SmarTech

BTH, Sweden.

Product Name: PBSKIDS

http://www.pbskids.org

Usability Measurement Proposal From User's Viewpoint

Drafted By:

Santosh Shah 870424P259

Uday Majeti 930801-7434

Usman Rafiq 880723P157

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TABLE OF CONTENTS

CHANGE LOG 3

1 INTRODUCTION 4
1.1 PURPOSE 4
1.2 PRODUCT 4
1.3 OVERVIEW 4

2 MEASUREMENT GOAL 5

3 GOAL QUESTION METRIC (GQM) **5**
3.1 GQM TABLE 5
3.2 GQM TREE 8

4 ENTITIES, ATTRIBUTES AND MATRICS **9**

5 QUESTIONAIRE **16**

6 PROPOSED EMPIRICAL STUDY **19**
6.1.TO-DO TASKS FOR FORMAL EXPERIMENTS 19
6.2. TARGETED AUDIENCE QUESTIONNAIRE 20

7 REFERENCES **24**

Revision History

Version	Date of Change	Changed By	Summary of Change	Page Changed
0.1	2014-05-05	Usman, Santosh and Uday	Initial Draft	ALL
1.0	2014-05-12	Usman, Santosh and Uday	Identified and documented entities, attributes and metrics	8 and above
1.1	2014-05-19	Usman, Santosh and Uday		4 and Above 16

1. Introduction

Over the past few years, a tremendous growth in number of websites is getting noticed. In the current era of information technology, any organization or business requires web existence. Besides this esteemed expansion there are number of quality factors that are considered for the success of any web. However, various research studies [1][2] have revealed that usability is the major quality factor that can be the dominant factor for success or failure of websites. Websites with poor usability are replaced by the websites with good usability [2].

1.1. Purpose

Currently holding Capability Maturity Model (CMM) level 4, SmarTech always focused to deliver web with best user experiences. To achieve this focus, the company put maximum efforts to ensure that the developed products are easy to use. The document under study is an effort to help in achieving this goal. This states the proposal for measuring usability from user's viewpoint for a latest developed web named as PBSKIDS.

1.2. Product

PBSKIDS is a web application that is principally designed for kids in order to enrich them with knowledge, technology, critical thinking and curiosity [3]. PBSKIDS also facilitate parents, teachers, guardians and communities to participate in order to accomplish this goal. Therefore, the intended audience includes kids (primary), parents, caregivers and teachersThe contents of web are proclaimed to be aligned with school curricula so to make kids successful in school and early life [3].

1.3. Overview

Following is a brief description and reminders of this document:

Section 1: It provides the context, purpose and overall description of document
Section 2: This section provides the measurement goal for which the product would be examined.
Section 3: This section specifies methodology, questions and metrics to be considered for achieving goals identified in section 2.
Section 4: It presents entities, attributes, attribute types, metrics and scale type.
Section 5: In this section, questionnaire is presented followed by suggested empirical study method.

2. Measurement Goal

Following table describes the measurement goal for this product:

Purpose	Perspective	Environment and Constraints
Evaluate PBSKIDS (product) in order to identify usability issues	Examine the usability from the viewpoint of users (User's perspective). • Identify usability factor issues related to simplicity, navigation, attractiveness, reliability, usefulness, supportability, efficiency, completeness, safety and compatibility	• Users are kids (primary), parents, teachers and caregivers. • Global users • Developed web based application (PBSKIDS)

3. Goal-Question-Metric (GQM)

GQM is the most acceptable method of measuring quality of projects and provides a top-down fashion in order to characterize and determine the measurement goals [4,7].

3.1.GQM Table

GQM table is produced explaining goals, relevant questions and metrics required for measurement in order to achieve the specified goals. The primary goal is divided into sub-goals and include simplicity, adoptability, supportability, safety, reliability, efficiency, correctness, completeness, compatibility and attractiveness. These sub goals are identified by exploring the product and with the help of research studies conducted on usability for web[3,4,5,6]:

Serial	Goal	Questions	Metrics
G1	**Simplicity**	Is it easy to input through picture?	Satisfaction with input method through pictures
		Is it helpful for user to input via close caption	Satisfaction with close caption as input method
		Is the sound as output useful?	Satisfaction with sound as an output method
		Is it helpful for user to get output via close caption	Satisfaction with close caption as an output method
		Is it easy for users to learn website	Time taken to learn a task
G2	**Navigation**	Is it easy to navigate to search?	Satisfaction to search
		Are any broken links in website?	Number of broken links

		Is it difficult to navigate between web pages back and forth?	satisfaction with navigation between web pages
		Do users have to remember information while navigating?	satisfaction with navigation
		Do users need to learn to use website?	Satisfaction with learning process
G3	**Reliability**	Are there errors in website?	Number of errors
		Is the schedule for TV programs are reliable?	Rating Scale
		Does the content of site match the kids' educational curriculum?	Satisfaction level of user with content correctness and matching
		Is the website content correct?	Confidence level of correctness
G4	**Usefulness**	Does the website really help to educate kids?	satisfaction in terms of usefulness
		Does the website help users (parents, caretaker and teachers) to monitor kids' progress?	Level of satisfaction of users to monitor kids performance
G5	**Supportability**	Does the website provide method to contact?	Confirmation with contact method(s) availability
		Are methods to contact for help are sufficient?	Satisfaction with means of contact support
		Does FAQ'S cover all user concerns and problems?	Level of satisfaction with FAQ's
		How long users need to wait for reply incase of contact?	Time to receive response
		Are 'closed captions' helpful for deaf or hard for hearing people?	Satisfaction with closed captions
		Does the website provide multiple payment methods for shopping	Confirmation with multiple payment methods
G6	**Attractiveness**	Is the color combination attractive?	Satisfaction with colors used
		Is the user interface consistent on all consumer devices?	Level of consistency with user interface
		How good users feel while using website?	Level of enjoyment
		Does a user get fascinating experience while using website?	Level of enjoyment

G7	**Efficiency**	How much time does it take to search?	Time to search
		How much time does it take to load website?	Time to load website
		How much time does it take to load games?	Time to load games
		How much time does it take to navigate between web-pages?	Time to switch between web-pages
G8	**Completeness**	Are 'closed captions' available throughout?	Number of videos without 'closed captions'
		Are the users' information kept safely?	Safety of user personal information.
G9	**Safety**	Is the payment process safe?	safety while payment
		Is the website fully secure to be used?	Feeling of security while using application?
		Does the website works as expected on the specified browser (Internet, Mozilla and Apple safari)?	satisfaction with different browsers
G10	**Compatibility**	Does the website works on I Pad, mobile phone, tablets and computers as expected?	satisfaction with different devices

3.2.GQM Tree

GOALS
Simplicity
Navigation
Reliability
Usefulness
Supportability
Attractiveness
Efficiency
Completeness
Safety
Compatibility

QUESTIONS
Is it easy to input through picture?
Is it helpful for user to input via close caption
Is the sound as output useful?
Is it helpful for user to get output via close caption
Is it easy for users to learn website
Is it easy to navigate to search?
Are any broken links in website?
Is it difficult to navigate between web pages back and forth?
Do users have to remember information while navigating?
Do users need to learn to use website?
Are there errors in website?
Is the schedule for TV programs are reliable?
Does the content of site match the kids' educational curriculum?
Is the website content correct?
Does the website really help to educate kids?
Does the website help users (parents, caretaker and teachers) to monitor kids' progress?
Does the website provide method to contact?
Are methods to contact for help are sufficient?
Does FAQ'S cover all user concerns and problems?
How long users need to wait for reply incase of contact?
Are 'closed captions' helpful for deaf or hard for hearing people?
Does the website provide multiple payment methods for shopping?
Is the color combination attractive?
Is the user interface consistent on all consumer devices?
How good users feel while using website?
Does a user get fascinating experience while using website?
How much time does it take to search?
How much time does it take to load website?
How much time does it take to load games?
How much time does it take to navigate between web-pages?
Are 'closed captions' available throughout?
Are the users' information kept safely?
Is the payment process safe?
Is the website fully secure to be used?
Does the website works as expected on the specified browser (Internet, Mozilla and Apple safari)?
Does the website works on I Pad, mobile phone, tablets and computers as expected?

METRICS
Satisfaction with input method through pictures
Satisfaction with close caption as input method
Satisfaction with sound as an output method
Satisfaction with close caption as an output method
Time taken to learn a task
Satisfaction to search
Number of broken links
satisfaction with navigation between web pages
satisfaction with navigation
Satisfaction with learning process
Number of errors
Rating Scale
Satisfaction level of user with content correctness and matching
Confidence level of correctness
satisfaction in terms of usefulness
Level of satisfaction of users to monitor kids performance
Confirmation with contact method(s) availability
Satisfaction with means of contact support
Level of satisfaction with FAQ's
Time to receive response
Satisfaction with closed captions
Confirmation with multiple payment methods
Satisfaction with color schemes used
Level of consistency with user interface
Level of enjoyment
Time to search
Time to load website
Time to load games
Time to switch between web-pages
Number of videos without 'closed captions'
Safety of user personal information.
safety while payment
Feeling of security while using application?
satisfaction with different browsers
satisfaction with different devices

PART II
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4. Entities, Attributes and Measures

Serial	Goal	Questions	Entities	Attributes		Metrics	Scale Type	Scale Point(If any)
				Internal	External			
G1	Simplicity	Is it easy to input through picture?	Input (process)		Easiness	Level of easiness with input method through pictures	Ordinal	Very Easy, Easy, Neutral, Hard, Very hard.
		Is it helpful for user to input via close caption	Input (process)		Easiness	Easiness with close caption as input method	Ordinal	Very Easy, Easy, Neutral, Hard, Very hard.
		Is the sound as output useful?	Output (process)		Usefulness	Satisfaction with sound as an output method	Ordinal	Very Useful, Useful, Neutral, Not Useful.
		Is it helpful for user to get output via close caption	Output (process)		Helpfulness	Satisfaction with close caption as an output method	Ordinal	Very Helpful, Helpful, Neutral, Not Helpful.
		Is it easy for users to learn	Learning process		Learnability	Time taken to learn a specific task in a specific	Ratio	Number of tasks per unit time

		website				environment.		
G2	**Navigation**	Is it easy to navigate to search?	Searching process		Easiness	Satisfaction to search		Very Easy, Easy, Neutral, Hard, Very hard.
		Are any broken links in website?	Testing process	Found broken links		Number of broken links	Absolute	Number
		Is it easy to navigate between web pages back and forth?	Navigation		Easiness	satisfaction with navigation between web pages	Ordinal	Very Easy, Easy, Neutral, Hard, Very hard.
		Do users have to remember information while navigating?	Navigation		Need to remember	Need to remember	Nominal	Yes or No
		Do users need to learn to use website?	Learning process		Learnability	Satisfaction with learning process	Nominal	Yes or No
G3	**Reliability**	Are there errors in website?	Defects	Defect density		Number of defects.	Absolute	
		Is the schedule for TV programs are reliable?	Schedule document	Reliability		Number of unmatched schedules	Absolute	

		Does the content of site match the kids' educational curriculum?	Testing process		Compliance	Satisfaction level of user with content correctness and matching	Nominal	Yes or No
		Is the website content correct?			Correctness	Confidence level of correctness	Nominal	Correct, Incorrect
G4	**Usefulness**	Does the website really help to educate kids?	Usability		Learnability	satisfaction in terms of usefulness	Nominal	Yes No
		Does the website help users (parents, caretaker and teachers) to monitor kids' progress?		Function understandability	Helpfulness	Effectiveness of functions to monitor kids performance	Ordinal	Very Helpful, Helpful, Neutral, Not Helpful
G5	**Supportability**	Does the website provide method to contact?	Functionality/ Usability	Availability		Confirmation with contact method(s) availability	Nominal	Yes or No
		Are methods to contact	Usability		Satisfaction	Satisfaction with means of contact	Ordinal	Very satisfied,

		for help are sufficient?				support		Satisfied, Neutral, Dissatisfied, very dissatisfied
		Does FAQ'S cover all user concerns and problems?	Usability		Cover-ability	Level of satisfaction with FAQ's	Nominal	Yes or NO
		How long users need to wait for reply incase of contact?	Support Process		Response time	Time to receive response	Ordinal	Within a day, within 3 days, within a week, greater than a week, Never
		Are 'closed captions' helpful for deaf or hard for hearing people?	Functionality/ Usability		Helpfulness	Helpfulness with closed captions	Nominal	Yes or NO
		Does the website provide multiple payment methods for shopping	Functionality **/**Supportability (Product)		Availability	Confirmation with multiple payment methods	Nominal	Yes or NO
G6	**Attractiveness**	Is the color combination attractive?	Usability		Attractiveness	Satisfaction with appearance of colors	Nominal	Yes or No
		Is the user	Usability		Consistency	consistency with	Nominal	Yes or NO

		interface consistent on all consumer devices?				user interface		
		How good users feel while using website?	Usability		Feeling	Level of enjoyment	Ordinal	Excellent, Good, Average, Fair, Poor
		Does a user get fascinating experience while using website?	Usability		Attractiveness	Level of enjoyment	Nominal	Yes or NO
G7	**Efficiency**	How much time does it take to search?	Efficiency/Time behavior		Response Time	Time to receive search results	Ordinal	<1 sec, < 10 sec, <minute, > minute
		How much time does it take to load website?	Efficiency/Time behavior		Response Time	Loading time for website	Ordinal	<1 sec, <10 sec, <minute, > minute
		How much time does it take to load games?	Efficiency/Time behavior		Response Time	Time to load games	Ordinal	< 1 sec, < 10 sec, < minute, > minute
		How much time does it take to	Efficiency/Time behavior		Response Time	Time to switch between web-pages	Ordinal	< 1 sec, < 10 sec, < minute,

		navigate between web-pages?						> minute
G8	**Completeness**	Does website provides all intended features for kids?	Functionality (Product)	Compliance with functional requirements		Number of un compliance features for kids?	Absolute	
		Are 'closed captions' available throughout?	Testing Process	Completeness		Number of videos without 'closed captions'	Absolute	
G9	**Safety**	Are the users' information kept safely?	Design Process	Security		Safety of user personal information.	Nominal	Yes or NO
		Is the payment process safe?	Testing Process	Security		safety while payment	Nominal	Yes or NO
		Is the website fully secure to be used?	Testing Process	Security		Feeling of security while using application?	Nominal	Yes or No
G10	**Compatibility**	Does the website works as expected on the specified browser (Internet, Mozilla and	Usability		Compatibility	- satisfaction with different browsers - Compliance with standard Interface	Nominal	Yes or No

		Apple safari)?						
		Does the website works on I Pad, mobile phone, tablets and computers as expected?	Usability		Portability	Portability compliance with other platforms/devices	Nominal	Yes or No

PART III
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5. Questionnaire

Following Questionnaire is suggested in order to measure the usability of website:

Serial	Questions	Rationale	Scale	Audience
1	How easy is to enter information with the help of pictures?	To measure usefulness and satisfaction with pictures as input method	Very Easy, Easy, Neutral, Hard, Very hard.	Kids
2	How helpful are the close captions for input/output?	Determine the effectiveness of close captions as input/output for special kids.	Enthusiastic, co-operative, Neutral, un co-operative, Disruptive	Kids
3	Are you satisfied with the voice based output?	Satisfaction with voice based output	Yes Or No	Kids
4	If No, why do you think so? Please, explain in brief.		Not Applicable	Kids
5	What is the time taken to learn a given specified task?	To determine the learnability	Number of tasks per unit time	Both
6	How easy it is to locate search option?	To measure the ease of access of search facility	Very Easy, Easy, Neutral, Hard, Very hard.	Both
7	How much time does it take to search?	To measure the efficiency	< 1 sec, < 10 sec, < 1 minute, >1 minute Never searches	Both
8	Are there any broken links in the website?	To acquire feedback on website navigation	Yes/No	Both

9	If Yes, Please mention the link(s) that you encountered?		NA	
10	Are there any errors in the website?	To discover the errors and measure reliability of website	Yes/No	Both
11	If Yes, Please mention the error(s) that you encountered?		Not Applicable	
12	Is there any mismatch in TV programs schedule?	To determine the reliability of TV programs schedule given on the website with the actual		Both
13	If Yes, Please mention the mismatched schedule(s)?		Not Applicable	
14	Does the content of site match the kids' educational curriculum?	To acquire feedback on the correctness of content presented in the website	Yes or No	Parents/ Guardians/ Teachers
15	If No, why do you think so? Please, explain in brief.		Not Applicable	
16	Does the website help to educate kids?	Satisfaction in terms of usefulness of website	Yes/No	Parents/ Guardians/ Teachers
17	If No, why do you think so? Please, explain in brief.		Not Applicable	
18	Are you satisfied with the contact/assistance facility of website?	To measure the supportability satisfaction with website contact facility	Very satisfied, Satisfied, Neutral, Dissatisfied, very dissatisfied	Parents/ Guardians/ Teachers
19	Are you satisfied with the payment procedure of website?	To get comments on availability of multiple payment methods and any dissatisfaction with payment methods	Yes or NO	Parents/ Guardians/ Teachers
20	If No, why do you think so? Please, explain in brief.		Not Applicable	
21	Do you like the colors in the website?	Satisfaction with coloring scheme of website	Yes or No	Kids
22	If No, what are your favorite colors?			
23	Did you face any bad experience while using website on other consumer devices?	To measure the consistency of behavior of website on devices including consumer	Yes , No, Not Experienced	Both

		devices		
24	If Yes, what are those? Please, explain in brief.		Not Applicable	
25	How do you feel while using website?	To identify whether website audience actually enjoys while using website or not	Excellent, Very Good, Good, Fair, Poor	Both
26	How much time does it take to load game?	Task based question to determine the responsiveness and efficiency of website features	< 1 sec, < 10 sec, < minute, > minute Never loads	Both
27	Does website provides all intended features for kids?	To get comments on the completeness of website in terms of functional features	Yes or NO	Both
28	If no, what do you think is missing?		Not Applicable	
29	Did you encounter any missing closed caption?	To determine consistency and completeness regarding close captions	Yes or NO	Both
30	If yes, please mention the missing area.		Not Applicable	
31	Do you feel secure while using website?	Determine whether website is secure enough to be used or not (Privacy, safety, security)	Yes or No	Both
32	If no, why do you think so? Please explain in brief.			
33	If you had chance of using website on multiple browsers, does it work correctly?	To discover consistent layout and working of website on different platforms and browsers	Yes or No	Both
34	If No, what challenges did you face? Please, explain in brief.		Not Applicable	
35	If you could mention a thing that you like the most, what would that be?	Satisfaction with most liked features that could help for more improvements	Not Applicable	
36	If you could change things in the website what would that be?	To obtain additional suggestions, ideas and features to enhance the experience of users	Not Applicable	

6. Proposed Empirical Study

In order to evaluate and improve usability of product, conduction of empirical investigation is required. There are various techniques to perform empirical study. For the product under study, formal experiment technique is proposed. So far, we have followed GQM model and analyzed various attributes that can play a vital role in determining the web usability of website. These attributes have to be studied and analyzed thoroughly. Impact of each attribute is required to be focused further. Similarly, the main audience of product comprise of pre-school and school kids (including special kids). Therefore, we require an intensively controlled experiment for evaluation of web usability. A questionnaire which primarily focuses on identified attributes of entities is used as an instrument to evaluate the application's usability.

Other alternatives for empirical study includes case study, post-mortem and surveys. Relevancy of these techniques regarding PBSKIDS is focused primarily before proposing experiment as data collection method. 'Case study' technique is not considered because of one primary reason; it doesn't provide us the 'control' that we need for our study, it is more of an observational study.

Likewise, as survey is a retrospective study so we also dropped this technique. As stated in the problem description, the development has just been completed and we are to analyze the usability of website. Thus, there is no availability of users who have been using website for long time so that it is hard and useless to implement this technique.

Similarly, postmortem analysis is also not considered as it is a retrospective study. Generally, postmortem is conducted after the development of the project, in order to understand, to learn from the experience during development.
Overall, the relevant techniques in current context were only case study and formal experiment. We preferred to propose formal experiment due to the controlled environment that we require.

6.1. To-do tasks for formal experiment

Following tasks are designed for the intended audience (users) of website in order to conduct formal experiment as an empirical data collection method:

Prerequisite: Freely Browse and explore the website (www.pbskids.org) for short duration (e.g. 5-10 minutes)

G1. Play the game "Say what!" and "Alphabet Soup" and answer all questions under G1 section by consumer devices provided to you. Please note: Different devices have different browsers.

G2. Try to find PBS Kids mission?

G3. Check the schedule and curriculum content with the document provided?

G4. Contact the website administrator and suggest a thing that you would like to see in the website.

G5. Other question. (Related to the free and exploratory browsing)

In addition, questionnaire is categorized according to the tasks cited above. During the whole process of formal experimentation, evaluators and facilitators would be available to users for assistance and explanation.

6.2. Targeted Audience Questionnaire

For target audience (pre-school and school children and parents/guardians/teachers), questionnaire are presented in following lines. In order to get answerers from kids, very interactive way is used to measure the metrics.

For Kids:

Prerequisite: Freely Browse and explore the website (www.pbskids.org) for short duration (e.g. 5-10 minutes)

G1. Play the game "Say what!" and "Alphabet Soup" and answer all questions under G1 section by consumer devices provided to you. Please note: Different devices have different browsers.

1) What is the time taken to learn for this specified task?
   [ ]
2) Did you face any bad experience while using website on other consumer devices?
   ❑ Yes ❑ No ❑ Not Experienced

3) If yes, what are those? Please, explain in brief.

_____

_____

4) How much time does it take to load game?

❑ < 1 sec ❑ < 10 sec ❑ < minute ❑ minute ❑ Never loads

5) If you had chance of using website on multiple browsers, does it work correctly?
   ❑Yes ❑No
6) If No, what are the issues:

_____

_____

G2. Try to find PBS Kids mission in website?

7) How easy it is to locate search option?

❑Very Hard ❑Hard ❑Neutral ❑Easy ❑Very Easy

8) How much time does it take to search ?

❑< 1 sec ❑ < 10 sec ❑ < 1 minute ❑ > 1 minute ❑never searches

G5:- Other question. (Related to the free and exploratory browsing)

9) How easy is to enter information with the help of pictures?

❑Very Hard ❑Hard ❑Neutral ❑Easy ❑Very Easy

10) How helpful are the close captions for input/output?

❑Disruptive ❑uncooperative ❑Neutral ❑cooperative ❑Enthusiastic

11) Are you satisfied with the voice based output?

❑Yes ❑No

12) If No, why do you think so? Please, explain in brief.

_____

_____

13) Do you like the colors in the website?

❑Yes ❑No

14) If No, what are your favorite colors?

_____

_____

15) Are there any broken links in the website?

❑Yes ❑No

16) If Yes, Please mention the links.

_____

_____

17) Are there errors in the website?

❑Yes ❑No

18) If Yes, Please mention the links.

_____

_____

19) Did you encounter any missing close caption?

❑Yes ❑No

20) If Yes, Please mention

_____

_____

21) How do you feel while using website?

❑Poor ❑Fair ❑Good ❑Very Good ❑Excellent

22) If you could mention a thing that you like the most, what would that be?

_____

_____

23) If you could change things in the website what would that be?

_____

_____

For Parents/Guardians/Teachers:

G2. Try to find PBS Kids mission in website?

1) What is the time taken to learn a given specified task?

2) How easy it is to locate search option?

❑Very Hard ❑Hard ❑Neutral ❑Easy ❑Very Easy

3) How much time does it take to search?

❑< 1 sec ❑ < 10 sec ❑ < 1 minute ❑ > 1 minute ❑never searches

4) Does the website help to educate kids?

❑Yes ❑No

5) If No, why do you think so? Please, explain in brief.

_____

_____

G4.Contact the website administrator and suggest a thing that you would like to see in the website.

6) Are you satisfied with the contact/assistance facility of website?

❑Very dissatisfied ❑Dissatisfied ❑Neutral ❑Satisfied ❑very Satisfied

G3. Check the schedule and curriculum content with the document provided?

7) Is there any mismatch in TV programs schedule?

❑Yes ❑No

8) If Yes, Please mention the mismatched schedule(s)

_____

_____

9) Does the content of site match the kids educational curriculum?
❑Yes ❑No

10) If No, why do you think so.

_____
_____

G5:- Other question. (Related to the free and exploratory browsing)

11) Does the website provide all intended features for kids?
❑Yes ❑No

12) If No, what do you think is missing

_____
_____

13) If you had chance of using website on multiple browsers, does it work correctly?
❑Yes ❑No
14) If No, what challenges did you face? Please, explain in brief.

_____
_____

15) Did you face any bad experience while using website on other consumer devices?
❑ Yes ❑ No ❑ Not Experienced

16) If yes, what are those? Please, explain in brief.

_____
_____

17) How do you feel while using website?
❑Poor ❑Fair ❑Good ❑Very Good ❑Excellent
18) Are you satisfied with the payment procedure of website?
❑Yes ❑No
19) If No, why do you think so? Please, explain in brief.

_____
_____

20) Are there any broken links in the website?
❑Yes ❑No
21) If Yes, Please mention the links.

_____
_____

7. References

[1] Matera, Maristella, Francesca Rizzo, and Giovanni Toffetti Carughi. "Web usability: Principles and evaluation methods." Web engineering. Springer Berlin Heidelberg, 2006. 143-180.

[2] Mendes, Emilia, Nile Mosley, and Steve Counsell. "The need for web engineering: an introduction." Web Engineering. Springer Berlin Heidelberg, 2006. 1-27.

[3] http://pbskids.org/help [Last Accessed: May 03, 2014]

[4] Hussain, Azham, et al. "Modeling Subjective Metrics for Mobile Evaluation."

[5] Hussain, Azham, and Maria Kutar. "Usability metric framework for mobile phone application." PGNet, ISBN (2009): 978-1.

[6] Conte, Tayana, et al. "Usability evaluation based on Web design perspectives." Empirical Software Engineering and Measurement, 2007. ESEM 2007. First International Symposium on. IEEE, 2007.

[7] Caldiera, V. R. B. G., and H. Dieter Rombach. "The goal question metric approach." Encyclopedia of software engineering 2.1994 (1994): 528-532.