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# **LUMIFY WORK ISTQB Test Automation Engineer User Guide**

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# **LUMIFY WORK ISTQB Test Automation Engineer**

## **Product Information**

## **Specifications**

• Course: ISTQB Test Automation Engineer

· Length: 3 days

• Price (Incl. GST): \$2090

Lumify Work's ISTQB Test Automation Engineer certification is designed to provide comprehensive training in software testing and automation. This course is delivered in partnership with Planit, the world-leading provider of software testing training. Automation is a key skill for modern testers, and this certification is the first step in becoming a part of the growing test automation space. The course includes a comprehensive manual, revision questions for each module, practice exam, and a pass guarantee. If you don't pass the exam on your first attempt, you can re-attend the course for free within 6 months. Please note that the exam is not included in the course fee but can be purchased separately. Contact us for a quote.

# **Learning Outcomes**

- Contribute to the development of a plan to integrate automated testing within the testing process
- Evaluate tools and technology for automation best fit to each project and organization
- Create an approach and methodology for building a test automation architecture (TAA)
- · Design and develop test automation solutions that meet the business needs
- Enable the transition of testing from a manual to an automated approach



- · Create automated test reporting and metrics collection
- Analyze a system under test to determine the appropriate automation solution
- Analyze test automation tools for a given project and report technical findings and recommendations
- Analyze factors of implementation, use, and maintenance requirements for a given Test Automation Solution
- Analyze deployment risks and identify technical issues that could lead to failure of the test automation project,
  and plan mitigation strategies
- · Verify the correctness of an automated test environment including test tool setup
- Verify the correct behavior for a given automated test script and/or test suite

# **Product Usage Instructions**

#### **Integrating Automated Testing**

To integrate automated testing within your testing process, follow these steps:

- 1. Identify the areas of your testing process that can be automated.
- 2. Create a plan for integrating automated testing, considering factors such as test coverage, test data management, and test environment setup.
- 3. Define the roles and responsibilities of team members involved in automated testing.
- 4. Select appropriate tools and technologies for automation that best fit your project and organization.

## **Building a Test Automation Architecture (TAA)**

To create an approach and methodology for building a test automation architecture, follow these steps:

- 1. Analyze your organization's testing needs and business goals.
- 2. Identify the components and layers required for your test automation architecture.
- 3. Design the structure of your test automation architecture, considering factors such as modularity, scalability, and maintainability.
- 4. Select the appropriate tools and technologies for each component of your test automation architecture.

#### **Designing and Developing Test Automation Solutions**

To design and develop test automation solutions that meet your business needs, follow these steps:

- 1. Identify the test scenarios and test cases that can be automated.
- Create a framework for organizing and managing your automated test scripts and test data.
- 3. Implement the automation logic and functionality using the selected test automation tools and technologies.
- 4. Verify the correctness of your automated test scripts and ensure they cover the desired test scenarios.

# **Transitioning from Manual to Automated Testing**

To enable the transition of testing from a manual to an automated approach, follow these steps:

- 1. Evaluate your existing manual test cases and identify the ones that are suitable for automation.
- 2. Design and implement automated versions of the selected manual test cases.
- 3. Run the automated test cases and compare the results with the expected outcomes.
- 4. Iteratively refine and improve your automated test cases based on feedback and test coverage requirements.

## **Creating Automated Test Reporting and Metrics**

To create automated test reporting and collect metrics, follow these steps:

- 1. Define the key metrics and reporting requirements for your automated testing process.
- 2. Implement mechanisms for capturing and storing relevant test execution data, such as test results, coverage information, and performance metrics.
- 3. Create reports and visualizations to present the collected metrics in a meaningful way.
- 4. Analyze the collected metrics to gain insights into the effectiveness of your automated testing process and identify areas for improvement.

### **Analyzing System Under Test for Automation**

To analyze a system under test and determine the appropriate automation solution, follow these steps:

- 1. Understand the architecture and components of the system under test.
- 2. Identify the test scenarios and test cases that are suitable for automation based on factors such as repeatability, complexity, and time constraints.
- 3. Evaluate the feasibility of automating the identified test scenarios and test cases, considering factors such as technical requirements, test data availability, and tool compatibility.
- 4. Select the appropriate automation solution based on the analysis and evaluation.

## **Analyzing Test Automation Tools**

To analyze test automation tools for a given project and report technical findings and recommendations, follow these steps:

- 1. Identify the requirements and objectives of your project in terms of test automation.
- 2. Research and evaluate different test automation tools available in the market.
- 3. Analyze the technical capabilities, features, and limitations of each tool.
- 4. Compare the tools based on factors such as ease of use, scalability, integration capabilities, and cost.
- Generate a technical report with findings and recommendations on the most suitable test automation tools for your project.

#### **Analyzing Implementation, Use, and Maintenance Requirements**

To analyze factors of implementation, use, and maintenance requirements for a given Test Automation Solution, follow these steps:

- 1. Identify the specific implementation, use, and maintenance requirements for your Test Automation Solution.
- 2. Analyze the impact of implementing the solution on your existing infrastructure, processes, and resources.
- 3. Evaluate the usability and user-friendliness of the solution for different stakeholders.
- 4. Determine the training and support needs for effectively implementing and using the solution.
- 5. Create a plan for maintaining and updating the Test Automation Solution based on future changes and enhancements.

## **Analyzing Deployment Risks and Planning Mitigation Strategies**

To analyze deployment risks and identify technical issues that could lead to failure of the test automation project, and plan mitigation strategies, follow these steps:

- 1. Identify potential risks and challenges associated with deploying the test automation solution.
- 2. Analyze the impact of these risks on the success of the project.
- 3. Develop mitigation strategies to address the identified risks, considering factors such as risk probability, impact severity, and available resources.
- 4. Create a contingency plan to minimize the impact of unforeseen issues during the deployment phase.

## **Verifying Automated Test Environment and Scripts**

To verify the correctness of an automated test environment including test tool setup and verify the correct behaviour for a given automated test script and/or test suite, follow these steps:

- 1. Ensure that the test environment is properly set up with all necessary dependencies and configurations.
- 2. Verify the installation and configuration of the selected test automation tools.
- 3. Run sample automated test scripts or test suites to validate their behaviour and functionality.
- 4. Compare the actual results with the expected outcomes to ensure correctness.

#### **FAQ**

• Q: Is the exam included in the course fee?

A: No, the exam is not included in the course fee. It can be purchased separately. Please contact us for a quote.

Q: What if I don't pass the exam on my first attempt?

A: If you don't pass the exam on your first attempt, you can re-attend the course for free within 6 months.

Q: How can I get more information about the course?

A: You can visit our website <a href="https://www.lumifywork.com/en-au/courses/istqb-advanced-test-automation-engineer/">https://www.lumifywork.com/en-au/courses/istqb-advanced-test-automation-engineer/</a> or contact us at 1800 853 276 or training@lumifywork.com.

• Q: How can I connect with Lumify Work on social media?

A: You can follow us on Facebook (<u>facebook.com/LumifyWorkAU</u>), LinkedIn (<u>linkedin.com/company/lumify-work</u>), Twitter (<u>twitter.com/LumifyWorkAU</u>), and YouTube (<u>youtube.com/@lumifywork</u>

#### WHY STUDY THIS COURSE

Want to learn the methods and processes for automating tests? In this ISTQB® Test Automation Engineer course, you will gain a solid understanding of test automation concepts and methods that are applicable across a number of development approaches, and test automation tools and platforms. Automation is a key skill for the modern tester. T his ISTQB Test Automation Engineer certification is the first step in becoming a part of the growing test automation space.

Included with this course:

- · Comprehensive course manual
- Revision questions for each module
- · Practice exam
- Pass guarantee: if you don't pass the exam the first time, re-attend the course for free within 6 months

**Please note:** The exam is not included in the course fee but can be purchased separately. Please contact us for a quote.

#### WHAT YOU'LL LEARN

Learning outcomes:

- Contribute to the development of a plan to integrate automated testing within the testing process.
- Evaluate tools and technology for automation best fit to each project and organisation.
- Create an approach and methodology for building a test automation architecture (TAA).
- Design and develop test automation solutions that meet business needs.
- Enable the transition of testing from a manual to an automated approach.
- Create automated test reporting and metrics collection.
- Analyse a system under test to determine the appropriate automation solution.
- Analyse test automation tools for a given project and report technical findings and recommendations.
- Analyse factors of implementation, use, and maintenance requirements for a given Test Automation Solution.
- Analyse deployment risks and identify technical issues that could lead to failure of the test automation project, and plan mitigation strategies.
- Verify the correctness of an automated test environment including test tool setup.
- Verify the correct behaviour for a given automated test script and/or test suite.

## **ISTQB AT LUMIFY WORK**

Since 1997, Planit has established its reputation as the world leading provider of software testing training, sharing its extensive knowledge and experience through a comprehensive range of international best-practice training courses like ISTQB.

Lumify Work's software testing training courses are delivered in partnership with Planit.

- My instructor was great being able to put scenarios into real-world instances that related to my specific situation.
- I was made to feel welcome from the moment I arrived and the ability to sit as a group outside the classroom to discuss our situations and our goals was extremely valuable.
- I learnt a lot and felt it was important that my goals by attending this course were met.
- · Great job Lumify Work team.

#### **AMANDA NICOL**

IT SUPPORT SERVICES MANAGER - HEALTH WORLD LIMITED

### **COURSE SUBJECTS**

- Introduction and Objectives for Test Automation Preparing for Test Automation.
- The Generic Test Automation Architecture.
- · Deployment Risks and Contingencies.
- Test Automation Reporting and Metrics.
- Transitioning Manual Testing to an Automated Environment Verifying the Test Automation Solution.
- · Continuous Improvement.

#### **Lumify Work Customised Training**

We can also deliver and customise this training course for larger groups saving your organisation time, money and resources. For more information, please contact us on 1 800 853 276.

#### WHO IS THE COURSE FOR

This course is designed for:

- · Experienced testers looking to develop expertise in test automation
- Test Managers need the skills to plan and lead automation projects
- Test Automation professionals wanting to accredit their skills for recognition by employers, clients, and peers

#### **PREREQUISITES**

Attendees must possess the ISTQB Foundation Certificate (or higher) and at least 3 years experience in testing.

The supply of this course by Lumify Work is governed by the booking terms and conditions. Please read the terms and conditions carefully before enrolling in this course, as enrolment in the course is conditional on acceptance of these terms and conditions.

https://www.lumifywork.com/en-au/courses/istqb-advanced-test-automation-engineer/

Call 1800 853 276 and speak to a Lumify Work Consultant today!

- training@lumifywork.com
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- linkedin.com/company/lumify-work
- twitter.com/LumifyWorkAU
- youtube.com/@lumifywork

#### **Documents / Resources**



**LUMIFY WORK ISTQB Test Automation Engineer** [pdf] User Guide

ISTQB Test Automation Engineer, Test Automation Engineer, Automation Engineer, Engineer

## References

- <sup>1</sup> <u>Lumify Work | Lumify Work AU</u>
- <u>Quantity Work | Lumity Work AU</u>
- 1STQB Test Automation Engineer | Lumify Work AU
- ISTQB Foundation | Lumify Work AU
- User Manual

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