

Computer Science and Engineering Hypermidia Applications

User Testing Document

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Our website: https://wild-care.herokuapp.com/index.html

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1 Abstract

The aim of this document is to report the User-Testing-based Usability Evaluation of Wild Care website which can be found at https://wild-care.herokuapp.com/.

The website that is analyzed into this document is intended to provide information about Wild Care association, the events that it organizes, the services provided and the volunteers that are involved into the association and its activities. It also gives the possibility to read faqs and to sent request via a form.

Tester followed a 2 steps procedure:

- 1. Execute given task following scenarios while they are evaluated with specific criteria
- 2. Surf the website freely
- 3. Fulfill a form with some questions related to landmarks, navigation and layout.

2 Design of the study

2.1 User profile definition

We have defined 2 segments of user profiles heterogeneous for what concern the gender and homogeneous for what concern other age, civil state and tech capabilities.

• User profile one

- Age range: between 18 to 35 years old
- Civil State: single or with fiancee
- Technology capabilities: normal web user with no peculiar capabilities

• User profile two

- Age range: between 40 to 60 years old
- Civil State: merried
- Technology capabilities: normal web user with no peculiar capabilities

2.2 Scenarios

The User testing is based on 3 scenarios

• Scenario 1

You are planning to go to Valtellina in September and you are looking for an event related to wild animals; once you get it you wanna know more and decide to call the event organizer.

- 1. Surf the events and find the September ones
- 2. Select an event that you like
- 3. Find even organizer phone number to contact him/her and get more info

• Scenario 2

You would like to become volunteer of an association that protects wild animals.

- 1. Get info about the association
- 2. Try to answer to your question reading faqs

3. Send a request to become volunteer

• Scenario 3

You are discovering Wild Care services and you would like to get more information about the event related to a certain service that you liked the most.

- 1. Surf the services
- 2. Select a service that you find interesting
- 3. Pick a related event and see its details

2.3 Variables to measure

To evaluate the task execution we have chosen to adopt the following metrics:

- time of execution: the clock starts when the user directs his/her attention to the application
- *success rate*: to a "complete success" is assigned a value equal to 1, to a "partial success" is assigned a value equal to 0.5 and to a "failure" a value equal to 0.0
- perceived difficulty: an oral evaluation between 0 and 5 given imemediately after the task execution
- *errors*: integer that express how many "wrong" links have been clicked to reach the goal or wrong paths have been taken
- satisfaction: an oral evaluation between 0 and 5 given imemediately after the task execution

2.4 Final survey

After all tasks execution, every user fulfilled a questionnaire formed by N questions with a rating between 0 to 5. We have used Forms Pro software to create the survey and collect data; we have reported here all questions for completeness.

- 1. How much useful did you find the topbar?
- 2. How much easy has it been to find events for month?
- 3. How much easy has it been to find services related to events?
- 4. How much easy has it been to find events organized by a volunteer?
- 5. How much easy has it been to find volunteer's details?
- 6. How easily did you find the mission of the association?
- 7. Do you find the text layout readable?
- 8. Do you find images dimension good?
- 9. Do you find website layout consistent?
- 10. Are semantic close events also close into the space?

The survey can be found at link

https://forms.office.com/FormsPro/Pages/ResponsePage.aspx?id=8eAiizYZfk-CTpheWGbGkZgSwAPI3GJPvXJ0APwN3yxUNU42NjFRRTIwTlA5SENQWTNKVEwwOzRBTS4u.

3 Execution of the study

The study has been executed in person at the end of the development of the website. The testers used their own laptop or our while we manually gather usability data. We took two tests at a time in parallel to reduce time and make it faster. In order to be sure that every tester didn't see the website before the execution we divided them in different rooms, who was doing the test was in one room with one of the developers and the others where waiting in the living room.

We have also chosen to respect our tester privacy and, for this reason, they are represented here through IDs.

3.1 User Profile 1

Here it is possible to see the result of task execution of each user belonging to user profile 1.

Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
1	10	1.0	0	0	5
2	5	1.0	0	0	5
3	10	1.0	0	0	5
1	11	1.0	0	0	4
2	6	1.0	0	0	5
3	37	1.0	1	2	4
1	10	1.0	0	0	4
2	12	1.0	0	0	4
3	24	1.0	0	0	4
	1 2 3 1 2 3 1	Task Time (s) 1 10 2 5 3 10 1 11 2 6 3 37 1 10	Task Time (s) Success 1 10 1.0 2 5 1.0 3 10 1.0 1 11 1.0 2 6 1.0 3 37 1.0 1 10 1.0	Task Time (s) Success Difficulty 1 10 1.0 0 2 5 1.0 0 3 10 1.0 0 1 11 1.0 0 2 6 1.0 0 3 37 1.0 1 1 10 1.0 0	Task Time (s) Success Difficulty Errors 1 10 1.0 0 0 2 5 1.0 0 0 3 10 1.0 0 0 1 11 1.0 0 0 2 6 1.0 0 0 3 37 1.0 1 2 1 10 1.0 0 0

Table 1: Evaluation tester ID 0000

Table 2: Evaluation tester ID 0002

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	10	Successo	0	0	4
Scenario 1	2	20	Successo	0	0	5
Scenario 1	3	40	Successo	1	0	4
Scenario 2	1	25	Successo	0	0	5
Scenario 2	2	20	Successo	0	0	4
Scenario 2	3	90	Successo	0	0	5
Scenario 3	1	30	Successo	0	0	4
Scenario 3	2	40	Successo	0	0	5
Scenario 3	3	60	Successo	1	0	5

Table 3: Evaluation tester 0003

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	0	5
Scenario 1	2	20	Successo	0	0	5
Scenario 1	3	40	Parziale	0	0	5
Scenario 2	1	25	Successo	0	0	5
Scenario 2	2	20	Successo	1	0	5
Scenario 2	3	90	Successo	0	0	5
Scenario 3	1	30	Successo	0	0	5
Scenario 3	2	40	Successo	0	0	5
Scenario 3	3	60	Successo	0	0	5

Table 4: Evaluation tester 4

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	1	0
Scenario 1	2	20	Successo	1	1	0
Scenario 1	3	40	Parziale	1	2	0
Scenario 2	1	25	Successo	0	1	0
Scenario 2	2	20	Successo	1	1	0
Scenario 2	3	90	Successo	3	3	0
Scenario 3	1	30	Successo	0	1	0
Scenario 3	2	40	Successo	0	1	0
Scenario 3	3	60	Successo	2	2	0

Table 5: Evaluation tester 5

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	1	0
Scenario 1	2	20	Successo	1	1	0
Scenario 1	3	40	Parziale	1	2	0
Scenario 2	1	25	Successo	0	1	0
Scenario 2	2	20	Successo	1	1	0
Scenario 2	3	90	Successo	3	3	0
Scenario 3	1	30	Successo	0	1	0
Scenario 3	2	40	Successo	0	1	0
Scenario 3	3	60	Successo	2	2	0

3.2 User Profile 2

Here it is possible to see the result of task execution of each user belonging to user profile 2. They got some problems when they had to find the phone number of a volunteer that organized a

certain event (*Scenario 1: task 3*) and the errors they made where given by the fact that they where searching this kind of information into "About us" page or by going to "All People" without remembering the organizer's name. They suggested to put organizers info upper into the "Event" page or add contact info directly to the "Event" page.

Table 6: Evaluation tester ID 0001

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	13	1.0	0	0	5
Scenario 1	2	7	1.0	0	0	5
Scenario 1	3	18	1.0	2	2	3
Scenario 2	1	6	1.0	0	0	5
Scenario 2	2	11	1.0	0	0	5
Scenario 2	3	12	1.0	0	0	5
Scenario 3	1	15	1.0	0	0	5
Scenario 3	2	17	1.0	0	0	5
Scenario 3	3	12	1.0	1	0	4

Table 7: Evaluation tester ID 0004

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	13	1.0	0	0	5
Scenario 1	2	9	1.0	0	0	5
Scenario 1	3	15	1.0	1	1	4
Scenario 2	1	25	1.0	1	1	4
Scenario 2	2	7	1.0	0	0	5
Scenario 2	3	18	1.0	0	0	5
Scenario 3	1	11	1.0	0	0	5
Scenario 3	2	4	1.0	0	0	5
Scenario 3	3	10	1.0	0	0	5

Table 8: Evaluation tester ID 0005

Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
1	21	1.0	0	0	5
2	12	1.0	0	0	5
3	25	1.0	2	2	4
1	7	1.0	0	0	5
2	5	1.0	0	0	5
3	4	1.0	0	0	5
1	13	1.0	0	0	5
2	20	1.0	0	0	5
3	21	1.0	0	0	4
	1 2 3 1 2 3 1 2	Task Time (s) 1 21 2 12 3 25 1 7 2 5 3 4 1 13 2 20	Task Time (s) Success 1 21 1.0 2 12 1.0 3 25 1.0 1 7 1.0 2 5 1.0 3 4 1.0 1 13 1.0 2 20 1.0	Task Time (s) Success Difficulty 1 21 1.0 0 2 12 1.0 0 3 25 1.0 2 1 7 1.0 0 2 5 1.0 0 3 4 1.0 0 1 13 1.0 0 2 20 1.0 0	Task Time (s) Success Difficulty Errors 1 21 1.0 0 0 2 12 1.0 0 0 3 25 1.0 2 2 1 7 1.0 0 0 2 5 1.0 0 0 3 4 1.0 0 0 1 13 1.0 0 0 2 20 1.0 0 0

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	14	1.0	0	0	5
Scenario 1	2	4	1.0	0	0	5
Scenario 1	3	18	1.0	1	2	4
Scenario 2	1	5	1.0	0	0	5
Scenario 2	2	11	1.0	0	0	5
Scenario 2	3	5	1.0	0	0	5
Scenario 3	1	22	1.0	0	0	5
Scenario 3	2	19	1.0	0	0	5
Scenario 3	3	15	1.0	0	0	5

Table 9: Evaluation tester ID 0006

The study has been executed in person at the end of the development of the website. The testers used their own laptop or our while we manually gather usability data. We took two tests at a time in parallel to reduce time and make it faster. In order to be sure that every tester didn't see the website before the execution we divided them in different rooms, who was doing the test was in one room with one of the developers and the others where waiting in the living room.

We have also chosen to respect our tester privacy and, for this reason, they are represented here through IDs.

4 Results

4.1 User Profile 1

Here it is possible to see the result of task execution of each user belonging to user profile 1.

Execution Perceived Scenario **Task Errors Satisfaction** Success **Difficulty** Time (s) Scenario 1 10 0 5 1 1.0 0 2 5 0 5 Scenario 1 1.0 0 5 Scenario 1 3 10 1.0 0 0 Scenario 2 11 0 4 1 1.0 0 Scenario 2 2 6 1.0 0 0 5 2 Scenario 2 3 37 4 1.0 1 0 4 Scenario 3 1 10 1.0 0 0 4 Scenario 3 2 12 1.0 0 Scenario 3 3 24 1.0 0 0 4

Table 10: Evaluation tester ID 0000

Table 11: Evaluation tester ID 0002

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	10	Successo	0	0	4
Scenario 1	2	20	Successo	0	0	5
Scenario 1	3	40	Successo	1	0	4
Scenario 2	1	25	Successo	0	0	5
Scenario 2	2	20	Successo	0	0	4
Scenario 2	3	90	Successo	0	0	5
Scenario 3	1	30	Successo	0	0	4
Scenario 3	2	40	Successo	0	0	5
Scenario 3	3	60	Successo	1	0	5

Table 12: Evaluation tester 0003

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	0	5
Scenario 1	2	20	Successo	0	0	5
Scenario 1	3	40	Parziale	0	0	5
Scenario 2	1	25	Successo	0	0	5
Scenario 2	2	20	Successo	1	0	5
Scenario 2	3	90	Successo	0	0	5
Scenario 3	1	30	Successo	0	0	5
Scenario 3	2	40	Successo	0	0	5
Scenario 3	3	60	Successo	0	0	5

Table 13: Evaluation tester 4

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	1	0
Scenario 1	2	20	Successo	1	1	0
Scenario 1	3	40	Parziale	1	2	0
Scenario 2	1	25	Successo	0	1	0
Scenario 2	2	20	Successo	1	1	0
Scenario 2	3	90	Successo	3	3	0
Scenario 3	1	30	Successo	0	1	0
Scenario 3	2	40	Successo	0	1	0
Scenario 3	3	60	Successo	2	2	0

Table 14: Evaluation tester 5

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	20	Successo	0	1	0
Scenario 1	2	20	Successo	1	1	0
Scenario 1	3	40	Parziale	1	2	0
Scenario 2	1	25	Successo	0	1	0
Scenario 2	2	20	Successo	1	1	0
Scenario 2	3	90	Successo	3	3	0
Scenario 3	1	30	Successo	0	1	0
Scenario 3	2	40	Successo	0	1	0
Scenario 3	3	60	Successo	2	2	0

4.2 User Profile 2

Here it is possible to see the result of task execution of each user belonging to user profile 2. They got some problems when they had to find the phone number of a volunteer that organized a certain event (*Scenario 1: task 3*) and the errors they made where given by the fact that they where searching this kind of information into "About us" page or by going to "All People" without remembering the organizer's name. They suggested to put organizers info upper into the "Event" page or add contact info directly to the "Event" page.

Table 15: Evaluation tester ID 0001

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	13	1.0	0	0	5
Scenario 1	2	7	1.0	0	0	5
Scenario 1	3	18	1.0	2	2	3
Scenario 2	1	6	1.0	0	0	5
Scenario 2	2	11	1.0	0	0	5
Scenario 2	3	12	1.0	0	0	5
Scenario 3	1	15	1.0	0	0	5
Scenario 3	2	17	1.0	0	0	5
Scenario 3	3	12	1.0	1	0	4

Table 16: Evaluation tester ID 0004

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	13	1.0	0	0	5
Scenario 1	2	9	1.0	0	0	5
Scenario 1	3	15	1.0	1	1	4
Scenario 2	1	25	1.0	1	1	4
Scenario 2	2	7	1.0	0	0	5
Scenario 2	3	18	1.0	0	0	5
Scenario 3	1	11	1.0	0	0	5
Scenario 3	2	4	1.0	0	0	5
Scenario 3	3	10	1.0	0	0	5

Table 17: Evaluation tester ID 0005

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	21	1.0	0	0	5
Scenario 1	2	12	1.0	0	0	5
Scenario 1	3	25	1.0	2	2	4
Scenario 2	1	7	1.0	0	0	5
Scenario 2	2	5	1.0	0	0	5
Scenario 2	3	4	1.0	0	0	5
Scenario 3	1	13	1.0	0	0	5
Scenario 3	2	20	1.0	0	0	5
Scenario 3	3	21	1.0	0	0	4

Table 18: Evaluation tester ID 0006

Scenario	Task	Execution Time (s)	Success	Perceived Difficulty	Errors	Satisfaction
Scenario 1	1	14	1.0	0	0	5
Scenario 1	2	4	1.0	0	0	5
Scenario 1	3	18	1.0	1	2	4
Scenario 2	1	5	1.0	0	0	5
Scenario 2	2	11	1.0	0	0	5
Scenario 2	3	5	1.0	0	0	5
Scenario 3	1	22	1.0	0	0	5
Scenario 3	2	19	1.0	0	0	5
Scenario 3	3	15	1.0	0	0	5

5 Conclusion