

Software Engineering Tools Lab

Assignment No-8

Module 5- Software testing using tools

PRN: 2020BTECS00079

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Q 1. What are the prerequisites for installing the TestLink tool.

Operating System: Windows, Linux, or Mac OS X

xampp-5.6.36

Web Server: Apache or IIS

Database: MySQL, PostgreSQL, or Microsoft SQL Server

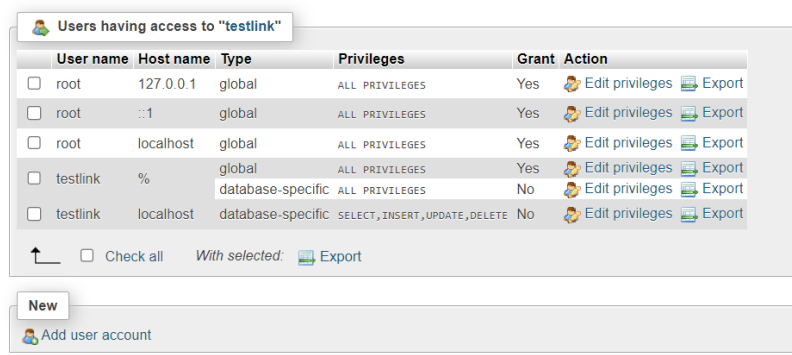
PHP: Version 5.6.x or higher

PHP Extensions: mbstring, gd, xml, mysqlnd, mysqli or pdo_mysql, zip

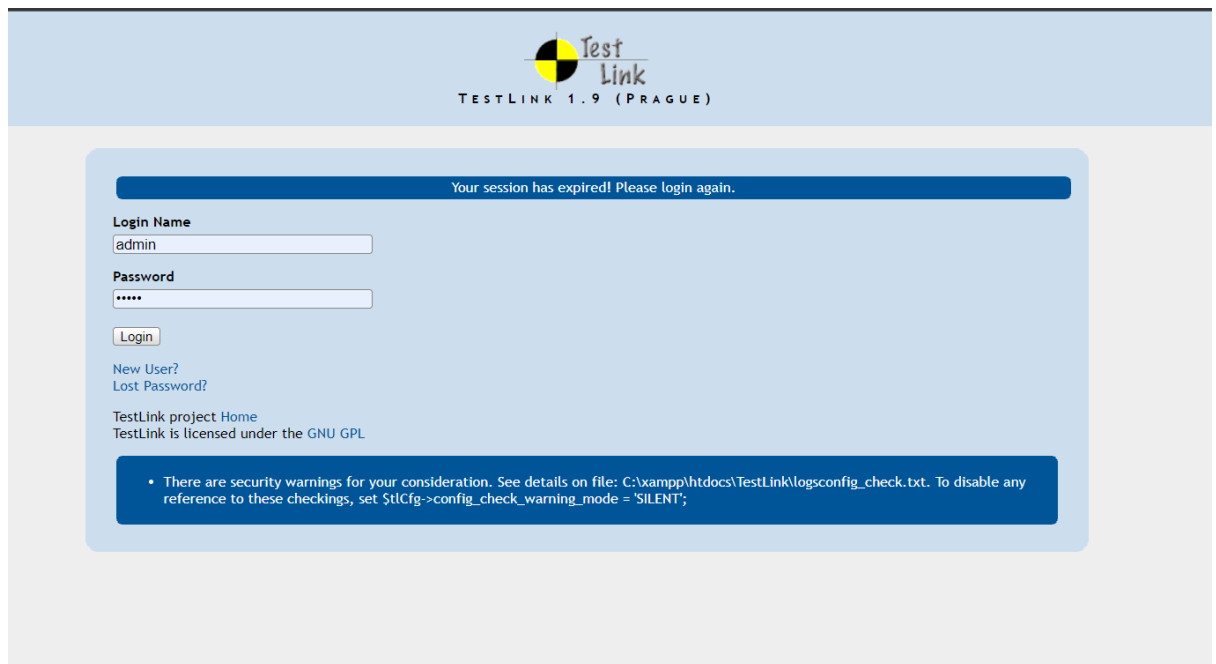
Browser: Any modern web browser such as Chrome, Firefox, or Safari

Q 2. Install TestLink tool on your machine (Provide screen shots for successful installation and login)

1. Download the latest stable version of TestLink from the official website (<https://testlink.org/>).
2. Extract the downloaded ZIP file to a directory on your machine.
3. Copy the extracted TestLink folder to your web server's document root directory.
4. Create a new database for TestLink and grant a user with necessary privileges to access the database.



5. Rename the configuration file config.inc.php.sample to config.inc.php and modify the necessary configuration settings such as database connection details.
6. Open a web browser and navigate to the TestLink installation URL (e.g., <http://localhost/testlink/install/index.php>).
7. Follow the on-screen instructions to complete the installation process, providing the necessary details such as database connection details and administrator account information.
8. Once the installation is complete, login to TestLink using the administrator account that you created during the installation process.



Q 3. Using TestLink tool create multiple test cases (at least 10) on any application/project that you have implemented.

Perform below tasks

- a. **Create New test project as SETProject**

Login to TestLink

Click on "Create new test project" under the "Test Project Management" tab

Enter the project name as "SETProject"

Enter a brief description of the project

Select any relevant options like enable requirements management, test plan management, etc.

Click on "Create Test Project"

The screenshot displays the TestLink 1.9 (Prague) web interface. The top navigation bar includes the TestLink logo, the version and environment information 'TestLink 1.9 (Prague) : admin [admin] [My Settings | Logout]', and a dropdown menu for 'Test Project'. The main content area is titled 'Test Project Management : Create a new project'. It contains a form with the following fields and options:

- Name ***: A text input field containing 'SETProject'.
- Prefix (used for Test case ID) ***: A text input field containing 'SET'.
- Project description**: A rich text editor area containing the text 'This is description of SETProject'.
- Enhanced features**: A section with four checkboxes:
 - ☒ Enable Requirements feature
 - ☒ Enable Testing Priority
 - ☒ Enable Test Automation (API keys)
 - ☐ Enable Inventory
- Availability**: A section with two checkboxes:
 - ☒ Active
 - ☒ Public

At the bottom of the form are 'Create' and 'Cancel' buttons. Below the form, a note indicates '* Mandatory fields'. The bottom section of the screenshot shows the 'Test Project Management' table, which lists the newly created project:

Name	Description	Prefix	Requirement Feature	Active	Public	delete
SETProject	This is description of SETProject	SET				

b. Create a test plan as SETProjectTestPlan

Click on the "Test Plan Management" tab

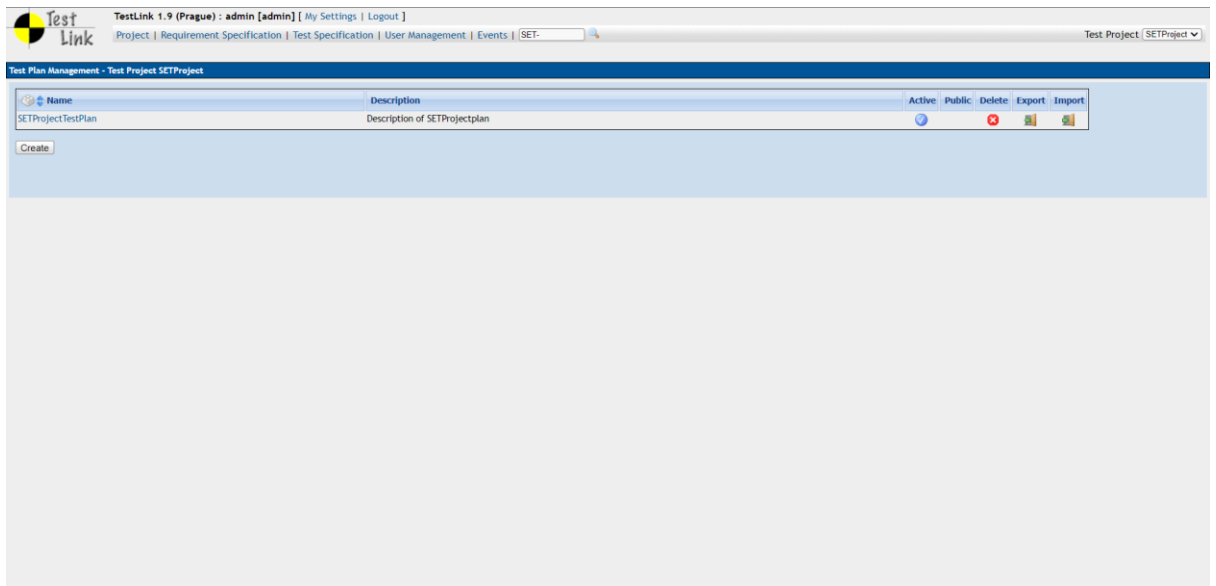
Click on "Create Test Plan" under SETProject

Enter the test plan name as "SETProjectTestPlan"

Enter a brief description of the test plan

Select the test cases to be included in the test plan

Click on "Create Test Plan"



c. **Create a build as SETProjectBuild**

Click on the "Builds" tab

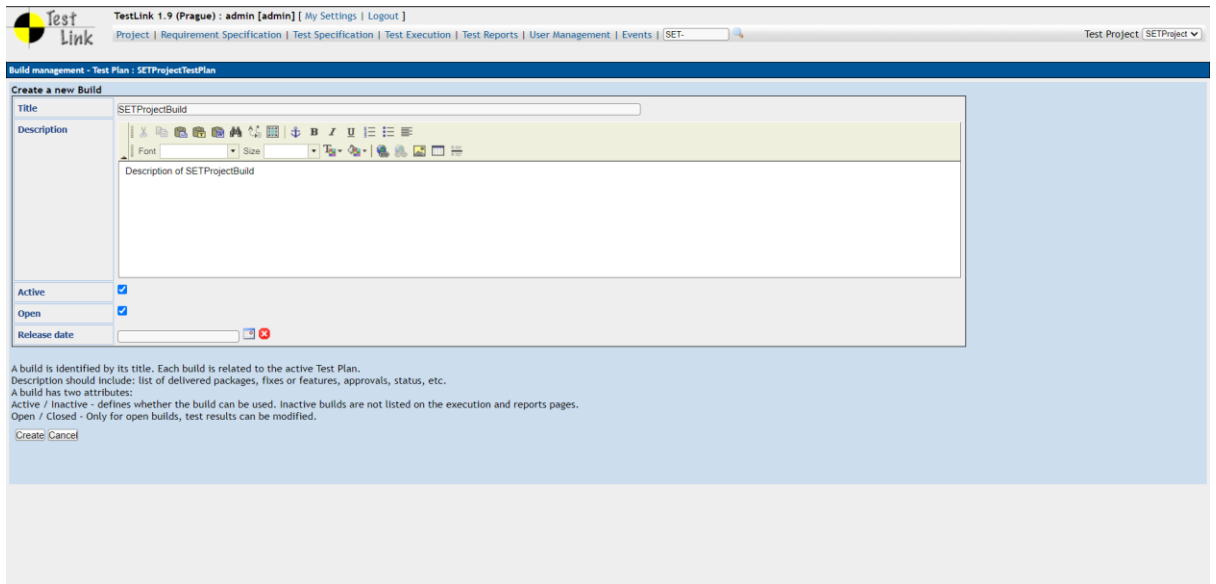
Click on "Create Build" under SETProject

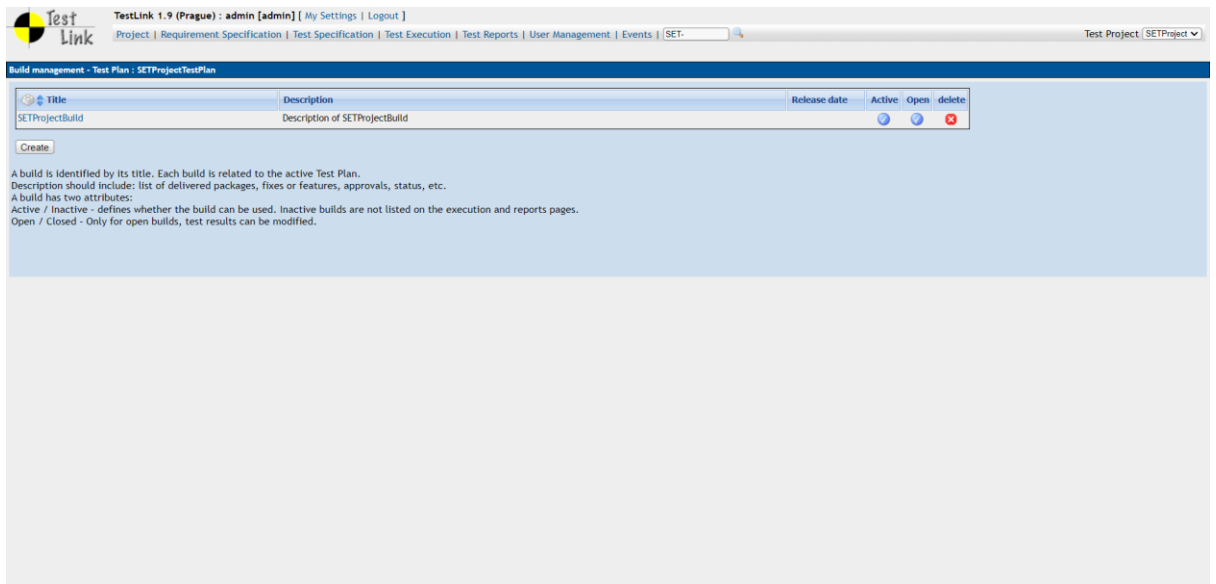
Enter the build name as "SETProjectBuild"

Enter a brief description of the build

Select the test plan for the build

Click on "Create Build"





d. **Create test suite as Test Suite 1 under SETProject**

Click on the "Test Specification" tab

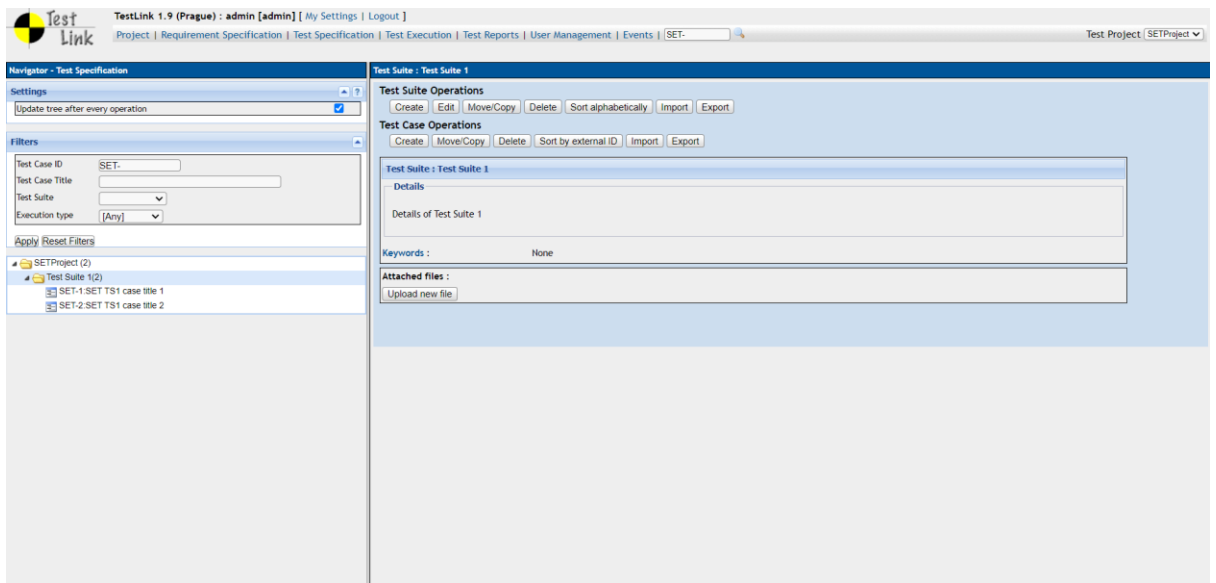
Click on "Create Test Suite" under SETProject

Enter the test suite name as "Test Suite 1"

Enter a brief description of the test suite

Select the test plan for the test suite

Click on "Create Test Suite"



e. **Create Test cases in TestLink Tool**

Click on "Create Test Case" under "Test Specification"

Enter the test case title and summary

Select the test suite to which the test case belongs

Add the steps to execute the test case and expected results

Add any preconditions and post-conditions
Click on "Create Test Case"

TestLink 1.9 (Prague) : admin [admin] [My Settings | Logout]

Project | Requirement Specification | Test Specification | Test Execution | Test Reports | User Management | Events | SET-

Test Project | SETProject

Navigator - Test Specification

Settings

Update tree after every operation ☒

Filters

Test Case ID: SET-

Test Case Title:

Test Suite:

Execution type: [Any]

Apply Reset Filters

SETProject (1)

Test Suite 1 (1)

SET-1-SET TS1 case title 1

Test Suite 1 - Create Test Case

Create Cancel

Test Case Title

SET TS1 case title 2

Summary

Preconditions

Execution type: Manual

Test Importance: Medium

Keywords

Available Keywords

Assigned Keywords

f. **Assign created Test Cases to the test plan SETProjectTestPlan**

Click on the "Test Plan Management" tab

Select the SETProjectTestPlan

Click on the "Test Case Assignment" tab

Select the test cases to be assigned to the test plan

Click on "Assign Test Case(s) to Test Plan"

g. **Create different roles as given below in the TestLink**

Click on the "User Management" tab

Click on "Define Roles" under SETProject

Create different roles like "Tester," "Test Manager," "Developer," etc.

TestLink 1.9 (Prague) : admin [admin] [My Settings | Logout]

Project | Requirement Specification | Test Specification | Test Execution | Test Reports | User Management | Events | SET-

Test Project | SETProject

User Management

View Users View roles Assign Test Project roles Assign Test Plan roles

Hide inactive users ☐

Login	First Name	Last Name	Email	Role	Locale	Active	disable
admin	Testlink	Administrator		admin	English (wide/UK)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Guest	Guest	1	admin@admin.com	guest	English (wide/UK)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Leader Admin	Leader Admin	1	admin@admin.com	leader	English (wide/UK)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Senior Tester Edit Execute	Senior Tester Edit Execute	1	admin@admin.com	senior tester	English (wide/UK)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tester	Tester	1	admin@admin.com	tester	English (wide/UK)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Create

h. Write a requirements in TestLink

Click on the "Requirements Specification" tab

Click on "Create Requirement Specification"

Enter the requirement name and description

Assign the requirement to a test plan

Click on "Create Requirement Specification"

The first screenshot shows the 'Create Requirements Specification Test Project: SETProject' form. The left sidebar contains a 'Navigator - Requirement Specifications' panel with filters for Document ID, Title, Status, Requirement Type, Req. Spec. Type, Expected no. of testcases, Has relation of type, and Test Case ID. The main area has fields for Document ID (Requirement 1), Title (Requirement title), and a text area for the requirement description. Below the text area is a 'Type' dropdown set to 'Section' and 'Save'/'Cancel' buttons.

The second screenshot shows the 'Req. Spec.: [Requirement 1] :: Requirement title' view. The left sidebar is similar to the first, but the 'Navigator' panel now shows a tree structure with 'SETProject' and 'Requirement 1: Requirement title(0)'. The main area displays the 'Requirement Specification Operations' (Create, Edit, Delete, Import, Export, Freeze all Requirements) and 'Requirement Operations' (Create, Import, Export). Below these are fields for 'Req. Spec.: [Requirement 1] :: Requirement title', 'Type: Section', 'Scope', and a text area for the requirement description. At the bottom, it shows 'Created on 24/04/2023 07:20:01 by admin' and an 'Attached files' section with an 'Upload new file' button.

i. Execute test cases

Click on the "Execute Tests" tab

Select the test plan and build

Select the test cases to be executed

Assign the test cases to a tester

Execute the test cases

