Liverpool John Moores University

Title: PROTOTYPE GAME DEVELOPMENT
Status: Definitive
Code: **7080COMP**   (120638)
Version Start Date: 01-08-2018

Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

Team	Leader
Chris Carter	Y

Academic Level:	FHEQ7	**Credit Value:**	20	**Total Delivered Hours:**	36
Total Learning Hours:	200	**Private Study:**	164		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	4
Practical	32

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Prototype advanced 3D game developed using rapid prototyping; game pitch	100	

Aims

To allow students to apply their game design skills, improve their technical game development capabilities, experience rapid prototyping skills and pitch their products in a realistic way.

Learning Outcomes

After completing the module the student should be able to:

1   Apply suitable game design techniques to the early stages of game development.
2   Apply rapid prototyping methodologies and tools in the context of an iterative development approach.
3   Implement advanced 3D game programming and development techniques.
4   Examine advanced software development tools and methodologies.
5   Demonstrate experience of the commercial game pitching process.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Prototype 3D Game   1   2   3   4   5

Outline Syllabus

3D game engines
Shader programming and special effects
Build process, asset and SKU management
Software development tools (version control, Github/SVN, bug tracking)
RAD tools, UI and progression-logic prototyping
Scripting for AI, environment and progression
Development processes (iterative, agile, scrum)
Distributed development approaches and tools
Cross-platform development and tools
Web development (Javascript, HTML5, WebGL, three.js)
Open game prototyping (open betas/early access, Kickstarter, Greenlight, social media)
Protype audio, music, FMV, narrative, storyboarding
Game pitch documentation and preparation

Learning Activities

The course will split into three activities. Formal lectures will cover background material with directed reading to support the course material. The largest portion will involve practical sessions during which students will perform rapid prototyping. Finally the pitching process will be performed in a tutorial style towards the end of the course.

Notes

This module encompasses a wide range of game development process and teaches students on the necessary technique to apply their game design skills, improve their technical game development capabilities, experience rapid prototyping skills and pitch their products in a realistic way.