HYPERMEDIA WEBSITE PROJECT

Usability Document

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ABSTRACT

The Usability document aims to highlight whether the site that was designed is user friendly. How can we achieve this goal? Through heuristic analysis. Thanks to the availability of some people who have offered to test the website and resolve some tasks, we can evaluate the strengths and weaknesses of the project by collecting the information of greatest interest and analysing it through diagrams and schemes that facilitate its comprehension understanding. The main questions we asked ourselves are: how will testers react to our site? Will they achieve their task in reasonable time? Is our site usable, comprehensible and clear?

DESIGN AND EXECUTION

INTRODUCTION

In order to find out how user-friendly the site is, we submitted to a sample of seven people some tasks to complete alone and in an isolated and comfortable environment.

TEST OBJECTIVES

Before conducting the test we registered the age, sex and profession of the users, all information that we will use to draw conclusions on the range that have encountered more or less difficulty and to understand if these difficulties are due to bad design of website or simply to the low level of familiarity of certain people with technology.

the table below shows the list of users who took part in the test.

NAME (sex)	ID	AGE	PROFESSION	TASK
Luca(M)	1	22	Student	ALL
Francesco (M)	2	40	Employee	ALL
Andrea (M)	3	15	Student	ALL
Federico (M)	4	35	Doctor	ALL
Irene (F)	5	59	Ex mechanical engineer	ALL
Fabio (M)	6	65	Employee	ALL
Alessia (F)	7	18	Student	ALL

METHOD

The User Testing method was used to carry out the study.
During these tasks, we took care to avoid problems of various kinds, such as a slow internet connection, external distractions or help from other people.
For each task we calculated the time taken by the users to solve it and we asked them to give a rating between 1 and 5 based on the difficulty of the task's resolution.
We have invited to report any suggestions for a possible improvement and any difficulties encountered in completing the tasks in the dedicated comment box.

EXAMPLE OF TEST

Below we present the list of tasks and the table delivered to each user to perform the test.

List of tasks (rate from 1 to 5):

-   Find the information about order and shipping;
-   Find the information about "HARRY POTTER RALLY" event;

- Find the information about the author: Alessandro d'Avenia;
- Do the registration and login;
- Buy two books with two different literary genres.

List of questions (rate from 1 to 5):

- how much do you like the design of the site?
- how intuitive is the site to use?
- how complete is the site in terms of content?

Survey for users:

Name:				
Surname:				
Age:				
Profession:				
Device:				
TASK ID	**DIFFICULTY (1-5)**	**SUCCESS**	**TIME**	**COMMENT**
1				
2				
3				
4				
5				

TASK ID	**DESCRIPTION**
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	**RATE (1-5)**
how much do you like the design of the site?	
how intuitive is the site to use?	
How useful was the content?	

SCORE REPORTING

In this paragraph we reported the result of our tests that we will present with the help of some table.

User 1

| Name: Luca |
| Surname: Conterio |
| Age: 22 |

Profession: Student
Device: PC

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	1	YES	00:11	//
2	2	YES	00:26	//
3	1	YES	00:15	//
4	3	YES	00:52	//
5	3	YES	01:09	Missing confirmation when adding a book to the cart and when "payment" button is clicked

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	4
how intuitive is the site to use?	4
How useful was the content?	5

User 2

Name: Francesco
Surname: Madero
Age: 40
Profession: Employee
Device: PC

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	1	YES	00:20	//
2	1	YES	00:30	//
3	1	YES	00:14	//
4	3	YES	01:02	//
5	2	YES	00:58	//

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)

how much do you like the design of the site?	4
how intuitive is the site to use?	3
How useful was the content?	4

User 3

Name: Andrea
Surname: Suardi
Age: 15
Profession: Student
Device: smartphone

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	1	YES	00:14	//
2	2	YES	00:20	//
3	1	YES	00:16	//
4	2	YES	00:50	//
5	3	YES	00:48	//

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	4
how intuitive is the site to use?	3
How useful was the content?	5

User 4

Name: Federico
Surname: Macchia
Age: 35
Profession: Doctor
Device: tablet

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	1	YES	00:10	//
2	1	YES	00:30	//
3	1	YES	00:15	//
4	2	YES	00:49	//
5	2	YES	01:00	//
TASK ID	DESCRIPTION			

1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	5
how intuitive is the site to use?	3
How useful was the content?	3

User 5

Name: Irene
Surname: Parabino
Profession: Ex mechanical engineer
Device: PC

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	2	YES	00:37	//
2	2	YES	00:30	//
3	2	YES	00:35	//
4	4	YES	02:00	//
5	3	YES	02:45	//

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	4
how intuitive is the site to use?	2
How useful was the content?	4

User 6

Name: Fabio
Surname: Rospi
Age: 65
Profession: Employee
Device: PC

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	3	YES	00:45	//

2	3	YES	00:40	//
3	4	YES	00:55	//
4	5	YES	04:55	//
5	5	YES	03:34	//

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	4
how intuitive is the site to use?	1
How useful was the content?	4

User 7

Name: Alessia
Surname: Bertoni
Age: 18
Profession: student
Device: PC

TASK ID	DIFFICULTY (1-5)	SUCCESS	TIME (minutes:seconds)	COMMENT
1	1	YES	00:15	//
2	1	YES	00:15	//
3	1	YES	00:18	//
4	2	YES	00:45	//
5	3	YES	00:59	//

TASK ID	DESCRIPTION
1	Find the page about order and shipping
2	Find the information (place, time and location) about "HARRY POTTER RALLY" event
3	Find the Bio of the author: Giovanni Verga
4	Do the registration and login
5	Buy three books: one of drama, one of romance and one of happiness

QUESTIONS	RATE (1-5)
how much do you like the design of the site?	5
how intuitive is the site to use?	4
How useful was the content?	3

AGGREGATED DATA

The table below represent a QUANTITATIVE result we have registered.

	USER ID	SUCCESS	DIFFICULTY	TIME	AVERAGE TIME	AVERAGE DIFFICULTY	PERCENTAGE SUCCESS
TASK 1	1	YES	1	00:11	00:21	1,43	100%
	2	YES	1	00:20			
	3	YES	1	00:14			
	4	YES	1	00:10			
	5	YES	2	00:37			
	6	YES	3	00:45			
	7	YES	1	00:15			
TASK 2	1	YES	2	00:26	00:27	1,71	100%
	2	YES	1	00:30			
	3	YES	2	00:20			
	4	YES	1	00:30			
	5	YES	2	00:30			
	6	YES	3	00:40			
	7	YES	1	00:15			
TASK 3	1	YES	1	00:15	24	1,57	100%
	2	YES	1	00:14			
	3	YES	1	00:16			
	4	YES	1	00:15			
	5	YES	2	00:35			
	6	YES	4	00:55			
	7	YES	1	00:18			
TASK 4	1	YES	3	00:52	01:36	3	100%
	2	YES	3	01:02			
	3	YES	2	00:50			
	4	YES	2	00:49			
	5	YES	4	02:00			
	6	YES	5	04:55			
	7	YES	2	00:45			
TASK 5	1	YES	3	01:09	01:36	3	100%
	2	YES	2	00:58			
	3	YES	3	00:48			
	4	YES	2	01:00			
	5	YES	3	02:45			
	6	YES	5	03:34			
	7	YES	3	00:59			

The table below represent a QUALITATIVE result we have registered.

| USER ID	QUESTION 1	QUESTION 2	QUESTION 3
1	4	4	5
2	4	3	4
3	4	3	5
4	5	3	3
5	4	2	4
6	4	1	4
7	5	4	3

ANALYSIS

In this paragraph we analyse and comment the aggregated data collected in the tables above.

QUANTITATIVE ANALYSIS
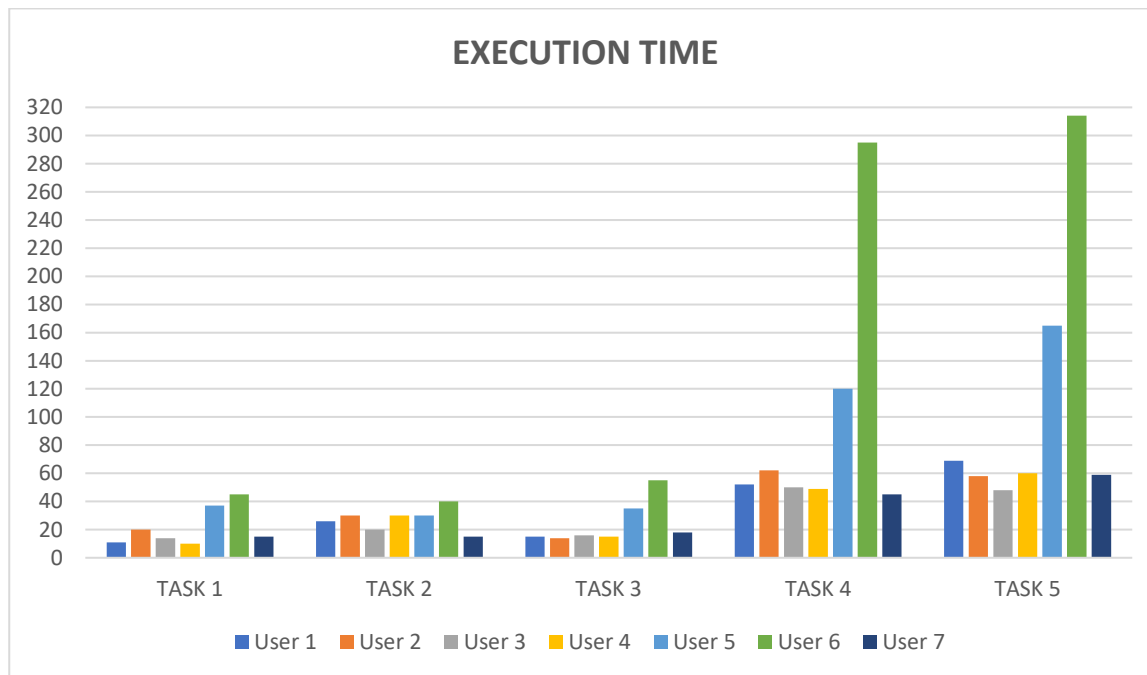
EXECUTION TIME

The execution time graph highlights how the first three tasks were performed very quickly by all users and almost in all three cases it took no more than 50 seconds to complete the request.
The last two tasks that we expected to be more expensive in terms of time were confirmed as such.
One piece of information that immediately attracts attention is the time of execution of the last two tasks by user 6: a 65-year-old person who does not usually surf the web and has found more difficulty than the others; this data does not worry too much because the long times used are due to the poor knowledge of the subject but it is however a data to work on to improve the browsing experience for any type of user.
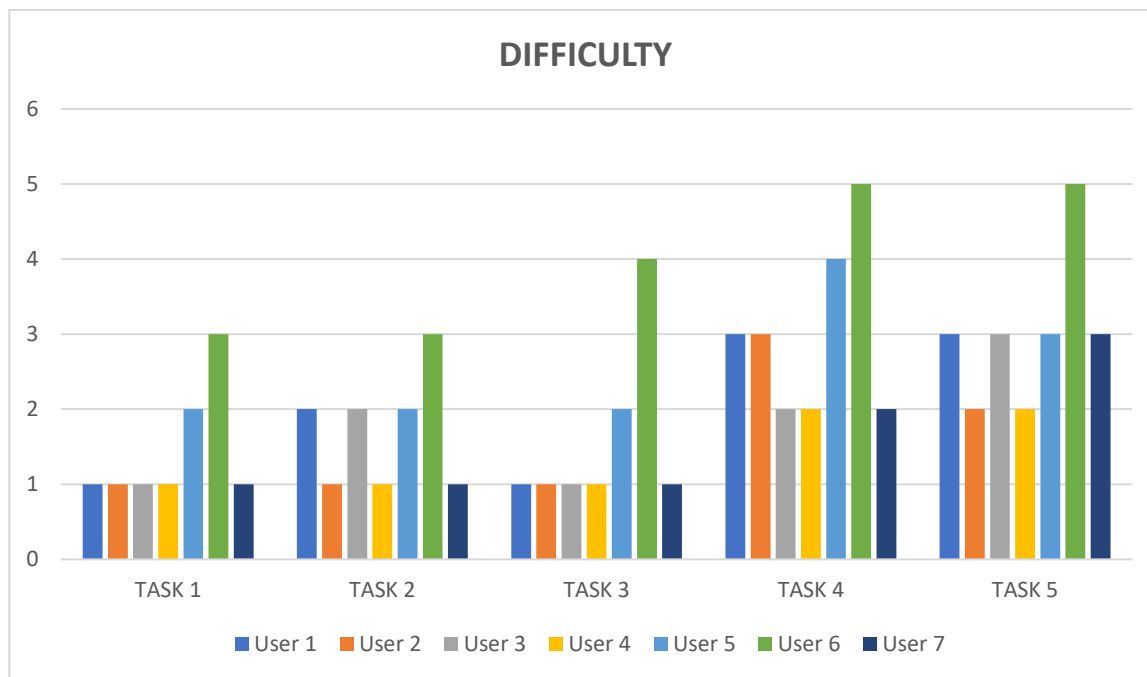
DIFFICULTY

The graph above highlights how also at the level of difficulty the first three tasks were the easiest to complete while the last two caused the users a bit more problems.

Analysing the range that were formed, we immediately notice that user 1,2,3,4 and 7 had more or less the same difficulties on all the tests; these users are very young boys and adults who are used to interacting with technological tools and surfing the web every day and therefore have not had too many problems to complete the tasks.

Users 5 and 6 who are the oldest have encountered several problems because they are not used to interacting with websites every day; in particular it can be assumed that user 6 has had more difficulties than user 5 due to previous gaps accumulated during the years of his career: while an engineer is inhabited to face ever new problems and has a well-confirmed technique to deal with them, an employee may not have the same skills and this could have caused these major difficulties.

Also, in this graph there are the same alarming data found during the previously analysis.

QUALITATIVE ANALYSIS

We can finally display the answers (feedback) to the questions reported above regarding our website's graphical design, its navigability and how the information reported in the website is useful.
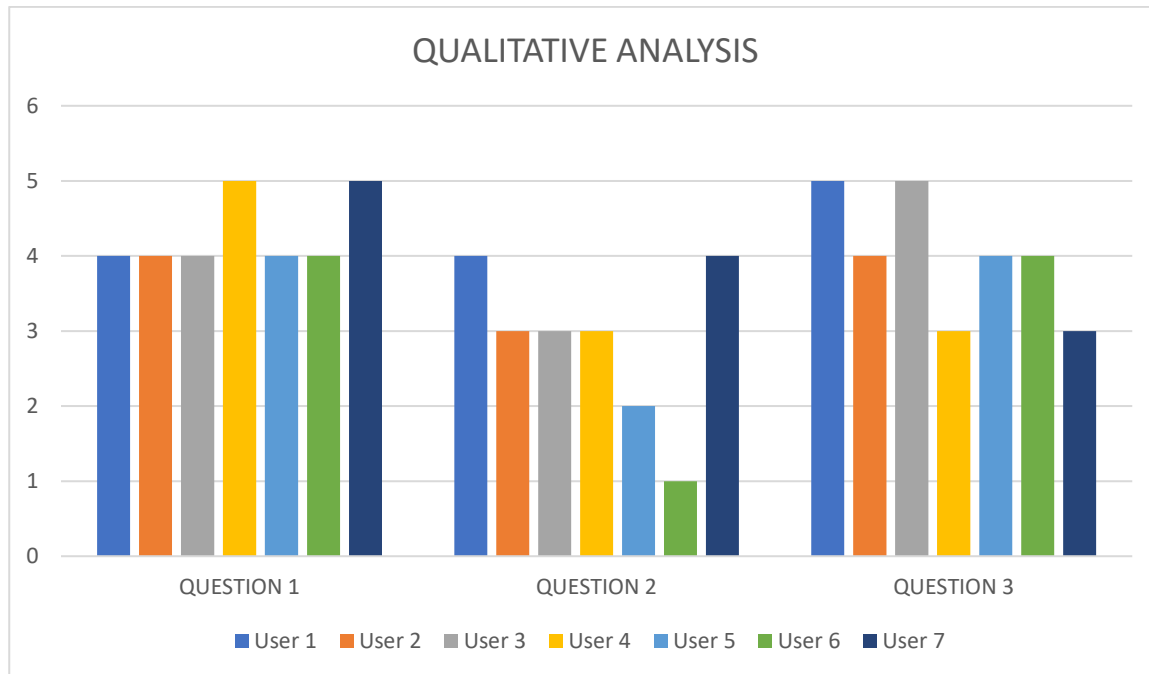
From this graph we can see how our website received a generally positive feedback.

In particular, the graphics and design part of the site is very appreciated by the users.

The intuitiveness of the site, on the other hand, did not leave all the testers satisfied, especially the older ones who probably would have preferred some small tutorials or some more visible buttons to reach their goals.

Finally, as regards the contents, there were users who found everything they were looking for and were satisfied by the completeness of the site while others evidently expected to find more.

CONCLUSION

The only comment that we have received is this: "Missing confirmation when adding a book to the cart and when "payment" button is clicked" wrote by Luca (user 1). We have provided to fix it.
As for the analysis carried out on the graphs we did not find alarming data that could lead to a re-planning a part of the site but we decided to adopt, to reduce the difficulties encountered by older users, tutorial techniques to facilitate browsing on the site for less experienced users who want to enjoy a service like the one we provide on our platform. The user testing method has proved itself useful to find some weaknesses that in the eyes of us developers that had escaped due to the direct involvement in the project itself.