COMP260
Distributed Systems

20 credits
Compulsory for BSc Computing for Games
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FALMOUTH
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Introduction

This module will help you to gain a deeper understanding of distributed systems, computer networking, and database technology. You will learn about the use of these technologies in the context of games and further game practical experience of applying that learning to a collaborative development of a multi-player game.

Aims

This module aims to help you:

- Gain in understanding of distributed systems through networking technology and databases
- Acquire knowledge and experience of networking and database technologies as applied to games
- Gain understanding and experience of how to apply networking and database technology in a specific game development context

LO	Learning Outcomes	Assessment Criteria
1	Show a basic understanding of creative computing solutions using professional techniques.	Work with the principles of networking, database, and parallel processing technology as applied to games and apply those technologies in a game development context.
2	Show a basic understanding of how to communicate effectively with stakeholders in writing, verbally and through adherence to coding standards.	Demonstrate the ability to listen and understand what is required for a networking/database solution in a live development context. Ascertain the aims of a groups game development concept to provide an appropriate networking or database solution.
3	Show a basic development of the ability to reflect critically on and evaluate working methods and solutions.	Analyse critically the strengths and weaknesses of your code and develop an ability to respond to the critical judgements of others.
4	Show a basic understanding of the ability to conduct research, present knowledge in an academic format and apply that research to practice.	Demonstrate a working knowledge of distributed systems and their application to games. Apply that appropriately that knowledge to identify and create servers for a game.
6	Show a basic understanding of methods used to help set goals, manage workloads to meet deadlines and to work collaboratively.	Show an understanding of how to plan and manage time. Meet deadlines by planning available time effectively.

Academic Staff	Gareth White	
	Dr Michael Scott (Moderator)	
Assignments	Distributed Processing Task	30%
	Client-Server Programming Task	60%
	Research Journal (Cybersecurity)	10%
Indicative Hours	Sessions	36 hours
	Directed Reading	18 hours
	Distributed Processing Task	22 hours
	Client-Server Game Task	34 hours
	Cross-Over with Collaborative Game	20 hours
	Cybersecurity Journal	12 hours
	Self-Directed Study	18 hours
	Self-Directed Studio Practice	40 hours
		200 hours

Each study block represents 600-hours of study. This means that 40 hours of study per week (including contact time) is expected, alongside a further 120-hours of studio practice across the assessment period.

Additional Resources

Session Plans & Materials:
```
http://learningspace.falmouth.ac.uk/course/
view.php?id=1259
```

Assignment Briefs:
```
http://github.com/falmouth-games-academy/
bsc-assignment-briefs/tree/2017-18/comp260
```

Reading List:
```
http://resourcelists.falmouth.ac.uk/modules/comp260
```