



Assessment of Website Quality based on Appearance

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ABSTRACT

Information is being presented these days in terms of text, data, images, video, and audio, graphics, and animations on websites. Information disseminated through web sites that are either dynamic or static. Quality of the WEB site is, however, a big question. Users are quite concerned about the quality of the WEB site. Too many operations, if needed, are undertaken for want of quality visualization of the content such as images, then the users lose interest in looking at that kind of content. WEB sites are presenting the content by integrating text and data with multimedia objects. Quality visualization in terms of the look and feel of the websites would be the real issue. The number of operations that the user is expected to carry should be minimum.

Quality presentation of look and feel is most important for making available web sites to customer satisfaction. Assessment of quality of look and feel is needed to project the extent to which the users will be satisfied with a web site that hosts different types of objects.

In this paper, a comprehensive method that computes the quality of look and feels considering all types of objects presented to the users presented. The method applied on live websites and all the weak areas of the website where quality improvement is required explored and presented.

Key words: Website, Assessment, Quality, Resource

1. INTRODUCTION

Internet and, subsequently, the Web technologies have led to heavy information exchange among the users' world over. People have access to information instantly at the least cost. Users are accessing the content presented on the web in different forms, which include images, text, graphics, video, and audio based objects. The audio and video objects are rendered in streaming, making it very difficult to judge the quality of these objects. Websites are being used increasingly for conducting e-commerce, making it more important that the websites are of high quality, especially concerning security and privacy. Websites are being used immensely for doing marketing of products. The way people go shopping changed drastically. Users' needs confidence and guarantee the correctness of the content before they start using it immensely for different purposes.

The information requirements of the users are changing rapidly. The expectations of the users for quality content are also ever-increasing. Users' satisfaction is directly proportional to the quality of the website. The importance of any website ceases if the information posted on the website is erroneous or has no relevance.

Many factors such as content, usability, completeness, structure, navigation, privacy, maintainability, security, look and feel, appearance, usability, functionality, flexibility, etc., have to be considered for assessing the quality of a web site. Every factor has to be individually modeled to determine its quality. Another model required for combining the quality of each factor and finally arrives at the total quality of the entire website. The quality of a factor can be computed using a subjective, objective, or quantitative approach. Subjective and objective methods provide inconsistent results and, therefore, not dependable. Few tools are in existence, and the same used for computing the quality. The tools take a holistic approach, not giving much importance to every factor. The quality of assessment is done either following a subjective or objective approach. The websites are being developed either to render static or dynamic content. Many websites developed considering a variety of content that includes videos, text, tables, animations, graphics, input/output forms leading to a complex system. Quality assessment of web sites is becoming complex due to the use of increased complexity of the websites.

Many objective or subjective methods used for computing the quality of the websites are in place. Both approaches are erroneous due to the existence of prejudice in subjective assessment and the existence of incompleteness in the objective assessment. The method proposed in the literature is biased that they are dependent on individual preferences. Some other methods based on statistical measurements do not provide direct quantitative measurement of quality, and also statistical measurements are limited to measuring the quality concerning the parameters like acceptance time, downtime, etc.

The quality requirements of a website differ from the type of user to user. Programmers who develop the website consider factors such as functionality, security, and maintainability as the most important factors that reflect the quality of the website. Regular users look at the quality of websites in terms of accuracy, ease of access, minimum navigation, more

personalization, etc. Analytics look at the quality of web site in terms of the quality of data accessed and stored.

A proper website must support user-specific requirements. Assessment of the quality of a website involves consideration for many factors. Most appropriate elements must be selected that match the needs of the user. However, the requirements of the users differ significantly. Therefore choosing the most appropriate set of factors is complicated. Developing web sites that ensure the quality of every element is expensive and at times, may lead to multiple web sites. It is also challenging to find a suitable model that allows the computation of the quality of every factor individually and interleaves – some factors interrelated. The condition of each element must be satisfied, and the quality of inter-dependence between the factors must also be satisfied.

Quality of some factors can be computed using subjective methods only, and some elements need to evaluate using objective methods while the majority of the factors calculated quantitatively. A composite model thus is required, which caters to computing the quality of a factor using its related suitable method.

In this paper, the quality assessment of the factor “Look and Feel” through a quantitative method presented. No technique, as such, existed in the literature that computes the quality of the element “Look and feel.” The sub-factors that constitute the factor “Look and feel” and the attributes of those sub-factors presented in the paper.

2. LITERATURE SURVEY

An eight-item measure of web quality is generated by Jeff Sauro *et al.*, [1] after organizing a survey conducted covering 100 web sites and 4000 users who use those web sites. They have developed a questioner contain questions that relate to four quality factors that include trust, usability, loyalty, and appearance. Their effort did not reveal any tangible quality assessment as the responses are either subjective or based on objective-based answering.

A user perspective based technique is used by Alireza Habibi *et al.*, [2] for developing a computational method that is reliable and consistent. The determined four factors for computing quality of the website that includes content, appearance, adequacy, which were found later as inadequate. They went on to define the element “Appearance” as the measure of visual attractiveness of a website that includes colors, fonts, and many multimedia based objects.

Maria Shusanti Febrianti *et al.*, [3] have conducted in-depth interactions on dimension stacking and 14-grain questions. “Webqual 3.0” was designed by observing in 3 areas, one of which is the usability of human-computer interaction. Usability is a quality related to site design, for example, the appearance, the more natural way of user navigation, and visualization of the user.

Quality of a website defined by Mohammed Alshehri *et al.*, [4] as the positive evaluation of the features of the website by the users, and that ensures the fulfillment of the user requirements and also that it reflects the overall excellence of the website. The factors that include appearance, web content, and technical adequacy identified as the most critical factors which are proved to be in-adequate assessment.

A quality scale designed by Bernd F. Reitsamer *et al.*, [5] used for computing the quality of the website considering four factors. He has used the scale to calculate the quality of their University site. He has not considered the functionality related to service interaction, support for transactions, transaction quality, safety, and has only found the quality of content, and appearance which are not adequate factors for computing the quality of the websites.

The customer's support for the websites and their behavior loyalty is tested by Sanjit Kumar Roy *et al.*, [6] using an empirical test that is built to test a composite E-commerce model. In the composite model, he has considered six factors for computing the quality of online retail shops, which include updated news, appearance, information, navigation, organization, and interactivity with the users. The authors have considered look, feel, and overall appearance of the website into account.

A large study is conducted by Brendan Spillane *et al.*, [7] to determine the impact of visual appearance on the perception of the users and found that both aspects positively correlated. However, the study is limited to microscopic visualization.

A study of the quality of the website related to apparel retailers is conducted by Romana Garma *et al.*, [8] through the use of WebQual instruments. Six factors considered include fitness of information to a given task, appearance innovativeness, trust, emotional appeal, type of transactions supported, and response time. They have studied whether web appearance is visually appealing and pleasing in addition to studying the ease of using the website.

A high-quality educational website is developed by Wing-Shui Ng *et al.*, [9], keeping in view the Pre-service teachers. He considered color, fonts, graphics, multimedia elements, and topography as the most critical factors that must be supported such that the website attracts many pre-service teachers. However, no correlation as such established.

The differences between the expectation of the users (considering five different factors) and perceptions of the users used for developing a quality assessment model by Davide Di Fatta *et al.*, [10]. Appearance is one of those five factors about which the expectation of users is sought and built into a model called SERVQUALmodel. They have concluded that the users will be satisfied if clear details related to equipment, physical facilities, and communicating materials provided on the website.

The context of B2C eCommerce is studied by Euijin Kim *et al.*, [11] and developed a model used for mediating trust of

the customer's purchase intention concerning website quality. He has predicted that web site quality determined in terms of appearance and functionality affects the initial trust of the customers. The initial belief affects the purchase intentions of the customers subsequently.

Rafikul Islam *et al.*, [12] have developed a model to evaluate the usability and extent usefulness of websites. This model considers the following seven factors: screen appearance, content, accessibility, navigation, media use, interactivity, and consistency.

Tamer Adel Saleh Alajrami *et al.*, [13] presented a paper on The impact of the Facebook website quality on a user's perceived attitude, intention, and loyalty among students of UTM. His study found that General Content Quality, Appearance Quality, and Reputation significantly influenced an individual's perspective. Also, both of Appearance Quality and Attitude influenced an individual's intention to use the Facebook website.

Xiuyuan Gao *et al.*, [14] presented a paper on The Influence of Mobile Website Quality on Consumer Satisfaction and Behavior. In the measurement of website design quality, he referred to the web site's navigation, appearance, and a sense of competency.

Dawn G. Gregg- Steven Walczak *et al.*, [15] presented a paper on The relationship between website quality, trust, and price premiums at online auctions. His website quality research focused on traditional businesses, and it is not clear whether the benefits of website quality will have as significant an impact in a domain like online auctions where vendors share a single market space (e.g., eBay) and can only control the appearance and content of a small portion of a web page.

Sandra Andrs Maria Correia Loureiro [16] presented a paper on The Role of Website Quality on PAD, Attitude, and Intentions to Visit and Recommend Island Destination. He measured Internet travel advertising(ad) content design using a group of seven items covering animation effects, position and size, pictures and texts in ads, exposure frequency and length, advertising creativity, ad interactivity, and the whole appearance.

Kholoud Al-Qeisi *et al.*, [17] indicated that the technical, general content and appearance dimensions of a website are most important for users. He implies that improvements to the appearance of a website should enhance the overall evaluation of the site, leading to higher usage intentions. Appearance refers to characteristics such as attractiveness, organization, proper use of fonts, colors, and proper use of multimedia.

Maliha Zaman *et al.*, [18] presented a paper on the Quality of Public Sector Website and its Impact on Citizen Involvement. He defined Appearance as the visual design and the layout of the PSW. He determined that many factors

need consideration for evaluating the appearance, such as resolution and color contrast.

Vassilis S. Moustakis [19] presented Website quality assessment criteria. He determined that Appearance and Multimedia capture aspects that relate to the site's "look and feel" with particular emphasis in state of the art graphics and multimedia artifacts.

Several approaches presented that lead to implementing personalized user interface [20], Enhancing the performance of search engines [21][22], and selection of the user interface dynamically for displaying mined results[23] that all lead to improvement of the quality of the web sites.

An architectural approach proposed by Sastry *et al.*[24] is useful for assessing the quality of a WEB site from a different perspective that includes usability of the WEB sites, quality of content, quality from the standpoint of completeness, [25][26][27].

3. INVESTIGATIONS AND FINDINGS

The effective use of WEB sites is primarily dependent on the look and feel of the WEB and the quality with which the look and feel of the WEB site developed. Youngsters these days want the very high-level look and feel if not they tend to ignore the website even if the content hosted on the WEB is vibrant and valuable.

The look and feel of the WEB site must be in line with the context in which the content displayed. Every WEB page shows the content that has the context. A web site, as such, developed in terms of a set of resource files that has code in it developed using the markup or scripting Languages. The content of the resources data is displayed to the end-user by a WEB browser — the User interface used for showing the results coded within the resource files itself.

The look and feel of the display are dependent on various aspects that include Fonts used; Text displayed, back Ground colors, foreground colors, representation of different types of menus systems and the display of multi-media objects that include Images, Videos, and Audio files and different kinds of animations included into the display outputs. The type of look and feel of various objects included in the display is dependent on the context in which the display made. The contexts used for developing a web site can be re-identified, and the standard look and feel profile used can be attached to the contexts.

In the student's management system, the typical contexts used include Registration, Fee Payment, Examinations, Academics, research, events, etc. The look and feel for each of the contexts in terms include different kinds of objects. The quality of each display is much dependent on the type of objects used and the characteristics used for making those objects. One can map the context, different objects included in the context, and characteristic values of the objects.

Building Expert system

An expert system can be built to derive Characteristic values of either characteristics or sub-characteristics of different types of objects that reflect the look and feel of the WEB sites. An intelligent system built for acquiring the expert system as the WEB site is on use by different users over some time. Alternatively, experts in the filed can define characteristic values.

Table 1 shows the mapping of the context to different objects and the characteristic values of those objects considering a student management system related web site as defined by the experts. The particular values can be updated as the experts gain the experience.

The quality of a WEB page is expected to be 100% if the above mentioned characteristic values are used to build the display having found the context around which the WEB sites built.

Finding the context of a WEB page:-

The most crucial issue is to find the context of every WEB page of a WEB site. Finding context is the most complicated issue. The context of every page can be manually defined and or intelligently fund based on the file name or the content enclosed into the markup code. One way to find the context is to find the repeated snippets, and the most commonly used snippet used as the context. A snippet table is used to generate the context. A context derived after assigning a minimum threshold value to each snippet. Table 2 shows the Snippets considered as contexts. From Table 2 It can be found that restorations, Academics, Research, events, and fee payment found in contexts. The context is the most considerable snippet value selected as a context.

Classifying the resource files as per contexts

There can be several resource files with the same context. A context recognized by grouping the resource files. The resource files grouped as the context. Table 3 shows the Groping of the resource files based on the context.

Processing the Resource files

Processing the resource files is the next step for determining the characteristic values for each of the Objects contained in the resource files and then computing the quality of the Objects concerning a context.

Algorithm

```

For each context
(
    For each of the resource file in the context
        (
            For each type of the object
                (

```

```

                    Find the objects
                    For each object find the characteristic value
                    from tags and attributes
                    Compare the characteristic values fetched
                    standard expert system-defined values
                    Find the variations
                    Find the quality of the object by subtracting the
                    deviation from 100% value
                    The overall quality assessed by multiplying the
                    object quality with the overall quality
                )
            )
        )
    )

```

Computing the variations and quality of the Objects:-

The objects contained in web pages belong to the same context found. For example, let the context be registration. Three html files are related to the context “registration.” The objects contained in these web pages can be as under, as shown in Table 4.

6. DISCUSSION AND EXPERIMENTAL RESULTS

The algorithm applied to standard WEB sites and the results obtained for a particular context shown in Table 5. For the context “Registrations,” three resource files Traced, which include the html files “Registrations,” “priorities,” and “subsections.” Experimental results related to the “registration” resource file shown in Table 5. The quality of the WEB site just considering the registration is either the product of the quality computations is the minimum of the quality values obtained for different characteristics, which in the example case is 0.33.

7. CONCLUSION

Websites are developed using a variety of objects, which include text, colors, images, videos, and graphics. The look and feel of the websites must be great; if not, the users will not like to surf the websites, and the importance of the web sites will be last in spite of rendering high-quality content. Assessing the quality of Websites is quite complicated as many intricate issues are involved, especially involving too many aspects that include colors, size, resolutions, inverse, and reverse videos, etc.

The Look and feel of web site vary from user to user. Many websites are moving towards personalizing the web sites so that the look and feel of the web sites presented as per the user’s desire and liking. However, users need to know the way to improve the look and feel as there are many options and variations. The users need to see the quality of the look and feel and also need to know the areas where quality is to be improved. Subjective and objective methods do not reflect the quality of the websites as it is difficult to make human judgments when variety and vast options exist.

In this paper, an interactive quantitative assessment of the quality of the websites presented, which can be used by the

user for quality assessment of different aspects and then interactively define the kind of quality improvement required when weak areas of the website are spotted out.

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Table 1: Expert System – Look and Feel of the WEB sites

Context 1: Registration:-

Object	Characteristic	Sub Characteristics	Characteristic value	
Font	Type		Time New Roman	
	Style		Regular	
	Size		11	
	Colour	Red		40
		Yellow		40
		Blue		40
Case		Sentence		
Text	Paragraph Margin		6	
	Front space		6	
	BackSpace		6	
	Style		Regular	
Tables	Number of columns		4	
	Number of rows		20	
	Row Heading Color	Red		45
		Yellow		45
Blue			45	
Tables	Column Heading Color	Red		50
		Yellow		50
		Blue		50
	Font Type	Regular		Regular
	Font Style	Bold		Bold
	Font Size	11		11
	Font Color	Red		60
		Yellow		60
		Blue		60
		Case		Regular
	Text	Paragraph Margin		6
		Front space		6
		BackSpace		6
Style			Regular	
Menus	Tree Menu	Number of Sub-menus	3	
	File Menu	Number of Listed objects	20	
	TAB Menu	Number	20	
	Tab Object Menu	Number	10	
	Bottom Bar color	Red		60
		Yellow		60
		Blue		60
Bottom Bar Objects	Number	20		
Background Colors	Red	65		
	YELLOW	65		
	Blue	65		
Foreground Colors	Red	40		
	YELLOW	40		
	Blue	40		

Object	Characteristic	Sub Characteristics	Characteristic value
Images	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	40
		YELLOW	40
Blue		40	
Videos	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	45
		YELLOW	45
		Blue	45
Frames per second	10		
Audio	Decibels	1000	

Context 2: Fee Payment:-

Object	Characteristic	Sub Characteristics	Characteristic value	
Font	Type		Time New Roman	
	Style		Regular	
	Size		11	
	Color	Red	40	
		Yellow	40	
		Blue	40	
Case		Sentence		
Text	Paragraph Margin		6	
	Front space		6	
	BackSpace		6	
	Style		Regular	
Tables	Number of columns		4	
	Number of rows		20	
	Row Heading Color	Red	45	
		Yellow	45	
Blue		45		
Tables	Column Heading Color	Red	50	
		Yellow	50	
		Blue	50	
	Font Type	Regular	Regular	
	Font Style	Bold	Bold	
	Font Size	11	11	
	Font Color	Red	60	
		Yellow	60	
		Blue	60	
		Case	Regular	
	Text	Paragraph Margin		6
		Front space		6
BackSpace			6	
Style			Regular	

Object	Characteristic	Sub Characteristics	Characteristic value	
Menus	Tree Menu	Number of Sub-menus	3	
	File Menu	Number of Listed objects	20	
	TAB Menu	Number	20	
	Tab Object Menu	Number	10	
	Bottom Bar color	Red		60
		Yellow		60
		Blue		60
Bottom Bar Objects	Number	20		
Background Colors	Red	65		
	YELLOW	65		
	Blue	65		
Foreground Colors	Red	40		
	YELLOW	40		
	Blue	40		
Images	Width in Pixel	1100		
	Height in Pixel	1100		
	Colors	Red		40
		YELLOW		40
Blue			40	
object	Characteristic	Sub Characteristics	Characteristic value	
Videos	Width in Pixel	1100		
	Height in Pixel	1100		
	Colors	Red		45
		YELLOW		45
		Blue		45
Frames per second	10			
Audio	Decibels	1000		

Context 3: Academics:-

object	Characteristic	Sub Characteristics	Characteristic value	
Font	Type		Time New Roman	
	Style		Regular	
	Size		11	
	Color	Red		40
		Yellow		40
		Blue		40
Case		Sentence		
Text	Paragraph Margin		6	
	Front space		6	
	BackSpace		6	
	Style		Regular	
Tables	Number of columns		4	
	Number of rows		20	
	Row Heading Color	Red		45
		Yellow		45
Blue			45	

object	Characteristic	Sub Characteristics	Characteristic value
Tables	Column Heading Color	Red	50
		Yellow	50
		Blue	50
	Font Type	Regular	Regular
	Font Style	Bold	Bold
	Font Size	11	11
	Font Color	Red	60
		Yellow	60
		Blue	60
	Text	Case	Regular
		Paragraph Margin	6
		Front space	6
		BackSpace	6
Menus	Tree Menu	Number of Sub-menus	3
	File Menu	Number of Listed objects	20
	TAB Menu	Number	20
	Tab Object Menu	Number	10
	Bottom Bar color	Red	60
		Yellow	60
		Blue	60
Bottom Bar Objects	Number	20	
Background Colors	Red	65	
	YELLOW	65	
	Blue	65	
Foreground Colors	Red	40	
	YELLOW	40	
	Blue	40	
Images	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	40
		YELLOW	40
Blue		40	
Videos	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	45
		YELLOW	45
		Blue	45
Frames per second	10		
Audio	Decibels	1000	

Context 4: Research

Object	Characteristic	Sub Characteristics	Characteristic value	
Font	Type		Time New Roman	
	Style		Regular	
	Size		11	
	Color	Red		40
		Yellow		40
		Blue		40
Case		Sentence		
Text	Paragraph Margin		6	
	Front space		6	
	BackSpace		6	
	Style		Regular	
Tables	Number of columns		4	
	Number of rows		20	
	Row Heading Color	Red		45
		Yellow		45
Blue			45	
Tables	Column Heading Color	Red		50
		Yellow		50
		Blue		50
	Font Type	Regular		Regular
	Font Style	Bold		Bold
	Font Size	11		11
	Font Colour	Red		60
		Yellow		60
		Blue		60
		Case		Regular
	Text	Paragraph Margin		6
		Front space		6
		BackSpace		6
Style			Regular	
Menus	Tree Menu	Number of Sub-menus	3	
	File Menu	Number of Listed objects	20	
	TAB Menu	Number	20	
	Tab Object Menu	Number	10	
	Bottom Bar color	Red		60
		Yellow		60
		Blue		60
Bottom Bar Objects	Number	20		
Background Colors	Red	65		
	YELLOW	65		
	Blue	65		
Foreground Colors	Red	40		
	YELLOW	40		
	Blue	40		
Images	Width in Pixel	1100		
	Height in Pixel	1100		
	Colors	Red		40
		YELLOW		40
Blue			40	

Object	Characteristic	Sub Characteristics	Characteristic value
Videos	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	45
		YELLOW	45
		Blue	45
Frames per second	10		
Audio	Decibels	1000	

Context 5: Events

object	Characteristic	Sub Characteristics	Characteristic value	
Font	Type		Time New Roman	
	Style		Regular	
	Size		11	
	Color	Red	40	
		Yellow	40	
		Blue	40	
	Case		Sentence	
Text	Paragraph Margin		6	
	Front space		6	
	BackSpace		6	
	Style		Regular	
Tables	Number of columns		4	
	Number of rows		20	
	Row Heading Color	Red	45	
		Yellow	45	
		Blue	45	
Tables	Column Heading Color	Red	50	
		Yellow	50	
		Blue	50	
	Font Type	Regular	Regular	
	Font Style	Bold	Bold	
	Font Size	11	11	
	Font Color	Red	60	
		Yellow	60	
		Blue	60	
	Text	Case	Regular	
		Text	Paragraph Margin	6
			Front space	6
			BackSpace	6
	Style		Regular	
Menus	Tree Menu	Number of Sub-menus	3	
	File Menu	Number of Listed objects	20	
	TAB Menu	Number	20	
	Tab Object Menu	Number	10	
	Bottom Bar color	Red	60	
		Yellow	60	
		Blue	60	
	Bottom Bar Objects	Number	20	

object	Characteristic	Sub Characteristics	Characteristic value
Background Colors	Red	65	
	YELLOW	65	
	Blue	65	
Foreground Colors	Red	40	
	YELLOW	40	
	Blue	40	
Images	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	40
		YELLOW	40
Blue		40	
Videos	Width in Pixel	1100	
	Height in Pixel	1100	
	Colors	Red	45
		YELLOW	45
		Blue	45
Frames per second	10		
Audio	Decibels	1000	

Table 2 :Context Identification

Serial Number	WEB Page Name	Snippet	Snippet occurrence value
1.	Registratins.html	Registrations	4
2.		Subject	2
3.		Priority	1
4.	Feepaymnet.html	Fee payment	4
5.		Receipt	1
6.		Challan	1
7.	Academics. Html	Lesson plan	2
8.		Course delivery	2
9.		Academics	6
10.	Research.html	Sponsored	6
11.		Academic research	6
12.		Research	10
13.	Events.html	Cultural	8
14.		sports	8
15.		Alumni	5
16.		Event	22

Table 3 : Classifying the Resource file as per the contexts

Serial Number	Context	Resource files
1.	Registrations	Registrations.html
		Priorities. Html
		SubSections.html
2.	Fee Payments	Challan.html
		Neftrtransfer.html
		Onlinetransfer.html
3.	Academics	Internalexams.html
		TimeTables.html
		Facultylocations.html
4.	Research	Paperspublihed.html
		Sponsoredprojects.html
		Internalprojects.html
5.	Events	Cultutral.html
		Sports.html
		Alumniactivities.html

Table 4: Object identification context-wise and object wise

Serial number	Resource files	Type of object	Number of Objects
1	Registrations.html	font	1
		Text	1
		Back Ground Color	1
		Fore Ground color	1
		Tables	1
		Images	1
		Videos	1
		Audios	1
2	Priorities. html	font	1
		Text	1
		Back Ground Color	1
		Fore Ground color	1
		Tables	1
		Images	1
		Videos	1
		Audios	1
3	SubSections.html	font	1
		Text	1
		Back Ground Color	1
		Fore Ground color	1
		Tables	1
		Images	1
		Videos	1
		Audios	1

Table 5: Experimental results for a sample Web site

Serial number	Resource files	Type of object	Number of Objects	Object Number	Characteristic	Computed Value	Standard value	Variation	Variation %	Quality Value
1	Registrations.html	font	1	1	Type	Time New Roman	Time New Roman	0	40	0.6
					Style	Italic	Regular	-1		
					Size	11	11	0		
					Color	40	40	0		
					Case	Low Case	Sentence	-1		
		Text	1	1	Paragraph Margin	6	6	0	0	1.0
					Front space	6	6	0		
					Back Space	6	6	0		
					Style	Regular	Regular	0		
		Back Ground Color	1	1	Red	65	65	0	0	1.0
					YELLOW	65	65	0		
					Blue	65	65	0		
		Fore Ground color	1	1	Red	65	65	0	0	1.0
YELLOW	65				65	0				
Blue	65				65	0				

Serial number	Resource files	Type of object	Number of Objects	Object Number	Characteristic	Computed Value	Standard value	Variation	Variation %	Quality Value
1	Registrations.htm	Tables	1	1	Column Heading Color	50	50	0	0	1.0
						50	50			
						50	50			
					Font Type	Regular	Regular	0	0	1.0
					Font Style	Bold	Bold	0	0	1.0
					Font Size	11	11	0	0	1.0
					Font Color	Red	60	0	0	1.0
						Yellow	60			
						Blue	60			
						Case	Regular			
					Text	Paragraph Margin	6	0	0	1.0
						Front space	6			
Back Space	6									
Style	Regular									
1	Registrations.html	Images	1	1	Width in Pixel	800	1100	-1	66	0.33
					Height in Pixel	800	1100	-1		
					Colors	40	40	0		
		Videos	1	1	Width in Pixel	1100	1100	0	0	1.0
					Height in Pixel	1100	1100	0		
					Colors	45	45	0		
					Frames per second	10	10	0		
		Audios	1	1	Decibels	1000	1000	0	0	1.0