Games AI
Lecture 1.0
Course introduction

- Course introduction
  - Content
  - Assessment

- Content
  - First 1/3: 80% of Games AI
  - Second 1/3: 20% of Games AI
  - Third 1/3: More techniques

- First 1/3: 80% of Games AI:
  - Finite State Machines
  - Utility-based AI
  - A* for Navigation
  - Behaviour Trees

- Second 1/3: 20% of Games AI:
  - PCG
  - Automatic Game Testing
  - Whole-game search
  - Planning

- Third 1/3: More techniques
  - Machine Learning
  - More A*?
  - More planning?
  - More PCG?

- Assessment
  - You develop a game with interesting AI
  - You each submit:
    - Written report
    - Source code
    - Playable version

- Your AI System:
  - Support the game experience (not e.g. monetsation optimisation!)
  - You decide:
    - Agent AI?
    - Procedural Content Generation?

- Evaluation
  - Written report:
    - Describe
    - Justify
    - Evaluate
  - Demonstrates clear evidence of significant and complex artificial intelligence coding and development work
  - Shows that you understand of the techniques you used and the ones you didn’t use (and why!)

- Save your code!
  - Use the lecture practicals to test out new techniques
  - Combine and reuse the code (appropriately!) for your assessment
- Don’t write the whole thing after one lecture!
  - You’ll need to combine multiple techniques
  - (or do something clever from the later parts of the course)
- Keep your game simple!
  - You get marks for your AI
  - Don’t worry about graphics, story, etc.

- Keep a design diary
  - You'll need to talk about the decisions you made during the development of your AI system

- Coming up:
  - **What is Games AI?**
  - **Finite State Machines**
  - What kind of game do you want to make?