

Selenium Webdriver Documentation

Step by step directions to get started with Selenium using Python as a programming language DESCRIPTION Selenium is the most popular open source test automation tool available in the market. In the last decade, its usage has dramatically increased in the IT sector across all types of organizations. The reason for its popularity is mainly because it supports multiple programming languages, test executions on multiple browsers and operating systems. In this book, we will learn about the different components of Selenium. We will discuss the concepts of WebDriver and learn how to apply test automation concepts with it to automate the testing of our application. We will learn the process of recognizing the test objects on the screen and writing Selenium commands using Python as a programming language We will also discuss how to use design patterns like the page object mode and data-driven testing to ensure building a robust test framework, which is modular and scalable in nature. KEY FEATURES Get introduced to the world of Selenium Understand the concept of locators in Selenium Learn how to write scripts using Selenium WebDriver in Python Learn the concepts of synchronization Learn how to handle different HTML elements like form, table, alert, frame, and dropdown Learn about design patterns like the page object model, data-driven tests, and adding assertions WHAT WILL YOU LEARN The objective is to introduce the world of Selenium to a manual tester who knows Python as a programming language. You will learn to demystify the concept of identifying test objects and writing Selenium commands to create robust test scripts. This book will help learn to automate different HTML elements, which we come across in the web applications we need to test. You will understand how to build a good test suite by learning the concept of design patterns like the page object model and data-driven tests to ensure maintainability of code. WHO THIS BOOK IS FOR This book is for people who have experience in manual testing and knowledge in Python as a programming language. This book will also be helpful for a developer who knows Python as a programming language and is looking for test automation as a career option. Table of Contents 1. Selenium - Important Conceptual Background 2. Selenium IDE 3. Locators in Selenium 4. Installation and Setup 5. Selenium WebDriver 6. Unit Test Creation n Python 7. Synchronizing Tests 8. Parameterization of Tests 9. Handling Different Web Elements 10. Working with Frames 11. Concept of the Page Object Model 12. Implementing Selenium Grid

This book presents the general objective of the REV2021 conference which is to contribute and discuss fundamentals, applications, and experiences in the field of Online and Remote Engineering, Virtual Instrumentation, and other related new technologies like Cross Reality, Data Science & Big Data, Internet of Things & Industrial Internet of Things, Industry 4.0, Cyber Security, and M2M & Smart Objects. Nowadays, online technologies are the core of most fields of engineering and the whole society and are inseparably connected, for example, with Internet of Things, Industry 4.0 & Industrial Internet of Things, Cloud Technologies, Data Science, Cross & Mixed Reality, Remote Working Environments, Online & Biomedical Engineering, to name only a few. Since the first REV conference in 2004, we tried to focus on the upcoming use of the Internet for engineering tasks and the opportunities as well as challenges around it. In a globally connected world, the interest in online collaboration, teleworking, remote services, and other digital working environments is rapidly increasing. Another objective of the conference is to discuss guidelines and new concepts for engineering education in higher and vocational education institutions, including emerging technologies in learning, MOOCs & MOOLs, and Open Resources. REV2021 on "Online Engineering and Society 4.0" was the 17th in a series of annual events concerning the area of Remote Engineering and Virtual Instrumentation. It has been organized in cooperation with the International Engineering and Technology Institute (IETI) as an online event from February 24 to 26, 2021. This book presents selected research papers on current developments in the fields of soft computing and signal processing from the Third International Conference on Soft Computing and Signal Processing (ICSCSP 2020). The book covers topics such as soft sets, rough sets, fuzzy logic, neural networks, genetic algorithms and machine learning and discusses various aspects of these topics, e.g., technological considerations, product implementation and application issues.

An easy-to-understand guide that will get you acquainted with the core concepts of Selenium WebDriver Key Featuresa- Understand and work with the core concepts of Selenium WebDriver 3.0a- Learn how to design a Keyword driven framework with Database a- Find how to use Build triggers in Jenkins to automate tests DescriptionThe book starts by introducing the Selenium WebDriver 3 and Selenium Server by covering each aspect of it in detail. You will learn different concepts like instances and how instances relate to browser sessions. You will further explore the new features in Java 8 with the help of easy to follow examples. Moving on, you will create a Singleton class for fetching WebDriver instances and then explore the different kinds of waits in Selenium. You will then delve into the advanced WebDriver interactions using the Actions class and the JavascriptExecutor. You will then understand the various database operations which will help you with using the MySQL database to store our framework. Next, you will go through the TestNG framework, followed by parallel execution. Further, you will use Maven as a build tool and Jenkins as a build automation tool. You will go through the working of Selenium Grid along with Mobile automation. Lastly, you will be taken through Selenium 4 and it's AI integrated features.What will you learna- Learn the process of building a Selenium Framework a- Understand the Keyword Driven Framework concept a- Work with Document Object Model to access page elementsa- Integrate Maven and Jenkins with Selenium WebDrivera- Use Selenium Grid to run multiple tests across Who this book is forThis book has been designed for Automation developers who would like to build a Keyword Driven framework that fetches keywords from Database. It is also intended for audiences who are interested in understanding Selenium and designing a framework.Table of Contents1. First look at Selenium WebDriver and Web Elements 2. Looking at the various WebDrivers3. A brief look at Java 8 4. Deep dive into Selenium WebDriver5. Actions class and the JavascriptExecutor6. WebDriver Events7. Database Operations8. Introduction to TestNG framework9. Parallel Execution10. Understanding Maven11. Jenkins Introduction and Scheduling12. Selenium grid and executing in the cloud13. Mobile test automation using Appium14. A look at Selenium-4About the AuthorPinakin Chaubal, a BE (Computer Science) with 19+ years of experience in the IT area. He has done PMP, ISTQB, HP0-M47 (QTP 11.0 Functional testing expert), and INS-21(General Insurance). He is working as an Automation Architect at Intellect Design Arena Ltd. (Previously Polaris Consulting). Previously he has worked with companies like Patni, Accenture, ACS International (USA), L&T Infotech(USA & India), Polaris Financial Technology, and SQS. He carries six years of onsite experience in the US and eight months in Hong Kong & China, working closely with the client and getting involved in senior management and stakeholder meetings. The clients that he has worked for are YES Bank, HSBC, Travelers Insurance, Harleysville Insurance, Albertsons retail chain, Bellsouth Telecommunications GE-Fleet Services, and GE-Supply. He is the creator of Youtube channel 'Automation Geek, ' which teaches PMP, ISTQB, Test Automation using Selenium and Cucumber, and Performance testing using JMeter 3.0. He is the author of 'Page Object Model using Selenium WebDriver and Java' and 'Selenium WebDriver Quick Start Guide'. He is also the reviewer of the newly released book on Selenium Frameworks - 'Selenium Framework Design in Data-Driven Testing' by Carl Cocchiaro. Increase the performance, capability, and reliability of your automated checks by mastering Selenium WebDriverAbout This Book• Create an extensible test framework in Java supporting parallel execution with TestNG• Understand the power, simplicity, and limitations of the core Selenium framework• Write clear, simple, readable, and reliable tests that perform complex test automation tasksWho This Book Is ForIf you are a software tester or a developer who has learnt the basics of Selenium using the WebDriver API and is now ready to take the next step, then this is the book for you.What You Will Learn• Provide fast, useful feedback with sensible errors and screenshots• Create extensible, well-composed page objects• Gain an in-depth understanding of implicit and explicit waits, and how you should use them• Leverage the full power of the Actions API• Explore the full potential of the JavascriptExecutor• Extend Selenium's capabilities by integrating other applications• Learn how to plug third-party products into Selenium, and where it is appropriate to do soIn DetailSelenium WebDriver, also

known as Selenium 2, is a UI automation tool used by software developers and QA engineers to test their web applications on different web browsers. The Selenium WebDriver API is fully object oriented compared with the deprecated Selenium RC. The WebDriver API provides multi-language support and run tests on all the most popular browsers. In this wide and complex World Wide Web era, this book will teach you how to tame it by gaining an in-depth understanding of the Selenium API. This book starts with how to solve the difficult problems that you will undoubtedly come across as you start using Selenium in an enterprise environment, followed by producing the right feedback when failing, and what the common exceptions are, explain them properly (including the root cause) and tell you how to fix them. You will also see the differences between the three available implicit waits and explicit waits, and learn to working with effective page objects. Moving on, the book shows you how to utilize the Advanced User Interactions API, how you can run any JavaScript you need through Selenium, and how to quickly spin up a Selenium Grid using Docker containers. At the end, the book will discuss the upcoming Selenium W3C specification and how it is going to affect the future of Selenium. **Style and approach** This book is a pragmatic guide that takes you through the process of creating a test framework. It then shows you how you can extend this framework to overcome common obstacles that you will come across whilst using Selenium.

Selenium WebDriver is an automation tool used by software developers to test the web applications. In this book you will gain a deep understanding of Selenium as a test tool and learn series of strategies that will help you create reliable and extensible test frameworks. Also focus on Java WebDriver API and learn to run tests on multiple browsers.

Learn to write automation test scripts using Selenium Web driver version 3.x and 2.x in java programming, java script, C#, python and run in Cucumber BDD feature files. Conduct experiment to write protractor-based Cucumber BDD framework in java script. Build TDD frameworks with the help of Testing, Visual Studio, Jenkins, Excel VBA, Selenium, HP UFT (formerly QTP), Ranorex, RFT and other wide-ranged QA testing tools. Design first Appium scripts after setting up the framework for mobile test automation. Build concurrent compatibility tests using Selenium Grid! Repeated interview questions are explained with justifications for Cucumber BDD, Selenium IDE, Selenium web driver and Selenium Grid.

Strengthen your applications by adopting Test-Driven Development (TDD), the OpenAPI Specification, Continuous Integration (CI), and container orchestration. **Key Features** Create production-grade JavaScript applications from scratch Build microservices and deploy them to a Docker container for scaling applications Test and deploy your code with confidence using Travis CI **Book Description** With the over-abundance of tools in the JavaScript ecosystem, it's easy to feel lost. Build tools, package managers, loaders, bundlers, linters, compilers, transpilers, typecheckers - how do you make sense of it all? In this book, we will build a simple API and React application from scratch. We begin by setting up our development environment using Git, yarn, Babel, and ESLint. Then, we will use Express, Elasticsearch and JSON Web Tokens (JWTs) to build a stateless API service. For the front-end, we will use React, Redux, and Webpack. A central theme in the book is maintaining code quality. As such, we will enforce a Test-Driven Development (TDD) process using Selenium, Cucumber, Mocha, Sinon, and Istanbul. As we progress through the book, the focus will shift towards automation and infrastructure. You will learn to work with Continuous Integration (CI) servers like Jenkins, deploying services inside Docker containers, and run them on Kubernetes. By following this book, you would gain the skills needed to build robust, production-ready applications. What you will learn Practice Test-Driven Development (TDD) throughout the entire book Use Cucumber, Mocha and Selenium to write E2E, integration, unit and UI tests Build stateless APIs using Express and Elasticsearch Document your API using OpenAPI and Swagger Build and bundle front-end applications using React, Redux and Webpack Containerize services using Docker Deploying scalable microservices using Kubernetes Who this book is for If you're a JavaScript developer looking to expand your skillset and become a senior JavaScript developer by building production-ready web applications, then this book is for you.

Step-by-step guide to understand key concepts for Selenium Automation using examples to shine in your interview for test automation roles **Key Features**a- Acquire Selenium skills to do independent test automation projectsa- Learn the basics of Selenium Web Driver for test automation using Seleniuma- Understand Page Object Model, including how and when they're used in test automationa- Understand the approach for building a test automation frameworka- Build Selenium test automation scripts using various languages - Java, Python, JavaScript/Node JS and Rubya- Learn how to report and integrate with CI tools for test automation a- Get some professional tips for handing interviews and test automation approacha- Implement cross-browser testing scenarios using Selenium Grid and commercial tools and services**Description**Software Engineering has taken massive strides with a multitude of technology innovations. With several changes being introduced - development of products and their integration into the market - understanding of mobile devices and user interface channels across a plethora of platforms is getting complex day by day. In addition, since the process or procedures of software testing for products and applications can become an act of boiling the ocean, the role of test automation is crucial while dealing with such challenges. The book starts with a brief introduction to the world of automation and why it is important, succinctly covering the history of Selenium and the capabilities it offers. In this book, you will learn how to do simple Selenium-based automation with examples and understand the progressive complexity of some key features. Before diving deep into advanced concepts such as Page Object Models, Test Automation Framework and Cross Browser testing, you will grasp comprehensive knowledge of several concepts related to Java, Python, JavaScript and Ruby programming languages. What will you learn By the end of the book, you will find several examples to help ignite your understanding and usage of Selenium across a myriad of languages and frameworks. With this, you'll be able to put your knowledge to practice and solve real-life test automation challenges such as testing a web site, mobile application and leveraging tools available for fast-tracking your test automation approach. Who this book is for The book is intended for anyone looking to make a career in test automation using Selenium, all aspiring manual testers who want to learn the most powerful test automation framework - Selenium and associated programming languages - or working professionals who want to switch their career to testing. **Table of Contents**1. Introduction to Test Automation2. Introduction to Selenium 3. Understanding Selenium Architecture4. Understanding Selenium Tools5. Understanding Web UI 6. Web UI Automation with Selenium Using Java & Python7. Selenium Coding with Other Languages - Ruby & JavaScript6. Building a Test Automation Framework with Selenium8. Advanced Features of Selenium Using Java & Python9. Cross-Browser Test Automation10. Tips and Tricks for Test Automation11. Interview Tips About the Author Kalilur Rahman has a Master's Degree in Business Administration preceded by an Engineering Degree in Computer Science and over 2 decades of experience in software development, testing and management consultancy. Kalilur has been a developer, designer, technical architect, test program manager, delivery unit head, IT Services and Factory Services Head of varying complexity across telecommunications, life sciences, retail and

have a basic understanding of software engineering concepts, object-oriented programming and basic programming fundamentals. Table of Contents 1. Introduction to Software Testing 2. Software Testing Levels, Types, Terms, and Definitions 3. Software Errors 4. Test Planning Process (According to IEEE standard 829) 5. Test Case Development 6. Defect Tracking 7. Types of Test Reports 8. Software Test Automation 9. Understanding the Software Testing Standards Filled with practical examples, taking a Step-by-Step approach Selenium By Example - Volume III: Selenium WebDriver will not only give the reader an overview and introduction to Selenium WebDriver, it will also give the reader an overview of best practices in Automated Testing, Automation Frameworks, and advice on introducing Automated Testing. Selenium By Example - Volume III: Selenium WebDriver takes a step-by-step approach to teaching the reader how to effectively use Selenium WebDriver.

Take a deep dive into building data-driven test frameworks using Selenium WebDriver Key Features A comprehensive guide to designing data-driven test frameworks using the Selenium 3 WebDriver API, AppiumDriver API, Java-Bindings, and TestNG Learn how to use Selenium Page Object Design Patterns and D.R.Y. (Don't Repeat Yourself) Approaches to software development in automated testing Discover the Selenium Grid Architecture and build your own grid for browser and mobile devices Use third party tools and services like ExtentReports for results processing, reporting, and SauceLabs for cloud-based test services Book Description The Selenium WebDriver 3.x Technology is an open source API available to test both Browser and Mobile applications. It is completely platform independent in that tests built for one browser or mobile device, will also work on all other browsers and mobile devices. Selenium supports all major development languages which allow it to be tied directly into the technology used to develop the applications. This guide will provide a step-by-step approach to designing and building a data-driven test framework using Selenium WebDriver, Java, and TestNG. The book starts off by introducing users to the Selenium Page Object Design Patterns and D.R.Y Approaches to Software Development. In doing so, it covers designing and building a Selenium WebDriver framework that supports both Browser and Mobile Devices. It will lead the user through a journey of architecting their own framework with a scalable driver class, Java utility classes, JSON Data Provider, Data-Driven Test Classes, and support for third party tools and plugins. Users will learn how to design and build a Selenium Grid from scratch to allow the framework to scale and support different browsers, mobile devices, versions, and platforms, and how they can leverage third party grids in the Cloud like SauceLabs. Other topics covered include designing abstract base and sub-classes, inheritance, dual-driver support, parallel testing, testing multi-branded applications, best practices for using locators, and data encapsulation. Finally, you will be presented with a sample fully-functional framework to get them up and running with the Selenium WebDriver for browser testing. By the end of the book, you will be able to design your own automation testing framework and perform data-driven testing with Selenium WebDriver. What you will learn Design the Selenium Driver Class for local, remote, and third party grid support Build Page Object Classes using the Selenium Page Object Model Develop Data-Driven Test Classes using the TestNG framework Encapsulate Data using the JSON Protocol Build a Selenium Grid for RemoteWebDriver Testing Construct Utility Classes for use in Synchronization, File I/O, Reporting and Test Listener Classes Run the sample framework and see the benefits of a live data-driven framework in real-time Who this book is for This book is intended for software quality assurance/testing professionals, software project managers, or software developers with prior experience in using Selenium and Java to test web-based applications. This book is geared towards the quality assurance and development professionals responsible for designing and building enterprise-based testing frameworks. The user should have a working knowledge of the Java, TestNG, and Selenium technologies

Learn BDD with SpecFlow (based on Gherkin) and Selenium WebDriver with C# along with an Intro to UnitTesting and TDD with TestStack. White About This Video Automate websites and write reliable automation code with Selenium Learn to write business-readable automated tests and maintainable tests with SpecFlow and apply a test-driven approach to grow software A practical course designed for middle-level developers who require a proficiency in C# In Detail SpecFlow is a framework that brings Behavior-Driven Development (BDD) into life. It is all about filling the gap between technical people and domain experts. SpecFlow is based on the Gherkin language. So, non-technical people can write executable documentation on their own. Selenium is a framework that drives browsers (Chrome, Firefox, Opera, and more). In other words, with the power of Selenium, you can write a program that automatically interacts with elements on a web page. TestStack.White (sometimes, written called teststack white) is a framework drives WinForms and WPF applications. This course covers: Theoretical background behind different types of testing (unit, integration, and acceptance testing) SpecFlow: generating steps, running and debugging tests, passing parameters, scenario outlines, data tables, converting parameters, converting data tables, custom conversions, sharing data, categorizing tests, scoped execution, hooks, and other features Selenium WebDriver: Locators, XPath locators, CSS locators, interacting with all element types, timeouts (explicit and implicit), locator priorities, picking scenarios to Test, the Page Object design pattern, the Page Object factory, uploading files, and more Scraping a live website with Selenium WebDriver Selenium Extras: managing a web browser TestStack.White and building a WPF app by TDD (with MVVM) Appendices: intro to unit testing and test-driven development.

An easy-to-understand guide that will get you acquainted with the core concepts of Selenium WebDriver KEY FEATURES - Learn how to build a Keyword Driven Automation Framework with Selenium using Java - Understand and work with the core concepts of Selenium WebDriver 3.0 - Find how to use Build triggers in Jenkins to automate tests DESCRIPTION The book starts by introducing the Selenium WebDriver 3 and Selenium Server by covering each aspect of it in detail. You will learn different concepts like instances and how instances relate to browser sessions. You will further explore the new features in Java 8 with the help of easy to follow examples. Moving on, you will create a Singleton class for fetching WebDriver instances and then explore the different kinds of waits in Selenium. You will then delve into the advanced WebDriver interactions using the Actions class and the JavascriptExecutor. You will then understand the various database operations which will help you with using the MySQL database to store our framework. Next, you will go through the TestNG framework, followed by parallel execution. Further, you will use Maven as a build tool and Jenkins as a build automation tool. You will go through the working of Selenium Grid along with Mobile automation. Lastly, you will be taken through Selenium 4 and it's AI integrated features. WHAT WILL YOU LEARN - Learn the process of building a Selenium Framework - Understand the Keyword Driven Framework concept - Work with Document Object Model to access page elements - Integrate Maven and Jenkins with Selenium WebDriver - Use Selenium Grid to run multiple tests across WHO THIS BOOK IS FOR This book has been designed for Automation developers who would like to build a Keyword Driven framework that fetches keywords from Database. It is also intended for audiences who are interested in

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Are you in charge of your own testing? Do you have the advice you need to advance your test approach? "Dear Evil Tester" contains advice about testing that you won't hear anywhere else. "Dear Evil Tester" is a three pronged publication designed to: -provoke not placate, -make you react rather than relax, -help you laugh not languish. Starting gently with the laugh out loud Agony Uncle answers originally published in 'The Testing Planet'. "Dear Evil Tester" then provides new answers, to never before published questions, that will hit your beliefs where they change. Before presenting you with essays that will help you unleash your own inner Evil Tester. With advice on automating, communication, talking at conferences, psychotherapy for testers, exploratory testing, tools, technical testing, and more. Dear Evil Tester randomly samples the Software Testing stonping ground before walking all over it. "Dear Evil Tester" is a revolutionary testing book for the mind which shows you an alternative approach to testing built on responsibility, control and laughter. Read what our early reviewers had to say: "Wonderful stuff there. Real deep." Rob Sabourin, @RobertASabourin Author of "I Am a Bug" "The more you know about software testing, the more you will find to amuse you." Dot Graham, @dorothygraham Author of "Experiences of Test Automation" "laugh-out-loud episodes" Paul Gerrard, @paul_gerrard Author of "The Tester's Pocketbook" "A great read for every Tester." Andy Glover, @cartoontester Author of "Cartoon Tester"

With more than 150 detailed recipes, this cookbook shows experienced Clojure developers how to solve a variety of programming tasks with this JVM language. The solutions cover everything from building dynamic websites and working with databases to network communication, cloud computing, and advanced testing strategies. And more than 60 of the world's best Clojurians contributed recipes. Each recipe includes code that you can use right away, along with a discussion on how and why the solution works, so you can adapt these patterns, approaches, and techniques to situations not specifically covered in this cookbook. Master built-in primitive and composite data structures Create, develop and publish libraries, using the Leiningen tool Interact with the local computer that's running your application Manage network communication protocols and libraries Use techniques for connecting to and using a variety of databases Build and maintain dynamic websites, using the Ring HTTP server library Tackle application tasks such as packaging, distributing, profiling, and logging Take on cloud computing and heavyweight distributed data crunching Dive into unit, integration, simulation, and property-based testing Clojure Cookbook is a collaborative project with contributions from some of the world's best Clojurians, whose backgrounds range from aerospace to social media, banking to robotics, AI research to e-commerce.

Developers who have a solid pre-existing knowledge of Yii's core concepts will find this book an ideal introduction to learning to write tests using Yii 2's tools. You'll learn to create faster and more reliable applications with less time and effort.

Throughout human history, technological advancements have been made for the ease of human labor. With our most recent advancements, it has been the work of scholars to discover ways for machines to take over a large part of this labor and reduce human intervention. These advancements may become essential processes to nearly every industry. It is essential to be knowledgeable about automation so that it may be applied. Research Anthology on Cross-Disciplinary Designs and Applications of Automation is a comprehensive resource on the emerging designs and application of automation. This collection features a number of authors spanning multiple disciplines such as home automation, healthcare automation, government automation, and more. Covering topics such as human-machine interaction, trust calibration, and sensors, this research anthology is an excellent resource for technologists, IT specialists, computer engineers, systems and software engineers, manufacturers, engineers, government officials, professors, students, healthcare administration, managers, CEOs, researchers, and academicians.

This book constitutes the thoroughly refereed proceedings of the 15th International Conference on Software Technologies, ICSoft 2020, which was held virtually due to the Covid-19 pandemic. The 12 revised full papers were carefully reviewed and selected from 95 submissions. The papers deal with the following topics: business process modelling; IT service management; interoperability and service-oriented architecture; project management software; scheduling and estimating; software metrics; requirements elicitation and specification; software and systems integration among others.

Real-world examples of cross-browser, mobile, and data-driven testing with all the latest features of Selenium WebDriver
3 Key Features
Unlock the full potential of Selenium to test your web applications Use Selenium Grid for faster, parallel running, and cross-browser testing Test iOS and Android Apps with Appium
Book Description Selenium WebDriver is an open source automation tool implemented through a browser-specific driver, which sends commands to a browser and retrieves results. The latest version of Selenium 3 brings with it a lot of new features that change the way you use and setup Selenium WebDriver. This book covers all those features along with the source code, including a demo website that allows you to work with an HTML5 application and other examples throughout the book. Selenium WebDriver 3 Practical Guide will walk you through the various APIs of Selenium WebDriver, which are used in automation tests, followed by a discussion of the various WebDriver implementations available. You will learn to strategize and handle rich web UI using advanced WebDriver API along with real-time challenges faced in WebDriver and solutions to handle them. You will discover different types and domains of testing such as cross-browser testing, load testing, and mobile testing with Selenium. Finally, you will also be introduced to data-driven testing using TestNG to create your own automation framework. By the end of this book, you will be able to select any web application and automate it the way you want. What you will learn Understand what Selenium 3 is and how it has been improved than its predecessor Use different mobile and desktop browser platforms with Selenium 3 Perform advanced actions, such as drag-and-drop and action builders on web page Learn to use Java 8 API and Selenium 3 together Explore remote WebDriver and discover how to use it Perform cross browser and distributed testing with Selenium Grid Use Actions API for performing various keyboard and mouse actions Who this book is for Selenium WebDriver 3 Practical Guide is for software quality assurance/testing professionals, software project managers, or software developers interested in using Selenium for testing their applications. Prior programming experience in Java is necessary.

If you are a quality testing professional, or a software or web application developer looking to create automation test scripts for your web applications, with an interest in Python, then this is the perfect guide for you. Python developers who need to do Selenium testing need not learn Java, as they can directly use Selenium for testing with this book.

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By taking you through the development of a real web application from beginning to end, the second edition of this hands-on guide demonstrates the practical advantages of test-driven development (TDD) with Python. You'll learn how to write and run tests before building each part of your app, and then develop the minimum amount of code required to pass those tests. The result? Clean code that works. In the

process, you'll learn the basics of Django, Selenium, Git, jQuery, and Mock, along with current web development techniques. If you're ready to take your Python skills to the next level, this book—updated for Python 3.6—clearly demonstrates how TDD encourages simple designs and inspires confidence. Dive into the TDD workflow, including the unit test/code cycle and refactoring Use unit tests for classes and functions, and functional tests for user interactions within the browser Learn when and how to use mock objects, and the pros and cons of isolated vs. integrated tests Test and automate your deployments with a staging server Apply tests to the third-party plugins you integrate into your site Run tests automatically by using a Continuous Integration environment Use TDD to build a REST API with a front-end Ajax interface Get writing tests and learn to design your own testing framework with Selenium WebDriver API Key Features Learn Selenium from the ground up Design your own testing framework Create reusable functionality in your framework Book Description Selenium WebDriver is a platform-independent API for automating the testing of both browser and mobile applications. It is also a core technology in many other browser automation tools, APIs, and frameworks. This book will guide you through the WebDriver APIs that are used in automation tests. Chapter by chapter, we will construct the building blocks of a page object model framework as you learn about the required Java and Selenium methods and terminology. The book starts with an introduction to the same-origin policy, cross-site scripting dangers, and the Document Object Model (DOM). Moving ahead, we'll learn about XPath, which allows us to select items on a page, and how to design a customized XPath. After that, we will be creating singleton patterns and drivers. Then you will learn about synchronization and handling pop-up windows. You will see how to create a factory for browsers and understand command design patterns applicable to this area. At the end of the book, we tie all this together by creating a framework and implementing multi-browser testing with Selenium Grid. What you will learn Understand what an XPath is and how to design a customized XPath Learn how to create a Maven project and build Create a Singleton driver Get to grips with Jenkins integration Create a factory for browsers Implement multi-browser testing with Selenium Grid Create a sample pop-up window and JavaScript alert Report using Extent Reports Who this book is for This book is for software testers or developers. Selenium is the most popular open-source test automation tool. Its widely used in Industry to automate web and mobile projects. Selenium can be used to test across different browsers and platforms. Its flexible enough to allow you to code your automation scripts in languages like Java, C#, Python etc. Selenium primarily has 3 components · Selenium Integrated Development Environment (IDE) · Selenium WebDriver · Selenium Grid This book covers tutorials and training to teach you Selenium 2 as well Selenium 3. The book uses Java as the scripting language. This book covers tutorials and training to teach you Selenium 2 as well Selenium 3. The book uses Java as the scripting language. Table Of Content Chapter 1: Introduction to Selenium Chapter 2: Introduction to WebDriver & Comparison with Selenium RC Chapter 3: Guide to install Selenium WebDriver Chapter 4: Creating your First Script in WebDriver Chapter 5: Find Element Chapter 6: Accessing Forms in WebDriver Chapter 7: Accessing Links & Tables using Selenium WebDriver Chapter 8: Keyboard Mouse Events , Uploading Files - WebDriver Chapter 9: Upload & Download a File Chapter 10: XPath Chapter 11: TestNG with Selenium Chapter 12: Handling Date Time Picker Chapter 13: Handling Alert & Popup Chapter 14: Handling Dynamic Web Tables Chapter 15: Using Contains, Sibling, Ancestor to Find Element Chapter 16: Implicit & Explicit Waits Chapter 17: Parameterization using XML and DataProviders Chapter 18: Excel in Selenium Chapter 19: Page Object Model (POM) & Page Factory Chapter 20: Selenium Grid Chapter 21: Keyword & Hybrid Frameworks with Selenium Chapter 22: Database Testing using Selenium Chapter 23: Handling Iframes in Selenium Chapter 24: Cross Browser Testing Chapter 25: PDF , Emails and Screenshot of Test Reports Chapter 26: How to Take Screenshot in Selenium Chapter 27: HTMLUnit Driver & PhantomJS Chapter 28: Robot API Chapter 29: AutoIT Chapter 30: Ajax Chapter 31: Drag and Drop action Chapter 32: Handling Cookie

To learn about software-testing job opportunities and practice with sample scripts on how to automate software applications using Selenium WebDriver, TestNG, JUnit, Cucumber BDD within Eclipse-based Java Projects and build an extensive Data Driven Automation Framework that consists of Screenshot capability, Log4J Integration, XSLT Reporting, Parameterisation, Object Repositories, Excel Sheets-based Data Input/Outputs, Cross Browser Tests using Firefox, Chrome and Internet Explorer, this book is an unmatched one. You can also enhance tests with Page Object Model, Reuse Selenium IDE scripts to Load Testing using JMeter!

A migração de aplicações para a nuvem com o Microsoft Azure é um caminho rápido e seguro para a transformação digital. Ao conhecer seus benefícios, é possível tirar o máximo proveito desse serviço fazendo escolhas mais assertivas para o seu projeto. Aplicações desenvolvidas para a nuvem desde o princípio usufruem de muitas facilidades, o que não quer dizer que outras não possam ser migradas e obter os mesmos resultados. Neste livro, por meio de práticas DevOps e arquitetura de microsserviços, o time de engenheiros da Microsoft fará a migração de uma aplicação para a nuvem em um processo de modernização. Você acompanhará todas as etapas, conhecerá os conceitos e verá na prática a eficiência e as vantagens da adoção da computação em nuvem.

Ruby, günümüzde popüler programlama dilleri arasında kendine oldukça yükseklerde bir yer edinmiş durumdadır. Bu denli gelişmesini birçok alanda kullanılabilmesine borçludur. Ruby ile terminal tabanlı programlar geliştirebileceğiniz gibi mobil uygulama ve web tabanlı uygulamaların yanı sıra görsel içerikli masaüstü programlar da geliştirebilmek mümkündür. Özellikle alanda önde gelen bir çok web sitesi Ruby'yi tercih etmektedir. Ruby programlama dilini tercih etmek için birçok sebep gösterilebilir, bunlar örneklenirecek olursak erişilebilir, yazımı kolaydır, okunarak dahi anlaşılabilir olması, çok fazla kural olmaması, çoklu platformlarda çalışabilmesi, gem paketleri gibi birçok nokta Ruby'nin avantajlarıdır. Yeni başlayan bireylerin dahi kolayca anlayabileceği içerikler sayesinde başlangıç seviyesinden Ruby ile web programlamaya kadar birçok alanda bilgi edinebileceğiniz zengin bir kaynak ortaya getirilmiştir. • Ruby Temelleri • Mac OS için Ruby • Windows için Ruby • Linux için Ruby • Ruby Toplulukları • IRB (Interactive Ruby) • Matematiksel İşlemler • Metinsel İşlemler • Metin Editörleri ile Kullanım • Ayrılmış Kelimeler • Kullanıcı Etkileşimli İşlemler • Mantıksal Operatörler • Akıllı Kontrolörleri • Etkileşimli Kontrolleri • Döngüler • Diziler • Dizi Fonksiyonları • Hash Yapıları • Hash Fonksiyonları • Ranges • Ranges Fonksiyonları • Fonksiyonlar • Entegre Fonksiyon Kullanımı • Değişken Kuralları • Class Yapıları • Class ve Fonksiyonlar • Require • Struct ve OpenStruct • Modüller ve Mixin • Tarih Zaman İşlemleri • Dosyalar ile Çalışmak • Proc ve Lambda • Ruby Gems • Web Servisleri • Faydalı Web Araçları • Selenium Web Drive • Sinatra Web Framework • Faydalı Kaynaklar • Çoklu Platformlarda Ruby • ve Daha Fazlası

Learn how to build amazing and complex reactive web applications easily with Vue.js About This Book Learn how to propagate DOM changes across the website without writing extensive jQuery callbacks code. Learn how to achieve reactivity and easily compose views with Vue.js and understand what it does behind the scenes. Explore the core features of Vue.js with small examples, learn how to build dynamic content into preexisting web applications, and build Vue.js applications from scratch. Who This Book Is For This book is perfect for novice web developer seeking to learn new technologies or frameworks and also for webdev gurus eager to enrich their experience. Whatever your level of expertise, this book is a great introduction to the wonderful world of reactive web apps. What You Will Learn Build a fully functioning reactive web application in Vue.js from scratch. The importance of the MVVM architecture and how Vue.js compares with other frameworks such as Angular.js and React.js. How to bring reactivity to an existing static application using Vue.js. How to use plugins to enrich your applications. How to develop customized plugins to meet your needs. How to use Vuex to manage global application's state. In Detail Vue.js is one of the latest

new frameworks to have piqued the interest of web developers due to its reactivity, reusable components, and ease of use. This book shows developers how to leverage its features to build high-performing, reactive web interfaces with Vue.js. From the initial structuring to full deployment, this book provides step-by-step guidance to developing an interactive web interface from scratch with Vue.js. You will start by building a simple application in Vue.js which will let you observe its features in action. Delving into more complex concepts, you will learn about reactive data binding, reusable components, plugins, filters, and state management with Vuex. This book will also teach you how to bring reactivity to an existing static application using Vue.js. By the time you finish this book you will have built, tested, and deployed a complete reactive application in Vue.js from scratch. Style and approach This book is a thorough, step-by-step guide showing readers how to build complete web apps with Vue.js. While teaching its intricacies, this book shows how to implement the MVVM architecture in the real world and build high-performing web interfaces.

Learn end-to-end automation testing techniques for web and mobile browsers using Selenium WebDriver, AppiumDriver, Java, and TestNG Key Features Explore the Selenium grid architecture and build your own grid for browser and mobile devices Use ExtentReports for processing results and SauceLabs for cloud-based test services Unlock the full potential of Selenium to test your web applications. Book Description Selenium WebDriver 3.x is an open source API for testing both browser and mobile applications. With the help of this book, you can build a solid foundation and can easily perform end-to-end testing on web and mobile browsers. You'll begin by being introduced to the Selenium Page Object Model for software development. You'll architect your own framework with a scalable driver class, Java utility classes, and support for third-party tools and plugins. You'll design and build a Selenium grid from scratch to enable the framework to scale and support different browsers, mobile devices, and platforms. You'll strategize and handle a rich web UI using the advanced WebDriver API and learn techniques to handle real-time challenges in WebDriver. You'll perform different types of testing, such as cross-browser testing, load testing, and mobile testing. Finally, you will also be introduced to data-driven testing, using TestNG to create your own automation framework. By the end of this Learning Path, you'll be able to design your own automation testing framework and perform data-driven testing with Selenium WebDriver. This Learning Path includes content from the following Packt products: Selenium WebDriver 3 Practical Guide - Second Edition by Unmesh Gundecha Selenium Framework Design in Data-Driven Testing by Carl Cocchiaro What you will learn Use different mobile and desktop browser platforms with Selenium 3 Use the Actions API for performing various keyboard and mouse actions Design the Selenium Driver Class for local, remote, and third-party grid support Build page object classes with the Selenium Page Object Model Develop data-driven test classes using the TestNG framework Encapsulate data using the JSON protocol Build a Selenium Grid for RemoteWebDriver testing Build and use utility classes in synchronization, file I/O, reporting and test listener classes Who this book is for This Learning Path is ideal for software quality assurance/testing professionals, software project managers, or software developers interested in using Selenium for testing their applications. Professionals responsible for designing and building enterprise-based testing frameworks will also find this Learning Path useful. Prior programming experience in Java and TestNG is necessary.

"Modern, efficient, and secure techniques for PHP professionals"--Cover.

Testing JavaScript Applications teaches you how to implement an automated testing plan for JavaScript-based web applications. Summary Automated testing will help you write high-quality software in less time, with more confidence, fewer bugs, and without constant manual oversight. Testing JavaScript Applications is a guide to building a comprehensive and reliable JS application testing suite, covering both how to write tests and how JS testing tools work under the hood. You'll learn from Lucas de Costa, a core contributor to popular JS testing libraries, as he shares a quality mindset for making testing decisions that deliver a real contribution to your business. You'll benefit from informative explanations and diagrams, easily-transferable code samples, and useful tips on using the latest and most consolidated libraries and frameworks of the JavaScript ecosystem. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Automated testing is essential to delivering good JavaScript applications every time. A complete testing strategy needs to cover functions in isolation, integration between different parts of your code, and correctness from the end user's perspective. This book will teach you how to deliver reliable software quickly and confidently. About the book Testing JavaScript Applications teaches you how to implement an automated testing plan for JavaScript-based web applications. It describes practical testing strategies, covers useful tools and libraries, and explains how to foster a culture of quality. In this clearly-written, example-rich book, you'll explore approaches for both backend and frontend applications and learn how to validate your software much more quickly and reliably. What's inside Unit, end-to-end, and integration testing Managing test cost and complexity Practicing test-driven development Dealing with external dependencies Tools like Jest and Cypress About the reader For junior JavaScript developers. About the author Lucas da Costa is a core maintainer of Chai and Sinon.JS, two of the most popular testing tools in the JavaScript ecosystem, and contributed to numerous other open-source projects, including Jest. Table of Contents PART 1 - TESTING JAVASCRIPT APPLICATIONS 1 An introduction to automated testing 2 What to test and when? Part 2 - WRITING TESTS 3 Testing techniques 4 Testing backend applications 5 Advanced backend testing techniques 6 Testing frontend applications 7 The React testing ecosystem 8 Testing React applications 9 Test-driven development 10 UI-based end-to-end testing 11 Writing UI-based end-to-end tests PART 3 - BUSINESS IMPACT 12 Continuous integration and continuous delivery 13 A culture of quality

Learn to build modern, secure, highly available web MVC applications and APIs using Python's Flask framework. Key Features Create production-ready MVC and REST API with the dynamic features of Flask Utilize the various extensions like Flask-JWT and Flask-SQLAlchemy to develop powerful applications Deploy your flask application on real-world platforms like AWS and Heroku on VM's or Docker containers Book Description Flask is a popular Python framework known for its lightweight and modular design. Mastering Flask Web Development will take you on a complete tour of the Flask environment and teach you how to build a production-ready application. You'll begin by learning about the installation of Flask and basic concepts such as MVC and accessing a database using an ORM. You will learn how to structure your application so that it can scale to any size with the help of Flask Blueprints. You'll then learn how to use Jinja2 templates with a high level of expertise. You will also learn how to develop with SQL or NoSQL databases, and how to develop REST APIs and JWT authentication. Next, you'll move on to build role-based access security and authentication using LDAP, OAuth, OpenID, and database. Also learn how to create asynchronous tasks that can scale to any load using Celery and RabbitMQ or Redis. You will also be introduced to a wide range of Flask extensions to leverage technologies such as cache, localization, and debugging. You will learn how to build your own Flask extensions, how to write tests, and how to get test coverage reports. Finally, you will learn how to deploy your application on Heroku and AWS using various technologies, such as Docker, CloudFormation, and Elastic Beanstalk, and will also learn how to develop Jenkins pipelines

to build, test, and deploy applications. What you will learn Develop a Flask extension using best practices Implement various authentication methods: LDAP, JWT, Database, OAuth, and OpenID Learn how to develop role-based access security and become an expert on Jinja2 templates Build tests for your applications and APIs Install and configure a distributed task queue using Celery and RabbitMQ Develop RESTful APIs and secure REST API's Deploy highly available applications that scale on Heroku and AWS using Docker or VMs Who this book is for The ideal target audience for this book would be Python developers who want to use Flask and its advanced features to create Enterprise grade and lightweight applications. The book is for those who have some exposure of Flask and want to take it from introductory to master level.

Python is a powerful yet very simple programming language. This book covers topics such as text processing, network administration, building GUI, web-scraping as well as database administration including data analytics & reporting.

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