Smoke Review of Test Data

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Abstract- This paper explains the importance of Smoke review on test data. It helps the reviewer to health check the test data before the tester to use test data in application testing. Smoke review of test data determines the stability of test data and it provides criteria for accepting the test data for detailed testing. So reviewer will give the go or not go to testing on the bases of Smoke review of Test data.

Index Terms- Smoke Review, Test data, Software testing

1 Introduction

The purpose of this research paper is to give details of smoke review of test data for the industry practices.

Test data:
Test Data is specifically identified as the input values, which we are going to supply to the system or application while testing.
It is a set of data created for testing for new or revised applications. Test data may be prepared manually or a testing tool with the help of a tester. Test data should be recorded so that it can be reused later otherwise it will lose its value for future use.

Test data must contain a sample of every category of valid data as well as many invalid conditions as possible. The data needs to be tested in boundaries, at boundaries and outside the boundaries.

Smoke Review:
In software industry, smoke review is a shallow and wide approach where all areas of the application without getting into too deep, is reviewed.

Smoke review basically deals with major functionalities of test data. This review tells whether the test data is able to use in test or not. Smoke Review is done manually.

2 Meaning of Smoke Review of Test Data

When we talk about Smoke Review of Test Data that means we are talking about the data which we will be used as an Input/output while testing the application.

Smoke review of test data is conducted to ensure that the most crucial functions of a program covered within the test data, but not bothering with finer details. Smoke review of test data is normal health check up to a test data before using test data in application testing or in test cases.

3 SCOPE OF SMOKE TESTING

We can define the scope of smoke review of test data with respect to when, where and how smoke review is performed as follows:

When:
Smoke review of test data is performed immediately after the test data prepared or before tester start testing. It is always perform when new test data prepared for the new or enhanced feature in build.

Where:
Smoke review of test data is generally done by the technical lead or senior tester. Reviewer checks that test data is covered core functionality of build or not.

How:
The focus of smoke review of test data is to insuring the quality of test data without going in finer details of the Application modules. This is high level review. We simply review the test data and checking that test data cover the customer required basic functionality or not.

4 Importance of Smoke Review of Test Data

Quality Improvement: Test data is written with the intent to detect the defects or not.
Check Tester Mindset: Check the tester understanding regarding the requirement before starting the testing of application.
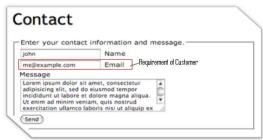**Validity of test data:** Test data coverage is adequate and as per customer requirement.
Help in Smoke testing: Identified test data should be used in smoke testing to check crucial functionality of the application with minimum number of test cases.

5   Real Time Example

Here, **customer requirement** was to validate E-mail ID enter by the user should be valid. As per customer requirement, user should only enter alphabets, digits, underscore, Dash in address field, missing domain name, not use Unicode character and E-mail length should be 100 characters maximum.

As per the Customer requirement, our validation engineer provides the following Test data on E-mail ID. In column, "Test data should be in smoke review" mark as **Yes** should be mandatory in Smoke Review of test data. If this test data is not found then give no go to test data and request the tester to enhance the test data.

S. No.	Test Case	Valid/ Invalid Email address Test data	Test data should be in Smoke review
1	Valid email	email@domain.com	Yes
2	Email contains dot in the address field	firstname.lastname@domain.com	No
3	Email contains dot with sub domain	email@subdomain.domain.com	No
4	Plus sign is considered valid character	firstname+lastname@domain.com	No
5	Domain is valid IP address	email@123.123.123.123	No
6	Square bracket around IP address is considered valid	email@[123.123.123.123]	No
7	Quotes around email is considered valid	"email"@domain.com	No
8	Digits in address are valid	1234567890@domain.com	Yes
9	Dash in domain name is valid	email@domain-one.com	No
10	Underscore in the address field is valid	_____@domain.com	Yes
11	.name is valid Top Level Domain name	email@domain.name	No
12	Dot in Top Level Domain name also considered valid (use co.jp as example here)	email@domain.co.jp	No
13	Dash in address field is valid	firstname-lastname@domain.com	Yes
14	Missing @ sign and domain	Plain address	Yes
15	Garbage	#@%^%#$@#$@#.com	No
16	Missing username	@domain.com	Yes
17	Encoded html within email is invalid	Joe Smith <email@domain.com>	No
18	Missing @	email.domain.com	No
19	Two @ sign	email@domain@domain.com	No
20	Leading dot in address is not allowed	.email@domain.com	No
21	Trailing dot in address is not allowed	email.@domain.com	No
22	Multiple dots	email..email@domain.com	No
23	Unicode char as address	あいうえお@domain.com	Yes
24	Text followed email is not allowed	email@domain.com (Joe Smith)	No
25	Missing top level domain (.com/.net/.org/etc)	email@domain	Yes
26	Leading dash in front of domain is invalid	email@-domain.com	No

27	.web is not a valid top level domain	email@domain.web	No
28	Invalid IP format	email@111.222.333.44444	No
29	Maximum limit of e-mail id	Safdjgsajgdjagsjdgjasgdjgsajgjgasdgj23424234hkjhdsfkjhdfkj234kjhkjhjkhk342342dfgfdgfg34dg@domain.com	Yes
30	More than Maximum limit of e-mail id	Safdjgsajgdjagsjdgjasgdjgsajgjgasdgj23424234hkjhdsfkjhdfkj234kjhkjhjkhk342342dfgfdgfg34dg345@domain.com	No
31	No data	No data	Yes
32	Use of space bar	Use of space bar	No

6   References

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