

About: Web application is created where the employee can take up a questionnaire that verifies if the employee's system is in compliance with the organization. The application will provide feedback to the employee with downloadable files as links for all non-compliant parameters.

Environmental Setup:

STS can be installed from <https://spring.io/tools>.

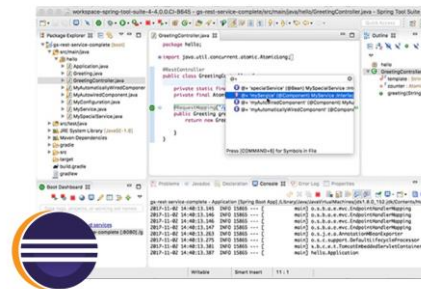
Spring Tools 4 for Eclipse

The all-new Spring Tool Suite 4.
Free. Open source.

4.10.0 - LINUX 64-BIT

4.10.0 - MACOS 64-BIT

4.10.0 - WINDOWS 64-BIT

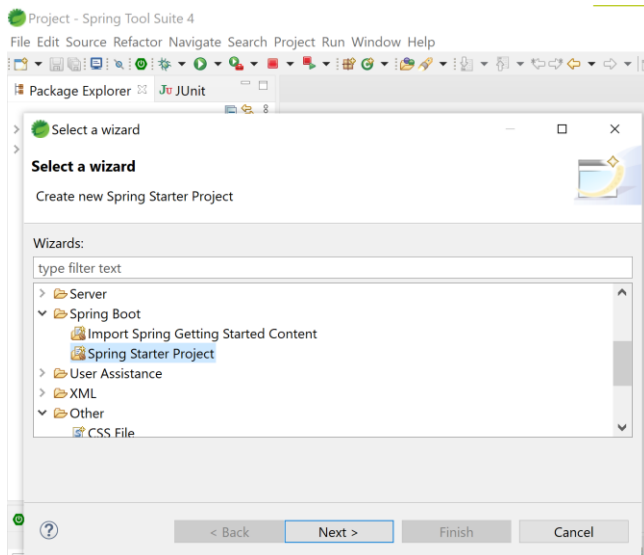


Download the Windows OS version.

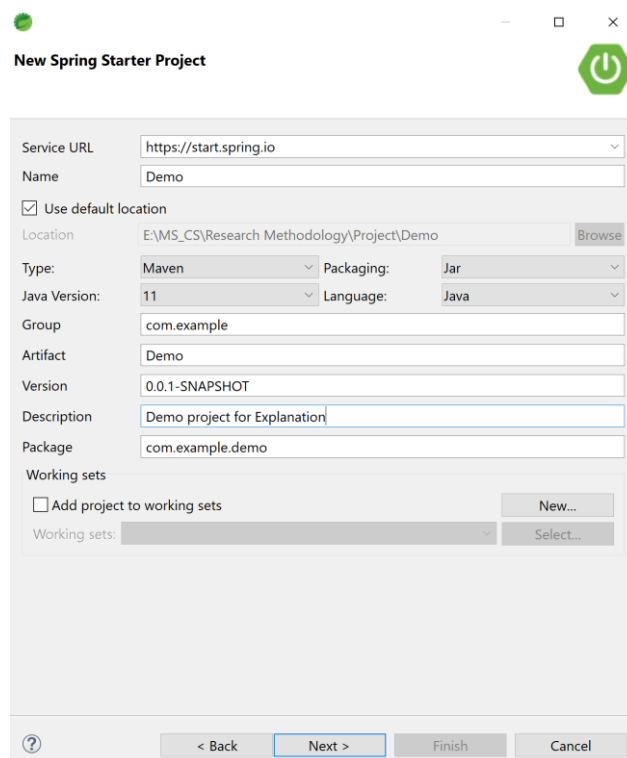
This is an executable jar file, which when extracted gave the following files.

configuration	15-02-2021 23:01	File folder	
dropins	15-02-2021 23:00	File folder	
features	15-02-2021 23:00	File folder	
META-INF	15-02-2021 23:00	File folder	
p2	15-02-2021 23:00	File folder	
plugins	15-02-2021 23:00	File folder	
readme	15-02-2021 23:00	File folder	
.eclipseproduct	15-02-2021 23:00	ECLIPSEPRODUCT...	1 KB
artifacts	15-02-2021 23:00	XML Document	163 KB
eclipsec	15-02-2021 23:00	Application	129 KB
license	15-02-2021 23:00	Text Document	12 KB
open-source-licenses	15-02-2021 23:00	Text Document	861 KB
SpringToolSuite4	15-02-2021 23:00	Application	417 KB
SpringToolSuite4	15-02-2021 23:00	Configuration sett...	1 KB

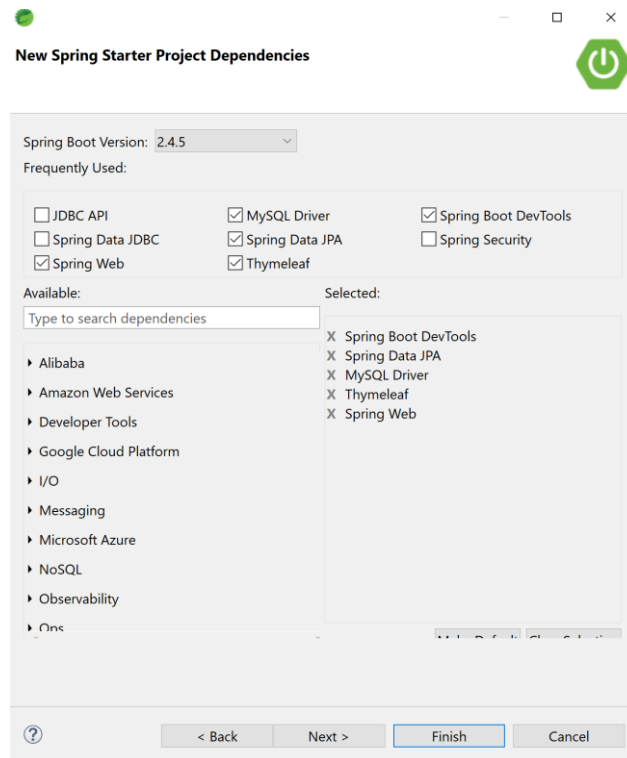
To open the application, use the 'SpringToolSuite4' application. Click on **File > New > Other > SpringStarterProject** and click on **Next**



Give a **name** for the project, enter a **description** and click on Next.

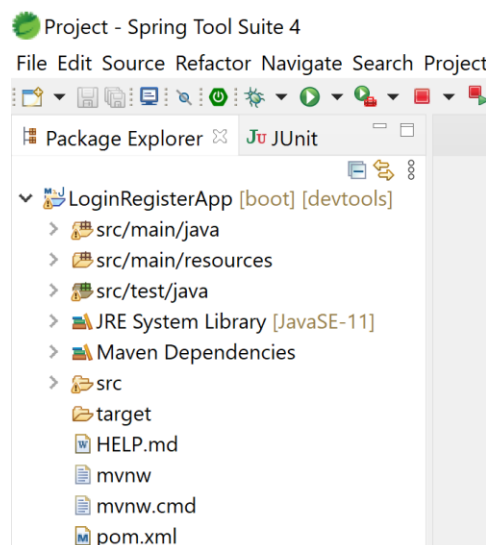


Select the required dependencies. For building this project, we used the selected dependencies as given in the screenshot. If we need any other dependencies, just type in the "**Type to search dependencies**" text field. Click on **Finish** once selected.

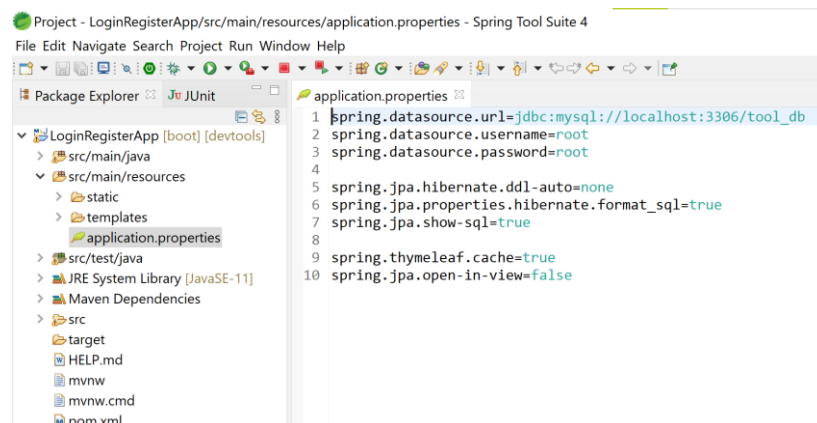


This will take around 30-40 minutes for creating the project, as it is downloading the dependencies from Internet.

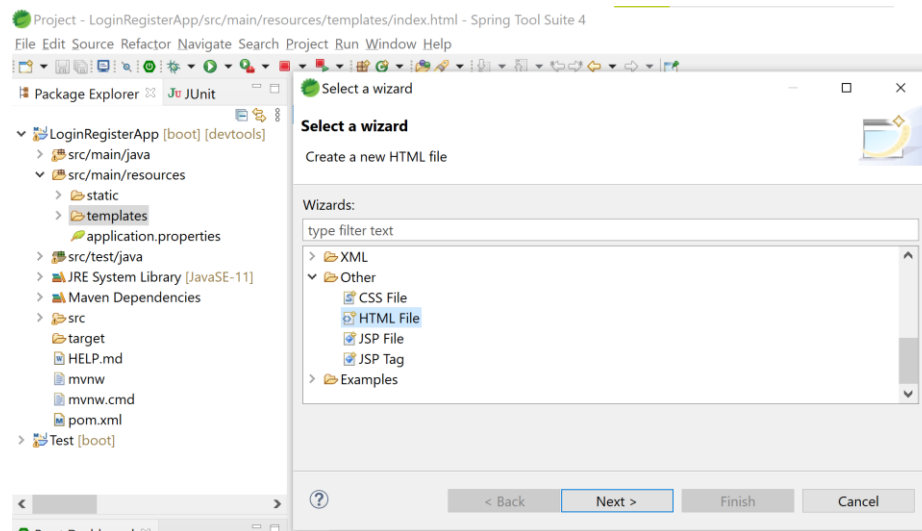
Once the project is created, it will contain the following folders under the project.



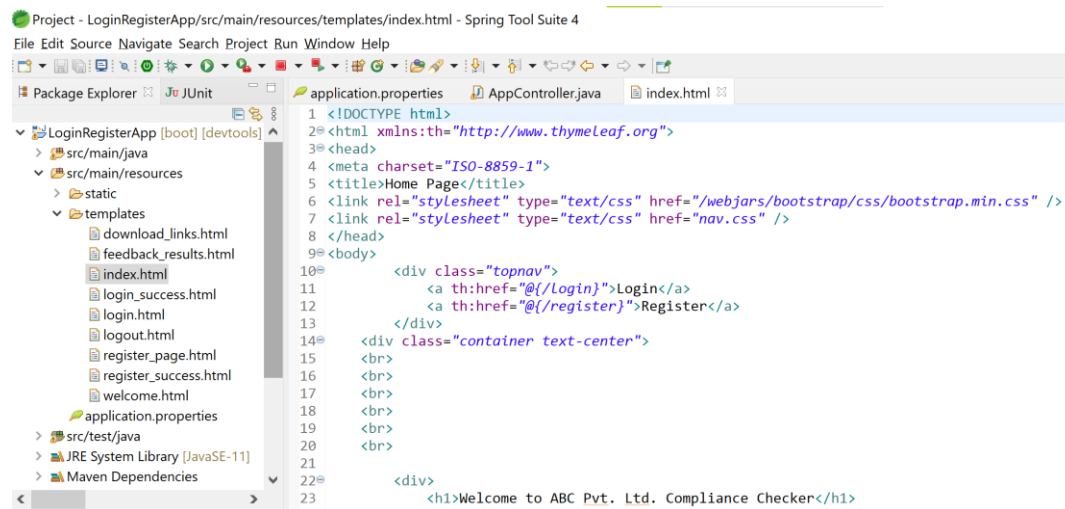
Under **src/main/resources** > **application.properties** file, add the properties required for the application.



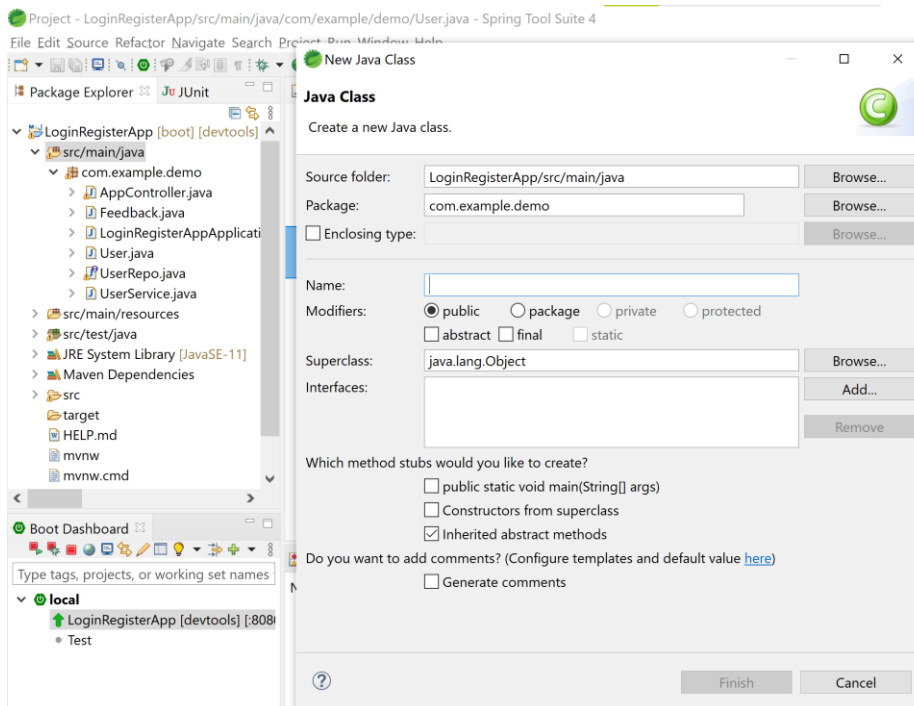
To create .html files, under the project, right click on **src/main/resources > templates > New > Other > HTML file** and click **Next**. Enter a name for the file and click **Finish**.



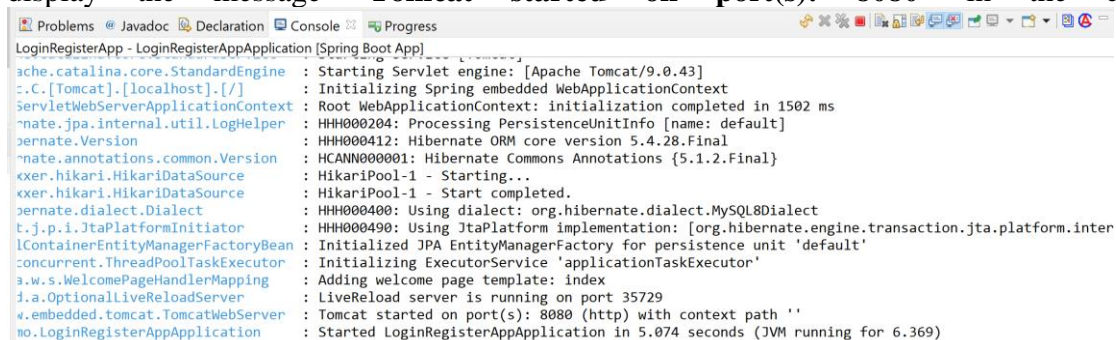
We can write html pages with Thymeleaf syntax in these .html files created.



For creating .java files associated with the .html files, right click on **src/main/resources > New > Class**. Enter a name for the file and click **Finish**.



Once all the files are created, we have to run the application. For this, run the file **LoginRegisterAppApplication.java** as java application. Upon successful running, it will display the message **'Tomcat started on port(s): 8080'** in the console.



Open browser and enter <http://localhost:8080/>. The **index.html** page will open up.

Screenshots of Results

Home page is given below. When we click on Register, the page to register is displayed.



Welcome to ABC Pvt. Ltd.
Compliance Checker

Welcome to ABC Pvt. Ltd.
Compliance Checker

Validations are done in all web forms. If the user enters doesn't enter all the fields, a warning error message will be displayed. Also, if the email Id already exists, then also an error message will be displayed. This will be checked with the database.

Employee Registration

Enter your Email ID

Enter your username

Enter your password

Please fill out this field.

Employee Registration

Enter your Email ID

Enter your username

Enter your password

This email id already exists !!!

An example screenshot of database is as follows.

MySQL Workbench

Archana x

File Edit View Query Database Server Tools Scripting Help

Navigator: Filter objects

SCHEMAS

- sakila
- sys
- tool_db
 - Tables
 - users
 - Views
 - Stored Procedures
 - Functions
- world

Administration Schemas

Information

No object selected

Query 1: users

1 select * from users

Limit to 50000 rows

Result Grid

id	email	password	username
8	remo@gmail.com	remo987	remo
9	jerem@gmail.com	jerem123	jerem
10	ramesh@gmail.com	ramesh1234	Ramesh
11	test@abc.com	test123	TEST123
12	maneesh@abc.com	Manee_890	Maneesh
16	ramesh@abc.com	ramesh123	Ramesh
17	archana@abc.com	archana123	archana
18	devi@abc.com	devi123	devi980
19	test1@abc.com	123456	test1
20	testuser@abc.com	testuser12	Testuser

Once the employee successfully registers in, he/she will be redirected to the page for logging in. There also we have done validations for the web form. The credentials entered are checked with the values in the database. If they don't match also, a message will be displayed.

You have registered
Successfully

[Click here to Login](#)

Enter your credentials to Login

Enter your Email ID

Enter your password

Invalid Credentials

Upon successful login, the employee can take up the Questionnaire.

Welcome **test123@abc.com**

To verify if your system comply with security standards of our organization,
click on the below link to take up the questionnaire

QUESTIONNAIRE

The Questionnaire looks like below. Contains questions for checking compliance of nine parameters.

Fill up the form below

All fields are mandatory

Enter the Windows OS version [To check : Go to command prompt and run the command "winver"]	<input type="text"/>	
Is "Avast" Antivirus installed?	<input type="radio"/> Yes <input type="radio"/> No	Is Microsoft Office 365 updated? [To check : Open any office application, go to account, click on "update now". There should be no updates pending]
If Avast is installed, Enter the version number, else enter "NA" [To check : Go to command prompt and run the command "appwiz.cpl", search for Avast]	<input type="text"/>	<input type="radio"/> Yes <input type="radio"/> No
Is firewall turned on? [To check : Go to Control panel -> system & security -> windows defender firewall state]	<input type="radio"/> Yes <input type="radio"/> No	Is your computer within the company's domain? [To check : Go to Control panel -> system & security -> system -> computer name -> it should be in domain, not be in workgroup]
Are your hard drives encrypted? [To check : Open file explorer and check the icon on the drive. If there is no lock symbol, then drive is not encrypted]	<input type="radio"/> Yes <input type="radio"/> No	What is the java version available? [To check : Go to Command Prompt and run the command "java -version"]
Is phish me plug-in available in Microsoft outlook? [To check : Open outlook and check if "Mr. Post Email inspector" phish me plug-in is added]	<input type="radio"/> Yes <input type="radio"/> No	What is the Google Chrome version? [To check : Go to command prompt and run the command "appwiz.cpl", search for google chrome]
		<input type="button" value="SUBMIT RESULTS"/>

TEST CASE 1 – Certain parameters are not in compliance. Once user clicks on the ‘**click here to download the scripts to update/install all non-compliance parameters**’, he will be redirected to the next page which contains link, which he can download and install.

Feedback on which all parameters are in compliance/not

Security Standard	In Compliance or not?
Windows OS version	Yes
Avast Antivirus	Yes
Avast Antivirus Version	Yes
Firewall	No
Encrypted Drives	No
Phish me plug-in	Yes
Office 365	No
Company's domain	No
Java version	No
Google Chrome Version	Yes

[Click here to download the scripts to update/install all non compliance parameters](#)

The links to download the zip files of all non compliance parameters are provided below !!!

Manual to turn on Firewall : [Firewall_Compliance_Manual.pdf](#) 224KB
To encrypt drives : [Encryption.zip](#) 0KB
Office365 : [Office365.zip](#) 3046KB
Manual to change the domain : [EDM_Compliance_Manual.pdf](#) 252KB
Java : [Java.zip](#) 1KB

TEST CASE 2 – All parameters are not in compliance. Next page will contain the links for all nine parameters.

Logout

Feedback on which all parameters are in compliance/not

Security Standard	In Compliance or not?
Windows OS version	No
Avast Antivirus	No
Avast Antivirus Version	No
Firewall	No
Encrypted Drives	No
Phish me plug-in	No
Office 365	No
Company's domain	No
Java version	No
Google Chrome Version	No

Logout

The links to download the zip files/ user manual of all non compliance parameters are provided below !!!

Windows OS link : [OS version.zip](#) 4977742KB
Avast Antivirus link : [Antivirus.zip](#) 1KB
Manual to turn on Firewall : [Firewall_Compliance_Manual.pdf](#) 224KB
To encrypt drives : [Encryption.zip](#) 1KB
Manual to install phish-me plugin : [Phish-me_Compliance_Manual.pdf](#) 271KB
Office365 : [Office365.zip](#) 3046KB
Manual to change the domain : [EDM_Compliance_Manual.pdf](#) 252KB
Java : [Java.zip](#) 1KB
Google Chrome : [Google Chrome.zip](#) 1KB

[Click here to download the scripts to update/install all non compliance parameters](#)

TEST CASE 2 – All parameters are in compliance. User can log out of the application.

Logout

Feedback on which all parameters are in compliance/not

Security Standard	In Compliance or not?
Windows OS version	Yes
Avast Antivirus	Yes
Avast Antivirus Version	Yes
Firewall	Yes
Encrypted Drives	Yes
Phish me plug-in	Yes
Office 365	Yes
Company's domain	Yes
Java version	Yes
Google Chrome Version	Yes

You have successfully logged out

[Click here to go back to home page](#)

You don't have any softwares to be updated

You may LOGOUT!!!!