



FREE eBook

LEARNING automation

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#automation

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About

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Chapter 1: Getting started with automation

Remarks

This section provides an overview of what automation is, and why a developer might want to use it.

It should also mention any large subjects within automation, and link out to the related topics. Since the Documentation for automation is new, you may need to create initial versions of those related topics.

Examples

Installation or Setup

Detailed instructions on getting automation set up or installed.

Identification of Test Automation Objective-Types-Approaches

Test Automation is broad topic. DEV/QA should delve on this questions first:

1. What is nature of product? (Web, Mobile, Cloud, IOT, Analytics)
2. What is development stage? (Developed-Legacy, In Development)
3. What is technology stack? (Java, C#, Python, Ruby, Node, React)
4. Is it SOA/Micro-services based?
5. What would be best approach to automation that can give faster feedback or ? (Unit Tests, Integration Tests, End-To-End Tests)

Test Automation Framework - Design Components

Test automation framework can have several components depending on automation planned. Some of them(though not limited to) are:

1. Test Runner (TestNG, JUnit, Jest, Protractor, Cucumber)
2. Test Container (BDD Specs-Steps, Junit Tests, Spec based functions)
3. Test Environment Configuration
4. Test Data Store
5. Assertion Libraries
6. Automation Driver Libraries (WebDriver, Appium, Jersey)
7. Reporting and Logging Libraries

Read Getting started with automation online: <https://riptutorial.com/automation/topic/8195/getting-started-with-automation>

Chapter 2: UI Automation

Introduction

The focus of this section would be list out tools, design approaches and common challenges for any UI Automation effort.

Examples

Web UI Automation

Design Approaches

- Driving Factor: What should be our driving engine? Should it be test functions, keywords, data or behavior? Here we list different approaches with examples.

- Data Driven/Keyword Driven/Hybrid:

- Code Driven:

- BDD/TDD/ATDD:

Cucumber-Java with Page Factory Approach

Steps for Getting Started:

- Download Eclipse
- Create a Java Maven Project with following example package organization

```
src/test/java com.example.pageobjects com.example.steps com.example.runner
src/test/resources
```
- Add Cucumber Eclipse Plugin : <https://github.com/cucumber/cucumber-eclipse/wiki>
- Add Cucumber Dependency to POM:<https://cucumber.io/docs/reference/jvm#java>
- Add Cucumber JUnit Dependency: <https://cucumber.io/docs/reference/jvm#junit-runner>
- Add Selenium Dependency:
<http://repo1.maven.org/maven2/org/seleniumhq/selenium/selenium-java/3.3.1/selenium-java-3.3.1.pom>

TBD

Read UI Automation online: <https://riptutorial.com/automation/topic/9443/ui-automation>

Credits

S. No	Chapters	Contributors
1	Getting started with automation	Community, I Am
2	UI Automation	I Am