

**TELECOM & Management SudParis Summer School Course Proposal 2009 : *Designing games - an interactive team project***

Programme	
Course Title	Designing games - an interactive team project
Context	
Objective	The aim of this course is to develop a simple, yet fun and challenging, computer video game. The game will be programmed so that it can be accessed over the internet and run through any web browser (so your friends and family can play). The main learning objective is team-work for problem solving. (You will also learn about game development and programming for the web.)
Pre-requisites	Students attending the course must have basic programming skills (in any language). Students with advanced programming experience are also welcome to participate. All participants must have an interest in games and/or puzzles.
Number of hours	27.5

**Description of the Course and the Teaching Method**

The course follows a [problem-based learning](#) approach: where emphasis is on working in groups, on open problems, supported by an expert facilitator.

Working in teams, inexperienced programmers will get an opportunity to see how their basic skills can be combined in order to scale-up to producing a simple video game. At the end of the course, the class will have designed and developed a game which would normally have taken an experienced programmer many months to build by themselves. More advanced programmers in the teams will be introduced to software design, software life cycle and software project management. At the end of the class, they will have experienced some of the problems that arise in real software development, and have a better understanding of how these problems can be avoided and/or solved. All participants will get a better understanding of problem solving. They will learn the importance of communication and team work. They will understand that successful game development is as much an art as it is a science.

Choosing what sort of game to build is an important part of the beginning of the project. The choice will be made by the participants (guided by the knowledge of the lecturer). Designing how the game will be built will be interactive and is the most important part of the project. Building and testing the game will be the responsibility of the participants (helped by the lecturer).

The course will be taught in 3 stages:

- Game choice and design
- Game building - everybody contributing, everybody programming
- Game playing - testing the game and making improvements to the design

Teaching Language	English
Number of places	10-20
Examination	Group Self Assessment
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