

**UAL Creative Computing Institute Diploma**  
**Unit 4: "Creative coding and creative computing frameworks"**  
**Assessment 2: MOCK Practical Exam**  
**Date: May 18th 2021.**

**Duration:**

1 week (designed to be possible to complete in two hours)  
I will work through my solution to this exam during the revision lecture on Monday 24th May 2021 from 1000–1300. I will also work through a mock multiple choice paper in the same session. I advise you to try to complete this practical exam before that session, so you can take the most out of the revision session you can. This MOCK is harder than the real exam, so if you can complete it, you will be in a good place.

**Directions:**

You may use the internet, but do not talk, confer with others or cheat. You are only cheating yourself. Otherwise, standard exam conditions apply.

The **examinable brief** is this:

**"Create an iOS application that allows users to move and resize a filled rectangular UIView around the screen using sliders or other user interface elements"**

**Please** read the following advice:

You should use Xcode to complete this exam.

Remember to **comment your code**, for yourself and your examiner.

Once you have finished your submission, please zip the entire folder and send me your submission on the UAL CCI Slack. Part of the reason for doing a mock is not only to revise for the eventual exam, but also to practice correctly submitting your project.

You are encouraged to make use of the Swift Explorations textbook (both student and teacher versions) for this exam. The example applications that Swift Explorations course take you through will be very useful for this exam. You can download the example applications by following the links in the introduction section of either textbook.

A passing grade will be given for applications that fulfil the examinable brief. Better grades will be given for applications

that go beyond the examinable brief. Consider what extra variables could be made controllable by users, or what graphic elements or text you could add to your application to make it more interesting or usable or fun.

Documentation of the "center" variable of a UIView:

<https://developer.apple.com/documentation/uikit/uiview/1622627-center>

Documentation of the "bounds" property of a UIView:

<https://developer.apple.com/documentation/uikit/uiview/1622580-bounds>

It is possible to find the size of the screen in which a view exists by accessing the width and height of the "frame" variable of the "view" variable in the UIViewController that the view exists in:

<https://developer.apple.com/documentation/uikit/uiviewcontroller>

<https://developer.apple.com/documentation/uikit/uiviewcontroller/1621460-view>

<https://developer.apple.com/documentation/uikit/uiview>

<https://developer.apple.com/documentation/uikit/uiview/1622621-frame>

**Good luck!**