

SEMINAR IN HMI COURSEWORK

Group Project

This document describes the group project to be completed by the students who are taking the module on Seminar in HMI in the academic year 2010/2011. The document consists of two parts: Part A contains the general description of the project. Part B provides a recommended method to carry out the assignment, and will be discussed in details in the laboratory hours.

Part A: General description of the project

Time scale

This group project will be conducted over semester 1 of the academic year 2010/2011 (starting on Friday October 29) deliverables due Friday January 15 after the Lecture to Prof. Antonella De Angeli).

Background and rationale

Your task is to produce a conceptual design of an integrated on-campus information system to support day-to-day activities of students, researchers, academics and administrative staff at the University of Bolzano-Bozen. The starting point is the current IT offering available at the University, including web-sites, public display, and monitoring room devices.

Your task is to propose a conceptual design of how a larger set of ICT could be exploited to improve everyday life in the campus with particular reference to new students and staff, mobility and the integration of University activities within the cultural context of the city.

The project will require the following activities:

- Formal evaluation and understanding of the limitations of current systems;
- Identification of key stakeholders and collection of user requirements
- PACT analysis
- Conceptual design of new systems;
- Evaluation of the conceptual design.

You need to be creative, concentrating on the user experience and the added values offered by your design. Important dimensions you need to consider include

- content,
- aesthetics
- usability

Help and contact information

It is expected that the work will be carried out independently by groups of students, and reviewed weekly in class.

Part B: Recommended Procedure

Introduction

The purpose of this assignment is to give you skills in the evaluation and design of new interactive systems. You will follow a user-centred design applying techniques and methods explained in class. The coursework procedure is organised in four basic activities:

- Formal evaluation of current IT systems to analyse their advantages and limitations choosing the best methods for different IT artifacts (e.g. heuristic analysis for web-site, field observation for public display, etc)
- PACT analysis
- Collection of user requirements (interviews, observations, questionnaire)
- Definition of success criteria and requirements of the envisaged system
- Generation of alternative design ideas
- Development of low fidelity prototypes
- Evaluation of the prototypes with representatives of the target user groups

You will be provided with a set of design instruments and templates during the lectures.

Deliverables

Each group will submit one deliverable, consisting of a report on the exercise. This will include:

1. **A cover sheet** with the details of all group members
2. A 15 pages report on the process, including
 - clear explanation of the methodologies and procedures followed
 - well justified requirements and success criteria
 - description of the iterative design process including the alternatives considered
 - rationale for each design choice and description of the final design
 - evaluation of your design against the criteria and requirements
 - critical reflection on the design exercise

Images, screen shots etc. can be attached in appendix and do not count towards the 15 pages.

3. **One CD or DVD per group** which contains all the artifacts that you have created individually (label individual contribution by names) and as a group as part of the evaluation and design process.

All deliverables are **due Friday January 15 after the lecture to Prof. Antonella De Angeli, or should be submitted to Prof. De Angeli 14 days before the students intend to take the oral examination.**

The report counts for 40% of the exam mark. The mark will be a group mark, but people who do NOT contribute to the work will receive a lower mark (up to 0 in case of no contribution at all). In case of problems which students are unable to deal with independently, they are required to contact Prof. De Angeli, as soon as the situation becomes evident. The contact must be initiated by e-mail, copying **each group** member. Marking will be based on the assessment of

- ❖ Presentation (10%);
- ❖ Validity and reliability of methodologies and procedures applied for data collection (30%);
- ❖ Critical analysis of results (30%);
- ❖ Quality of design suggestions (20%);
- ❖ Reflection and suggestions for further research (10%).