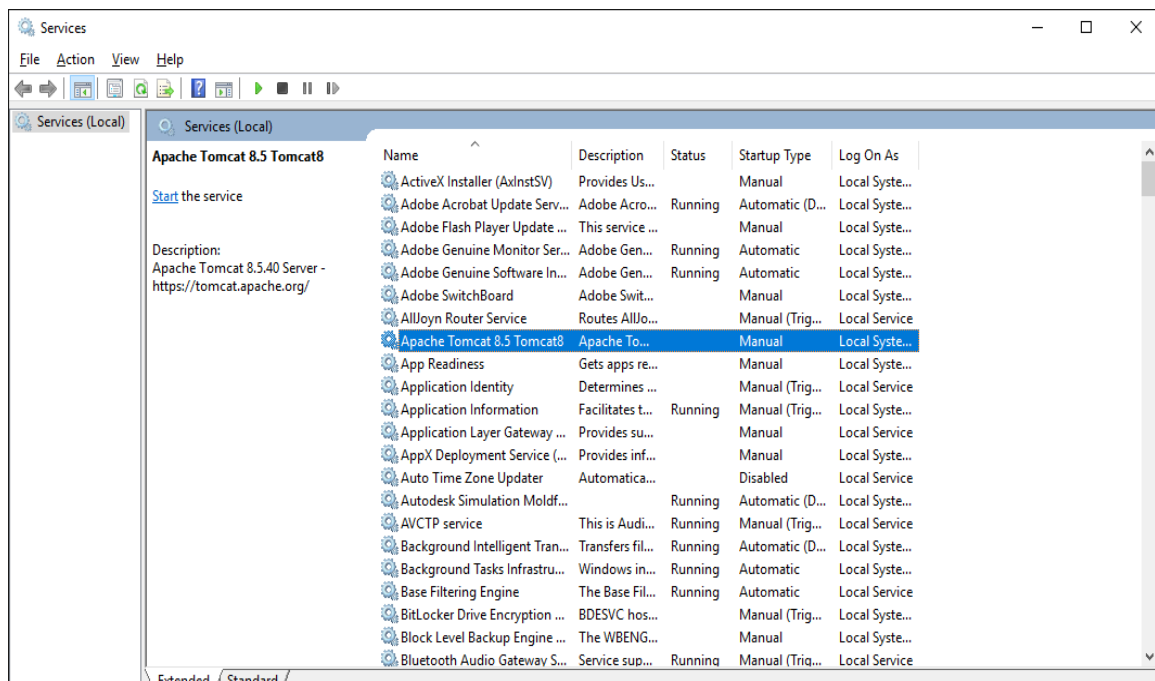
## 5. Deploy the Project Package WAR

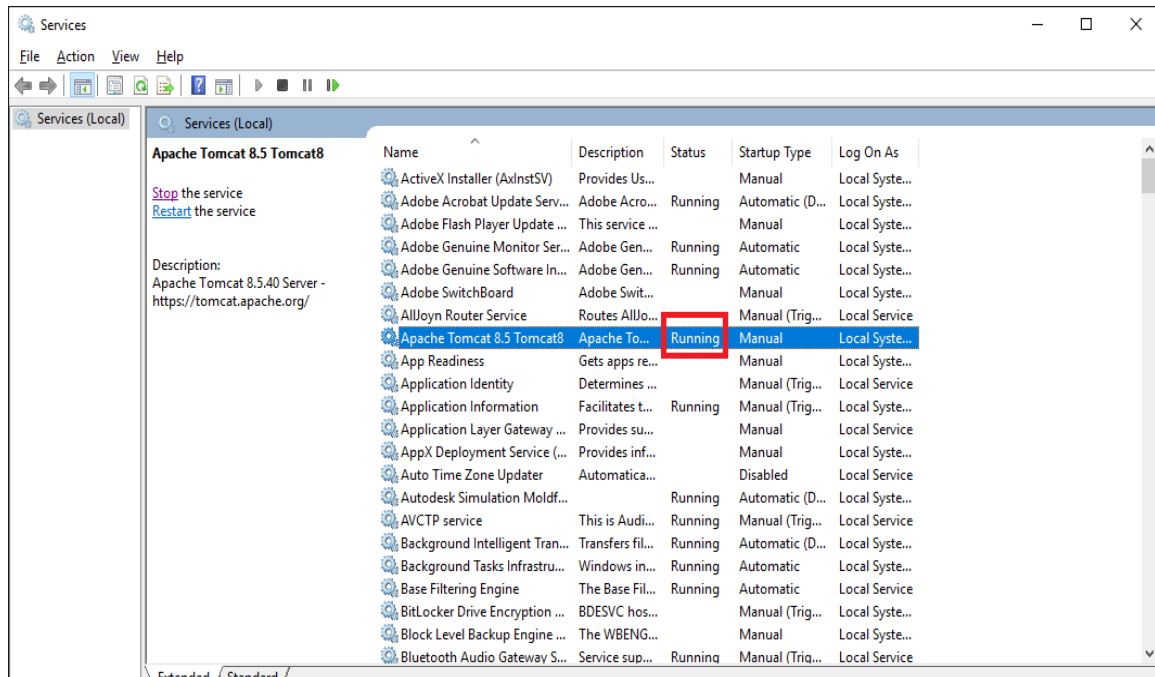
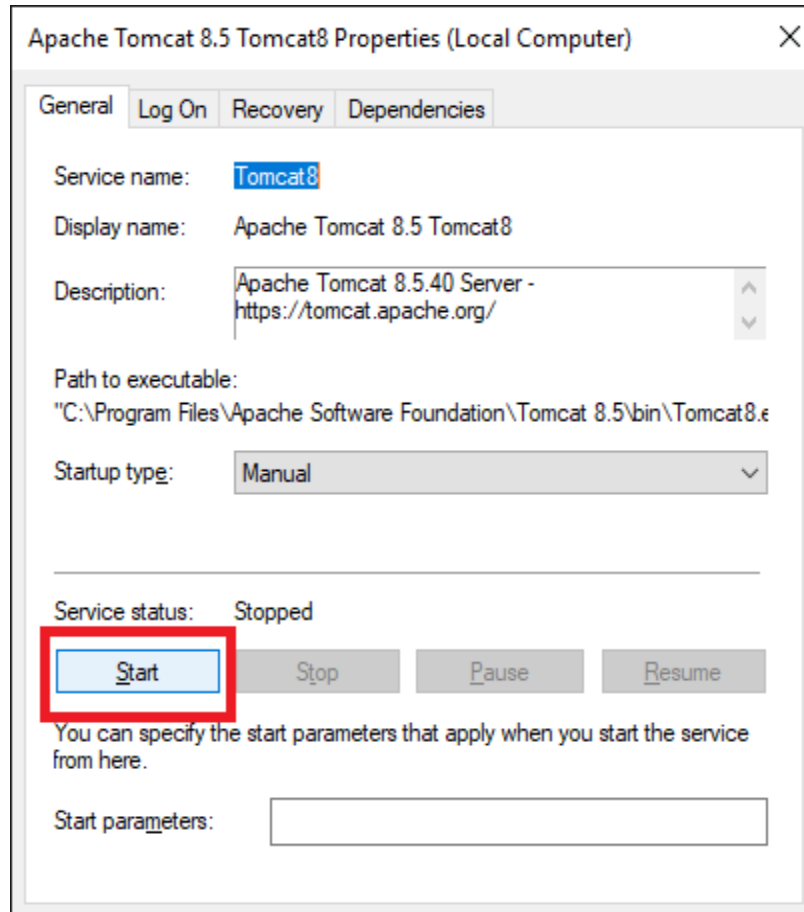
### a. Copy Sdot.WAR into C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps

[https://github.com/teamHexMtech/IRS-RS-2019-03-09-IS01PT-GRP-Hex-Sdot\\_Scheduling\\_and\\_Dispatch\\_Optimization\\_Tool/blob/master/Miscellaneous/Sdot.war](https://github.com/teamHexMtech/IRS-RS-2019-03-09-IS01PT-GRP-Hex-Sdot_Scheduling_and_Dispatch_Optimization_Tool/blob/master/Miscellaneous/Sdot.war)

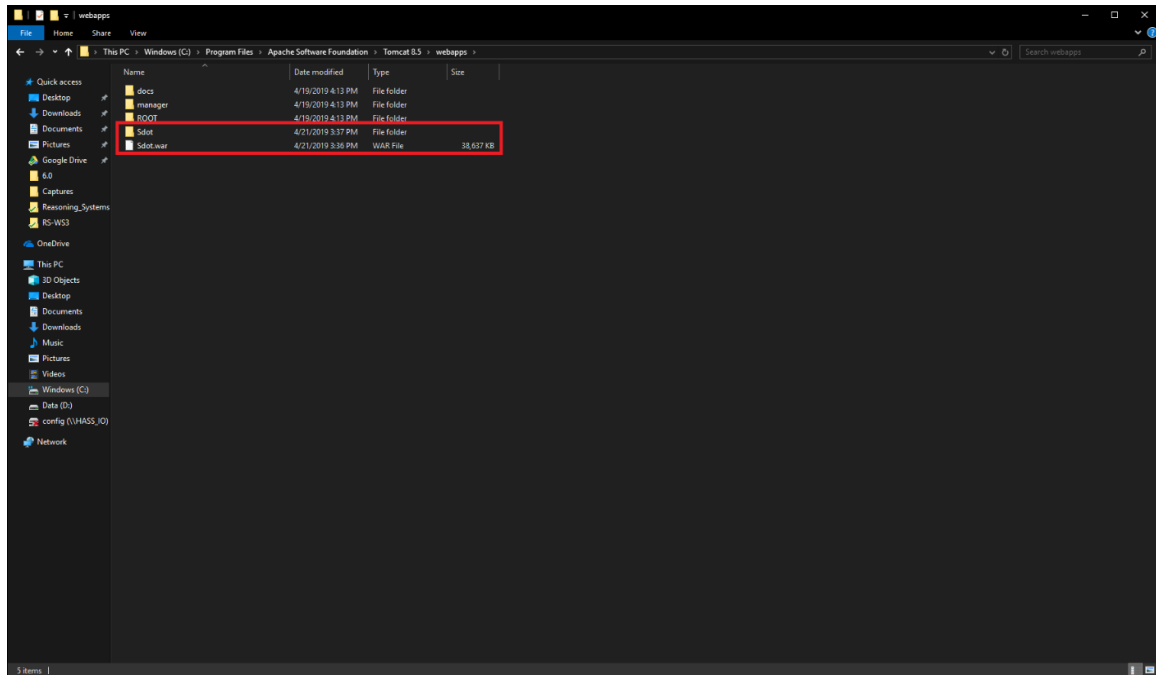
## 6. Start the Service

### a. Press Windows + R, Run Services.msc, start the tomcat service





**b. Check if Sdot.war Folder is created in C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps**



**c. Wait for about 5 minutes, then go to this link:**

<http://localhost:8080/Sdot/home/index>

**d. Go to Java Folder and Give Full Access Permission**

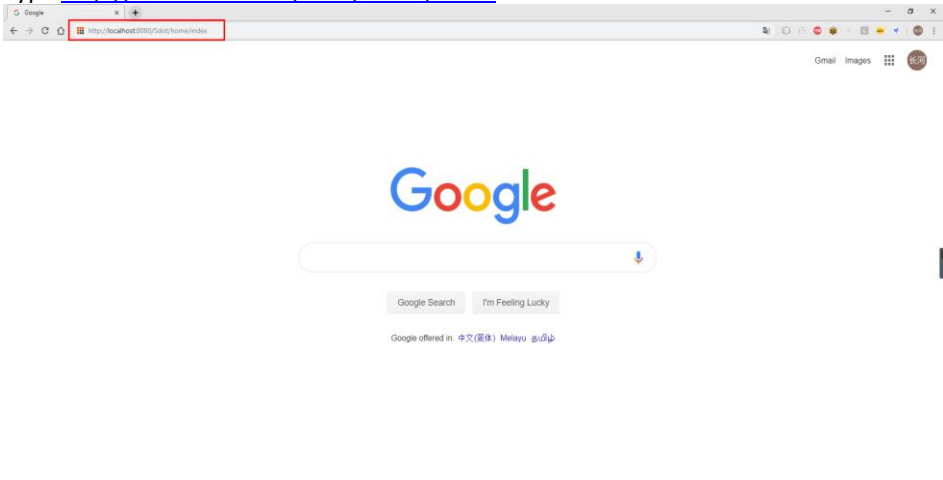
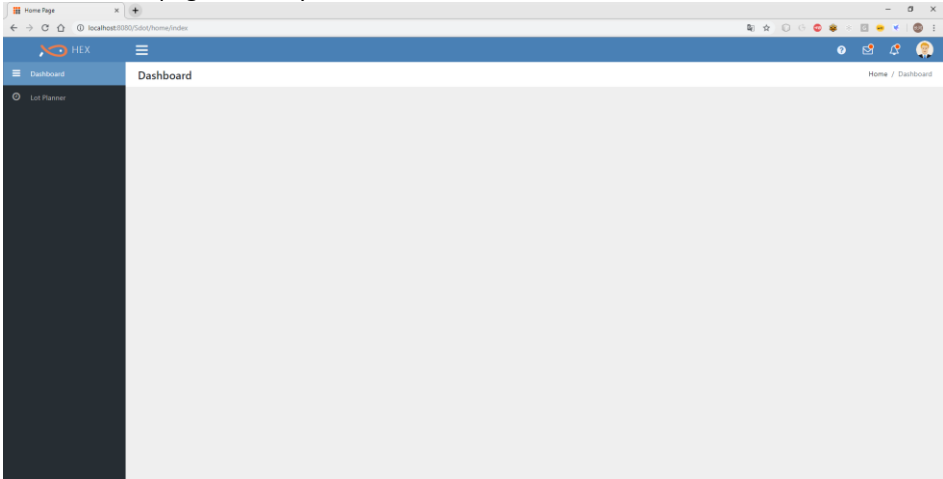
**Goto C:\Program Files\ Right click Java folder, click properties. Select the security tab.**

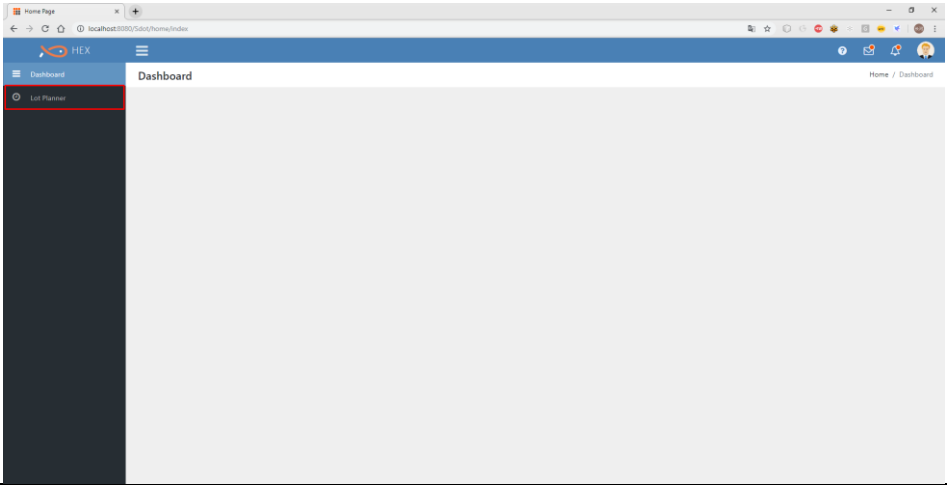
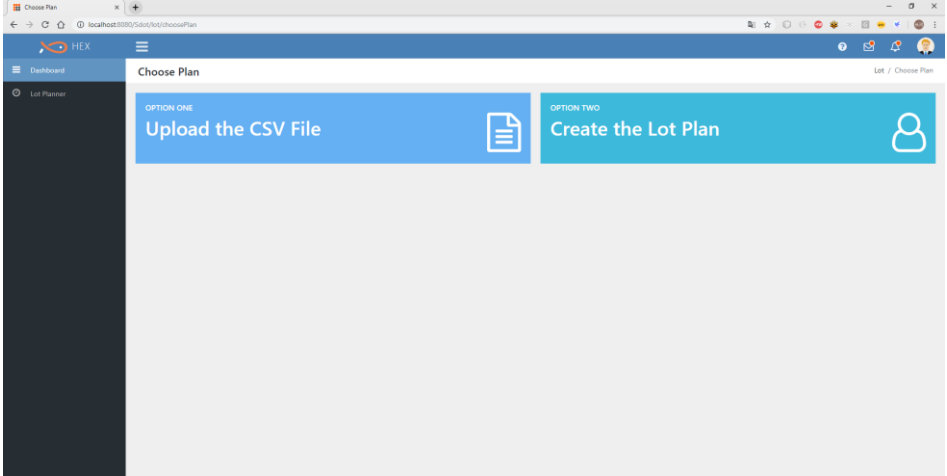
**There, click on "Edit" button, which will pop up PERMISSIONS FOR JAVA window.**

**In "PERMISSIONS OF JAVA" window, you will see several clickable options like CREATOR OWNER, SYSTEM, among them is your username. Click on it, and check mark the FULL CONTROL option in Permissions for sub window.**

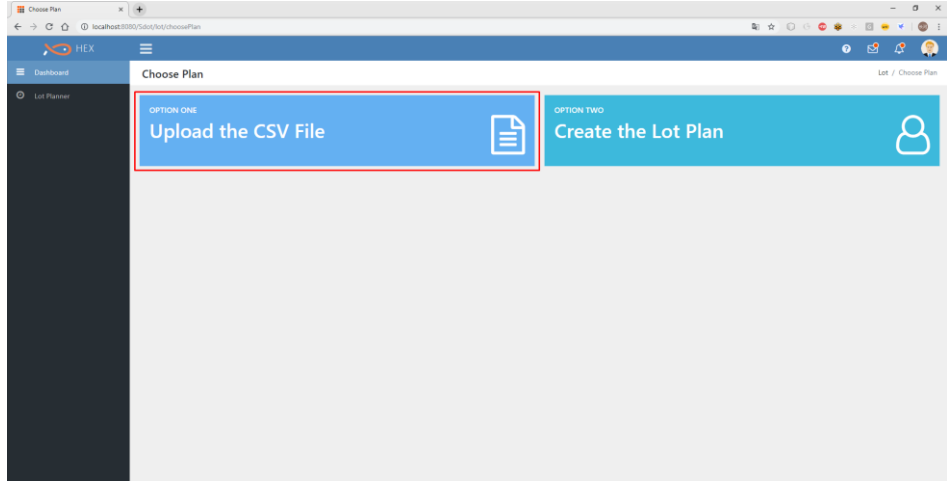
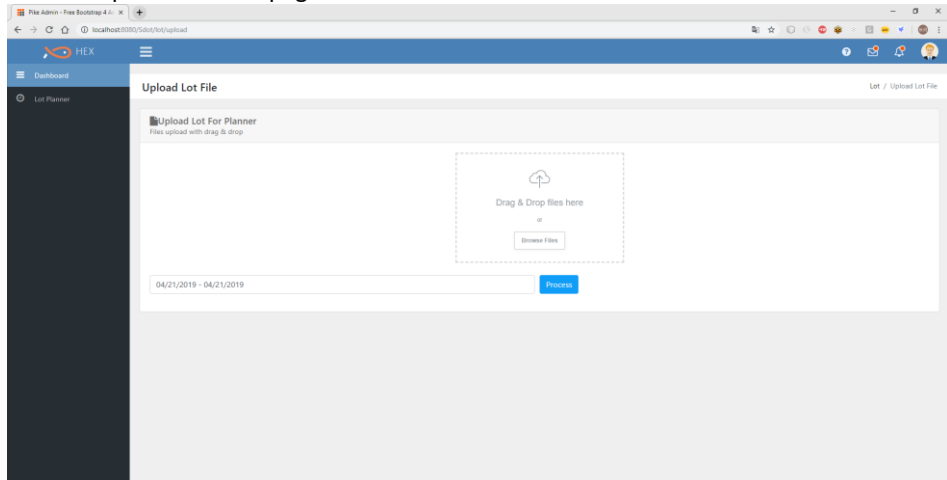
**Hit apply and ok.**

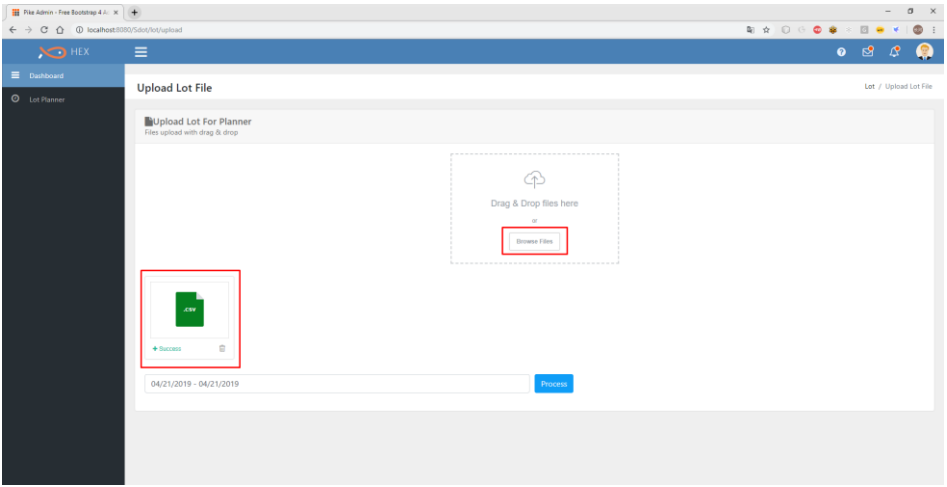
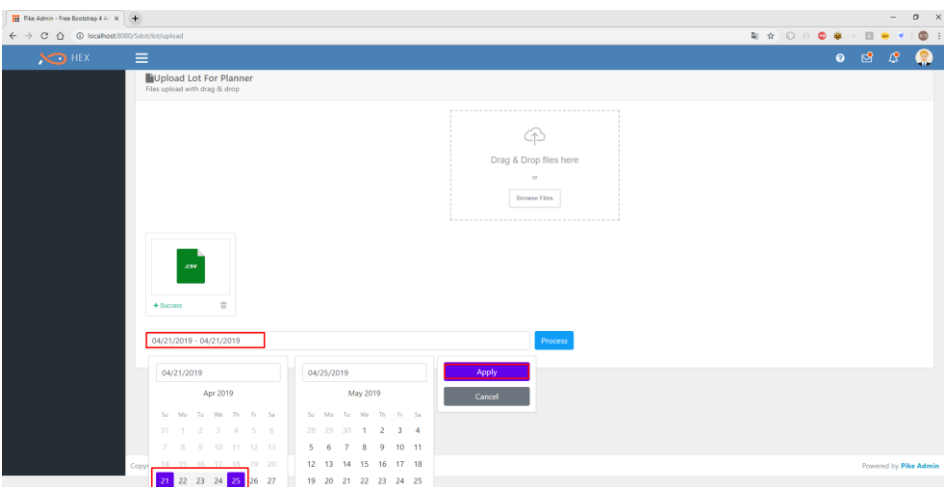
# Test Scenario

Test Case 1	Login the Home page
User Input	<p>Type <a href="http://localhost:8080/Sdot/home/index">http://localhost:8080/Sdot/home/index</a> in browser</p> 
System out put	<p>Get the home page of the system</p> 

Test Case 2	Navigate to Lot Planner Page
User Input	<p>Click the “Lot Planner” on the left side menu</p>  <p>The screenshot shows a web browser window with the URL 'localhost:8080/560/home/index'. The page title is 'HEX'. The left sidebar contains a menu with 'Dashboard' and 'Lot Planner'. The 'Lot Planner' item is highlighted with a red box. The main content area is titled 'Dashboard' and is currently empty.</p>
System out put	<p>Get the Lot Planner page</p>  <p>The screenshot shows a web browser window with the URL 'localhost:8080/560/lot/choosePlan'. The page title is 'HEX'. The left sidebar contains a menu with 'Dashboard' and 'Lot Planner'. The 'Lot Planner' item is highlighted. The main content area is titled 'Choose Plan' and contains two options: 'OPTION ONE: Upload the CSV File' with a document icon, and 'OPTION TWO: Create the Lot Plan' with a user icon.</p>

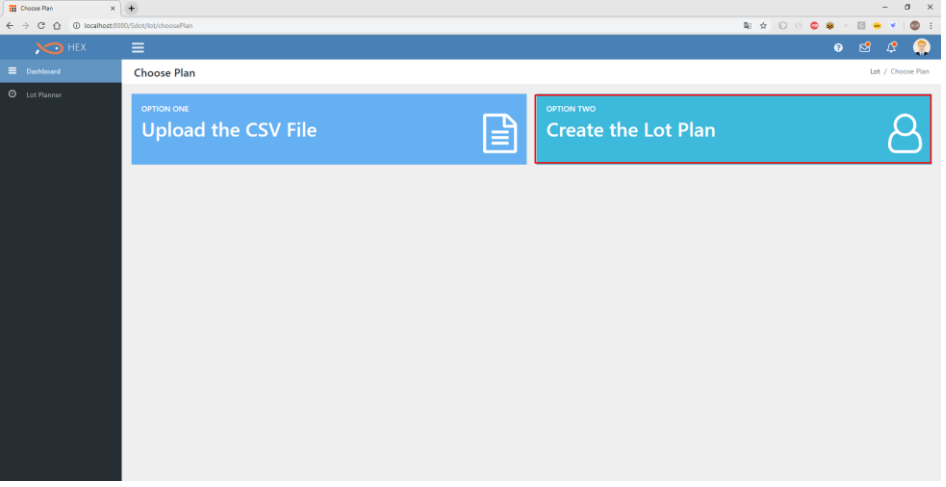
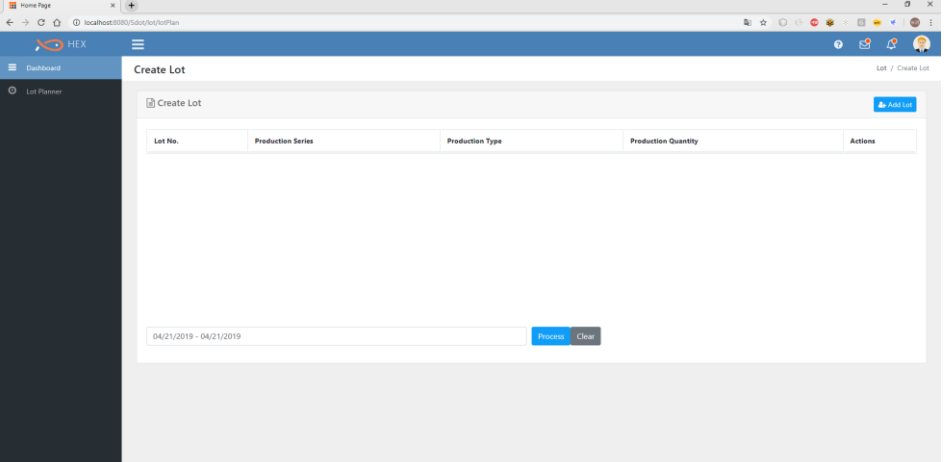


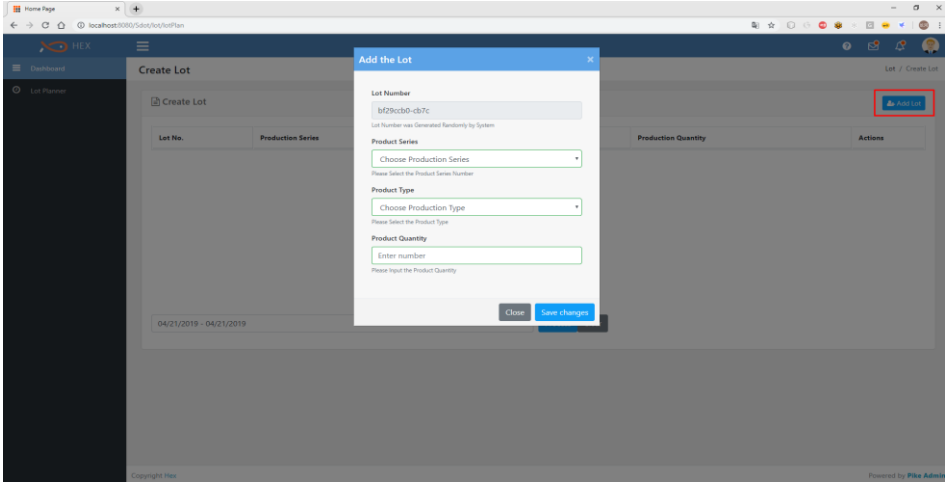
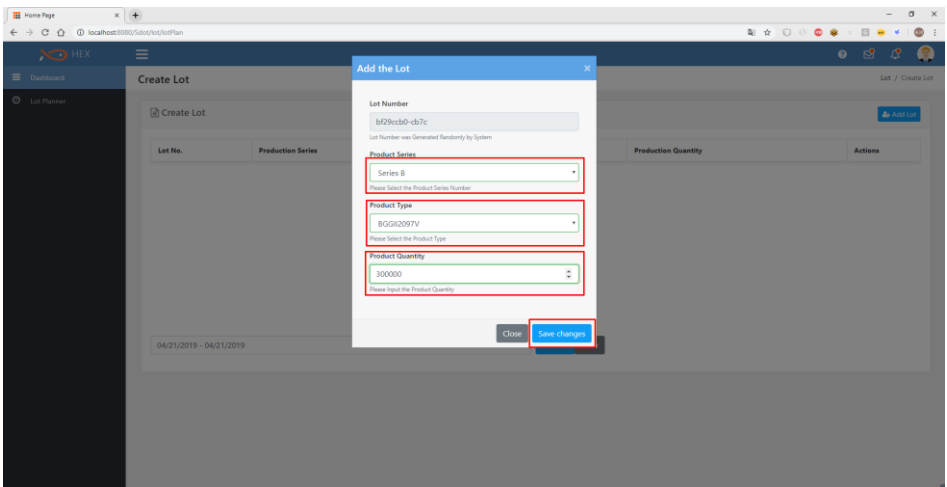
Test Case 3	Navigate to Upload CSV Page
User Input	<p>Click the "Upload the CSV" button</p> 
System output	<p>Get the Upload the CSV page</p> 

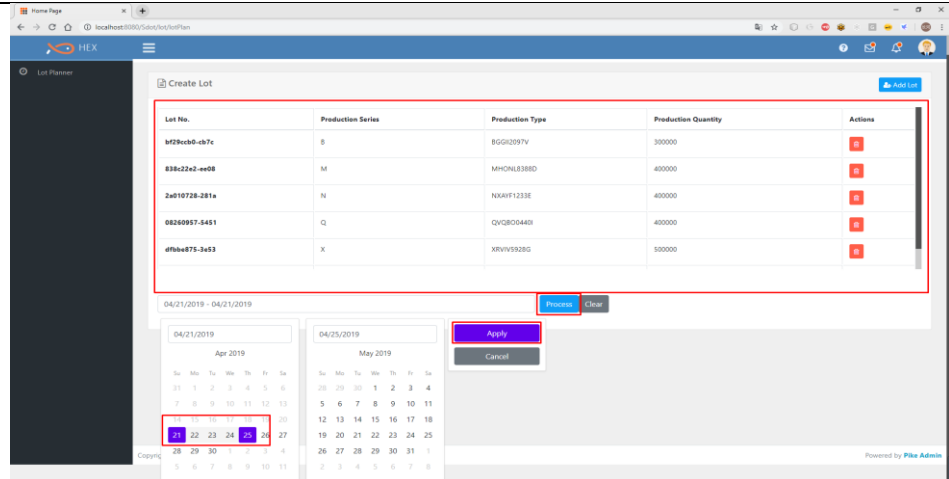
Test Case 4	Upload Test csv file and schedule the lot plan
User Input	<p>1. Drag the file or click "Browse files" to upload the csv file</p>  <p>2. Click the date picker and select plan date</p>  <p>3. Click the "Process" button and wait for result (one minute)</p>

System out put

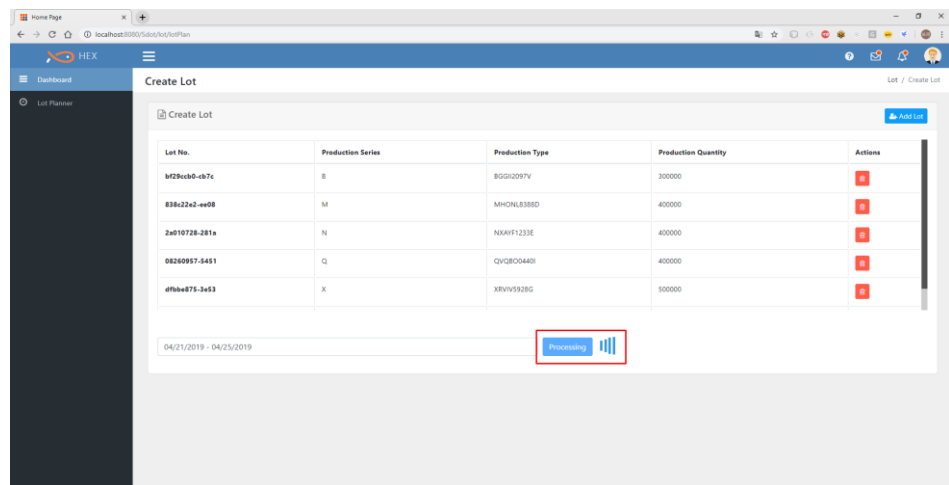
Get the schedule plan and lot information

Test Case 5	Navigate to Create Lot Page
User Input	Click the “Create the Lot Plan” button
	 <p>The screenshot shows a web browser window displaying the 'Choose Plan' page. The page has a dark sidebar on the left with a 'Dashboard' link. The main content area has a header 'Choose Plan' and two large buttons. The first button, 'OPTION ONE Upload the CSV File', is blue with a document icon. The second button, 'OPTION TWO Create the Lot Plan', is teal with a user icon and is highlighted with a red rectangular border. The browser's address bar shows 'localhost:8080/lot/choosePlan'.</p>
System out put	Get the Create the Lot Plan page
	 <p>The screenshot shows a web browser window displaying the 'Create Lot' page. The page has a dark sidebar on the left with a 'Dashboard' link. The main content area has a header 'Create Lot' and a form. The form has four input fields: 'Lot No.', 'Production Series', 'Production Type', and 'Production Quantity'. Below these fields is a date range selector showing '04/21/2019 - 04/21/2019'. There are two buttons at the bottom right: 'Process' (blue) and 'Clear' (grey). The browser's address bar shows 'localhost:8080/lot/lotPlan'.</p>

Test Case 6	Create Lot manually and schedule the lot plan
User Input	<ol style="list-style-type: none"> <li>Click "Add Lot" button</li> </ol>  <ol style="list-style-type: none"> <li>Fill in the lot information and click "Save Changes" button</li> </ol>  <ol style="list-style-type: none"> <li>Repeat step 2 and choose the plan date</li> </ol>



4. Click "Process" button and wait for result (around one minute)



System out put

Get the schedule plan and lot information

