



**ISEL / ADEETC**

Master in Communication and Multimedia Network Engineering

**Interactive Multimedia Applications**

# **Lab Work 1**

# **Interactive Multimedia**

# **Applications**

**Mobile Application**

**Users Research and Task Analysis**

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## Introduction

The objective of this work is to define the characteristics and requirements of the mobile app that will be implemented in the final project. It is also objective to carry out the analysis phase of the methodology focused on the user experience to develop mobile applications.

**Note:** this lab work should be done in class and the resulting documents must be delivered through the Moodle platform until **March 22nd**. The idea for the final project must be accepted by the professor.

## Laboratory Work

### App Definition

1. Make a description of the mobile application that you want to develop in the final project of the curricular unit.
2. Make a Web search for 2 similar applications. Make a description of the applications found and enumerate the main differences with respect to the application defined in the previous point.

### Tasks

3. Make a list and description of the **tasks** that you think the user can perform in your application. Attention: it is not being asked for the **system features** but the **tasks** that the user can do.

### User Research and Task Analysis

4. Use the informal method based on a set of questions to define the audience and the tasks for the mobile application proposed for the final project. To describe the audience and the tasks they desire to perform in the app, in general, user interviews, surveys or user observations are performed. In the context of this curricular unit, it is difficult to

find samples of many types of users. Thus, select 3 classmates (to simulate the audience) and interview each one in order to answer a set of questions.

4.1. Describe the audience by answering the following questions:

- Who are the users (Groups)?
- What is their age range (Personal Characteristics)?
- What are their professions (Personal Characteristics)?
- What are their schooling (Personal Characteristics)?
- What are their knowledge of the technology (Personal Characteristics)?
- What is their motivation for using an app of this kind (Motivation)?
- What are their physical characteristics (physical characteristics)?

4.2. Describe the tasks the users desire to perform in the app by answering the following questions:

- What are the desirable tasks?
- What other similar tools do they use (Tools)?
- What information do users know about the tasks to be performed in the new app to develop (Tasks)?
- What are the users experience, that is, what knowledge will they bring to the tasks of the new app to be developed (Tasks)?
- How did they learn to do the tasks (Tasks)?

5. After the interviews, group the tasks desired by the users and those described in point 3. Select the final list of the tasks and describe them.

## Requirements

6. Set the requirements of the application you want to develop in the final project of the curricular unit. The requirements must be defined after acceptance of the idea by the professor. Four requirements of the following five must be included in your app:
- a. Multimedia Content;
  - b. NoSQL database;
  - c. Authentication;
  - d. Notifications;
  - e. Georeferenced information (e.g., on a map).