#### 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

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#### 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 a user testing method.

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## 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 Scenarios defined for the test

#### 1.C Partecipants for the test

For this test the partecipants 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. 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 task 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.

The tasks requested to the user are:

- Task 1:
- Task 2:

# 1. DESIGN AND EXECUTION OF THE STUDY

1.E. How the test was performed

- Task 3:
- Task 4:
- Task 5:

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

We've considered –Complete success (without assistance) = 1.0 –Partial success, or if assistance given = 0.5 –Gives up or wrong answer = 0.0

Rule 1 –The participant should continue to work on each task until they either complete it or reach the point at which they give up/wrong answer or seek assistance. •Rule 2 –"Three strikes and you're out." •Three wrong paths, or three attempts from the start. •Rule 3 –Define cut-off time (threshold) based on precise design requirements (typically not specified) •E.g. Find a way to fix your iPod [cut-off: 4 minutes] –Then: •"Call" the task after cut-off time •Better: Follow Rule 1 but record Failure after threshold

Errors are incorrect actions that may lead to task failure •What constitutes an error: –Entering incorrect data into a form field –Making the wrong choice in a menu or drop-down list –Taking an incorrect sequence of actions –Failing to take a key action •Why to measure errors –An error will result in a significant inefficiency –An error will result in significant costs –An error will result in task failure

# Chapter 3

# Discussion of results