Platforms for networked communities

Academic Year: (2021 / 2022) **Review date: 11-07-2020**

Department assigned to the subject:

Coordinating teacher: DELGADO KLOOS, CARLOS

Type: Electives ECTS Credits : 6.0

Year : 1 Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

It is expected that students who register in the course have knowledge in basic technologies of representation and management of information in the web (HTML, XML), as well as of programming (in languages such as Java or Python).

OBJECTIVES

After successful completion of the course, students should have acquired the following competences:

- Creativity and brainstorming
- Work in groups with a division of tasks (leadership, negotiation, conflict resolution)
- Understand advanced technical documentation
- Resolution of specific problems with evaluation of different alternatives
- Presentation of the work done with a reasoning of decisions taken

DESCRIPTION OF CONTENTS: PROGRAMME

The course will be structured through a set of modules, which are independent but interrelated, which will cover the following contents:

1) Transversal competences:
- Techiques and tools for creativity
- Techiques and tools for working in groups
- Techiques and tools for sofware development
- Techniques and tools for presentation

2) Technical knowledge
- Use of an API of a collaborative system
- Implementation of a project based on this API

As a reference, the following systems have been worked with in previous years: Google Wave (2010), Junaio (2011), OpenFeint (2012), Google Course Builder (2013 and 2016), Open edX (2014), Oppia (2015), Actions on Google (2018, 2019, and 2020).

Here

http://rita.det.uvigo.es/VAEPRITA/201403/uploads/VAEP-RITA.2014.V2.N1.A3.pdf

is a description in Spanish of the work carried out by the students with Google Course Builder. Engineers from Google California mentored the projects with biweekly videoconferences and email interaction. An English reference is the following

http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7024100

One of the projects developed an extension for Google Course Builder that allowed editing and sharing assessments in GIFT format. This idea found its way into version 1.8 of the platform later on.

LEARNING ACTIVITIES AND METHODOLOGY

The methodology is mainly practical. Students, in groups that are formed at the beginning of the course, shall conceive, design, implement, test and present a collaborative system software project. In order to help them in this project:

- Students will be taught with techniques and tools about creativity, work in groups, collaborative software design, presentation.
- In addition to the teachers of the course, other professionals of the sector will participate in the course. These professionals can provide guidance on technical and opportunity issues.
- Specific invited conferences might be offered.

ASSESSMENT SYSTEM

The evaluation will be done based on the developed project, its presentation, and student performance and participation during the course. In addition to the opinion of the lecturers of the course, the impression of the external invited professionals will be taken into account using rubrics. As the work is a project development during the course, it is mandatory the student attendance to the class sessions. It is allowed that a student does not attend up to 20% of the class sessions by justified causes.

% end-of-term-examination:	0
% of continuous assessment (assigments, laboratory, practicals…):	100

BASIC BIBLIOGRAPHY

- J. López Quijado Domine JavaScript, Ra-ma, 2005
- Mark Lutz Programming Python, O'Reilly Media, Inc., 2010
- PMI Standards Committee A guide to the project management body of knowledge, Project Management Institute, 1996
- W. Chun Core python programming (Vol. 1), Prentice Hall Professional, 2001