LABORATÓRIOS INTEGRADOS - GAMIFICAÇÃO

Code: 27220

Main Scientific Area: Computer Graphics and Multimedia

Lecturer: Duarte Filipe Oliveira Duque

Language of Instruction: Portuguese

Regime: T3

Contact Hours: 24h Total Workload: 57h

ECTS: 3,0

Objectives

In this UC it is intended to apply the knowledge acquired during the first two semesters and implement a technological solution(application/game) to carry out a pedagogical activity using the concepts of gamification. Throughout the semester students will develop practical work.

Learning Outcomes

Students at the end of this UC must apply gamification concepts in different contexts of use.

Course Contents

1. Gamification Techniques

1.1. Reward

1.2. Competition

1.3. Challenge

2. Game design elements

2.1. Points

2.2. Badges

2.3. Leaderboards

2.4. Performance charts

2.5. Storytelling

2.6. Avatars

2.7. Team 3. Examples of application in pedagogical contexts

Recommended Bibliography

- Steffen P. Walz; Sebastian Deterding, "Gamification as Behavioral Psychology," in The Gameful World: Approaches, Issues, Applications, MIT Press, 2014, pp.81-105.

- Yu-kai Chou (2015). Actionable Gamification: Beyond Points, Badges, and Leaderboards. ISBN: 1511744049

- Michael Matera. (2015). Explore Like a PIRATE: Gamification and Game-Inspired Course Design to Engage, Enrich and Elevate Your Learners. - Karl M. Kapp. (2012). The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education. Pfeiffer; 1st edition, ISBN-10: 1118096347

Learning and Teaching Methods

With this program students will learn the main applications of gamification, its advantages, and main techniques. Thus, they will be able to develop pedagogical activities that take advantage of these techniques in creating learning contents that better capture the attention and interest of the recipients. The practical development of an activity will also allow its evaluation and validation.

Assessment Methods

The assessment will only be practical, in small groups or individually.

The evaluation criteria will be:

- Project development (10%)

- Game Design Document (20%)

- Final Project (80%)

Application of gamification techniques Relevance of the game design to the proposed theme