Web Designing Concepts

Digital Notes By

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Quality Assurance and Testing

To ensure quality of the web site the site is tested, fixed, retested, and fully documented before it is delivered to the client.

What is Unique about Testing Web Sites?

a.   Quality as philosophy
b.   Quality assurance begins at the beginning

Role of Testing in Quality Assurance

1. Get the scope document or project plan from the project manager.
2. Make test plan accordingly and decide on metrics to measure the success of a project, for both technical and user-based requirements.
3. Set up an appropriate testing or targeted environment. Make the testing efforts before a project goes into production.
4. Manage reporting and tracking problems.
5. At the end of project, provide a QA summary to the client and rest of the team.

Strategy of Testing?

1. Black box Testing

(It is requirement based testing)

2. White box testing

(It is for website and internal structure)

Jobs of Tester

1. Tester do not know the internal complexity of the program.
2. Testing is based on specification.
3. Tester execute every possible scenario.
4. All the test incorporate valid and invalid inputs.

Common Risks Associated with Testing

1. Slipped Schedule
2. Bug-fixing resources
3. Metrics
4. Outdated or irrelevant specification
5. Untrained testers
6. Changing or unclear technologies graphics
7. Component module application and system integration

Website Evaluation & Hosting

1. It encapsulate the migration of a website overtime.
2. Version control and changes of both physical and virtual environment have an impact on testing.
3. The site evaluation document tracks how and when the site migrate from development to staging for further going live.

Test Plan

✓ Test plan is a service delivery agreement which include the following aspects:

- Introduction
- Scope
- Bug Categories & severity
- Configuration Management
- Risk & assumptions
- Testing schedule & cycle
- Testing resources
- Test cases
- Bug report
- Quality assurance summary

Test Types

1. Functional Tests
2. Stress Tests
3. Load Tests
4. Regression Tests
5. Boundary Analysis

Web Testing Tools

1. Bug-tracking system
2. Site-sweeper
3. System monitor for memory testing
4. Soft test

Technological Advances and the Impact on Web Teams

Emerging Technologies and Changing Needs

- ✓ Web needs latest information, services & audiences.
- ✓ Few of the emerging technologies that are used for handling the changing needs are as follows:

  1. The web as Interactive Television
  2. The web as Information Store
  3. The web and E-Commerce
  4. Portable web: Convenience and Access
  5. Other Tools

Preparing for Change

- ✓ Technological has many effects on web team in technical aspects.
- ✓ New tools will be created and new skills will be required.
- ✓ Web team will began to cooperate with specialized member in addition to the core team.
- ✓ Communication gap between team members with new members must be handled.
- ✓ Development process must be clearly articulated on the project website.
- ✓ Finding the right person for a job is always a challenge for the project manager.
- ✓ Partnership with developers are critical to deliver a kind of web application of the future.

Changes in the Process

(i) When developing static Web sites:

- ✓ Process is fairly straight forward
- ✓ Can design a navigation system and individual pages
- ✓ Pages are finite and easy to test and troubleshoot
- ✓ Programming these pages in HTML is very straight forward
- ✓ Even when scripting is used, it process data or produce effects remain the same after you create them.

(ii) With data-driven web sites :

- ✓ Pages are created dynamic based on the user's input
- ✓ All the pages are not created
- ✓ Only the templates is developed
- ✓ Navigation systems which are scalable to accommodate many pages is created based on user's input
- ✓ Design, production and testing cycles will be different from the static pages
- ✓ Designers and engineers might have to collaborate to create iterations of templates depending on the kind of data that populates the templates
- ✓ The logic used to create database interface is same as used to create Web interfaces.

Process for the Change

(A) Production Considerations

Developer will have to change their graphics using style sheets in measurement other than pixel & new formats for creating graphics like vectors that can be resized dynamically.

(B) Security on the Web

It is important to e-commerce & to business that are selling product service online by providing interface than the user to walk through payment level in the design process.

(C) Privacy

Consumers want to know what you are going to do with information you have obtained from them. So it's important that you have privacy statement that is easy to manage on the website.

The Evolving Team

This industry is moving so fast. There are lot of opportunities out there. To get the best result from your team you must provide good working experiences and opportunities for the growth and evolution of your team.

Where Do You Go from Here?

a. Stay Up to Date
b. Attend a Conference
c. Go to User Group Meetings
d. Stay on Top of New Technologies

1. The Care and Grooming of Your Team

Taking care of your team takes a lot of work and some investment in training and education. Team members must be kept challenged and excited about their work. To do this, you need to provide opportunities for your team to grow.

2. Changing Skill sets

- HTML Developers Become Extinct
- Programmers Face Increasing Demands
- More Creative and Technical Staff Members Needed

3. Detecting Weakness in a Team

Understand what their days are like and you'll see how productive they are – you can then reflect some change to make them even more productive.

4. Training

In-house training and mentoring is also a way to share knowledge and improve the team's performance.

5. User Groups (UseNet)

User groups are a great way to learn and to stay connected in the web community.

6. Classes

Technology education centers, community college and universities offering classes for skill enhancement.

8. Books

There are so many books that are complete guide to learn any new technology or language.

References

For Content

Jessica Burdman, "Collaborative Web Development", Pearson Education Asia.

THANK YOU