
Free Learning Resources For Software Testers

An ongoing project to create a set of links to free online learning resources for new and experienced Software Testers (Click Readme.md to view).

Since computer science and IT university departments don't invariably offer dedicated software testing modules and resources are spread among various different providers linked to different methodologies, I created this project to help guide new testers into some sort of useful curriculum and collate some existing web-based resources into lists of links.

The rules I wish to implement are -

1. Content must be relevant to testers
2. Content must be informative and not overly "salesy"
3. Content must be free of charge

(the exceptions to these being books and magazines, of which most have to be paid for, and blogs - some of which are linked to test consultancies and thus may have promotional pieces in them)

This project is very new and the more resources are added the better. I ask the testing community to help by contacting me to offer new content or fork and create a pull request. If you have any suggestions, please let me know. In the meantime, I hope you find the resources below useful.

Paul Maxwell-Walters @TestingRants, paulwalters2002@yahoo.co.uk

Introduction to Testing

- Open Lecture by James Bach on Software Testing
- Agile Software Testing with James Bach
- Black Box Software Testing (BBST)
 - Foundations
 - Bug Advocacy
 - Test Design
 - Exploratory Testing
- Create Your Tester Portfolio, Issi Hazan & Shmuel Gershon
- How to get started in Software Testing, Tim Elbe, Adventures in QA
- Four Hour Tester, Joep Schuurkes and Helena Jeret-Mae
- Whiteboard Testing Videos

The Testing Mindset (with some Logic and Philosophy)

- List of Cognitive Biases, Wikipedia
- Propositional Logic, Kevin deLaPlante
- Agile Testing Mindset and the Role of the Agile Tester, Amir Gharai, Testing Excellence
- Philosophy for Beginners, Marianne Talbot, University of Oxford CCE
- General Philosophy, Peter Millican, University of Oxford

Test Design and Execution

- Requirements Analysis, University of Michigan
- Test Design Techniques (Videos)
- Heuristic Test Strategy Model, James Bach
- An Introduction to Scenario Testing (Cem Kaner)
- EuroSTAR Software Testing Video: Ten Minute Test Plan with James Whittaker
- CAST 2014 Keynote - Test Cases are Not Testing: Toward a Performance Culture
- The Art and Science of Questioning, Jessica Ingrassellino
- Software Testing Best Practices, Rex Black
- Test Matrices, Michael Bolton

Testing Tools and Techniques

- What Testing Tools should I Learn, Mark Winteringham, Ministry of Testing
- Investing in Testing - The Importance of the Right Technique, Rex Black
- Top Test Management Tools

Exploratory Testing

- What is Exploratory Testing, James Bach
- Rigorous Exploratory Testing, Elizabeth Hendrickson
- Exploratory Testing, gov.uk Service Manual

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- [Evolving Understanding About Exploratory Testing](#), Michael Bolton
 - [Testing and Noticing](#), Michael Bolton and James Bach
 - [Google Tech Talks - Exploratory Testing](#), Jon Bach
 - [Test Heuristics Cheat Sheet](#), Elizabeth Hendrickson
 - [Exploratory Testing](#), Martin Mudge
 - [Session Based Testing](#), Peter Tennekes
 - [Session Based Test Management](#), Jon Bach

Test Automation

- [Page Object Pattern](#)
- [Selenium Documentation](#)
- [Selenium WebDriver tutorials \(Java\)](#), Guru99
- [Getting Started with Selenium WebDriver Pt1](#) (Alan Richardson, Evil Tester)
- [Getting Started with Selenium Webdriver Pt2](#) (Alan Richardson, Evil Tester)
- [Verify XPath Expression in Chrome](#)
- [SoapUI Tutorials](#)
- [Elemental Selenium Tips Archive](#)
- [Postman API Testing Documentation](#)
- [Rest API Testing](#), (Alan Richardson, Evil Tester)
- [Screenplay Pattern with Serenity](#)
- [Webdriverio Documentation](#) (Webdriver binding for nodejs)
- [Test Automation Learning Paths](#)

Test Reporting

- [Test Execution Reports](#), SoftwareTestingHelp
- [Effective Test Status Reporting](#), Rex Black

Defect Lifecycle Management

- Bug Advocacy - How to Win Friends, Impress Programmers and Stomp Bugs, Cem Kaner
- Defect Life Cycle: Essentials of Software Testing, Jennifer Marsh, Udemy Blog

Testing in Agile

- Agile Manifesto Principles
- Agile Testing Overview, Elizabeth Hendrickson
- Agile Test Planning with the Agile Testing Quadrants, Lisa Crispin and Janet Gregory
- Quick Tools for Agile Testing, Lisa Crispin and Janet Gregory

Programming and Academic Computer Science

- Into to C on Windows, Handmade Hero
- Unix Tools, Markus Kuhn, University of Cambridge
- Python3 Basics, Harrison Kinsley, Sendex
- Introduction to Computer Programming in Python, Fall 2016, MIT OpenCourseWare
- Java for Testers, Alan Richardson, Evil Tester
- Building Dynamic Websites, David J. Malan, CS75.TV, Harvard Extension School
- Development Tutorials, NewCircle Training
- Computation Theory, Shai Simonson, Coderisland
- CS2: Data Structures and Algorithms, Richard Buckland, University of New South Wales
- UHCL Graduate Database Course, Gary Boetticher
- Introduction to Artificial Intelligence, Peter Norvig and Sebastian Thrun, Udacity
- Deep Learning, Nando de Freitas, University of Oxford

Security and Penetration Testing

- OWASP Testing Guide
- OWASP Top 10 Cheat Sheet

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- Security I, Markus Kuhn, University of Cambridge
 - Security II, Markus Kuhn, University of Cambridge
 - Understanding the OWASP Top 10, Gary Hockin
 - Cross Site Scripting (XSS) Tutorials, Draps TV
 - Hacking - Intro to Cross Site Scripting (XSS), Caleb Curry
 - Metasploit for Network Security Tutorials, Bucky Roberts, the New Boston
 - Learning Python Web Testing, Tutorials HG
 - Web Application Pen Testing tutorials with Mutillidae, IronGeek.com
 - Penetration Testing Lab Articles
 - WebGoat User and Install Guides, OWASP
 - Web Pentesting Workshop with BurpSuite and Mutillidae Pt 1, Jeremy Druin
 - SQL Injection, OWASP Testing Guide
 - Basic and Advanced SQL Injection Techniques, Brandon Perry, Infosec Southwest
 - NMap Tutorials for Beginners, Bucky Roberts, the New Boston
 - Ethical Hacking - Hacking for Fun and Profit!, Pentester University
 - Kali Linux and Backtrack, JackkTutorials
 - How not to suck at Pen Testing, Jon Strand

Mobile Testing

Android

- Testing Views in Isolation with Espresso
- How testing can provide you with the best documentation

ios

- Getting started with XCTest framework for testing iOS apps

Developing as a Tester

- 30 Days of Testing, Ministry of Testing
- Buccaneer-Tester: Winning Your Reputation
- Becoming a World-Class Tester, Ilari Henrik Aegerter
- The power of believing that you can improve, Carol Dweck, TedTalks

Podcasts

- PerfBytes Podcast
- QualiTest's the Testing Show
- MKLTestHead Podcasts
- Hanselminutes Podcast
- Let's Talk About Tests, Baby
- The Dojo, Ministry of Testing
- TWiT Security Now
- Defensive Security Podcast
- James Bach's Podcast
- OWASP 24/7 Podcast
- Testing in the Pub
- STP Radio
- Paul's Security Weekly and Hack Naked News
- Test Talks Podcast
- Risky Business Security Podcast
- Software Engineering Radio
- RBCS Podcast, Rex Black
- Super Testing Bros
- AB Testing Podcast
- TestCast
- Test and Code

Blogs

(In last name/company name alphabetical order to avoid order bias)

- Nikolay Advolodkin, UltimateQA
- Ilari Henrik Aegerter, Testing Observations
- Ashfaque Ahmed's Blog
- Dan Ashby's Blog
- Avocado Consulting Blog
- James Bach's Satisfice Blog
- Jon Bach, Tested
- Dan Billing, the Test Doctor
- Michael Bolton's Developsense Blog
- Richard Bradshaw, Friendly Tester
- Common Exploits
- Carnal0wnage PenTest Blog
- Anne-Marie Charrett, Maverick Tester
- Katrina Clokie's Blog
- Agile Testing with Lisa Crispin
- Joe Colantonio's Blog
- Sammy Connelly's Blog
- Danny Dainton's Blog
- Google Testing Blog
- Janet Gregory, Dragonfire Inc.
- Paul Grizzaffi, Responsible Automation
- Lee Hawkins, Rocker Tester
- Elizabeth Hendrickson, TestObsessed
- Aaron Hodder, TestKiwi
- Matthew Heusser, XNDEV
- Stephen Janeaway's Blog

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- Angie Jones's Blog
 - Mohinder Khosla's Blog
 - Keith Klein, Quality Remarks
 - Lyon Testing
 - Michael Larson, MKLTestHead
 - Mike Lyles' Blog
 - Claire Mann, Aclairefication
 - Rajesh Mathur, Pragmatic Testing Blog
 - Offensive Security Blog
 - QA Hates You
 - Alan Page's AngryWeasel Blog
 - PenTest Geek
 - Erik Petersen, TestingSpot
 - Brett Pettichord
 - Maaret Pyhäjärvi
 - OWASP Blog
 - RBCS Blog
 - Rich Rogers, RichRTesting
 - Huib Shoots, Magnifiant
 - SANS Penetration Testing Blog
 - Sticky Minds Articles
 - Mike Talk's Test Sheep Blog
 - Testing Rants Blog
 - Jonathan Rasmusson, Agile Warrior
 - James Sheasby Thomas

Magazines and Periodicals

- Testing Trapeze

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- TEST Magazine
 - PenTest Magazine

Books

- Lessons Learned in Software Testing by Pettichord, Kaner, Bach.
- Perfect Software and Other Illusions about Testing by Weinberg.
- Explore It! by Elisabeth Hendrickson.
- Software Testing Techniques: Finding the Defects that Matter by Loveland, Miller, Prewitt Jr., Shannon
- Fifty Quick Ideas to Improve Your Tests: by Gojko Adzic, David Evans and Tom Roden
- How Google Tests Software; by James A. Whittaker, Jason Arbon, Jeff Carollo
- The Digital Quality Handbook
- How We Test Software at Microsoft
- Agile Testing Foundations, Rex Black et al
- Test Automation in the Real World: Practical Lessons for Automated Testing, Greg Paskal
- How to Test, Mike Talks

Offbeat, possibly even Bonkers Stuff

- On Vegan Cooking and What Testers can Learn from it

Online Sessions

- <https://weekendtesting.com>
- Slack Channel : Women in Testing
- Skype Channel : Software testing 24 * 7
- Slack Channel : Ministry of Testing
- Slack Channel : Testers.io

Software Testing Conferences

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Other Resources on Github

- [Awesome Testing](#)
- [Awesome AppSec](#)
- [Android Testing Kata](#)
- [iOS Testing Kata](#)

Tester Twitter Handles

- [Parveen Khan](#)
- [Testingmind](#)
- [Alexander Serebrenik](#)
- [Test Automation University](#)
- [TestProject](#)
- [The QA Lead](#)
- [Testim.io](#)
- [Ministry of Testing](#)
- [Trending in Testing](#)
- [Software Testing & QA Online Network.](#)
- [Software Testing Weekly](#)
- [QA Madness](#)
- [Software Testing Tips & Tricks](#)