



COMP140: Individual Creative Computing Project

1: Module Induction

Module

Module Description

On this module, you will build upon the experience you gained in creative computing to realise a more substantial individual creative computing project. This will allow you to refine your approach to computer programming within the context of building object-orientated software. It will also entail developing your confidence with computing hardware (such as Arduino) as well as developing mastery with the use of notation associated with object-orientated architecture, such as unified modelling language (UML). In this project, you will not only bring different elements together, taking existing code and pseudocode from appropriate sources, but also start to arrange, synthesise, and extend code in order to build more functional, robust, and maintainable solutions. In tackling the architectural design and implementation of a creative computing system, you will also consider standards and regulations, and their relationship to topics such as privacy, data protection, accessibility, internationalisation, law, and ethics.

Assignments

Assignment 1

- ▶ You will build the controller and game
- ▶ The design of your game can change slightly
- ▶ For the controller, there is an expectation that you will buy some additional components
- ▶ Finally, you will lose marks if you submit a controller which is a bare breadboard
- ▶ We expect for you to build something or embedded the controller into an item

Assignment 2

- ▶ You have to write a report & a poster
- ▶ The report will detail the development of the software and hardware of your game & controller
- ▶ The poster will summarise the key elements of the software and hardware of you game & controller

Formative Deadlines

- ▶ Assignment 1
 - ▶ **Week 6** - First Prototype of game and controller
 - ▶ **Week 9** - Peer Review of game and controller
- ▶ Assignment 2
 - ▶ **Week 3** - Project proposal
 - ▶ **Week 8** - Draft Poster presentation
 - ▶ **Week 10** - Report Peer Review
- ▶ **Week 3 - Project Proposal**

Examples from Previous Session

- ▶ Pancake - <https://youtu.be/36qeLNNPf7M>
- ▶ Games in a Controller -
<https://youtu.be/Oqrn3l64mBM>
- ▶ Surgery - <https://youtu.be/LiTpkKHJizA>
- ▶ Safe - <https://youtu.be/X4wB3AakSvA>
- ▶ Tank - <https://youtu.be/AL3LrcRskig>
- ▶ Skateboard - <https://youtu.be/Wj4Eb0yUejE>
- ▶ Snooker - <https://youtu.be/4XFZ4PMoPTE>

Alt-Controller

Notable Alt-Controller Games

- ▶ Deep VR - <https://www.polygon.com/2015/3/2/8133675/deep-vr-meditation>
- ▶ Space Box - https://www.gamasutra.com/view/news/290700/ALTCTRLGDC_Showcase_Spacebox.php
- ▶ Line Wobbler - <http://wobblylabs.com/projects/wobbler>
- ▶ Tie Your Laces - <https://twitter.com/wethrowswitches/status/1181557419199094784>

Notable Alt-Controller Games

- ▶ GDC Alt-Ctrl 2018 Roundup

<https://www.gamasutra.com/altctrlgdc2018>

- ▶ Nintendo Labo - <https://www.nintendo.co.uk/Nintendo-Labo/Nintendo-Labo-1328637.html>

- ▶ Xbox Adaptive Controller -

<https://www.microsoft.com/en-gb/p/xbox-adaptive-controller/8nsdbhz1n3d8>

Exercises

Activity - Alt-Controller Research

- ▶ Review the Shake that Button Website-
<https://shakethatbutton.com/> & Past alt.ctrl.GDC entries
- ▶ Pick 3 games and note down the following information in a Google Doc or similar
 - ▶ Name
 - ▶ URL
 - ▶ Screenshot
 - ▶ brief description
 - ▶ What you find interesting about it
- ▶ Do this before the session in **Week 2**
- ▶ **Keep this document, it will feed into your coursework!**