Website Testing Guide: How to Test a Website?

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What is website testing?

Website testing is a special type of software testing that caters to finding bugs in websites exclusively. Though the basic concept of testing is quite the same, there are few differences in the way testing ensues.



Testing your website is very important and here are a few reasons to convince you about that:

- Websites can face several issues like broken links, search functions not operational, images not loading, forms not submitting properly, etc. To assure your website does not face any such issue, it is vital to conduct website testing on it.
- There are various browsers available in the market; your audiences might be using different ones. So it is very important to test that your website functions well on all the commonly used browsers.
- According to <u>Statista</u>, the number of mobile phone users is said to reach 4.68 billion by 2019. With such a large population using mobile devices, it is important to test that your website is well tuned to various mobile devices.
- Testing for web standard compliance is also very important as these sites are more user-friendly, more accessible and have more chances to rank higher on Google.
- Website testing helps in judging the accessibility of your website.
- It helps to test and monitor the performance of your website.
- Website testing can also help you improve your conversion rate through A/B or multivariate testing.
- SEO testing is another major part of website testing that helps your website rank higher on various search engines.
- Testing your website for proper Google Analytics installation can help you measure your guest's figures properly.
- Content testing of your website is another very important aspect of website testing.
- Security of your website is an important issue that is efficiently dealt with proper website security testing.

Website Testing Checklist

Before you begin with your website testing, be ready with a checklist to not to miss on any part of it.

For Functional Testing

- Check whether usable HTML is used or not.
- Validate different field like dropdowns, text boxes, check boxes, radio options, links,
 Combo box inputs, etc.
- Verify CSS (Cascading Style Sheet)
- Validate that internal links are appropriately linked to anticipated pages of your websites.
- Validate that internal links are appropriately linked to anticipated pages of external websites.
- Ensure the proper functioning of Email links.
- Validate that there are no broken links generated in your website.
- Validate that the web forms are consistent and hold the essential input and output controls. Also, validate that the data is properly captured.

- Validate the database for effective data processing.
- Cookie testing should not be missed for enhanced security of your users.
- Check your website for appropriate error messages
- make sure that the required and optional fields are properly handled.
- Counter-check the security measures for proper storing of sensitive data.

For Performance Testing

Test your website for attributes like Speed, Responsiveness, Stability, Scalability, etc. under various load conditions.

For Web Usability Testing

- Validate that Site Load-time is reasonable.
- Inspect font size and spacing between lines is easily readable by the users.
- Ensure the use of Flash & Add-ons.
- Validate the correct usage of ALT Tags for all images.
- In case of internal link breakage, the proper error message should be displayed.
- Check the correct placement of the website logo.
- Check tagline.
- Validate the contact details.
- Validate the navigation system is easy to understand for the users.
- Make sure that the navigation labels are clear and concise.
- Validate the correct usage of buttons and links for easy navigation.
- Validate that the company logo is linked with the home page. (Not mandatory, but is commonly practiced)
- Check the proper positioning and ease of usage of the search button
- Ensure that the heading is clear and descriptive
- Check the proper use of heading tags like H1, H2, etc.
- Validate that critical content is displayed in average screen resolution on the first.
- Make sure that steady usage of font styles and colours has been done across your website.
- Validate the use of user-friendly and meaningful keywords
- Validate that the title are meaningful and self-explanatory

For Compatibility Testing



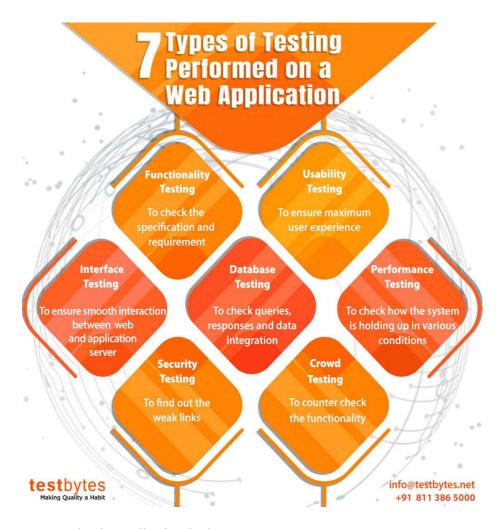
Validate your website with

- Browsers and its versions.
- Operating systems and its versions.
- Hardware configurations.
- Network environments.
- Screen resolutions.

For Web Security Testing

- Validate your website for password cracking.
- Test your website for threat exposure.
- Validate your website for URL management.
- Validate SQL injection.
- Validate your website for Cross Site Scripting (XSS).

Types of Web Testing



Website testing can be broadly divided into various parts:

#1. Functional Testing

Tests the functionality of the website and ensure it works as per the requirement specification.

#2. Browser Compatibility Testing

Your users might be using different browsers and to offer a smooth browsing experience to ensure that you conduct a vivid round of <u>browser compatibility testing</u>. It ensures that your website works fine on various different browsers.

#3. Usability Testing

Your website should be easy to use for the users, it should provide easy navigation, usage and look and feel to the users.

#4. Accessibility Testing

Accessibility testing can be called as a subset of <u>usability testing</u>, where testing is done whether your website can be easy to use by disabled people. It specifically tests if your website is designed in consideration with people with disability.

#5. Performance Testing

Your website has to bear some load on a day to day basis. Considering an average load condition, you should ensure that your website works fine under this load condition. Hence, performance testing of the website is done to test its stability and its responsiveness under a particular load.

#6. Stress and Load Testing

Your website can at times be subjected to undue load conditions and it should be fairly designed to work properly under such heavy load conditions. Hence it is important to conduct stress and load testing to test website stability under heavy load conditions.

#7. Site Monitoring

Regular down times can lessen the trust of your users on your website. Hence it is important to automatically observe your website to test for downtime.

#8. Conversion Rate Testing

Dealing with the testing of how to convert more visitors into customers, this has become the favorite website testing of the present day world.

#9. Security Testing

Websites are prone to hacking; hence testing their security is at most important.

#10. Spelling and Grammar Checking

Spelling and grammar mistakes can have a bad impression for your brand, so thoroughly check your content for spelling and grammar errors.

Techniques to reduce your website testing efforts

Some of the techniques that you can imply to reduce your testing efforts are:

Automated testing

With automated testing, you can save a lot of time manually executing every test case and can further spend that time innovating better ways to enhance your testing efforts.

Mobile emulators and simulators

Since there are huge chances of people browsing your website through mobile devices, you need to test your website in various mobile devices and operating systems.

This can be a very tiring task to test your website on hundreds of available mobile devices, operating systems, and combustion of both. And hence an easy way out is to use mobile emulators and simulators.

Live web testing

Live web testing allows you to debug a website on various browsers and operating system combinations instantly available in the <u>Cloud</u>.

Website Testing Tips

Here are some website testing tips to get better results:

1) Integrate Exploratory Testing with Conventional Testing Techniques

Exploratory testing has a few shortcomings. You can simply overcome these by assimilating exploratory testing with other testing methods. It helps in producing more reliable test results, and significantly reducing the time for testing.

2) Don't miss on Sanity testing - it's important!

Sanity testing can immensely help you in validating the functions and features of your website in reduced time.

3) Validate All Third-Party Applications, Plug-ins, and Extensions

Test if the extensions and plug-ins are completely compatible with the web application and also detect the defects in them. Remember they can adversely affect the performance of your website.

4) Automate the chatbox testing

Chatbots testing has to be done in different testing environments and also the coordination among the bots needs to be rigorously tested. This can be a painstaking task and hence it is better to automate chatbox testing efforts.

5) Keep URL String Unalterable

Hackers have an ability to alter URL string to hack sensitive information or to redirect your site to some malicious link. Try to keep your URL string unalterable to avoid any chances of malicious activities.

6) Test with a hacker's IQ

Try testing your website with the intent of a hacker and try finding to hack a website with minimal resistance for best results.

7) Be a Part of Development Team

With the increasing adaptation of Agile methodology and DevOps learn to work in coordination with developers, business analysts, and customer.

Website Testing Tools

Here are a few website testing tools that can decrease your testing efforts considerably.

- 1. SoapUl
- 2. TestingWhiz
- 3. SOAPSonar
- 4. SOAtest
- 5. TestMaker
- 6. Postman
- 7. vRest
- 8. HttpMaster
- 9. Runscope
- 10. Rapise
- 11. Weblnject
- 12. Storm

Conclusion



Websites are different from desktop software, so treat them differently and follow website <u>testing methodology</u> to get the best testing results. They are seamlessly integrating and interacting with other software around the globe. So testing is important as lot is at stake.