

POLITECNICO DI MILANO



Corso di Laurea Magistrale in Computer Science and Engineering  
Dipartimento di Elettronica e Informazione

---

# Usability Study Report

## *The Big Family*

---

*Hypermedia Applications 2018 Project*

Authors:

Alessandro Aimi [alessandro.aimi@mail.polimi.it](mailto:alessandro.aimi@mail.polimi.it)

Roberto Bigazzi [roberto.bigazzi@mail.polimi.it](mailto:roberto.bigazzi@mail.polimi.it)

Abstract:

This document is a report for the usability of “The Big Family” site hosted on <https://polimi-hyp-2018-team-10483610.herokuapp.com> developed for Hypermedia Application course project. For the evaluation is performed the user testing method.

*16/05/2018*

Academic Year 2017-2018

# Contents

<b>1</b>	<b>Design and execution of the study</b>	<b>1</b>
1.A	Evaluation method adopted . . . . .	1
1.B	Task scenarios defined for the test . . . . .	1
1.C	Partecipants for the test . . . . .	2
1.D	Usability variables to be measured . . . . .	2
1.E	How the test was performed . . . . .	3
<b>2</b>	<b>Results</b>	<b>4</b>
<b>3</b>	<b>Discussion of results</b>	<b>6</b>

# Chapter 1

## Design and execution of the study

### 1.A Evaluation method adopted

For the evaluation of the usability of “The Big Family” site is used the user testing method. With this approach usability properties are retrieved analyzing the interaction between some representatives of real users and the system. The test is performed as the developers of the site want to gather data in order to improve their product.

### 1.B Task scenarios defined for the test

- Task 1: You stumbled upon the website of “The Big Family”, understand what is the scope of this association.
- Task 2: You are helping a friend looking for services for disabled people near Certaldo. Identify the ones offered by the association.
- Task 3: You want to write an email to have some more information about the association. Find the address.
- Task 4: You need to contact someone working in the Pet Therapy service. Find a telephone number to call.
- Task 5: You want to visit the association’s site nearest to your house. Find where it is.

## 1.C Participants for the test

For this test the participants are 5 users and 1 moderators.  
The users are recruited in order to best match the possible target audience for the system, and this was done considering that the site is about an association that holds some children care center on the territory.  
The user profiles found in the audience of the association are:

- Young adult
- Adult parent of a child
- Retired

The user goal is to:

- Find information about the association, since one of their relatives is a children with disability and the association could be useful for him/her

The moderator is one the developers of the site, alternately, depending on the disponibility of them.

## 1.D Usability variables to be measured

For each user and task, the moderators gather quantitative and qualitative indicators.

Quantitative indicators:

- Efficiency (time used for every task)
- Effectiveness (task completion (with or without assistance))
- Number of errors
- Task success rate

Qualitative data:

- What is liked/disliked
- Disorientation (information not found)
- Frustration

## 1.E How the test was performed

For the execution of the test a typical context of use of the site is simulated (i.e on the dining room table or in the living room) and every user is requested to work with a laptop to perform the tasks predefined by the moderator. If the user does not know English, the moderators will help with the translation. Before starting the test, its steps and its purpose are explained, the user is set at his ease and is told that he can leave whenever he wants. The sheet with the tasks is given to the user that can start to read and to ask what he doesn't understand of it or whatever comes to his mind. At this point the actual test can start. Since every profile of the audience can need and perform any action on the site, all predefined tasks are requested to every user. As long as the user performs the various tasks the moderator is present to gather the data needed and to observe any obstacle for the users to reach their goals.

After the test a simple questionnaire is delivered to the user to understand his opinion about the usability of the system.

## Chapter 2

# Results

For execution of the test some rules about the task performance are used. Starting from the scoring method considered for the task success, the one used is the following:

- Complete success (without assistance) = 1
- Partial success, or if assistance given = 0.5
- Gives up or wrong answer = 0

For the determination of unsuccessful tasks, a task is considered unsuccessful if one of the following condition is matched:

- The user give up on trying to complete the task
- Three wrong paths, or three attempts from the start
- The cut-off time (threshold) is elapsed (for this test 4 minutes are chosen as cut-off time)

At last, action is considered an error if:

- The user enter incorrect data into a form field
- The user makes the wrong choice in a menu or drop-down list
- The user takes an incorrect sequence of actions
- The user fails to take a key action

The tasks' results show that everyone was able to complete all the tasks in a reasonable time and with zero errors. The only noteworthy data are three:

## 2. RESULTS

---

- On the first task one person took a long time (2 minutes and 21 seconds), made three errors and noted that a link to the “Who We Are” page could be added to the content of the homepage. On average this task took more time than the other ones to everybody and another person did one error.
- On the third task one person made two errors and it took 48 seconds to complete it (not incredibly higher than average time). Also was noted that “Contact Us” landmark could be more noticeable.
- On the fifth task one person made four errors and it took 2 minutes and 11 seconds to complete (pretty higher than average). It was also suggested that the “Locations” landmark could be more noticeable.

The data collected by survey confirms the task’s result, with a good overall impression of the structure and information architecture, content and navigation. Only one person replied neutral at the statement “It was easy to find the information I needed”.

## Chapter 3

# Discussion of results

In the end we can say that it could be useful to change the page title “Who We Are” in something more like “What Is The Association” or “History And Values” to highlight the fact that the page is telling about the association, his history and his scope. Also we coul find a better position for the “Contact Us” landmark.