



Top 13 Most Controversial Software Testing Concepts

By Gabriel Rodriguez

The objective of this publication is to debunk the existent myths in the market today for definitions of certain software testing concepts, such as: *Test Case*, *Test Script*, *Test Plan* just to name a few. This article relies on trustworthy sources such as websites and testing books of renowned authors to explain the definitions of these controversial concepts.

Please, consider the following caveats when reading this article:

- Each **Source (Either Website or book)** has its unique style to explain the concept; however the definitions gathered below have certain **keywords** in common.
- These **keywords** were underlined for your convenience, in the **Definition** column.
- The purpose of gathering and comparing several definitions from several sources was to show you that even though these definitions come from different sources, the definitions still conserving its main fundamental nature.

What Is Quality Control?		
Source (Book/Website)	URL	Definition
Website – Quality Assurance Institute (QAI) Certified Software Tester (CSTE) Study Guide	http://www.softwarecertifications.org	Quality control is the process by which <u>product quality is compared with applicable standards</u> , and the action taken when nonconformance is detected. Quality control is a line function, and the work is done within a process to ensure that <u>the work product conforms to standards and requirements</u> .
Book - Managing the Testing Process, Second Edition by Rex Black	NA	A set of <u>activities designate to evaluate the quality</u> of developed or manufactured <u>products</u> .
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html#Q	The operational techniques and the <u>activities used to fulfill and verify requirements of quality</u> .
Website - Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Quality_control	In engineering and manufacturing, quality control and quality engineering are involved in developing systems to <u>ensure products or services are designed and produced to meet or exceed customer requirements</u> . These systems are often developed in



		<p>conjunction with other business and engineering disciplines using a cross-functional approach.</p>
<p>Quality Control Examples:</p> <ul style="list-style-type: none"> • Inspections and Peer Reviews • Testing <ul style="list-style-type: none"> ○ Black Box Testing <ul style="list-style-type: none"> ▪ System Testing ○ White Box Testing 		

<h3 style="text-align: center;">What Is Quality Assurance?</h3>		
Source (Book/Website)	URL	Definition
Website – Quality Assurance Institute (QAI) Certified Software Tester (CSTE) Study Guide	http://www.softwarecertifications.org	<p>Quality Assurance (IEEE Standard 610.12.1990) <u>Quality assurance is a planned and systematic set of activities necessary to provide adequate confidence that products and services will conform to specified requirements and meet user needs.</u></p>
Book – Managing the Testing Process, Second Edition by Rex Black	NA	<p>A set of activities designed to <u>evaluate the process</u> by which products are developed or manufactured.</p>
Website – ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html#Q	<p>All those <u>planned or systematic actions necessary to provide adequate confidence</u> that a product or service is of the type and quality needed and expected by the customer.</p>
Website – Software QA/Test Resource Center	http://www.softwareqatest.com/qatfaq1.html#FAQ1_1	<p>Software QA involves the entire software development <u>PROCESS</u> – monitoring and improving the process, making sure that any agreed-upon standards and procedures are followed, and ensuring that problems are found and dealt with. <u>It is oriented to 'prevention'.</u></p>
Website – Wikipedia The Free	http://en.wikipedia.org/wiki/Quality_assurance	<p>Is the <u>activity of providing evidence needed to establish quality in work,</u></p>



Encyclopedia		and that activities that require good quality are being performed effectively. All those <u>planned or systematic actions necessary to provide enough confidence</u> that a product or service will satisfy the given requirements for quality.
<p>Quality Assurance Examples:</p> <ul style="list-style-type: none"> • Test Plan Process • Test Design Process • Defect Tracking Process • Measurement Program (Metrics) • Estimating Process 		

What Is A Test Script?		
Source (Book/Website)	URL	Definition
Website – Quality Assurance Institute (QAI) Quality Today (QAI – Newsletter)	http://www.qaiworldwide.org	Test Scripts are <u>step-by-step instructions that describe how a test case is to be executed</u> . Scripts should specify an order of actions that should be performed during a test session. The scripts should also contain expected results. <u>Test scripts may be manually prepared using paper forms, or may be automated using capture/playback tools</u> or other kinds of automated scripting tools.
Website – Astra Infotech – The software Engineering Company	http://www.astrainfotech.com/software-testing-glossary.html	A <u>collection of step-by-step instructions that realize a test, enabling its execution</u> . <u>Test scripts may take the form of either documented textual instructions that are executed manually or computer readable instructions that enable automated test execution</u>
Website – PC Magazine	http://www.pcmag.com/encyclopedia_term/0,2542,t=test+script&i=52774,00.asp	The instructions in a test program. It defines the actions and pass/fail criteria. For example, if the action is “to enter a valid account number,” the expected result is that the data are accepted. Entering an invalid number should yield a particular error message
Website – Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Test_script	A test script is a short program written in a programming language used to test part of the functionality of a software system. However a

		written <u>set of steps</u> that can be <u>executed</u> (whether <u>manually</u> or <u>automatically</u>) can also be called a test script.
Book – Testing Applications on the web by Hung Q. Nguyen	NA	<u>Step – by – step instructions</u> that describe how a test case is to be <u>executed</u> . A <u>test script</u> may contain <u>one or more test cases</u> .
Website – ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html	Commonly used to refer to the <u>instructions for a particular test</u> that will be carried out by an automated test tool.
Book – The Rational Unified Process An Introduction, Third Edition by Kruchten	NA	Are <u>manual</u> or <u>automated procedures</u> used by the tester to execute the tests.

Test Script Example:

- Each **step** in the example below corresponds to a **test script**. A test case is composed of several **test scripts**.

The screenshot shows an Excel spreadsheet titled "Microsoft Excel - FIDO_Project_TestCases". The spreadsheet content is as follows:

Priority	TC#	Test Name	Step #	Action	Expected Results	Test Results
PROJECTS_TEST CASES - CONTROL TESTING						
Total Number of Test Cases						
High Priority Test Cases						
Medium Priority Test Cases						
Project Window						
	PC001	Add Project - Project Summary				
(Verifying labels and buttons)						
			1	Log into FIDO	Fido home page will be displayed	P
			2	Click on Projects tab	Project Window will be displayed	P
			3	Click on Add Project link	Add Project Window will be displayed. Verify the following fields: - Project (Read-only, Numeric), - Project Name (Field), - Project Manager (Field), - Search (Button), - Workgroup (Dropdown list), - Project Type (Dropdown list), - Request Date (Field), - Due Date (Field), - Close Date (Field), - Description (Field), - Status (Dropdown list), - Originated by (Read-only, two	P

Red circles in the image highlight the rows for Step 1 and Step 3. Arrows point from these circles to the labels "Test Script 1" and "Test Script 2" respectively.



What is a Test Case?

Source (Book/Website)	URL	Definition
Website – Quality Assurance Institute (QAI) Certified Software Tester (CSTE) Study Guide	http://www.softwarecertifications.org	IEEE Standard 610 (1990) defines test case as follows: “(1) <u>A set of test inputs, execution conditions, and expected results developed for a particular objective, such as to exercise a particular program path or to verify compliance with a specific requirement.</u>
Website - Cem Kaner J.D., Ph.D.	http://www.kaner.com/pdfs/GoodTest.pdf	(2) (IEEE Std 829-1983) Documentation specifying <u>inputs, predicted results, and a set of execution conditions</u> for a test item.
Website - PC Magazine	http://www.pcmag.com/encyclopedia_term/0,2542,t=test+case&i=52771,00.asp	A <u>set of test data</u> and test programs (test scripts) and their <u>expected results</u> . A test case <u>validates one or more system requirements</u> and generates a pass or fail.
Website - Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Test_case	The most common definition of a test case is a <u>set of conditions</u> or variables under which a tester will determine if a requirement or use case upon an application is partially or fully satisfied. What characterizes a formal, written test case is that there is a <u>known input</u> and an <u>expected output, which is worked out before the test is executed</u> . The known input should test a precondition and the expected output should test a post condition.
Website - Astra Infotech – The software Engineering Company	http://www.astrainfotech.com/software-testing-glossary.html	The specification (usually formal) of a set of <u>test inputs, execution conditions, and expected results</u> , identified for the purpose of making an evaluation of some particular aspect of a Target Test Item.
Website - Construx- Software Development Best Practices	http://www.construx.com/Default.aspx	A description of <u>inputs, execution instructions, and expected results</u> , which are created for the purpose of determining whether a specific software feature works correctly or a <u>specific requirement has been satisfied</u> .
Website - OASIS - Advancing open standards for the	http://lists.oasis-open.org/archives/ebxml-	A test case is a <u>sequence of discrete test steps</u> .

information society	iic/200302/doc00001.doc	
Website – Mosaic, Inc. Software Risk Management Services	http://www.testablerequirements.com/testablerequirements/glossry.htm	Represents the specific <u>detailed input and action steps taken during the execution of testing with predetermined expected results.</u> Usually, this involves very <u>specific steps</u> of action taken within the system, such as opening XYZ window, entering ABC data, and pressing V push button.
Website – Round Rock Systems Test	http://www.rrstinc.com/downloads/Developing_Test_Cases.pdf	A Test Case has a stimulus with a <u>set of conditions and an expected result.</u> A Test Case may be complex with multiple conditions and results or a simple Pass or Fail. A <u>Test Case has an expected result.</u> When the Test Case is executed, the actual result is compared to the expected result. A Test Case is repeatable.
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html	Test Case is a commonly used term for a specific test. This is usually the smallest unit of testing. A Test Case will <u>consist of information such as requirements testing, test steps, verification steps, prerequisites, outputs, test environment, etc.</u> A <u>set of inputs, execution preconditions, and expected outcomes</u> developed for a particular objective, such as to exercise a particular program path or to <u>verify compliance with a specific requirement.</u>
Book - Managing the Testing Process, Second Edition by Rex Black	NA	A <u>sequence of steps, sub steps, and other action,</u> and other actions, performed serially , in parallel, or some combination of consecution, that create the desire test conditions that the test case is designed to evaluate.
Test Case Example:		
<ul style="list-style-type: none"> • A Test Case is composed of several test scripts (steps) as illustrated in the image below: 		

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	INVOICE TEST CASES - CONTROL TESTING												
2	Total Number of Test Cases = 67												
3	High Priority Test Cases = 45												
4	Medium Priority Test Cases = 22												
5													
6	Prior	TC#	Test Name	Step #	Action	Expected Results	Test Results						
7			Invoice Window										
8		IC001	Add Invoice - Invoice Window										
9			Invoice Number (Alphanumeric Chars), Invoice Date (Today's Date <mm/dd/yyyy>), Ap Vendor Name <Dropdown list>, Invoice Description <Min Chars (1)>, Add Detail button, Project Number <Dropdown list>, Original Amount (Numeric Chars), Markup PCT (Numeric Chars), Bill Code <Dropdown list>, Hours/Quantity (Numeric Chars), Rebill Amount (Numeric Chars), Description <Max Chars (256)>, Add Detail button, Save button.										
10				1	Log into FIDO	Fido home page will be displayed	P						
11				2	Click on Invoice tab	Invoice Window will be displayed	P						
12				3	Click on Add Invoice link	Add Invoice window will be displayed	P						
13				4	Type Alphanumeric Chars in Invoice Number (e.g. ABC002120)	Data entered successfully	P						
14				5	Click on Invoice Date calendar icon and select Today's date	Data selected successfully	P						
15				6	Click on Ap Vendor Name dropdown list and select any option from the list (e.g. ADAMS DESIGN & ANIMA)	Data selected successfully	P						
16				7	Type 1 Char in	Data entered successfully							

This is One Test Case, which is composed of several test scripts (steps)

What Is A Test Scenario?

Source (Book/Website)	URL	Definition
Website - Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Scenario_test	Scenario testing is a software testing activity that uses scenario tests, or simply scenarios , which <u>are based on a hypothetical story to help a person think through a complex problem or system</u> . They can be as simple as a diagram for a testing environment or they could be a description written in prose. The ideal scenario has five key characteristics. It is (a) a story that is (b) motivating, (c) credible, (d) complex, and (e) easy to evaluate. <u>These tests are usually different from test cases in that test cases are single steps and scenarios cover a number of steps.</u>
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html	Definition of <u>a set of test cases or test scripts and the sequence in which they are to be executed.</u>
Website - PC Magazine	http://www.pcmag.com/encyclopedia_term/0,2542,t=test+scenario&i=52773,00.asp	A <u>set of test cases that ensure that the business process flows are tested from end to end</u> . They may be <u>independent tests</u> or a <u>series of tests</u> that follow each other, each dependent on the output of the previous one.
Test Scenario Example: <ul style="list-style-type: none"> Image 1 (below), is an example of a Test Scenario, which basically consists of a set of test scripts (steps) directing the software testers on what to do. A best practice is to use screenshots during the sequence of the execution: 		

- Click on **New Case** button

Test Scripts (Steps) to execute part of this test scenario

Case	Product	MBF	Chn	Qual	Pended	Eff Date	Status
Added 06/13/2007 11:21	Medical	1.000	5	06/13/07	06/13/07	Pend	
Added 06/13/2007 12:18	Medical	1.000	5	06/13/07	07/01/07	Pend	
Added 06/13/2007 11:10	Medical	1.000	5	06/13/07	07/01/07	Pend	
Added 06/13/2007 11:09	Medical	1.000	5	06/13/07	07/01/07	Pend	

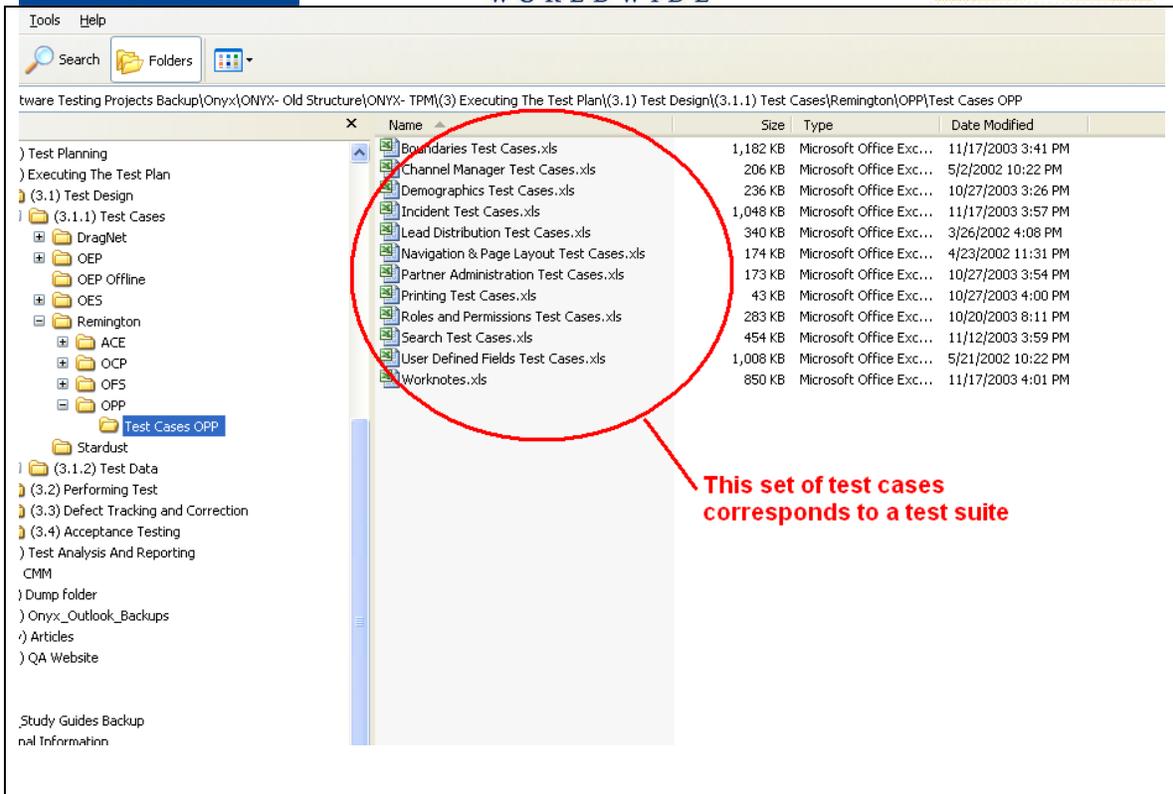
Screenshots to explain what the Software testers are going to see

- Enter the following information:
 - o **Zip:** 50309 (Note: This is on of Iowa's zip codes)
 - o In **Product** dropdown list select **Medical**
 - o In **Eff Date** select: 7/1/2007

Test Scripts (Steps) to execute this test scenario

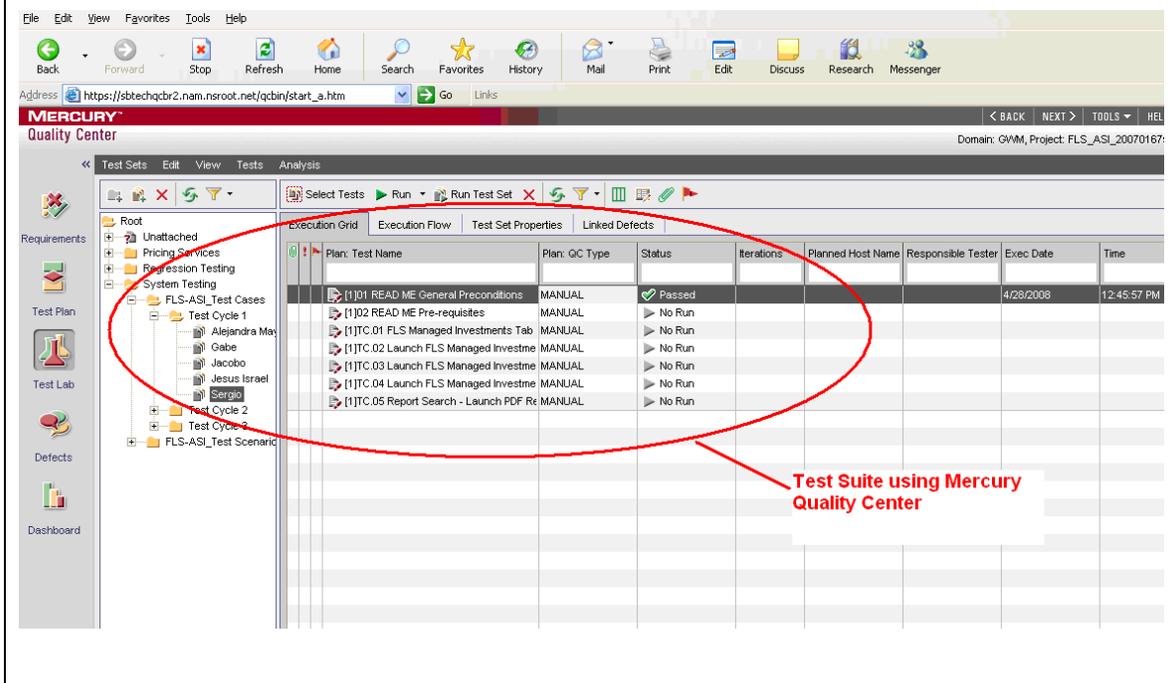
What Is A Test Suite?

Source (Book/Website)	URL	Definition
Website - PC Magazine	http://www.pcmag.com/encyclopedia_term/0,2542,t=test+suite&i=52775,00.asp	A collection of test scenarios and/or test cases that are related or that may cooperate with each other.
Website - Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Test_suite	Is a collection of test cases that are intended to be used as input to a software program to show that it has some specified set of behaviors (i.e., the behaviors listed in its specification).
Book - Testing Applications on the web by Hung Q. Nguyen		A collection of test scripts or test cases that is used for validating bug fixes within a logical or physical area of a product.
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html	A collection of tests used to validate the behavior of a product. The scope of a Test Suite varies from organization to organization. There may be several Test Suites for a particular product for example: In most cases however a Test Suite is a high level concept, grouping together hundreds or thousands of tests related by what they are intended to test.
Book - Managing the Testing Process, Second Edition by Rex Black	NA	A framework for the execution of a group of test cases; a way of organizing test cases.
<p>Test Suite Example:</p> <ul style="list-style-type: none"> Image 1 (Below) displays a test suite framework using Windows folder structure : <p>Image 1 -</p>		



- Image 2 (below) , displays a test suite framework using Mercury Quality Center:

Image 2 -



What Is A Test Matrix?

Source (Book/Website)	URL	Definition
Book - Effective Methods For Software Testing, Second Edition by William E. Perry	NA	<ul style="list-style-type: none"> The test matrix is a key component of the test plan. <u>On one side it lists what is to be tested; on the other, it indicates which test is to be performed, or 'how' software will be tested.</u> Between the two dimensions of the matrix are the tests applicable to the software. The test matrix is also a test 'proof'. It proves that each testable function has at least one test, and that each test is designed to test a specific function.
Book - Testing Computer Software, Second Edition by Cem Kaner, Jack Falk, Hung Quoc Nguyen	NA	<ul style="list-style-type: none"> The matrix's main function is data collection. It provides a structure for testing the effect of <u>combining two or more variables, circumstances, types of hardware, or events.</u> <u>The row and column headings identify test conditions.</u>
Test Matrix Example: <ul style="list-style-type: none"> Image 1, displays a simple test matrix for a small application with a few functionality implemented <p>Image 1 -</p>		

What Is A Traceability Matrix?

Source (Book/Website)	URL	Definition
Website - Wikipedia The Free Encyclopedia	http://www.wikipedia.com	<ul style="list-style-type: none"> • In software development, the term traceability refers to the ability to link requirements back to stakeholders' rationales and forward to corresponding design artifacts, code, and test cases. • Traceability supports numerous software engineering activities such as change impact analysis, compliance verification of code, regression test selection, and requirements validation. • It is usually accomplished in the form of a matrix created for the verification and validation of the project.
Website – Managing Requirements	http://www.jiludwig.com/Traceability_Matrix_Structure.html	<ul style="list-style-type: none"> • A traceability matrix is created by associating requirements with the work products that satisfy them. Tests are associated with the requirements on which they are based and the product tested to meet the requirement. • In traceability, the relationship of driver to satisfier can be one-to-one, one-to-many, many-to-one, or many-to-many • The purpose of the traceability matrix is: <ul style="list-style-type: none"> ○ To map relevant <u>Software Development Life cycle Documentation (SDLC). (Requirements, Functional or Design specifications) with test plan (test cases).</u> • Process to generate a Traceability Matrix: <ul style="list-style-type: none"> ○ Requirements, Functional or Design documentation must

- exist.
- Test Plan must be created.

Traceability Matrix Example:

- The image below, displays an example of a traceability matrix, tracing Functional Specifications and Design specifications of the application with the Test Plan and Test Cases.

ONYS DATA MODEL_ REQUIREMENTS AND FUNCTIONAL SPECIFICATION TRACEABILITY MATRIX												
BI REQUIREMENTS			FUNCTIONAL SPECIFICATION DOCUMENT		MODEL DESING SPEC		Data Model Test Plan					
ID	USER REQUIREMENTS	FORWARD TRACEABILITY	ID	FUNCTIONAL REQUIREMENTS	BACKWARD TRACEABILITY	ID	MODEL DESIGN	BACKWARD TRACEABILITY	ID	DATA MODEL TEST PLAN	BACKWARD TRACEABILITY	TC#
U1	TBD		F1	Base model will contain most of the tables from the Onyx schema. <i>Note: Check the Func Spec doc for all the tables that will be included</i>		M1	2.1. Transactional Tables: implemented in the base model as a query subject	F1	T1	Presentation Baseline	F1.M1	TC.01,02,03,04,05,06,07
U2	TBD		F2	Base model can reference one or more data sources		M2	2.1.1. Association Tables: Association tables are modeled using shortcut query subjects	F2			M2	TC.08,09,10,11,12,13,14,15,16,17,18,19,20
U3	TBD		F3	Namespace folders will be used in the base model to separate		M3	2.2. Domain Tables: a domain table only has the	F3				

This traceability matrix is tracking Functional Specifications and Design Specifications with the Test Plan and Test Cases



What Is An End To End Scenario?

Source (Book/Website)	URL	Definition
Website – ACUTEST Software Testing Services	http://www.acutest.co.uk/acutest/end-to-end-testing	End-to-end testing is <u>the process of testing transactions or business level products as they pass right through the computer systems.</u> Thus this generally ensures that all aspects of the business are supported by the systems under test. This <u>ensures that the overall process flows as expected,</u> that is that system components integrate together correctly and that the right information is passed between them.
Website – Systematic Methods Research Ltd.	http://www.smr.co.uk/guides/End2EndTesting.html	The objective of E2E is to <u>look at the state of the system as well as its behavior.</u> A realization needs to be made that the user interface is not what we are primarily interested in as it simply provides a representation of the underlying data and displays some of its behavior. In E2E we should be more <u>interested in the underlying data and scenarios across all subsystems.</u>
NASA Article PDF		The End-to-End test will be run at each site using <u>Day-in-the-Life Scenarios.</u> The scenarios will be used as the basis for validating systems operations. Additionally, the purpose will be to prove that the system can work around problems, recover from failures, and prove that the system is viable from an operations perspective.
Website – IASA International Association of Software Architects	http://www.iasahome.org/c/portal/layout?p_l_id=PU B.1.353	End-To-End Testing refers to User Level testing of Component based systems. It <u>verifies that the integrated component functions correctly as part of the overall system,</u> and the existing Components of the System work as before. End-To-End Testing approaches the system from a Functional Side and the Architecture side, thus combining Black-Box and White-Box Techniques. The Steps required to



		<p>perform End-To-End testing include Test Design, Test Execution and Test Results Analysis.</p>
<p>Website - ApTest - Software Testing Specialists</p>	<p>http://www.aptest.com/global.html</p>	<p>End-to-End testing: Testing a complete application environment in a <u>situation that mimics real-world use, such as interacting with a database, using network communications, or interacting with other hardware, applications, or systems if appropriate.</u></p>
<p>Website – Onyx</p>	<p>http://www.onyx.com/</p>	<ul style="list-style-type: none"> • End-To-End (E2E) Testing is a QA activity whose primary goal is to <u>verify interaction points between multiple features and/or systems using real-world user processes and data workflow.</u> • By <u>simulating these real-world scenarios</u>, E2E Tests increase the quality of the applications in the areas most critical to our customers. • A secondary goal of E2E Testing is to find important usability flaws that affect the ability of the application to deliver its intended value. • By exercising the software in a manner that is similar to how customers will use the software, macro-level usability issues will surface and can be evaluated.
<p>End To End Example:</p> <ul style="list-style-type: none"> • Image 1, displays an example of an End To End from a CRM application (Note: Due to space limitations all the End To End was not included in this example) 		

1. OEP Login Page: Designer Logs into OEP with non global Profile of 'Data Entry Team Profile' selected from 'Profiles' dropdown
2. Load the 'Application' Page
3. Click the 'Design Mode' button on the main toolbar
4. Load Navigation Design Page
 - a. Remove the following Buttons from the Header Area:
 - i. Home
 - ii. Task Manager
 - iii. List Manager
 - iv. Messenger
 - b. Remove the following Links from the Navigation Area
 - i. Sales Tools
 - ii. Service Tools
 - iii. Internet Tools
 - iv. Manage
 - c. Remove the following SubLinks from the 'Customer' node in the Navigations Area
 - i. Literature
 - ii. Surveys
 - iii. Campaigns
 - iv. Attachments
 - v. Work Tickets
 - d. Remove the following SubLinks from the 'Add New...' node in the Navigation Area
 - i. Work Ticket
 - ii. Email
 - iii. Email using a Template
5. Click the 'Compile Application' button

- Image 2, displays another example of an End To End but this time using screenshots of the application:

ASSURANT

ASSURANT Health

THOMAS BARK

Add Proposal

Make changes to the information below and press Open Proposal

Proposal Name: 01/18/2007 - 9:55:45 PM

Zip: _____

Type: TIC SG Medical

Effective Date: 04/01/2007

Agent: Task, PajTask, agent, new, [removed], jesus

Assign To: [removed]

Open Proposal

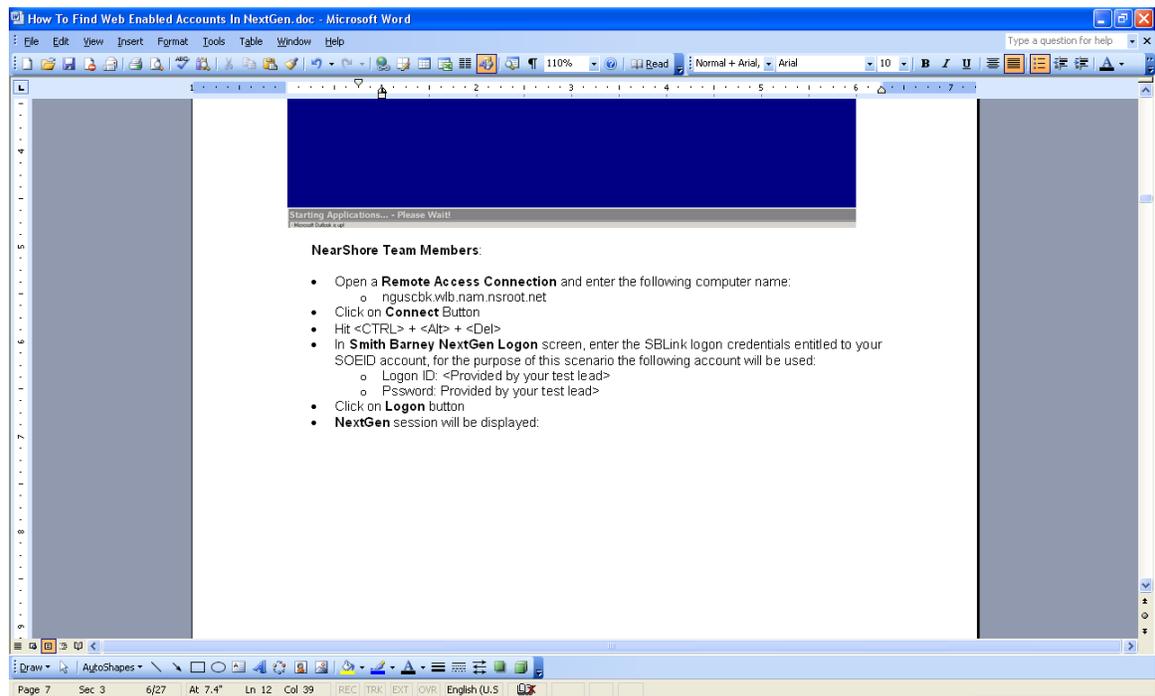
- Fill out the Add Proposal Page:
 - o **Proposal Name:** <Enter a meaningful name>
 - o **Type:** Select TIC SG Medical
 - o **Zip:** Enter OK Zip code , e.g. 73716
 - o **Effective Date:** select any date less than 10/1/07 from the drop down list
 - o **Agent:** Select any Agent from Assign To list

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What Is A Test Procedure?

Source (Book/Website)	URL	Definition
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html	A document <u>providing detailed instructions for the execution of one or more test cases.</u>
Website - Astra Infotech – The software Engineering Company	http://www.astrainfotech.com/software-testing-glossary.html#t	The procedural aspect of a given test, usually a <u>set of detailed instructions for the setup and step-by-step execution of one or more given test cases.</u> The test procedure is captured in both test scenarios and test scripts.
Website – University of Oulu, electrical and information engineering	http://www.ee.oulu.fi/research/ouspg/sage/glossary/	(1) <u>Detailed instructions for the set-up, execution, and evaluation of results for a given test case.</u> (2) A document containing a set of associated instructions as in (1). (3) Documentation specifying a sequence of actions for the execution of a test.

Test Procedure Example:



How To Find Web Enabled Accounts In NextGen.doc - Microsoft Word

Starting Applications... Please Wait

NearShore Team Members:

- Open a **Remote Access Connection** and enter the following computer name:
 - nguscbk.wlb.nam.nsroot.net
- Click on **Connect** Button
- Hit <CTRL> + <Alt> +
- In **Smith Barney NextGen Logon** screen, enter the SBLink logon credentials entitled to your SOEID account, for the purpose of this scenario the following account will be used:
 - Logon ID: <Provided by your test lead>
 - Pssword: Provided by your test lead>
- Click on **Logon** button
- **NextGen** session will be displayed:

Page 7 Sec 3 6/27 At 7.4" Ln 12 Col 39 REC TRK EXT OVR English (U.S.)

What Is A Check List?

Source (Book/Website)	URL	Definition
Book - Effective Methods For Software Testing, Second Edition by William E. Perry	NA	A series of <u>proving questions</u> designed for use in reviewing a <u>predetermined area or function.</u>
Website – Quality Assurance Institute (QAI) Certified Software Tester (CSTE) Study Guide	http://www.softwarecertifications.org	This is a simple list of <u>questions that enables people to follow or check processes.</u>
Website - Wikipedia The Free Encyclopedia	http://en.wikipedia.org/wiki/Checklist	It helps to ensure consistency and <u>completeness in carrying out a task.</u> A basic example is the "to do list." A more advanced checklist would be a schedule, which lays out tasks to be done according to time of day or other factors.
Website – Wet Tropics Management Authority – Rainforest Explorer	http://www.wettropics.gov.au/st/rainforest_explorer/Resources/Documents/8to9/HowTo/Checklist.pdf	Checklists are an everyday item that many people use to ensure they're on track with Something. <u>Your checklist should be written as a series of questions.</u>

Checklist Example:

The screenshot shows an Excel spreadsheet titled "Assurant_RiskAnalysisChecklist.xls". The spreadsheet is used for risk analysis and contains the following data:

Risk Analysis					
INSTRUCTIONS FOR ENTERING DATA					
Number	Item	Response	Comments		
17		YES	NO	N/A	
18	1				
19	2				
20	3				
21	4				
22	5				

A red circle highlights the first two items (rows 18 and 19), and a red arrow points to the 'Response' column with the text "Series of questions".



What Is A Test Strategy?

Source (Book/Website)	URL	Definition
Book - Effective Methods For Software Testing, Second Edition by William E. Perry	NA	The objective of testing is to <u>reduce the risks</u> inherent in computer systems, the <u>strategy must address the risks</u> and present a process that can reduce those risks. The systems concerns or risks then establish the objectives for the test process.
Website – AllInterview.Com, Share your Knowledge	http://www.allinterview.com/s/howanswers/16986.html	Test strategy indicates <u>levels of testing to be applied</u> , techniques, method and tools to be used.
Website - Astra Infotech – The software Engineering Company	http://www.astrainfotech.com/software-testing-glossary.html#	Defines the strategic plan for <u>how the test effort will be conducted</u> against one or more aspects of the target system.
Website – University of Oulu, electrical and information engineering	http://www.ee.oulu.fi/research/ouspg/sage/glossary/	Any method for generating tests based on formally or informally defined criteria of test completeness (also <u>test technique</u>).
Website – Software Testing Help	http://www.softwaretestinghelp.com/types-of-risks-in-software-projects/	To save time and money you should be able to <u>prioritize your testing work</u> . How will you prioritize testing work? For this you should be able to <u>judge more important and less important testing work</u> . How will you decide which work is more or less important? Here comes need of <u>risk-based testing</u> .
Website - Stickyminds	http://www.stickyminds.com/site-wide.asp?Function=edetail&ObjectType=ART&ObjectId=2056	Test strategy <u>is based on risk assessment</u> . The <u>test strategy indicates how testing is to be carried out</u> . In order to make the best possible use of resources and time, it is decided on which parts and aspects of the system the emphasis should fall. The test strategy forms an important basis for a structured approach to testing and makes a major contribution to a manageable test process.
Test Strategy Example:		

Microsoft Excel - FIDO_Test Strategy.xls

concerns (expressed as a question) in the appropriate test phase column. Define the test strategy, you need to develop a test strategy for each concern.

	TEST FACTORS	FIDO_SYSTEM DEVELOPMENT PHASES/CONCERNS					Concerns Identified
	(Ranked High to Low)	Vendor Relationship Startup	Inception	Elaboration	Construction	Transition	
	Correctness	NA	NA	NA	<p>Concern 1: Has the length of max and min fields in FIDO been identified?</p> <p>Concern 2: Does FIDO handle special characters in its fields?</p> <p>Concern 3: Has the Calculations in FIDO been white box tested?</p> <p>Concern 4: Does FIDO handle invalid transactions?</p> <p>Test Strategy: Control Testing, and Error handling</p>		

System Development Phases / Identify Business Risks / Place Risks in Matrix



What Is A Test Plan?

Source (Book/Website)	URL	Definition
Website – Software QA/Test Resource Center	http://www.softwareqatest.com/qatfaq2.html#FAQ2_6b	A software project test plan is a <u>document that describes the objectives, scope, approach, and focus of a software testing effort.</u>
Website - Astra Infotech – The software Engineering Company	http://www.astrainfotech.com/software-testing-glossary.html#t	A document <u>describing the scope, approach, resources, and schedule of intended testing activities.</u> It identifies test items, the features to be tested, the testing tasks, who will do each task, and any risks requiring contingency planning.
Website – University of Oulu, electrical and information engineering	http://www.ee.oulu.fi/research/ouspg/sage/glossary/	<p>A document <u>describing the scope, approach, resources, and schedule of intended test activities.</u> It identifies test items, the features to be tested, the testing tasks, who will do each task, and any risks requiring contingency planning.</p> <p>A record of the test planning process detailing the degree of tester independence, the test environment, the test case design techniques and test measurement techniques to be used, and the rationale for their choice.</p>
Website - ApTest - Software Testing Specialists	http://www.aptest.com/glossary.html#T	A <u>document describing the scope, approach, resources, and schedule of intended testing activities.</u> It identifies test items, the features to be tested, the testing tasks, who will do each task, and any risks requiring contingency planning.
Book - Effective Methods For Software Testing, Second Edition by William E. Perry	NA	The <u>test plan describes how testing will be accomplished.</u> Its creation is essential to <u>effective testing,</u> and should take about one-third of the total

test effort. If the plan is developed carefully, test execution, analysis, and reporting will flow smoothly.

Consider the test plan an evolving document. As the development effort changes in scope, the test plan must change accordingly. It is important to keep the test plan current and to follow it, for it is the execution of the test plan that management must rely on to assure that testing is effective.

Test Plan Example:

The screenshot shows a Microsoft Word window with the following Table of Contents:

Table of Contents	
TEST PLAN INTRODUCTION	5
1 DESCRIPTION OF WINDOWS VISTA PROJECT	6
2 TESTING SCOPE.....	9
2.1 WHAT WILL BE COVERED IN WINDOWS VISTA PROJECT TESTING	9
2.2 WHAT WILL NOT BE COVERED IN WINDOWS VISTA PROJECT TESTING	9
3 TEST OBJECTIVES	9
4 ASSUMPTIONS	11
4.1 TEST PRE-REQUISITES.....	11
4.2 ENTRANCE CRITERIA.....	11
4.3 EXIT CRITERIA.....	12
5 RISK ANALYSIS.....	13
6 TEST DESIGN	14
6.1 STAGES OF TESTING	15
6.2 TYPES OF TEST TO BE CONDUCTED.....	15
6.3 CHECKLIST	17
7 ROLES AND RESPONSIBILITIES	17
8 TEST SCHEDULE AND RESOURCES	18
8.1 MAJOR TEST ACTIVITIES	18
8.2 SEQUENCE OF TEST.....	19
8.3 DEPENDENCE ON OTHER PROJECT ACTIVITIES	23
8.4 ESTIMATES FOR EACH ACTIVITY.....	23
8.5 PEOPLE, TOOLS AND FACILITIES.....	24
9 TEST DATA MANAGEMENT	28