Interfaces de Usuario

Grado en Ingeniería Informática

Course 2017 / 2018

Programming exercises

(Assignments)

DESIGN METHODOLOGIES

Prototyping

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1. Introduction

This document presents the **third set of programming exercises**. In this set, there is just one exercise about the application of the rapid prototyping process for redesigning an existing webpage. This section describes how the exercises will be carried out (estimated effort, date of submission), assessed (assessment criteria), and submitted.

Estimated effort

The estimated number of hours each student will need to devote to completing the exercises is 10, which will be distributed along **two** working weeks and sessions. The sessions will take place in small lecture rooms, wherein the lecturers will (i) introduce JavaScript to the students, (ii) go through a number of examples and (iii) solve general doubts or concerns.

Submission

The programming exercises will be submitted on the **10th week of the course** (see the timetable of lab sessions in Aula Global). The submission will consist of one exercise. The exercise to be submitted will be specified at the start of the submission session.

Assessment

In this set of exercises, we will evaluate: **functionality** (i.e. what you are asked to do), **code** (e.g. can a person who is not you understand the code? Have you written comments in the code?) and **user interface design** (e.g. think about a human user interacting with your page – colors, size of text…)

This set of exercises corresponds to 33% of the final mark of the labs of the course, i.e. 10% of the final mark. Students **will not pass** the course if they either copy the exercises from web pages or from another group, or allow them to copy their exercises.

Organisation of the document

This document is divided into three sections. Section 2 describes the exercise and the submission procedure, along with the assessment criteria.

2. Exercise

The aim of this exercise is to design a tool to watch and share videos. The webpage can be used with or without a subscription.

Not subscribed users can navigate published videos and basic information about them (description, *likes*, *sharings*, keywords), search for videos related to a specific topic, and sign up to the website.

Subscribed users can use the same functions of the not subscribed users. Additionally, they can also interact with the videos (*likes*, *comments* and *sharings* in other social networks), save favourite videos, create a public or private playlist, and follow a playlist created by other users. They can also create a collaborative list where other users can participate and add content.

The tool design will follow the user center design methodology, as explained in the following section.

3. Design Methodology

To design the website, you are going to apply the user centre design approach (explained during the theory session, Module 2 – Methodology) and, in particular, its three first phases (excepting the evaluation):

1. **knowing the user** with the definition of 3 personas as detailed descriptions of the end users of the website (who is going to use the website), including goals, skills, attitudes, tasks and context;
2. **analysing** three examples of similar websites (e.g. Youtube, Netflix, HBO, …) using the Nielsen's heuristics and Van Duyne's design patterns. From the three personas previously defined and the three web sites here analysed, extract the following information:
   a. main goal of the tool,
   b. lists of functionalities to include in the tool, and
   c. a scenario as an example of how the tool will be used;
3. **designing** a Hi-Fi (High Fidelity) prototype, including 2-3 pages as required to carry out the scenario previously defined.
4. **documenting** the design process including each one of the previous phases, specifying which heuristics and design patterns have been applied.

4. Material

In the following, several examples of prototyping tools that can be used for developing the assignment, are listed

1. Moqups (https://moqups.com/) - The free version includes two projects with a limited number of 300 objects and 5 Mb of storage
2. Pencil Project (http://pencil.evolus.vn/) - Open Source
3. Maqueta (http://maqetta.org/) - Open Source
4. Axure (http://www.axure.com) - Free version for academic students
5. Balsamiq (https://balsamiq.com/) - Free version for academic students

Each practical group can use any other prototyping tool they already know.

5. Norms

The realisation and submission of the programming exercises is guided by the following set of rules. If you do not comply with them, your mark **won't be more than 3** in the exercises.

Conducting the exercises

The exercises will be carried out in groups of two people.

The members of each group will belong to the same lab group.

The members of the group cannot be altered throughout the course.

IMPORTANT: The lecturers will not solve problems via e-mail.

Submitting the exercises

The exercises will be submitted **at the beginning of the session** indicated in the introduction of this document. Exercises submitted afterwards will not be considered.

The submission norms are:

- All the files will be submitted through Aula Global.
- All the files will be either zip or rar files, with the following filename:

  Ep03_grXX.zip

- XX is the ID of your group. For example, group 5 will submit ep01 as:

  Ep03_gr05.zip

The zip or rar files will have the following structure:

- **design.pdf**. A pdf file with images of the proposed redesign. Moreover, a justification of the design choices and the proposed changes has to be included. If the used prototyping tool allows to share the redesign, you have to include it in the submission file.

IMPORTANT: Exercises must be submitted as it has been stated before. Other forms of submission will not be considered.