

CE810 - Game Design 2

Introduction

Joseph Walton-Rivers & Piers Williams

Monday, 14 May 2018

University of Essex

But First ...

Before we begin though ...

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But emphasis can change subtly meaning of a sentence so it is included in the slide as well as in our anunciation

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An Overview

1. Evaluate the mechanics of a game.
2. Explain gameplay elements in terms of game theory.
3. Describe the relationship of story and computer games.
4. Develop measures of player experience and apply them to optimise game parameters.
5. Evaluate the effects of game AI on player experience.

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5. As it says on the tin

The Goal

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└ An Overview

└ The Goal

To use **game playing agents (AI)** to help us test points in our **design space** to improve **player experience** in games

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We will cover this in more detail in a later slide

Game Agents

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└ An Overview

└ Game Agents

How is AI used in games?

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How is AI used in games?

Bots Agents that act like players *possibly*

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Directors Things that alter the game

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Directors Things that alter the game

For this module, we'll mostly be talking about bots.

Design Space

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└ An Overview

└ Design Space

Games have many different **parameters** which can be tuned to produce different outcomes.

Examples:

Click bullet to see an example of how complex modern games treat “damage” on a bullet

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- How much damage does my **bullet** do?
- How many coins do I need to collect?
- What terrain can my scout walk over?

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Examples:

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Definition

Collection of events that **occur** to the player **during** the game

- Understand **differences** in variations - is version A better than version B?

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- Does a game have defects/exploits

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- Game Design Spaces

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- Player Experience

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└ An Overview

└ Main Topics

- Game Design Spaces
- Player Experience

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- ~~General Video Game AI~~

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└ Who are We?

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Joseph Walton-Rivers

- PhD Student
- Research on:
 - Artificial Intelligence
 - Player Modelling
 - Believability



Piers R. Williams

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 - Co-operation

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Admin Stuff

- Two Weeks - here (Lab 2)

Click the link and show them the timetable

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- Module will be a mixture of lectures, labs and group work.

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└ Admin Stuff
└ Structure

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- Information on our site
<http://ce810.fosslab.uk/timetable.html>

Click the link and show them the timetable

- Asteroids Experiment [10%]

Full details on the [module page](#).

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└ Assessment

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 - Search design space for target game

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- Game Design Hack [40%]

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 - Working game and brief description of how it works

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