

Test Automation Framework Taf Home

Learn Android Test-Driven Development! Writing apps is hard. Writing testable apps is even harder, but it doesn't have to be. Reading and understanding all the official Google documentation on testing can be time-consuming - and confusing. This is where Android Test-Driven Development comes to the rescue! In this book, you'll learn about Android Test-Driven Development the quick and easy way: by following fun and easy-to-read tutorials. Who This Book Is For This book is for the intermediate Android developers who already know the basics of Android and Kotlin development but want to learn Android Test-Driven Development. Topics Covered in Android Test-Driven Development - Getting Started with Testing: Learn the core concepts involved in testing including what is a test, why should you test, what should you test and what you should not test. - Test-Driven Development (TDD): Discover the Red-Green-Refactor steps and how to apply them. - The Testing Pyramid: Learn about the different types of tests and how to organize them. - Unit Tests: Learn how to start writing unit tests with TDD using JUnit and Mockito. - Integration Tests: Writing tests with different subsystems is a must in today's complex application world. Learn how to test with different subsystems including the persistence and network layers. - Architecting for Testing: Explore how to architect your app for testing and why it matters. - TDD on Legacy Projects: Take your TDD to the next level by learning how to apply it to existing legacy projects. And much more, including Espresso tests, UI tests, code coverage and refactoring. One thing you can count on: after reading this book, you'll be prepared to take advantage of Android Test-Driven Development in your own apps!

Discover how to manage and scale your infrastructure using Infrastructure as Code (IaC) with Terraform Key Features Get up and running with the latest version of Terraform, v0.13 Design and manage infrastructure that can be shared, tested, modified, provisioned, and deployed Work through practical recipes to achieve zero-downtime deployment and scale your infrastructure effectively Book Description HashiCorp Configuration Language (HCL) has changed how we define and provision a data center infrastructure with the launch of Terraform—one of the most popular and powerful products for building Infrastructure as Code. This practical guide will show you how to leverage HashiCorp's Terraform tool to manage a complex infrastructure with ease. Starting with recipes for setting up the environment, this book will gradually guide you in configuring, provisioning, collaborating, and building a multi-environment architecture. Unlike other books, you'll also be able to explore recipes with real-world examples to provision your Azure infrastructure with Terraform. Once you've covered topics such as Azure Template, Azure CLI, Terraform configuration, and Terragrunt, you'll delve into manual and automated testing with Terraform configurations. The next set of chapters will show you how to manage a balanced and efficient infrastructure and create reusable infrastructure with Terraform modules. Finally, you'll explore the latest DevOps trends such as continuous integration and continuous delivery (CI/CD) and zero-downtime deployments. By the end of this book, you'll have developed the skills you need to get the most value out of Terraform and

manage your infrastructure effectively. What you will learn Understand how to install Terraform for local development Get to grips with writing Terraform configuration for infrastructure provisioning Use Terraform for advanced infrastructure use cases Understand how to write and use Terraform modules Discover how to use Terraform for Azure infrastructure provisioning Become well-versed in testing Terraform configuration Execute Terraform configuration in CI/CD pipelines Explore how to use Terraform Cloud Who this book is for This book is for developers, operators, and DevOps engineers looking to improve their workflow and use Infrastructure as Code. Experience with Microsoft Azure, Jenkins, shell scripting, and DevOps practices is required to get the most out of this Terraform book.

This book discusses how model-based approaches can improve the daily practice of software professionals. This is known as Model-Driven Software Engineering (MDSE) or, simply, Model-Driven Engineering (MDE). MDSE practices have proved to increase efficiency and effectiveness in software development, as demonstrated by various quantitative and qualitative studies. MDSE adoption in the software industry is foreseen to grow exponentially in the near future, e.g., due to the convergence of software development and business analysis. The aim of this book is to provide you with an agile and flexible tool to introduce you to the MDSE world, thus allowing you to quickly understand its basic principles and techniques and to choose the right set of MDSE instruments for your needs so that you can start to benefit from MDSE right away. The book is organized into two main parts. The first part discusses the foundations of MDSE in terms of basic concepts (i.e., models and transformations), driving principles, application scenarios, and current standards, like the well-known MDA initiative proposed by OMG (Object Management Group) as well as the practices on how to integrate MDSE in existing development processes. The second part deals with the technical aspects of MDSE, spanning from the basics on when and how to build a domain-specific modeling language, to the description of Model-to-Text and Model-to-Model transformations, and the tools that support the management of MDSE projects. The second edition of the book features: a set of completely new topics, including: full example of the creation of a new modeling language (IFML), discussion of modeling issues and approaches in specific domains, like business process modeling, user interaction modeling, and enterprise architecture complete revision of examples, figures, and text, for improving readability, understandability, and coherence better formulation of definitions, dependencies between concepts and ideas addition of a complete index of book content In addition to the contents of the book, more resources are provided on the book's website <http://www.mdse-book.com>, including the examples presented in the book.

The book informs about agricultural landscapes, their features, functions and regulatory mechanisms. It characterizes agricultural production systems, trends of their development, and their impacts on the landscape. Agricultural landscapes are multifunctional systems, coupled with all nexus problems of the 21st century. This has led to serious discrepancies between agriculture and environment, and between urban and rural population. The mission, key topics and methods of research in order to

understanding, monitoring and controlling processes in rural landscapes is being explained. Studies of international expert teams, many of them from Russia, demonstrate approaches towards both improving agricultural productivity and sustainability, and enhancing ecosystem services of agricultural landscapes. Scientists of different disciplines, decision makers, farmers and further informed people dealing with the evolvement of thriving rural landscapes are the primary audience of this book.

Product Lifecycle Management for Digital Transformation of Industries

Natural Products Isolation

Software Product Lines

An Introduction to LTE

Practices and Patterns: Practices and Patterns

Test Automation Engineering

Software Testing Techniques

The Temenos T24 core banking application is a critical application for the banks that use it and has a primary focus on providing an appropriate level of high availability and disaster recovery. The level of availability is determined largely by the configuration of the infrastructure that supports T24. This infrastructure is built on hardware, middleware, and networking, in addition to the operational procedures and practices that are used to operate T24. Many options are available for meeting a client's high availability and disaster recovery requirements. The solution chosen by a Temenos T24 user depends on many factors. These factors include a user's detailed availability and recovery requirements; their existing datacenter standards, practices, and processes; and the available network infrastructure. Therefore, the optimum solution must be determined on a case-by-case basis for each deployment. This IBM® Redpaper™ publication serves as a guide to help IT architects and other technical staff who are designing, configuring, and building the infrastructure to support Temenos T24. It shows how IBM software can deliver high availability and disaster recovery for Temenos T24 to meet a client's requirements. This software might run on IBM AIX®, IBM WebSphere® Application Server, WebSphere MQ Server, and IBM DB2®. These IBM software components are typically used for a Temenos T24 deployment on an IBM middleware stack to ensure a highly available infrastructure for T24.

What are the forces that will continue to shape the U.S. workforce and workplace over the

next 10 to 15 years? With its eye on forming sound policy and helping stakeholders in the private and public sectors make informed decisions, the U.S. Department of Labor asked RAND to look at the future of work. The authors analyze trends in and the implications of shifting demographic patterns, the pace of technological change, and the path of economic globalization.

Professional testing of software is an essential task that requires a profound knowledge of testing techniques. The International Software Testing Qualifications Board (ISTQB) has developed a universally accepted, international qualification scheme aimed at software and system testing professionals, and has created the Syllabi and Tests for the "Certified Tester." Today about 300,000 people have taken the ISTQB certification exams. The authors of Software Testing Foundations, 4th Edition, are among the creators of the Certified Tester Syllabus and are currently active in the ISTQB. This thoroughly revised and updated fourth edition covers the "Foundations Level" (entry level) and teaches the most important methods of software testing. It is designed for self-study and provides the information necessary to pass the Certified Tester-Foundations Level exam, version 2011, as defined by the ISTQB. Also in this new edition, technical terms have been precisely stated according to the recently revised and updated ISTQB glossary. Topics covered: Fundamentals of Testing Testing and the Software Lifecycle Static and Dynamic Testing Techniques Test Management Test Tools Also mentioned are some updates to the syllabus that are due in 2015.

Machine learning is a branch of artificial intelligence (AI) that develops algorithms that allow computers to learn from examples without being explicitly programmed. Machine learning identifies patterns in the data and models the results. These descriptive models enable a better understanding of the underlying insights the data offers. Machine learning is a powerful tool with many applications, from real-time fraud detection, the Internet of Things (IoT), recommender systems, and smart cars. It will not be long before some form of machine learning is integrated into all machines, augmenting the user experience and automatically running many processes intelligently. SAS offers many different solutions to use machine learning to model and predict your data. The papers included in this special collection demonstrate how cutting-edge machine learning techniques can benefit your data analysis.

Also available free as a PDF from sas.com/books.

Enterprise Continuous Testing

Efficiently define, launch, and manage Infrastructure as Code across various cloud platforms

Effective Use of Test Execution Tools

InfoSphere DataStage Parallel Framework Standard Practices

Exploring and Optimizing Agricultural Landscapes

Mastering SoapUI

Terraform Cookbook

This book discusses challenges and solutions for the required information processing and management within the context of multi-disciplinary engineering of production systems. The authors consider methods, architectures, and technologies applicable in use cases according to the viewpoints of product engineering and production system engineering, and regarding the triangle of (1) product to be produced by a (2) production process executed on (3) a production system resource. With this book industrial production systems engineering researchers will get a better understanding of the challenges and requirements of multi-disciplinary engineering that will guide them in future research and development activities. Engineers and managers from engineering domains will be able to get a better understanding of the benefits and limitations of applicable methods, architectures, and technologies for selected use cases. IT researchers will be enabled to identify research issues related to the development of new methods, architectures, and technologies for multi-disciplinary engineering, pushing forward the current state of the art.

Linux on System z offers many advantages to customers who rely on the IBM® mainframe systems to run their businesses. Linux on System z makes use of the qualities of service in the System z® hardware and in z/VM®, making it a robust industrial strength Linux. This provides an excellent platform for hosting Oracle solutions that run in your enterprise. This IBM Redbooks® publication is divided into several sections to share the following experiences that are gained while Oracle Database 11gR2 is installed and tested: Setting up Red Hat Enterprise Linux 6 for Oracle Managing an Oracle on Linux on System z environment Provisioning Linux guests using several tools It also includes many general hints and tips for running Oracle products on IBM System z with Linux and z/VM. Interested readers include database consultants, installers, administrators, and system programmers. This book is not meant to replace Oracle documentation but to supplement it with our experiences while Oracle products are installed and used.

Software development is a complex craft requiring many steps in its road to completion. In particular, achieving the best context-dependent ratio between cost and quality can only be achieved through an adequate testing strategy. "Integration Testing from the Trenches" covers through different areas of testing and integration tests in both Java & JavaEE ecosystems:

Definitions of relevant terms around testing and integration testing Basic testing tools usable for testing Build tools usage for integration testing, including recipes for Maven and Gradle Mocks, stubs and fakes, in particular in regard to infrastructure resources such as databases, mail and FTP servers, web services In-container testing for the Spring and Spring MVC applications In-container testing for JavaEE application This book is intended for software developers that want to go beyond just unit-testing and test the collaboration of their classes and modules in an efficient way. At some point in time, available tools were restricted to Jakarta Cactus for Struts. However, the thriving Open Source ecosystem can now provide everything we need to provide proper integration tests, as well as ways to use them with the greatest possible Return Over Investment. This treat of a reptile-inspired romance is revived by a fresh new cover look.

Learn Android TDD by Building Real-World Apps

America's Secret MiGs

13th IFIP WG 5.1 International Conference, PLM 2016, Columbia, SC, USA, July 11-13, 2016, Revised Selected Papers

High Availability and Disaster Recovery for Temenos T24 with IBM DB2 and AIX

Machine-readable Cataloging

Oracle on LinuxONE

A History, Analysis, and Overview of Key Issues

This book constitutes the refereed proceedings of the 13th IFIP WG 5.1 International Conference on Product Lifecycle Management, PLM 2016, held in Columbia, SC, USA, in July 2016. The 57 revised full papers presented were carefully reviewed and selected from 77 submissions. The papers are organized in the following topical sections: knowledge sharing, re-use and preservation; collaborative development architectures; interoperability and systems integration; lean product development and the role of PLM; PLM and innovation; PLM tools; cloud computing and PLM tools; traceability and performance; building information modeling; big data analytics and business intelligence; information lifecycle management; industry 4.0; metrics, standards and regulation; and product, service and systems.

Software Testing Techniques, 2nd Edition is the first book-length work that explicitly addresses the idea that design for testability is as important as testing itself not just by saying that testability is a desirable goal, but by showing the reader how it to do it. Every chapter has testability guidelines that illustrate how the technique discussed in the chapter can be used to make software more easily tested and therefore more reliable and maintainable. Application of all techniques to unit, integration, maintenance, and system testing are discussed throughout this book. As a self-study text, as a classroom text, as a working reference, it is a book that no programmer, independent software tester, software engineer, testing theorist, system designer, or software

project manager can be without.

Natural Products Isolation: Second Edition presents a practical overview of just how natural products can be extracted, prepared, and isolated from the source material. Maintaining the main theme and philosophy of the first edition, this second edition incorporates all the new significant developments in this field of research. The chapters are divided into four distinct sections: introduction, extraction, chromatography, and special topics. This second edition provides substantial background information for natural product researchers and will prove a useful reference guide to all of the available techniques.

In this IBM® Redbooks® publication, we present guidelines for the development of highly efficient and scalable information integration applications with InfoSphere™ DataStage® (DS) parallel jobs. InfoSphere DataStage is at the core of IBM Information Server, providing components that yield a high degree of freedom. For any particular problem there might be multiple solutions, which tend to be influenced by personal preferences, background, and previous experience. All too often, those solutions yield less than optimal, and non-scalable, implementations. This book includes a comprehensive detailed description of the components available, and descriptions on how to use them to obtain scalable and efficient solutions, for both batch and real-time scenarios. The advice provided in this document is the result of the combined proven experience from a number of expert practitioners in the field of high performance information integration, evolved over several years. This book is intended for IT architects, Information Management specialists, and Information Integration specialists responsible for delivering cost-effective IBM InfoSphere DataStage performance on all platforms.

Continuous Integration

The 21st Century at Work: Forces Shaping the Future Workforce and Workplace in the United States

Esio Trot

Improving Software Quality and Reducing Risk

What Technology Wants

China's Strategic Modernization Implications for the United States

Understanding MARC Bibliographic

Information and communication technologies (ICTs) are increasingly being recognized as essential tools of development--to empower poor people, enhance skills, increase productivity and improve governance at all levels. The success of ICT-enabled e-development) will thus not be measured by the diffusion of technology, but by advances in development itself: economic ultimately, achievement of the Millenium Development Goals. This volume examines a wide range of issues related to e-deve

focus on the requirements and realities of using ICTs to advance development goals. The report does not attempt to present an overview of e-development. Rather, it highlights key issues that have immediate relevance to policy makers in developing nations. It highlights two issues in particular, e-government and e-education, because applications in these areas can lead to significant development outcomes and can also be successfully deployed through public-private partnerships, leveraging limited government funding to achieve greater impact.

Master the art of testing and automating your SOA using SoapUI About This Book Design real-time test automation framework for applications using SoapUI Learn how to solve test automation issues for complex systems A complete guide to understanding test automation from quality assurance to business assurance Who This Book Is For The book is intended for test architects, SOA test specialists, testers, test managers, and software developers who have a good understanding of SOA, web services, Groovy Scripting, and Java What You Will Learn Familiarize yourself with Test Web services from functional, nonfunctional, and security aspects Learn how to design service orchestrations Design test automation solutions for SOA-based Enterprise applications Learn multilayer test automation using SoapUI under a single umbrella Integrate your SoapUI framework with Jenkins In Detail SoapUI is an open-source cross-platform application that provides complete test coverage and supports all the standard protocols and technologies. This book includes numerous examples of implementing SoapUI to achieve quality and business assurance. Starting with the features and functionalities, the book will then focus on functional testing, load testing, and security testing of web services. Furthermore, you will learn how to design web services and then design data-driven, keyword-driven, and hybrid-driven frameworks in SoapUI. Then the book will show you how to test services and services using SoapUI with the help of Selenium. You will also learn how to integrate SoapUI with Jenkins for CI and SOA testing with backward- and forward-compatibility. The final part of the book will show you how to virtualize a service response in SoapUI Service Mocking. You will finish the journey by discovering the best practices for SoapUI test automation and preparing you for the certification of SoapUI. Style and approach Filled with real-time examples, this book will help readers take their knowledge to the next level. This book is a comprehensive guide that will cover the end-to-end life cycle of implementing SoapUI in various phases of software development the software development life cycle.

2018 version of the OSINT Tools and Resources Handbook. This version is almost three times the size of the last public release and reflects the changing intelligence needs of our clients in both the public and private sector, as well as the many areas we have covered over the past two years.

A modern and unified treatment of the mechanics, planning, and control of robots, suitable for a first course in robotics.

Integration Testing from the Trenches

Instrument Flying Handbook (FAA-H-8083-15A)

E-development

Modern Robotics

Experiences with Oracle 11gR2 on Linux on System z

Software Test Automation

By Example

Even with the most extreme automation, we simply don't have time for the "test everything" approach. It's impossible to test every possible path through a modern business application every time that we want to release. Fortunately, we don't need to. If we rethink our testing approach, we can get a thorough assessment of a release candidate's business risk with much less testing than most companies are doing today. Enterprise Continuous Testing: Transforming Testing for Agile and DevOps introduces a Continuous Testing strategy that helps enterprises accelerate and prioritize testing to meet the needs of fast-paced Agile and DevOps initiatives. Software testing has traditionally been the enemy of speed and innovation--a slow, costly process that delays releases while delivering questionable business value. This new strategy helps you test smarter, so testing provides rapid insight into what matters most to the business. Target Audience This book is written for senior quality managers and business executives who need to achieve the optimal balance between speed and quality when delivering the software that drives the modern business. It provides a roadmap for how to accelerate delivery with high confidence and low business risk. In summary: If you want to realign your Global 2000 organization's quality process with the unrelenting drive towards accelerated delivery speed and "Continuous Everything," then you're in the right place.

This IBM® Redpaper™ publication will help you plan, install, tailor, and configure the new IBM PowerHA® with IBM HyperSwap® clustering solution. PowerHA with HyperSwap adds transparent storage protection for replicated storage, improving overall system availability by masking storage failures. The PowerHA cluster is an Extended Distance cluster with two sites. It manages, in principle, the replicated storage infrastructure through HyperSwap functionality. The storage is provided by two DS8800s configured to replicate each other using Metro Mirror Peer-to-Peer Remote Copy (PPRC) synchronous replication. DS8800 supports in-band (SCSI commands) communication, which is used to manage (and automate) the replication using IBM AIX® HyperSwap framework and PowerHA automation and management capabilities.

An updated resource for instrument flight instructors, pilots, and students.

Oracle Database 12c running on Linux is available for deployment on IBM® LinuxONE. The enterprise-grade Linux on LinuxONE solution is designed to add value to Oracle Database solutions, including the new functions that are introduced in Oracle Database 12c. In this IBM Redbooks® publication, we explore the IBM and Oracle Alliance and describe how Oracle Database benefits from LinuxONE. We then explain how to set up Linux guests to install Oracle Database 12c. We also describe how to use the Oracle Enterprise Manager Cloud Control Agent to manage Oracle Database 12c Release 1. Additionally, we discuss encryption for Oracle using Oracle Transparent Data

Encryption (TDE) on Oracle 12c Release 2. We also describe a successful consolidation project from sizing to migration, performance management topics, and high availability. Finally, we end with a chapter about surrounding Oracle with Open Source software. The audience for this publication includes database consultants, installers, administrators, and system programmers. This publication is not meant to replace Oracle documentation, but to supplement it with our experiences while installing and using Oracle products.

Second Edition

Security and Quality in Cyber-Physical Systems Engineering

Wireless Communications

With Forewords by Robert M. Lee and Tom Gilb

Android Test-Driven Development by Tutorials (Second Edition)

Multi-Disciplinary Engineering for Cyber-Physical Production Systems

Machine Learning with SAS

Describes how to structure and build an automated testing regime that will give lasting benefits in the use of test execution tools to automate testing on a medium to large scale. Offers practical advice for selecting the right tool and for implementing automated testing practices within an organization, and presents an extensive collection of case studies and guest chapters reflecting both good and bad experiences in test automation. Useful for recent purchasers of test automation tools, technical managers, vendors, and consultants. The authors are consultant partners in a company that provides consultancy and training in software testing and test automation. Annotation copyrighted by Book News, Inc., Portland, OR

This handbook supersedes FAA-H-8261 -16, Instrument Procedures Handbook, dated 2014. It is designed as a technical reference for all pilots who operate under instrument flight rules (IFR) in the National Airspace System (NAS). It expands and updates information contained in the FAA-H-8083-15B, Instrument Flying Handbook, and introduces advanced information for IFR operations. Instrument flight instructors, instrument pilots, and instrument students will also find this handbook a valuable resource since it is used as a reference for the Airline Transport Pilot and Instrument Knowledge Tests and for the Practical Test Standards. It also provides detailed coverage of instrument charts and procedures including IFR takeoff, departure, en route, arrival, approach, and landing. Safety information covering relevant subjects such as runway incursion, land and hold short operations, controlled flight into terrain, and human factors issues also are included.

"Professor Andreas F. Molisch, renowned researcher and educator, has put together the comprehensive book, Wireless Communications. The second edition, which includes a wealth of new material on important topics, ensures the role of the text as the key resource for every student, researcher, and practitioner

in the field." –Professor Moe Win, MIT, USA Wireless communications has grown rapidly over the past decade from a niche market into one of the most important, fast moving industries. Fully updated to incorporate the latest research and developments, Wireless Communications, Second Edition provides an authoritative overview of the principles and applications of mobile communication technology. The author provides an in-depth analysis of current treatment of the area, addressing both the traditional elements, such as Rayleigh fading, BER in flat fading channels, and equalisation, and more recently emerging topics such as multi-user detection in CDMA systems, MIMO systems, and cognitive radio. The dominant wireless standards; including cellular, cordless and wireless LANs; are discussed. Topics featured include: wireless propagation channels, transceivers and signal processing, multiple access and advanced transceiver schemes, and standardised wireless systems. Combines mathematical descriptions with intuitive explanations of the physical facts, enabling readers to acquire a deep understanding of the subject. Includes new chapters on cognitive radio, cooperative communications and relaying, video coding, 3GPP Long Term Evolution, and WiMax; plus significant new sections on multi-user MIMO, 802.11n, and information theory. Companion website featuring: supplementary material on 'DECT', solutions manual and presentation slides for instructors, appendices, list of abbreviations and other useful resources.

From the late 1960s until the end of the Cold War, the United States Air Force acquired and flew Russian-made MiG jets, culminating in a secret squadron dedicated to exposing American fighter pilots to enemy technology and tactics. Red Eagles tells the story of this squadron from the first tests of MiGs following the Vietnam War when the USAF had been woefully under-prepared in aerial combat. These initial flights would develop into the "black" or classified program known internally as Constant Peg. At a secret air base in Nevada, ace American fighter pilots were presented with a range of different MiG jets with a simple remit: to expose "the threat" to as many of their brethren as possible. Maintaining and flying these "assets" without spare parts or manuals was an almost impossible task, putting those flying the MiGs in mortal danger on every flight. Despite these challenges, in all more than 5,900 American aircrews would train against America's secret MiGs, giving them the skills they needed to face the enemy in real combat situations. For the first time, this book tells the story of Constant Peg and the 4477th Red Eagles Squadron in the words of the men who made it possible.

Federal Aviation Administration FAA-G-8082-22

Special Collection

Guidelines on Hepatitis B and C Testing

A Study Guide for the Certified Tester Exam

Remote Pilot - Small Unmanned Aircraft Systems Study Guide

Instrument Procedures Handbook

Women and Military Service

Becoming an automated software testing expert first requires knowledge and understanding of an organizations development methodology, tools, schedules, and resources. Within this context, an overall strategy for implementing automated testing can unfold. Development of automated tests needs to be coordinated alongside other test activity and become part of the overall testing strategy. To successfully build and maintain a suite of automated tests requires the adoption of a process similar to application software development. In the world of automated tests, a framework describes those reusable components which form the basis of an automated testing program. An automated testing expert will assess the requirements of an organization, navigate the challenges posed by people and technology, and recommend, plan, implement, and maintain a process that maximizes the participation of all testers in creating automated scripts and analyzing run results. Expert automators should have broad knowledge of technical environments, hands-on experience with a variety of automated testing tools, and a technical background to ensure customization can be achieved.

Testing and diagnosis of hepatitis B (HBV) and C (HCV) infection is the gateway for access to both prevention and treatment services, and is a crucial component of an effective response to the hepatitis epidemic. Early identification of persons with chronic HBV or HCV infection enables them to receive the necessary care and treatment to prevent or delay progression of liver disease. Testing also provides an opportunity to link people to interventions to reduce transmission, through counselling on risk behaviors and provision of prevention commodities (such as sterile needles and syringes) and hepatitis B vaccination. These are the first WHO guidelines on testing for chronic HBV and HCV infection and complement published guidance by WHO on the prevention, care and treatment of chronic hepatitis C and hepatitis B infection. These guidelines outline the public health approach to strengthening and expanding current testing practices for HBV and HCV, and are intended for use across age groups and populations.

The Federal Aviation Administration (FAA) has published the Remote Pilot - Small Unmanned Aircraft Systems (sUAS) Study Guide to communicate the knowledge areas you need to study to prepare to take the Remote Pilot Certificate with an sUAS rating airman knowledge test.

From the author of the New York Times bestseller The Inevitable—a sweeping vision of technology as a living force that can expand our individual potential In this provocative book, one of today's most respected thinkers turns the conversation about technology on its head by viewing technology as a natural system, an extension of biological evolution. By mapping the behavior of life, we paradoxically get a glimpse at where technology is headed-or "what it wants." Kevin Kelly offers a dozen trajectories in the coming decades for this near-living system. And as we align ourselves with technology's agenda, we can capture its colossal potential. This visionary and optimistic book explores how technology gives our lives greater meaning and is a must-read for anyone curious about the future.

Data Models and Software Solutions for Handling Complex Engineering Projects

Transforming Testing for Agile and DevOps

FAA-H-8083-16A

Red Eagles

Deploying PowerHA Solution with AIX HyperSwap

Test-driven Development

Model-Driven Software Engineering in Practice

Following on from the successful first edition (March 2012), this book gives a clear explanation of what LTE does and how it works. The content is expressed at a systems level, offering readers the opportunity to grasp the key factors that make LTE the hot topic amongst vendors and operators across the globe. The book assumes no more than a basic knowledge of mobile telecommunication systems, and the reader is not expected to have any previous knowledge of the complex mathematical operations that underpin LTE. This second edition introduces new material for the current state of the industry, such as the new features of LTE in Releases 11 and 12, notably coordinated multipoint transmission and proximity services; the main short- and long-term solutions for LTE voice calls, namely circuit switched fallback and the IP multimedia subsystem; and the evolution and current state of the LTE market. It also extends some of the material from the first edition, such as inter-operation with other technologies such as GSM, UMTS, wireless local area networks and cdma2000; additional features of LTE Advanced, notably heterogeneous networks and traffic offloading; data transport in the evolved packet core; coverage and capacity estimation for LTE; and a more rigorous treatment of modulation, demodulation and OFDMA. The author breaks down the system into logical blocks, by initially introducing the architecture of LTE, explaining the techniques used for radio transmission and reception and the overall operation of the system, and concluding with more specialized topics such as LTE voice calls and the later releases of the specifications. This methodical approach enables readers to move on to tackle the specifications and the more advanced texts with confidence.

For any software developer who has spent days in “integration hell,” cobbling together

myriad software components, Continuous Integration: Improving Software Quality and Reducing Risk illustrates how to transform integration from a necessary evil into an everyday part of the development process. The key, as the authors show, is to integrate regularly and often using continuous integration (CI) practices and techniques. The authors first examine the concept of CI and its practices from the ground up and then move on to explore other effective processes performed by CI systems, such as database integration, testing, inspection, deployment, and feedback. Through more than forty CI-related practices using application examples in different languages, readers learn that CI leads to more rapid software development, produces deployable software at every step in the development lifecycle, and reduces the time between defect introduction and detection, saving time and lowering costs. With successful implementation of CI, developers reduce risks and repetitive manual processes, and teams receive better project visibility. The book covers How to make integration a "non-event" on your software development projects How to reduce the amount of repetitive processes you perform when building your software Practices and techniques for using CI effectively with your teams Reducing the risks of late defect discovery, low-quality software, lack of visibility, and lack of deployable software Assessments of different CI servers and related tools on the market The book's companion Web site, www.integratebutton.com, provides updates and code examples.

Write clean code that works with the help of this groundbreaking software method. Example-driven teaching is the basis of Beck's step-by-step instruction that will have readers using TDD to further their projects.

This book examines the requirements, risks, and solutions to improve the security and quality of complex cyber-physical systems (C-CPS), such as production systems, power plants, and airplanes, in order to ascertain whether it is possible to protect engineering organizations against cyber threats and to ensure engineering project quality. The book consists of three parts that logically build upon each other. Part I "Product Engineering of Complex Cyber-Physical Systems" discusses the structure and behavior of engineering organizations producing complex cyber-physical systems, providing

insights into processes and engineering activities, and highlighting the requirements and border conditions for secure and high-quality engineering. Part II "Engineering Quality Improvement" addresses quality improvements with a focus on engineering data generation, exchange, aggregation, and use within an engineering organization, and the need for proper data modeling and engineering-result validation. Lastly, Part III "Engineering Security Improvement" considers security aspects concerning C-CPS engineering, including engineering organizations' security assessments and engineering data management, security concepts and technologies that may be leveraged to mitigate the manipulation of engineering data, as well as design and run-time aspects of secure complex cyber-physical systems. The book is intended for several target groups: it enables computer scientists to identify research issues related to the development of new methods, architectures, and technologies for improving quality and security in multi-disciplinary engineering, pushing forward the current state of the art. It also allows researchers involved in the engineering of C-CPS to gain a better understanding of the challenges and requirements of multi-disciplinary engineering that will guide them in their future research and development activities. Lastly, it offers practicing engineers and managers with engineering backgrounds insights into the benefits and limitations of applicable methods, architectures, and technologies for selected use cases.

Software Testing Foundations

Open Source Intelligence Tools and Resources Handbook

LTE, LTE-Advanced, SAE, VoLTE and 4G Mobile Communications

From Excitement to Effectiveness

Guide to the ISTQB Advanced Level Certification