INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Integrated Project 2			Field of study	Game design and development		
Master in	Digital Game Design and Development			School	School of Public Management, Communication and Tourism		
Academic Year	2023/2024	Year of study	1	Level	2-1	ECTS credits	6.0
Type	Semestral	Semester	2	Code	5074-802-1202-00-23		

Workload (hours)	162	Contact hours	T -	TP -	PL 45	TC -	S -	E -	OT -	O -

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s): Barbara Costa Vilas Boas Barroso, Carlos Sousa Casimiro da Costa, João Paulo Pereira de Sousa

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Integrate knowledge and skills acquired in the other CUs of the semester into the design and development of a game.
2. The ability to auto and self-analyze the application of this knowledge and skills to improve the project.

Prerequisites

Not applicable

Course contents

The focus of this course is project-oriented, in the design and development of a medium to high complexity game, developed collaboratively in small teams. In addition to the summoning of knowledge and skills worked on in the other CUs of the semester, for systematization and aggregate application, transversal issues to the praxis in the area of digital games are addressed.

Course contents (extended version)

1. Design and development under agile methodologies:
   - Life cycle, planning, and development phases of a project;
   - Risk assessment and mitigation;
   - Deadlines, resources, and costs;
   - Subcontracting;
   - Submission.
2. Communication:
   - Leadership and team management;
   - - Relationship with clients and/or external producers;
   - Publicizing the project.
3. Common tools for the different profiles of team members:
   - Iterative cycles and version control;
   - Use of shared repositories;
   - Dynamic documentation of design and development processes.
4. Critical reflection about the work developed:
   - Internal evaluation
   - Benchmarking;
   - Playtesting data;
   - Postmortem.

Recommended reading

1. Ambler, S. W. & Lines, M. (2012). Disciplined Agile Delivery (DAD): Practitioner's Guide to Agile Software Delivery in the Enterprise. IBM Press. ISBN: 0132810131.
2. deWinter, J. & Moeller, R. M. (2014). Computer Games and Technical Communication. Critical Methods and Applications at the Intersection. Routledge. ISBN 9781138710207.
3. Malakar, S. (2021). AGILE in Practice: Practical Use-cases on Project Management Methods including Agile, Kanban and Scrum. BPB Publications. ISBN: 978-9389423440.
4. Whitaker, J. & Mancini, R. (2012). Technical Documentation and Process. 1st Edition. CRC Press. ISBN: 978-1439861592.
5. Bibliografia específica a cada equipa / projeto articulada com os docentes da UC.

Teaching and learning methods

This course is characterized by a practice-laboratorial approach, using technical equipment suitable for the design and development of a digital game. Teams of 4 to 6 students are estimated. The micro-exposition of content will reinforce concepts, techniques or methodologies in the light of praxis. The dynamic and co-responsible attitude of the team will be encouraged in weekly sprint meetings.

Assessment methods

- Final Evaluation - (Regular, Student Worker) (Final, Supplementary, Special)
   - Projects - 100% (Project developed collaboratively with final presentation of results.)

Language of instruction

1. Portuguese
2. English

Electronic validation

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20-03-2024	03-04-2024	10-04-2024	17-04-2024