Selenium Webdriver Documentation

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 understanding Selenium and designing a framework TABLE OF CONTENTS 1. First look at Selenium WebDriver and Web Elements 2. Looking at the various WebDrivers 3. A brief look at Java 8 4. Deep dive into Selenium WebDriver 5. Actions class and the JavascriptExecutor 6. WebDriver Events 7. Database Operations 8. Introduction to TestNG framework 9. Parallel Execution 10. Understanding Maven 11. Jenkins Introduction and Scheduling 12. Selenium grid and executing in the cloud 13. Mobile test automation using Appium 14. A look at Selenium-4

XXIII International Scientific and Practical Conference

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.

Whether you are an experienced WebDriver developer or someone who was newly assigned a task to create automated tests, this book is for

you. Since the ideas and concepts are described in simple terms, no previous experience in computer coding or programming is required. This book provides a complete and modern guide to web scraping, using Python as the programming language, without glossing over important details or best practices. Written with a data science audience in mind, the book explores both scraping and the larger context of web technologies in which it operates, to ensure full understanding. The authors recommend web scraping as a powerful tool for any data scientist's arsenal, as many data science projects start by obtaining an appropriate data set. Starting with a brief overview on scraping and real-life use cases, the authors explore the core concepts of HTTP, HTML, and CSS to provide a solid foundation. Along with a quick Python primer, they cover Selenium for JavaScript-heavy sites, and web crawling in detail. The book finishes with a recap of best practices and a collection of examples that bring together everything you've learned and illustrate various data science use cases. What You'll Learn Leverage well-established best practices and commonly-used Python packages Handle today's web, including JavaScript, cookies, and common web scraping mitigation techniques Understand the managerial and legal concerns regarding web scraping Who This Book is For A data science oriented audience that is probably already familiar with Python or another programming language or analytical toolkit (R, SAS, SPSS, etc). Students or instructors in university courses may also benefit. Readers unfamiliar with Python will appreciate a quick Python primer in chapter 1 to catch up with the basics and provide pointers to other guides as well.

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

Ruby?Web???????????? ?? ?? ??? ???Amazon?????????Excel????????????????????????????????Web??????????????????? ????????????????????? ??????????? ???????????????????????????????????? ?Web?????????????? ???? ?1? ??? ?1? ????????????? ?2? ???????????? ?2? ??? ?3? ???????? ????????????? ?4? Web ??????????????? ?5? Web???? ????????????? ?6? ??????Excel?????????? ?7? ??? ??A ??????? ??B ???? ??C ??????? ??D Ruby ??? ???

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.

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 84. 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.

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 HMTL5 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 is 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.

Selenium is a 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 unmatchable one. You can also enhance tests with Page Object Model, Reuse Selenium IDE scripts to Load Testing using JMeter!

Knowledge for Free... Get that job, you aspire for! Want to switch to that high paying job? Or are you already been preparing hard to give interview the next weekend? Do you know how many people get rejected in interviews by preparing only concepts but not focusing on actually which questions will be asked in the interview? Don't be that person this time. This is the most comprehensive Selenium Testing interview questions book that you can ever find out. It contains: 500 most frequently asked and important Selenium Testing interview questions and answers Wide range of questions which cover not only basics in Selenium Testing but also most advanced and complex questions which will help freshers, experienced professionals, senior developers, testers to crack their interviews.

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.

Learning Selenium Testing Tools with PythonPackt Publishing Ltd

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.

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.

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.

This book includes a selection of papers from the 2018 World Conference on Information Systems and Technologies (WorldCIST'18), held in Naples, Italy on March27-29, 2018. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and the challenges of modern information systems and technologies research together with their technological development and applications. The main topics covered are: A) Information and Knowledge Management; B) Organizational Models and Information Systems; C) Software and Systems Modeling; D) Software Systems, Architectures, Applications and Tools; E) Multimedia Systems and Applications; F)

Computer Networks, Mobility and Pervasive Systems; G) Intelligent and Decision Support Systems; H) Big Data Analytics and Applications; I) Human–Computer Interaction; J) Ethics, Computers & Security; K) Health Informatics; L) Information Technologies in Education; M) Information Technologies in Radiocommunications; N) Technologies for Biomedical Applications.

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.

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to: • Search for text in a file or across multiple files • Create, update, move, and rename files and folders • Search the Web and download online content • Update and format data in Excel spreadsheets of any size • Split, merge, watermark, and encrypt PDFs • Send email responses and text notifications • Fill out online forms Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

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.

Ruby, günümüzde popüler programlama dilleri aras?nda kendine oldukça yükseklerde bir yer edinmi? durumdad?r. Bu denli geli?mesini birçok alanda kullan?labilmesine borçludur. Ruby ile terminal tabanl? programlar geli?tirebilece?iniz gibi mobil uygulama ve web tabanl? uygulamalar?n yan?nda görsel içerikli masaüstü programlar da geli?tirebilmek mümkündür. Özellikle alan?nda önde gelen bir çok web sitesi Ruby'i tercih etmektedir. Ruby programlama dilini tercih etmek için birçok sebep gösterilebilir, bunlar? örneklendirecek olursak e?er; yaz?m kolayl???,okunarak dahi anla??labilir olmas?,çok fazla kuralc? olmamas?, çoklu platformlarda çal??ma olana?? sunmas?, gem paketleri gibi birçok nokta Ruby'nin avantajlar?ndand?r. Yeni

ba?layan bireylerin dahi kolayca anlayabilece?i içerikler sayesinde ba?lang?ç seviyesinden Ruby ile web programlamaya kadar birçok alanda bilgi edinebilece?iniz zengin bir kaynak ortaya getirilmi?tir. • Ruby Temelleri • Mac OS ?çin Ruby • Windows ?çin Ruby • Linux için Ruby • Ruby Topluluklar? • IRB (Interactive Ruby) • Matematiksel ??lemler • Metinsel ??lemler • Metin Editörleri ile Kullan?m? • Ayr?lm?? Kelimeler • Kullan?c? Etkile?imli ??lemler • Mant?ksal Operatörler • Ak?? Kontrolörleri • E?itlik Kontrolleri • Döngüler • Diziler • Dizi Fonksiyonlar? • Hash Yap?lar? • Hash Fonksiyonlar? • Ranges • Ranges Fonksiyonlar? • Fonksiyonlar • Entegre Fonksiyon Kullan?m? • De?i?ken Kurallar? • Class Yap?lar? • Class ve Fonksiyonlar • Require • Struct ve OpenStruct • Modüller ve Mixin • Tarih Zaman ??lemleri • Dosyalar ile Çal??mak • Proc ve Lambda • Ruby Gems • Web Servisleri • Faydal? Web Araçlar? • Selenium Web Drive • Sinatra Web Framework • Faydal? Kaynaklar • Çoklu Platformlarda Ruby • ve Daha Fazlas?

One-stop Guide to software testing types, software errors, and planning process DESCRIPTION Software testing is conducted to assist testers with information to improvise the quality of the product under testing. The book primarily aims to present testing concepts, principles, practices, methods cum approaches used in practice. The book will help the readers to learn and detect faults in software before delivering it to the end user. The book is a judicious mix of software testing concepts, principles, methodologies, and tools to undertake a professional course in software testing. The book will be a useful resource for students, academicians, industry experts, and software architects to learn artefacts of testing. Book discuss the foundation and primary aspects connected to the world of software testing, then it discusses the levels, types and terminologies associated with software testing. In the further chapters it will gives a comprehensive overview of software errors faced in software testing as well as various techniques for error detection, then the test case development and security testing. In the last section of the book discusses the defect tracking, test reports, software automation testing using the Selenium tool and then ISO/IEEE-based software testing standards. KEY FEATURES Presents a comprehensive investigation about the software testing approach in terms of techniques, tools and standards Highlights test case development and defect tracking In-depth coverage of test reports development Covers the Selenium testing tool in detail Comprehensively covers IEEE/ISO/IEC software testing standards WHAT WILL YOU LEARN With this book, the readers will be able to learn: Taxonomy, principles and concepts connected to software testing. Software errors, defect tracking, and the entire testing process to create quality products. Generate test cases and reports for detecting errors, bugs, and faults. Automation testing using the Selenium testing tool. Software testing standards as per IEEE/ISO/IEC to conduct standard and quality testing. WHO THIS BOOK IS FOR The readers should 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

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. 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. Testing JavaScript Applications teaches you how to create JavaScript tests that are targeted to your application's specific needs. Through dozens of detailed code samples that you can apply to your own projects, you'll learn how to write tests for both backend and frontend applications, covering the full spectrum of testing types. Taking on the role of a developer for a bakery's web store, you'll learn to validate different aspects including databases, third-party services, and how to spin-up a real browser instance to interact with the entire application. All examples are delivered using the popular testing tool Jest and modern packages of the JavaScript ecosystem. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Selenium By Example - Volume I: Selenium IDE takes a step-by-step approach to teaching the reader how to effectively use Selenium IDE. The topics include: Installing and using Selenium IDE. Step-by-step examples on how to make recordings using Selenium IDE. How to play-back your recordings, including the various play-back options. Advanced recording techniques. Exporting your recordings out of Selenium IDE. Discussions on Automated Testing approaches using Selenium IDE. All in an example based, step-by-step approach."

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 approachThis 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.

The three-volume set LNCS 12762, 12763, and 12764 constitutes the refereed proceedings of the Human Computer Interaction thematic area of the 23rd International Conference on Human-Computer Interaction, HCII 2021, which took place virtually in July 2021. The total of 1276 papers and 241 posters included in the 39 HCII 2021 proceedings volumes was carefully reviewed and selected from 5222 submissions. The 139 papers included in this HCI 2021 proceedings were organized in topical sections as follows: Part I, Theory, Methods and Tools: HCI theory, education and practice; UX evaluation methods, techniques and tools; emotional and persuasive design; and emotions and cognition in HCI Part II, Interaction Techniques and Novel Applications: Novel interaction techniques; human-robot interaction; digital wellbeing; and HCI in surgery Part III, Design and User Experience Case Studies: Design case studies; user experience and technology acceptance studies; and HCI, social distancing, information, communication and work.

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.

Step-by-step guide to understand key concepts for Selenium Automation using examples to shine in your interview for test automation roles

Key Featuresa- 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 servicesDescriptionSoftware 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 learnBy 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 forThe 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 Contents1. 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 healthcare industries. His LinkedIn Profile: https://www.linkedin.com/in/kalilurrahman/

Step by step directions to get started with Selenium using Python as a programming languageKey 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 assertionsDescriptionSelenium 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 languageWe 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. What will you learnThe 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 contents1. Selenium - Important Conceptual Background2. Selenium IDE3. Locators in Selenium4. Installation and Setup5. Selenium WebDriver6. Unit Test Creation n Python7. Synchronizing Tests8. Parameterization of Tests9. Handling Different Web Elements10. Working with Frames11. Concept of the Page Object Model12. Implementing Selenium Grid About the authorPallavi has an overall professional experience of 14 years. She has worked in varied roles as a product/project manager in the presales team and marketing team for solutions on test automation tools.She holds two provisional patents along with other contributors for her work on building tool agnostic test automation framework solutions. Currently, she is acting as a test automation coach, writer, speakerand owner at 5 Elements Learning where she collaborates and works with test automation enthusiasts across the globe. As an avid learner, she likes to keep herself updated to the latest trends andTechnologies. She is a firm believer in a larger good and likes to live by example.She volunteers her time for the organization eVidyaloka where she acts as a centre administrator. She is a lifetime member for the Jabarkhet forest reserve and People for Animals.Her Website: http://5elementslearning.comHer LinkedIn Profile: https://www.linkedin.com/in/pallavirsharma/

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. 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. 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

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.

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

An enterprise Java developer's guide to learning JAX-RS, context and dependency injection, JavaServer Faces (JSF), and microservices with Eclipse MicroProfile using the latest features of Jakarta EE Key Features Explore Jakarta EE's latest features and API specifications and discover their benefits Build and deploy microservices using Jakarta EE 8 and Eclipse MicroProfile Build robust RESTful web services for various enterprise scenarios using the JAX-RS, JSON-P, and JSON-B APIs Book Description Jakarta EE is widely used around the world for developing enterprise applications for a variety of domains. With this book, Java professionals will be able to enhance their skills to deliver powerful enterprise solutions using practical recipes. This second edition of the Jakarta EE Cookbook takes you through the improvements introduced in its latest version and helps you get hands-on with its significant APIs and features used for server-side development. You'll use Jakarta EE for creating RESTful web services and web applications with the JAX-RS, JSON-P, and JSON-B APIs and learn how you can improve the security of your enterprise solutions. Not only will you learn how to use the most important servers on the market, but you'll also learn to make the best of what they have to offer for your project. From an architectural point of view, this Jakarta book covers microservices, cloud computing, and containers. It allows you to explore all the tools for building reactive applications using Jakarta EE and core Java features such as lambdas. Finally, you'll discover how professionals can improve their projects by engaging with and contributing to the community. By the end of this book, you'll have become proficient in developing and deploying enterprise applications using Jakarta EE. What you will learn Work with Jakarta EE's most commonly used APIs and features for server-side development Enable fast and secure communication in web applications with the help of HTTP2 Build enterprise applications with reusable components Break down monoliths into

microservices using Jakarta EE and Eclipse MicroProfile Improve your enterprise applications with multithreading and concurrency Run applications in the cloud with the help of containers Get to grips with continuous delivery and deployment for shipping your applications effectively Who this book is for This book is for Java EE developers who want to build enterprise applications or update their legacy apps with Jakarta EE's latest features and specifications. Some experience of working with Java EE and knowledge of web and cloud computing will assist with understanding the concepts covered in this book.

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.

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 stomping 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" 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.

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 are TestNG is necessary.

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