



Games Design and Development

Welcome to COMP3218



Games Matter

- “Life is more fun if you play games.”
 - *Roald Dahl, My Uncle Oswald*
- “Games lubricate the body and the mind.”
 - *Benjamin Franklin*
- “Reality is broken. Game designers can fix it.”
 - *Jane McGonigal*

Computer Games are our medium, our culture, our means of expression. They matter because they reflect us.

Games Matter

“Over the centuries, mankind has tried many ways of combating the forces of evil... prayer, fasting, good works and so on

➔ *Terry Pratchett*



Games Matter

“Over the centuries, mankind has tried many ways of combating the forces of evil... prayer, fasting, good works and so on. Up until Doom, no one seemed to have thought about the double-barrel shotgun. **Eat leaden death, demon...**”

➔ *Terry Pratchett*



64 AMMO	65% HEALTH	2 3 4 5 6 7 ARMS		68% ARMOR	BULL 400 / 400 SHEL 64 / 100 ROKT 2 / 100 CELL 0 / 600
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For Everyone

- We believe that everyone, **no matter what gender, sexual orientation, ethnicity, religion or disability** has the right to play games, criticize games and make games without getting harassed or threatened. It is the diversity of our community that allows games to flourish.
- If you see threats of violence or harm in comments on Steam, YouTube, Twitch, Twitter, Facebook or reddit, please take a minute to report them on the respective sites.
- If you see hateful, harassing speech, take a public stand against it and make the gaming community a more enjoyable space to be in.

Because Games Matter!



Horizon Zero Dawn

Who Are We?



Who Are We?



David Millard

@hoosfoos | davidmillard.org | dem@soton.ac.uk

Who Are We?

age chapman

Adriane.Chapman@soton.ac.uk



le?

Tom Blount

@Tom_Blount | tb12g09@ecs.soton.ac.uk



Structure



Minecraft

- We have two objectives:
 - 1) To make you think more deeply about games
 - 2) To give you direct experience of making games

- So the course is based around two Unity game development activities **done in pairs**

- Each lasts five weeks

- Different pair for each activity

- Each finishes with an Expo where you show your games to each other and other students

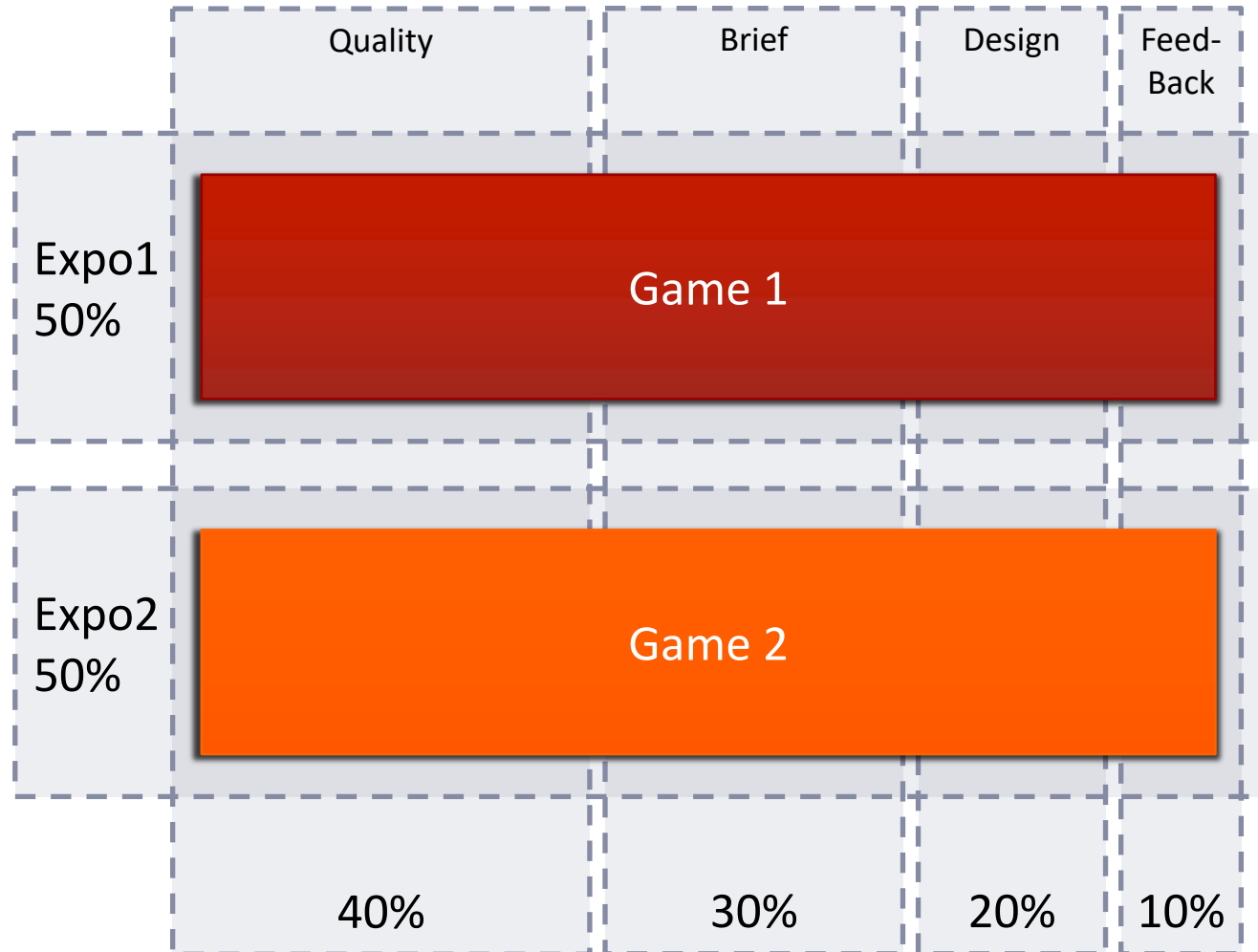
How Will You Be Assessed?



For each Expo:

- You submit a 1 page document answering key questions about your game
 - Related to the ideas and theories from the course
 - Explaining how you responded to feedback from labs
- You submit the game itself – as a runnable game (a windows .exe), and as a project (.zip)
- We mark the submission as one, you will get
 - **public** feedback in the form of a Let's Play video
 - We *will* compare your game to the marks criteria
 - But *will not* discuss marks (you get a **private** email instead)
 - Search for **COMP3218** on YouTube for previous years'
- **There is no exam.** 100% of marks come from the 2 games. Marks are shared equally between your pair.

Marks Breakdown



Structure

Week	Lectures (Tue 9-11am)	Lab (Thu 3-5pm)	Person
1	Intro to the Course and Unity	No lab	all
2	Game Structures and Elements	Unity Workshop	age
3	Mechanics, Dynamics, and Interactions	Sprint Workshop	age
4	Level Design and Tutorials	Sprint Workshop	tb
5	Balance and Difficulty	Feedback Workshop	dem
6	Adaptivity and Procedural Generation	Sprint Workshop	age
7	Interactivity, Agency and Non-linear Narratives	Expo 1	dem
8	Writing for Games: Form and Technique	Sprint Workshop	tb
9	Game Narrative Design and Poetics	Sprint Workshop	dem
10	Innovation in Games	Feedback Workshop	dem
11	The Games Industry Guest Lecture	Sprint Workshop	all
12	No lecture	Expo 2	

Sprint 1
Game Design Basics

Sprint 2
Narrative

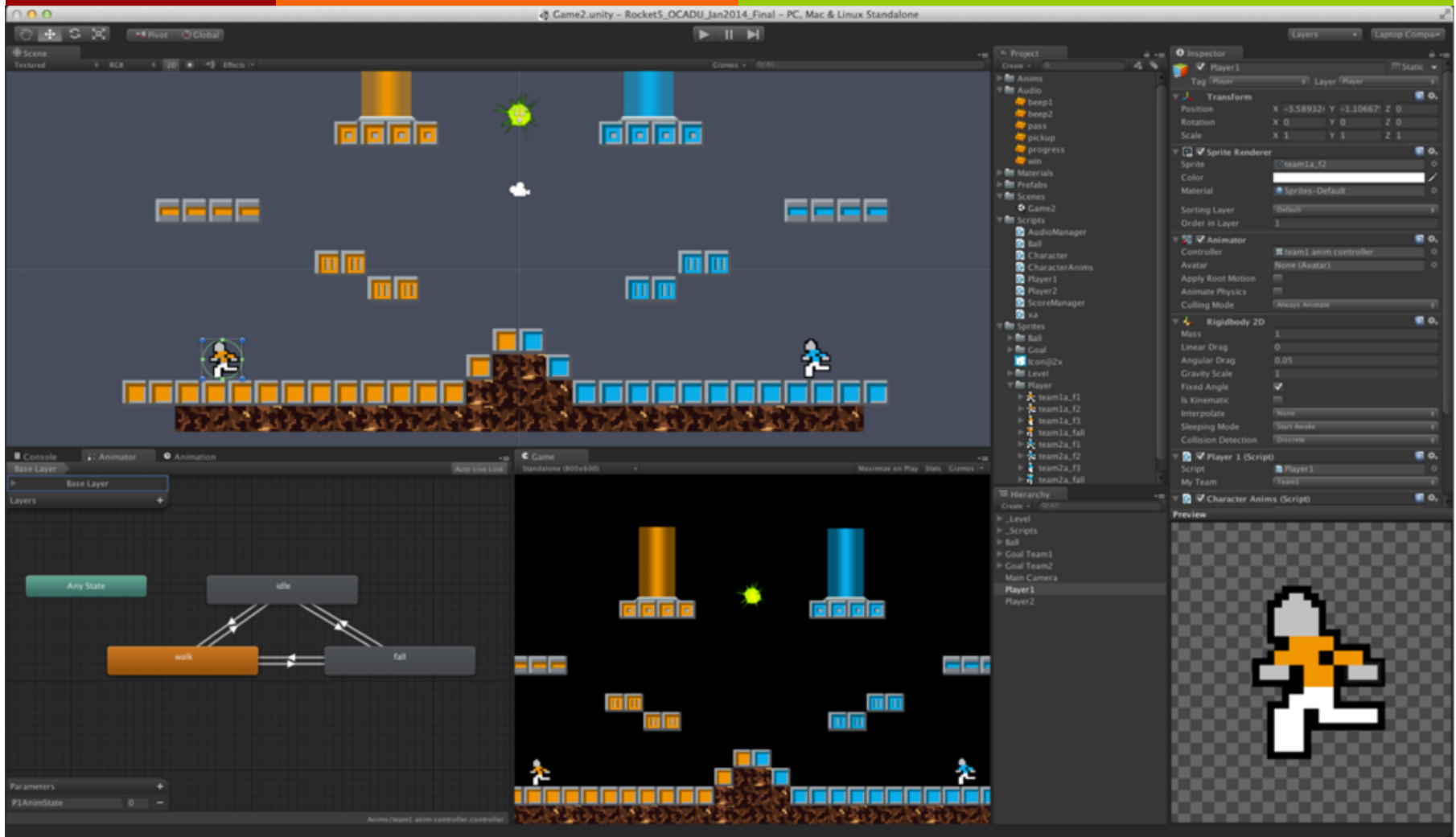
EASTER



Red Dead Redemption

- In this course we will use Unity
- Cross-platform Game Engine
- 2d and 3d support
- Scripts written in C# and JavaScript
- Download Unity from www.unity.com
 - Free Personal Edition is sufficient
- Great Tutorials at www.unity.com/learn

Example Screen



Alternatives to Unity



- General Platforms
 - Unreal Engine (suite of game dev tools)
 - Gamemaker (drag + drop with simple scripts)
- Genre Specific
 - Twine (web-based tool for creating IF)
 - Inform 7 (natural language tool for IF)
 - AGS (tools to create graphic adventure games)
 - RPGmaker (tools to create 2d (J)RPGs)
- For this course **please use Unity** – it's a powerful, flexible and popular engine – knowing it will only do you good!

Labs

Lab (Thu 3-5pm)
No lab
Unity Workshop
Sprint Workshop
Sprint Workshop
Feedback Workshop
Sprint Workshop
Expo 1
Sprint Workshop
Sprint Workshop
Feedback Workshop
Sprint Workshop
Expo 2

➤ Tuesday 1500-1700, building 25/1009

➤ Plenty of Machines with Unity (2 per pair)

➤ Welcome to bring your own machine

➤ Unity personal license is free

➤ There are four types of lab event:

1. **Unity Workshop** – work through a Unity Tutorial
2. **Sprint Workshop** – work with partner on your game
3. **Feedback Workshop** – get feedback on your game idea
4. **Expo** – show off your games to each other

➤ Relatively unstructured but demonstrators will be there to answer questions and help where possible

The screenshot shows the Unity Learn website interface. At the top, there is a navigation bar with the Unity Learn logo and links for Projects, Courses, Tutorials, and Topics. A search bar is present with the placeholder text "What do you want to learn?". A "Start Project" button is located in the top right corner. The main content area features a large image of a rolling ball game scene. Below the image, the title "Roll-a-ball" is displayed in a large font. Underneath the title, it says "Project • Beginner • 1 Hour 25 Mins • 586". The Unity Technologies logo is also visible. Below the main content, there are three columns of information: "Your progress" with a "Sign in to track your progress" button; "Summary" with a description of the project and a link to the official forum; and "Topics we'll cover" with a "For Educators" button. There is also an "Industry" section with a "Games" button and a "Language" section with "English" selected. A "Recommended Unity versions" section shows "5 and Above".

unity Learn Projects Courses Tutorials Topics

What do you want to learn?

Start Project

Roll-a-ball

Project • Beginner • 1 Hour 25 Mins • 586

Unity Technologies

Overview For Educators Details

Your progress

Sign in to track your progress

Where am I?

1. Introduction to Roll-a-ball
2. Environment and Player
3. Camera and Play Area
4. Collecting, Scoring and Building the Game

Summary

Create a simple rolling ball game that teaches you many of the principles of working with Unity. No asset download is required for this project.

Questions? [Ask in the official forum thread here.](#)

[Want to learn more about Unity Development? Connect with an expert Unity dev for a live 1:1 lesson.](#)

Recommended Unity versions

5 and Above

Topics we'll cover

For Educators

Industry

Games

Language

English

Roll-a-ball tutorial

Website

- Timetable
- Presentations
- Tutorial Links
- Expo Info
- Resources

The screenshot shows a web browser window displaying the University of Southampton website. The page is for the course COMP3218: Game Design and Development (2019-2020). The header includes the university name and navigation links. The main content area has tabs for Overview, Resources, Syllabus, Evaluation, Send Message, Students, and Help. The page is currently in the 'Overview' tab. It lists lecturers: David Millard (Module Leader), Tom Blount (Lecturer), Age Chapman (Lecturer), and Thanassis Tiropanis (Moderator). There is a section for 'Lecturer tools' with a link to 'Create/View Assignments'. The main text welcomes students to the course and provides information about the timetable and lab sessions. It also includes a list of links for 'Previous Let's Plays' and a 'Summary' section with a bulleted list of course activities.

University of Southampton
School of Electronics and Computer Science

COMP3218: Game Design and Development (2019-2020)

Overview Resources Syllabus Evaluation Send Message Students Help You are a leader on this module.

David Millard
Module Leader

Age Chapman
Lecturer

Tom Blount
Lecturer

Thanassis Tiropanis
Moderator

Southampton campuses, Semester 2.
» [View notes pages](#)

[Timetable](#) | [Labs](#) | [Coursework](#) | [Resources](#) | [Back to COMP3218](#)

[edit] COMP3218 Game Design and Development

The module for those interested in game development. An opportunity to consolidate and improve your portfolio, or to explore concepts of design, or to learn some of the cutting edge development techniques.

Recorded Lectures can be found [here](#).

For canonical information, check out the syllabus: [SYLLABUS!!!](#)

If you have any questions, please contact [Dave Millard](#).

[edit] Previous Let's Plays

- [2018/19 Let's Plays](#)
- [2017/18 Let's Plays](#)
- [2016/17 Let's Plays](#)
- [2015/16 Let's Plays](#)

[edit] Summary

- Lectures: learn about game design theory
- Labs: learn about development in a framework
- Coursework: create 2 game prototypes
- Assessment: demonstrate your prototypes at a class expo
- Feedback: [Let's Plays!](#) and Expo
- Exam: nope
- Tech: Unity 3D (language is C# but this is syntactically similar to Java)

Lecturer tools

[Create/View Assignments](#)

When feedback has been sent to students, the lecturer should use the Handin link below and push the button on the handin page to log the date.

Update on this week's COMP3218 sessions

Hi all,

welcome to COMP3218 - Game Design and Development! This course uses two timetabled sessions, a lab on Tuesdays and a double lecture on Friday afternoon, however this first week is slightly different:

- 1) ** There is no lab tomorrow ** - our labs start in week 2, so there is no need to come to the scheduled slot tomorrow (on Tuesday 28th). Our first activity will be Friday's lecture, however...
- 2) This weeks lecture on Friday clashes with the launch session for the Global Game Jam and I suspect that many of you will be interested in taking part. In order to enable you to do both things we will only use the first hour (1600-1645) for the lecture, finishing early to allow people to get across to the 1700 Jam session. This is an event we've supported for a number of years and if you haven already you should check it out!

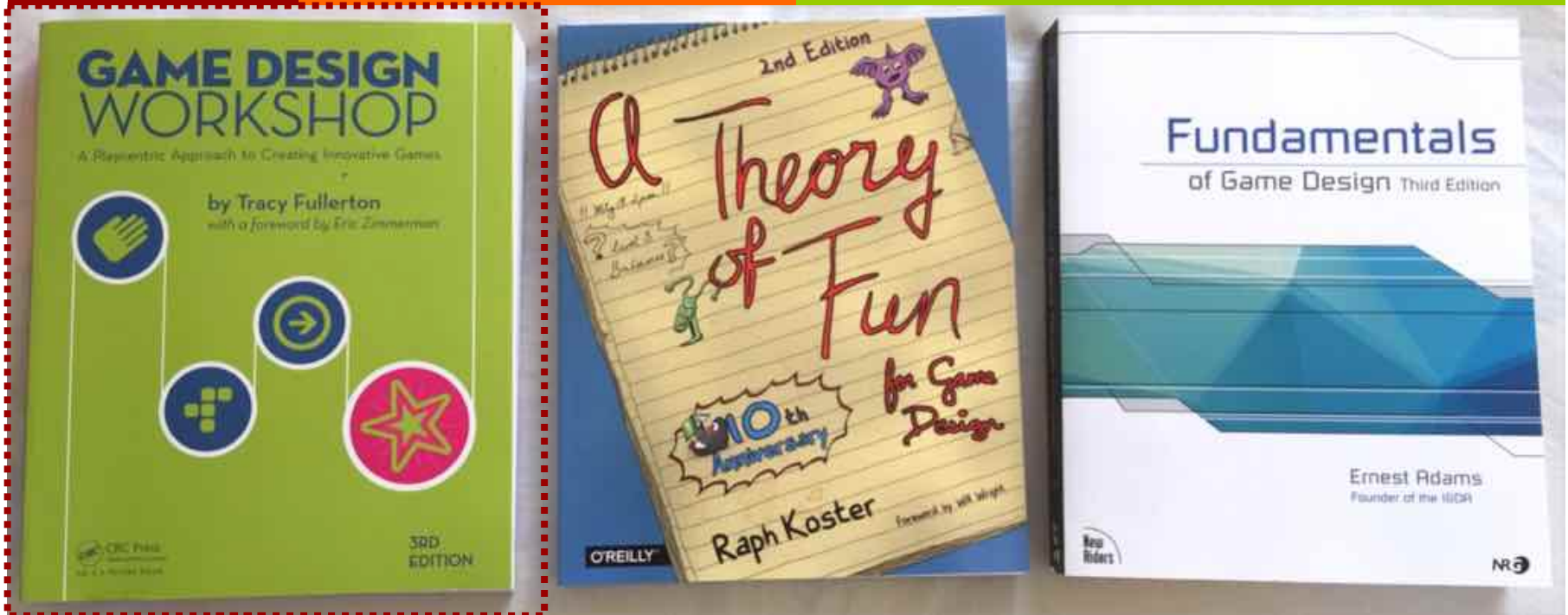
<https://southamptongamejam.org>

In the meantime the notes for this year's course are live at the usual place (<https://secure.ecs.soton.ac.uk/module/COMP3218/>) and we look forward to meeting with you all on Friday!

All the best,
Dave, age, and Tom
dem@soton.ac.uk - 10:12 PM, Monday January 27th

<https://secure.ecs.soton.ac.uk/module/COMP3218/>

Books + Resources



- Course Text: Game Design Workshop
- Available online as a PDF* or through the library

* Google is your friend

Online Resources



- YouTube channel on all aspects of game design
- Started by James Portnow and Daniel Floyd
- Links to relevant episodes on our website



- Free online version of Game Developer Magazine
- Lots of info on the games industry
- Case studies of real problems tackled in real games

www.extra-credits.net

www.youtube.com/user/ExtraCreditz

www.gamasutra.com

Pitfalls



Prince of Persia

- Creating Games is fun and absorbing
DON'T SPEND TOO MUCH TIME ON IT!
- Expectation is **8 hours** a week (inc lectures!)
≈ **25 hours** of dev time each per Expo
- The goal of each Expo is not a **complete** game – there are no marks for scale!
- Work on creating a small **playable prototype** that fulfills the brief

Pitfalls 2



➤ Creating Games is fun and absorbing

DON'T FORGET THE GOAL!

➤ This is not about creating random games

➤ For each Expo you will be expected to demonstrate a **specific thing**

➤ 60% of the mark is for this!

➤ A good game will get a bad mark if it does not fulfil the brief!

Marks Breakdown



	Quality	Brief	Design	Feed-Back
Expo1 50%	Game 1			
Expo2 50%	Game 2			
	40%	30%	20%	10%

Marks Breakdown



Don't attend
the labs

Portal

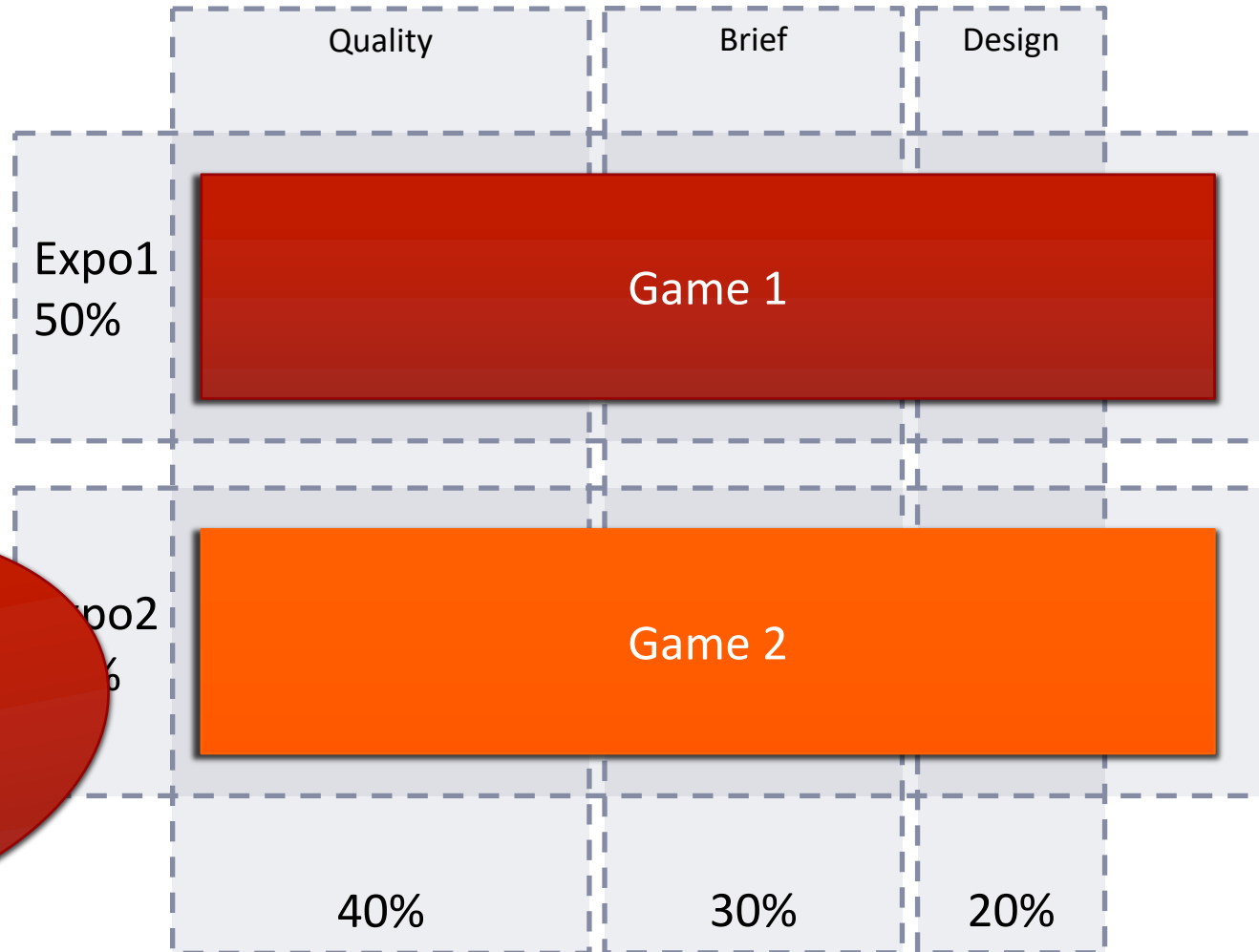
	Quality	Brief	Design	Feed-Back
Expo1 50%	Game 1			
Expo2 6%	Game 2			
	40%	30%	20%	10%

Marks Breakdown



Don't attend
the labs

Portal



Marks Breakdown



Don't apply
what you've
learned

Portal

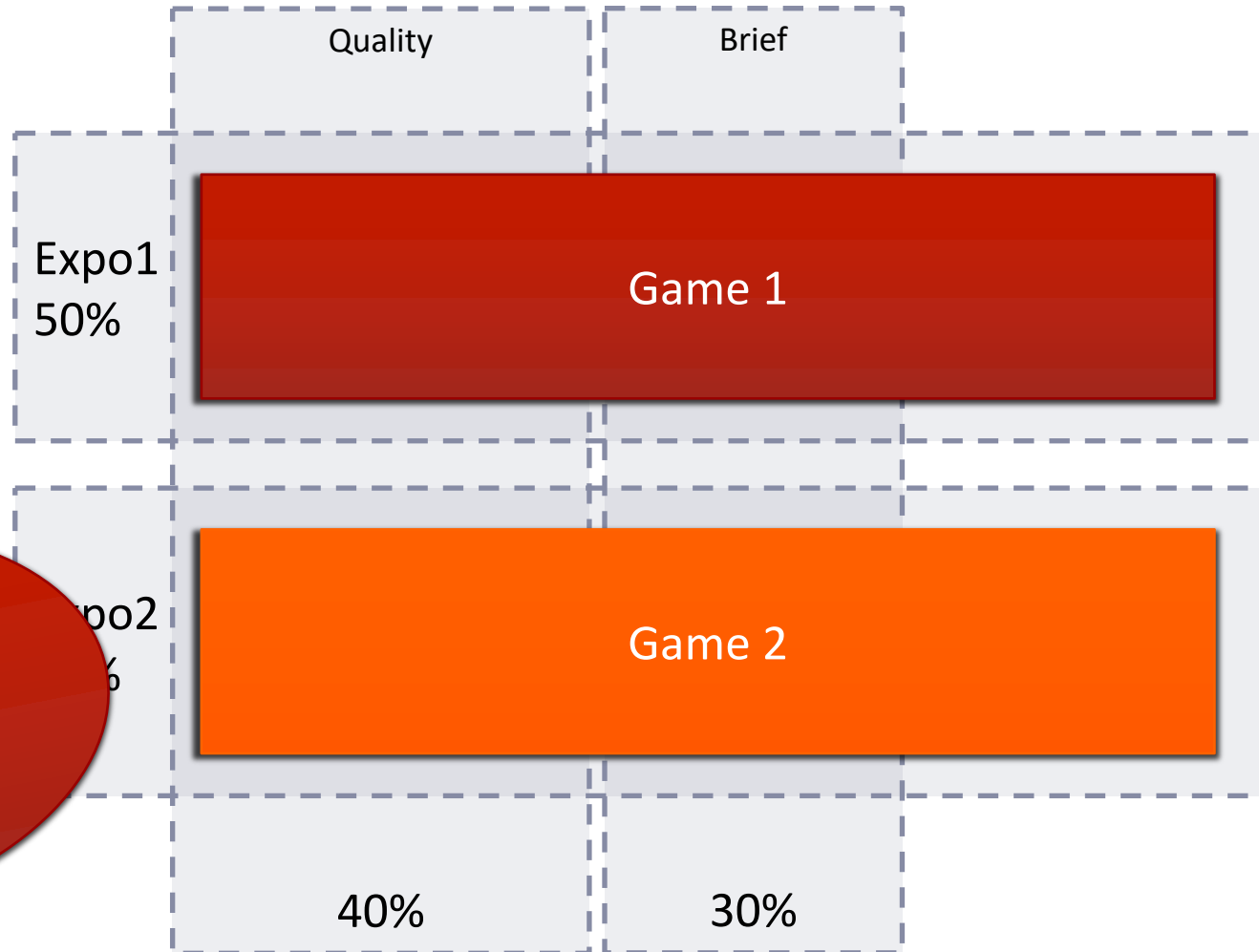
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Marks Breakdown



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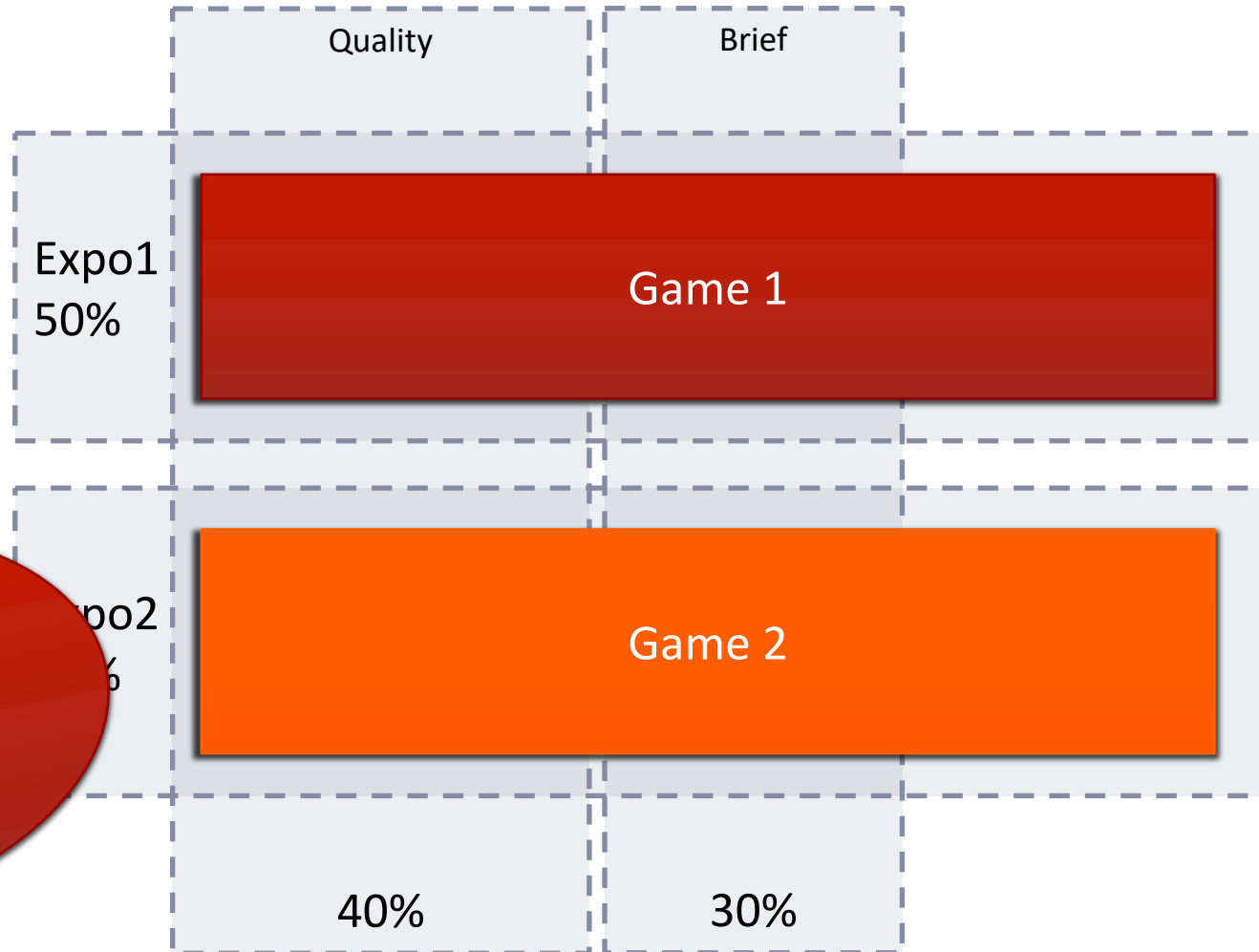


Marks Breakdown



Don't do what
was asked

Portal

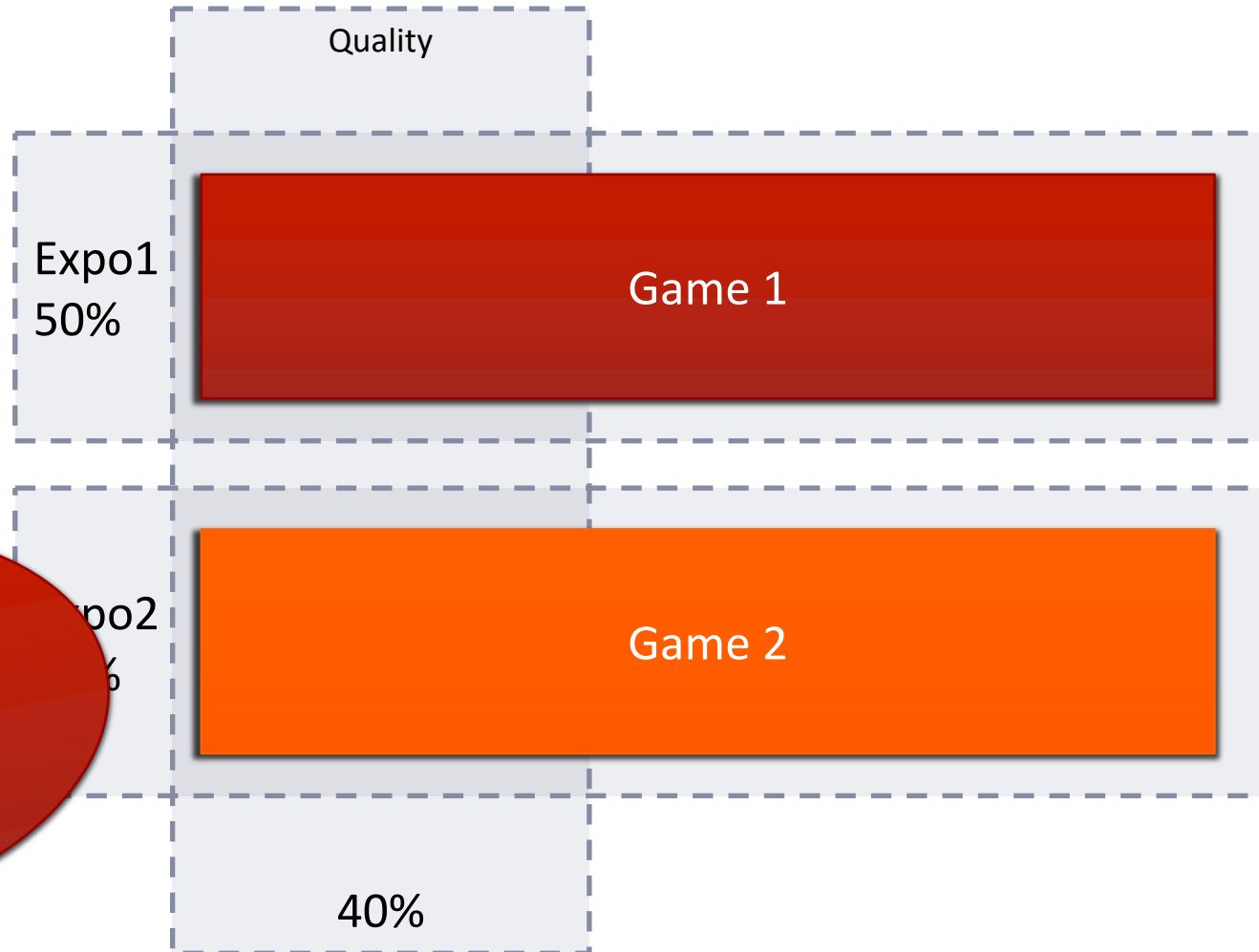


Marks Breakdown



Don't do what
was asked

Portal



Extra Credits – Ludus Florentis

Discussion: Are Games Art?



Thank You

COMP3218 Website: <https://secure.ecs.soton.ac.uk/module/COMP3218/>



David Millard

@hoosfoos | davidmillard.org | dem@soton.ac.uk



age chapman

Adriane.Chapman@soton.ac.uk



Tom Blount

@Tom_Blount | tb12g09@ecs.soton.ac.uk