# User Experiment Complementary Information for "Accessibility Evaluation of Design Patterns on Moodle Mobile"

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#### 1. Introduction

This document contains complementary information regarding the User Experimentation described in Accessibility Evaluation of Design Patterns on Moodle Mobile.

This document consists of two sections: the first one describes the tasks performed by the participants in the experiment; the second section describes the set of Design Patterns evaluated in the experiment.

# 2. Description of the tasks

In the experiment, each participant had to perform five tasks involving the Moodle Mobile<sup>1</sup> application. All tasks were related to common activities already performed by the participants in their daily activities in Moodle desktop version. This section presents a short description of all the five activities.

# 1. Activity 1: Consult Events on Calendar

In this activity the participant should access the Calendar Events page and access the detailed information on the event "Experimento 26/04".

### 2. Activity 2: Check the Questionnaire grade

In this activity the participant should consult the grade received in a questionnaire activity they had performed in class in the previous week.

## 3. Activity 3: Send a private message to another student

The participant should send a private message to one of two specific students named "Aluna Moodle" and "Aluno Moodle". The participant had to use the messaging function available in the app.

### 4. Activity 4: Read an article

In this activity the participant should find and read a chapter of a book available in the course materials with the title "The sun is our only truly renewable energy source".

### 5. Activity 5: Answer to a quiz

The participant should answer to a quiz regarding a future activity that would happen in the following weeks in the chemistry class.

https://download.moodle.org/mobile/

# 3. Description of the Design Patterns

This sections presents a description of the seven Design Patterns evaluated in the experimentation. More information on the description and usage of these Design Patterns on mobile devices can be found on [Hoober and Berkman 2011].

# • Toggle Menu

When dealing with small screens, usually there is not much space for content and navigation controls. One alternative is to follow the Toggle Menu pattern which defines a button or link that triggers an animation and displays the menu in the bottom, in one of the sides of the screen, on top or even over the entire screen.

#### • Icon

An Icon is a graphical representation of a functionality or destination. In a mobile app, an icon can be used as an indicator of some action that can be done with or without complementary text. While icons are useful in the design of interfaces, the icons should be understandable to the user that should be capable to relate the graphical representation of the functionality with the icon image even if the icon also presents a simple complementary text.

### • Infinite List

The Infinite List pattern defines an alternative to dealing with a large amount of data in a small screen. When a list of item is too big and needs pagination in order to save processing power or if there is no way of knowing how many items a list will have, an Infinite List of items can be used with loading of new items when the user reaches the end of the screen, then new items are loaded and a loading indicator should be shown as feedback.

#### • Vertical List

Vertical List is list with limited number of items where all items are loaded and displayed at once and the scrolling direction is vertical.

### • Input Area

An Input Area is any type of input functionality, for example a text field of a form.

#### • Button

A Button is a representation of an action and should not be seen as a more important link, but rather as a trigger for a functionality. Buttons can be consisted of only text or may be accompanied by a significative icon that represents the action. A Button is one of the most common Design Pattern in any interface and has great importance, therefore, it's important that the text of the button correctly represents the action associated with it.

### • Form Selection

Form Selection is any interface element where the user can select one or more item of a preloaded list of options. There are many representations of this pattern: selection box, radio button and checkbox, for example.

### References

[Hoober and Berkman 2011] Hoober, S. and Berkman, E. (2011). *Designing mobile interfaces*. O'Reilly Media, Inc.