



21st ANNUAL CONFERENCE
28-30 MARCH 2017
 GLOBAL GOALS:
LOCAL ACTION



Taking the hard road: making a free-cycling app from scratch

Paul Crossley & Nav Dhuti, LSBU



Headline Sponsor

CarbonCredentials



Where and who are we?

The London South Bank community



18,000 students
1,800 staff

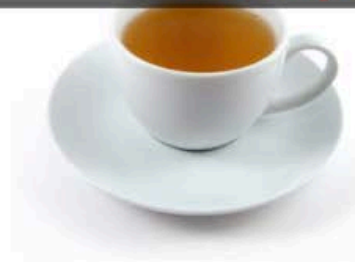
A yellow dot is located on the left side of the image, near the bottom, marking a specific location on the South Bank of the River Thames.

LSBU Sustainability Strategy



Managing our impacts

Campus - Community - Curriculum



Become what you want to be



The opportunity



[Media Centre](#) [Funding](#) [Jobs](#) [Tenders](#) [Blog](#) |

[Home](#)

[Our plan](#)

[About us](#) ▾

[Who we work with](#) ▾

[Donate](#)

WRAP reveals the UK's £30 billion unused wardrobe

11th July 2012

UK consumers have around £30 billion worth of clothes which they haven't worn for a year hanging in their wardrobes, reveals a new report by WRAP, the UK's lead body on resource efficiency.

Related documents

 [Valuing our clothes](#)
speech Liz Goodwin (83
KB)

The opportunity



When 613 students moved out of McLaren Hall in 2015 over **3 TONNES** of re-usable items were collected

The SDGs...links with free-cycling



New, innovative ways to engage people with re-use



Building digitally-connected 'free-cycling communities'

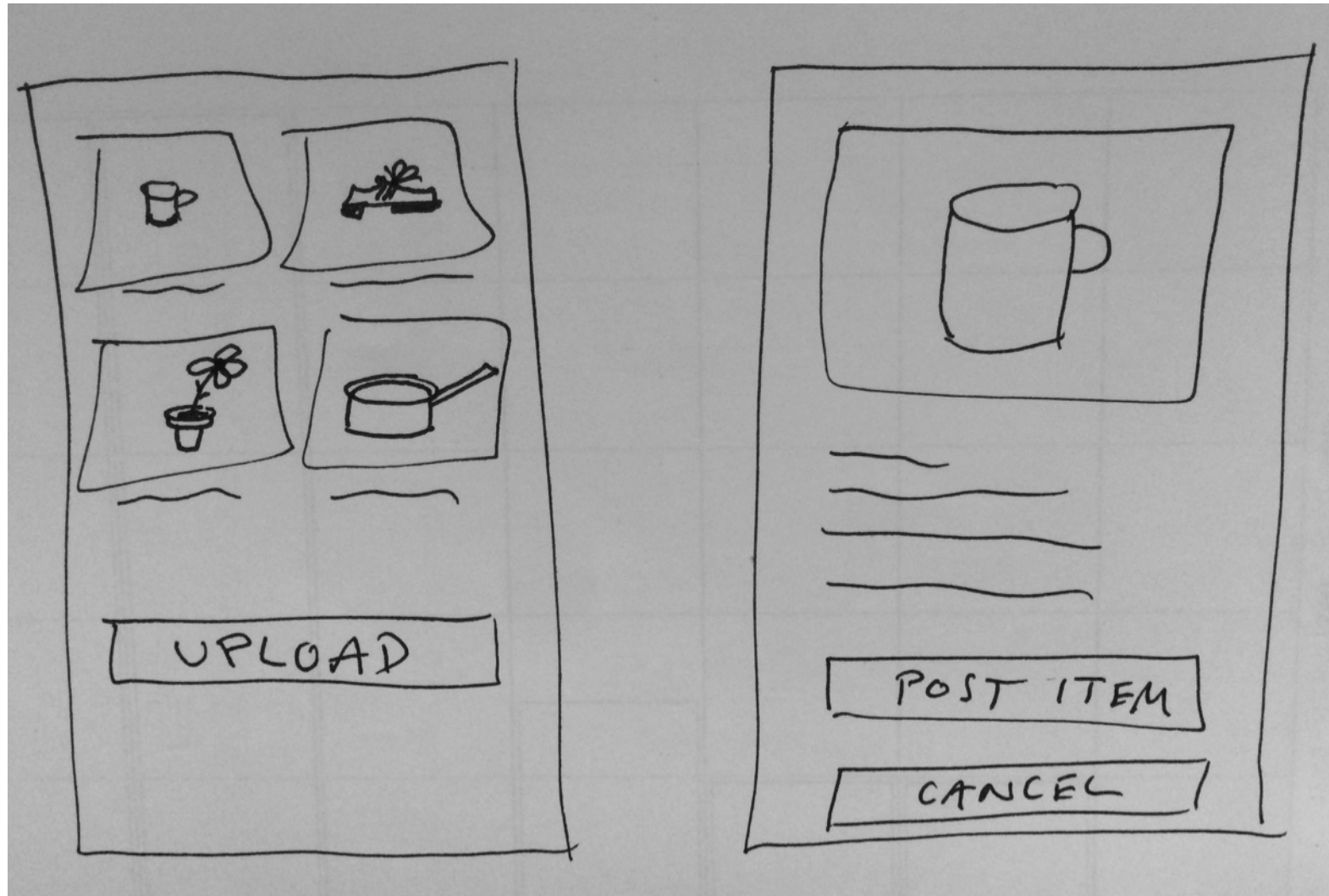


Increasing re-use and reducing landfill

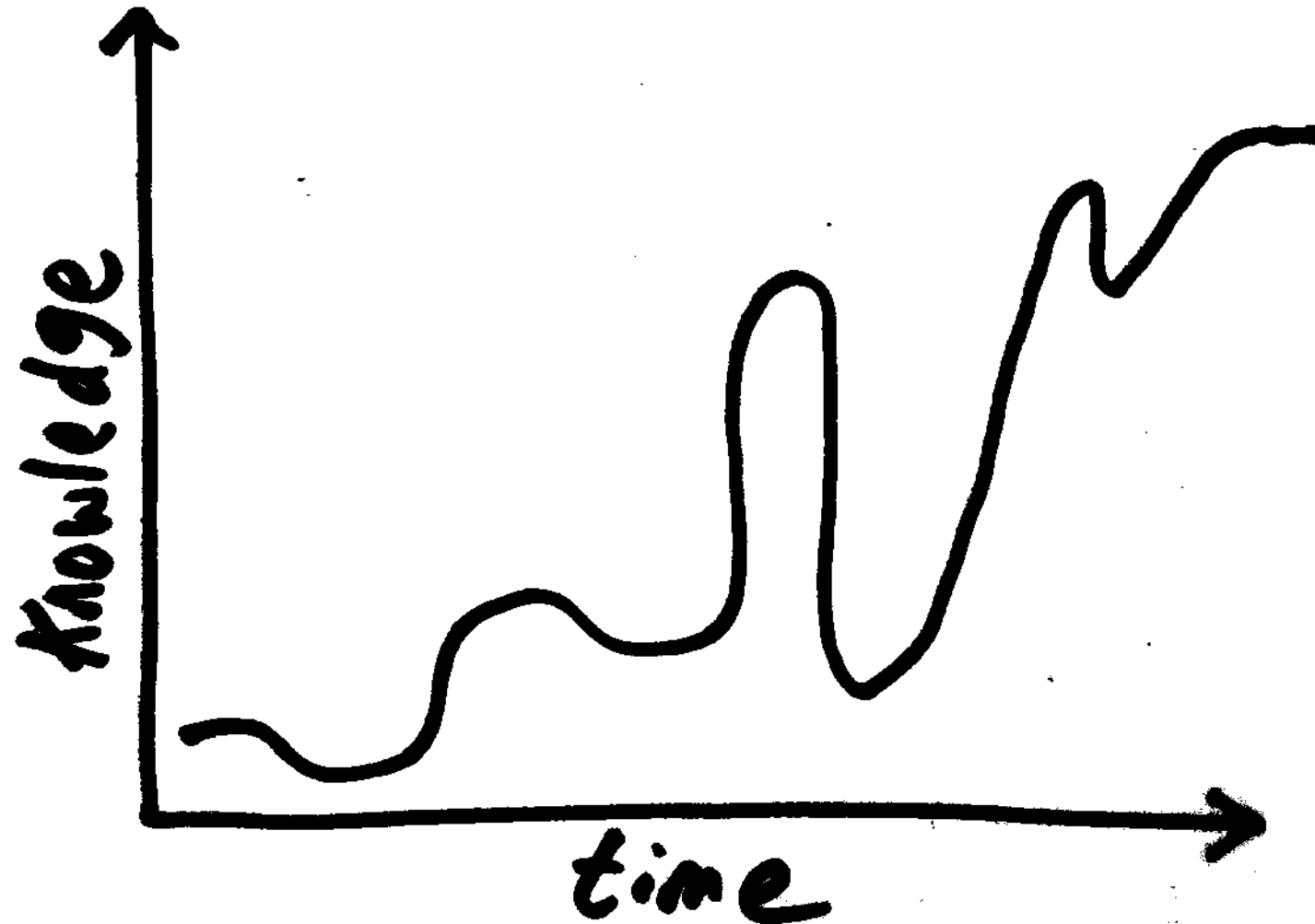


Use fewer raw materials and reduce landfill demand

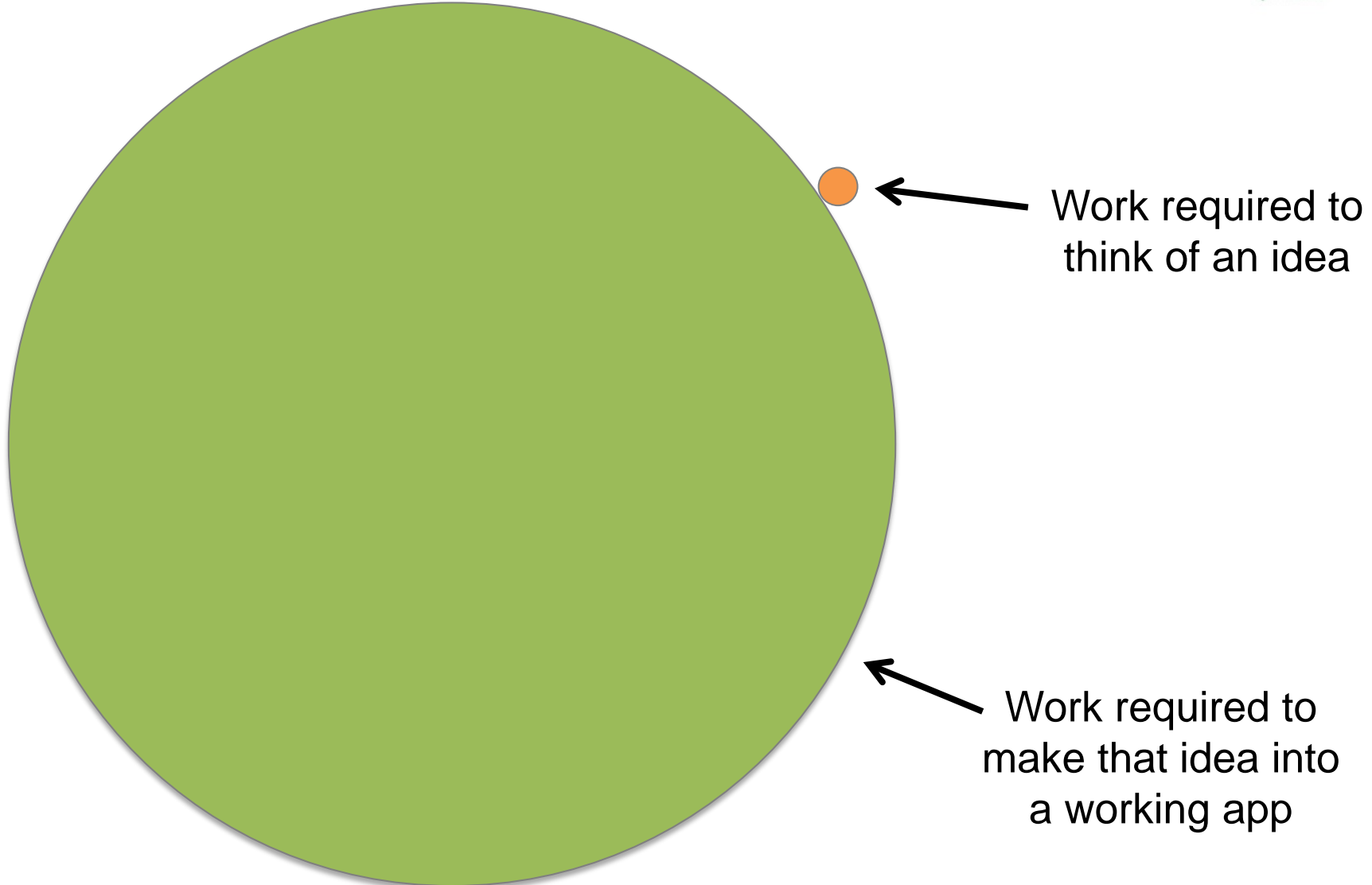
The idea...



The (my) learning curve...



Understanding the amount of work...

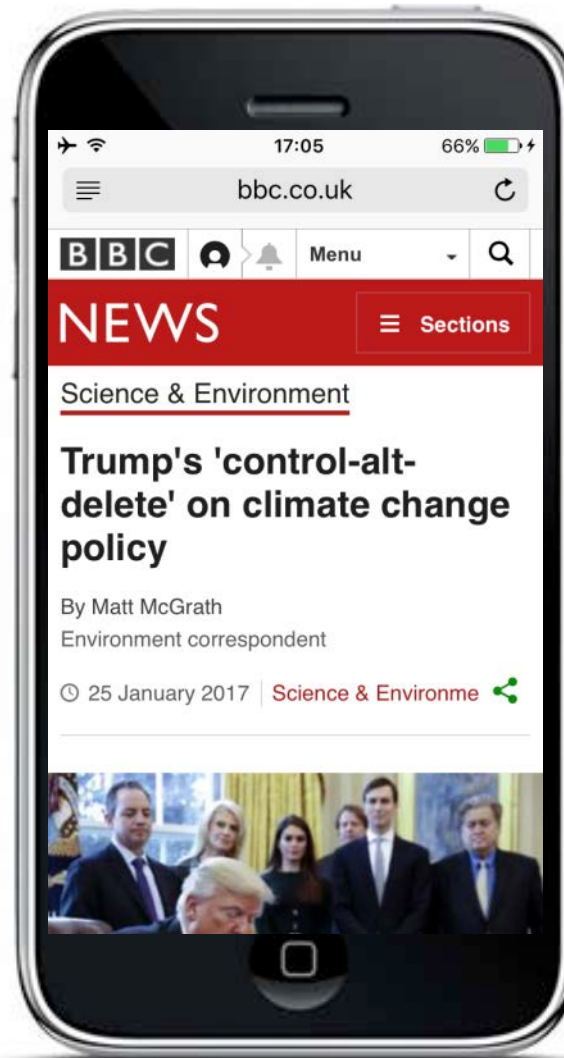


What is an app?



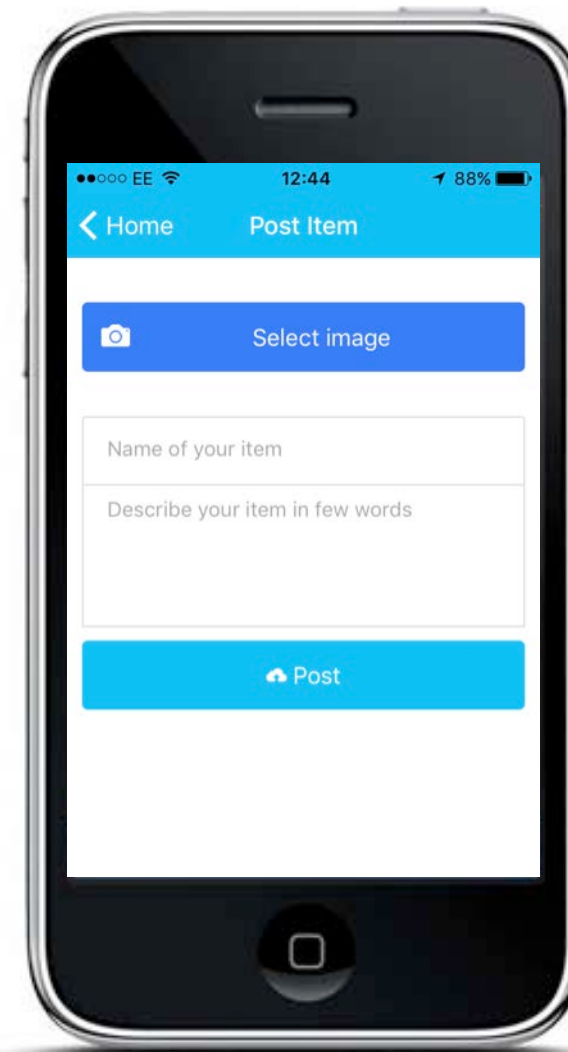
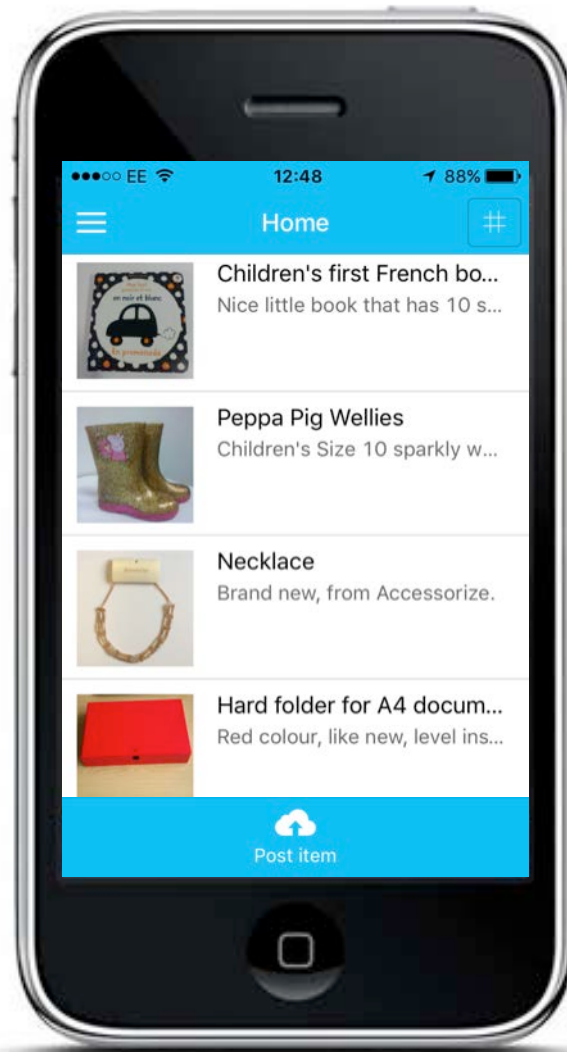
Standard website...not an app

What is an app?



A mobile optimised website...but still not quite an app

This is an app!



An app! User can upload images, text, sound, location etc...

Which platform(s) do you want?



One size does not fit all

The reality (the matrix...)

The screenshot shows the Xcode IDE with a Swift file named `iOS_CalcTests.m` open. The file contains a test method `testAddition` that simulates pressing buttons on a calculator. A context menu is open over the `testAddition` method, showing options like `Generate`, `Test Method`, `SetUp Method`, and `TearDown Method`. The `Test Results` pane at the bottom shows that the `testAddition` test failed, with a message indicating that the display field text is not equal to the expected string.

```
* 2. Check: display + 2 = 10.
*/
- (void) testAddition {
    [calc_view_controller press:[calc_view viewWithTag: 6]]; // 6
    [calc_view_controller press:[calc_view viewWithTag:13]]; // +
    [calc_view_controller press:[calc_view viewWithTag: 2]]; // 2
    [calc_view_controller press:[calc_view viewWithTag:12]]; // =
    XCTAssertTrue([calc_view_controller.displayField text] isEqualToString:@"10");

    [calc_view_controller press:[calc_view viewWithTag:13]]; // +
    [calc_view_controller press:[calc_view viewWithTag: 2]]; // 2
    [calc_view_controller press:[calc_view viewWithTag:12]]; // =
    XCTAssertTrue([calc_view_controller.displayField text] isEqualToString:@"10");
}
```

Run All in iOS_CalcTests

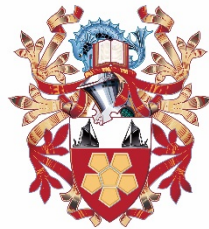
Test Results

Test Name	Duration	Status
iOS_CalcTests	21ms	Failed
testAddition	4ms	Failed
testAppDelegate	3ms	Passed
testClear	4ms	Failed
testDelete	3ms	Passed
testDivision	3ms	Passed
testMultiplication	2ms	Passed
testSubtraction	2ms	Passed

Terminal

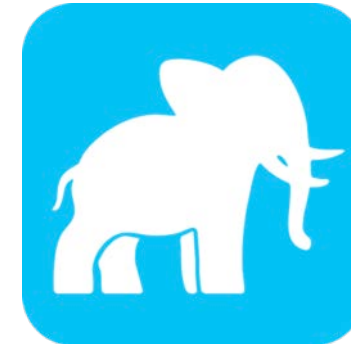
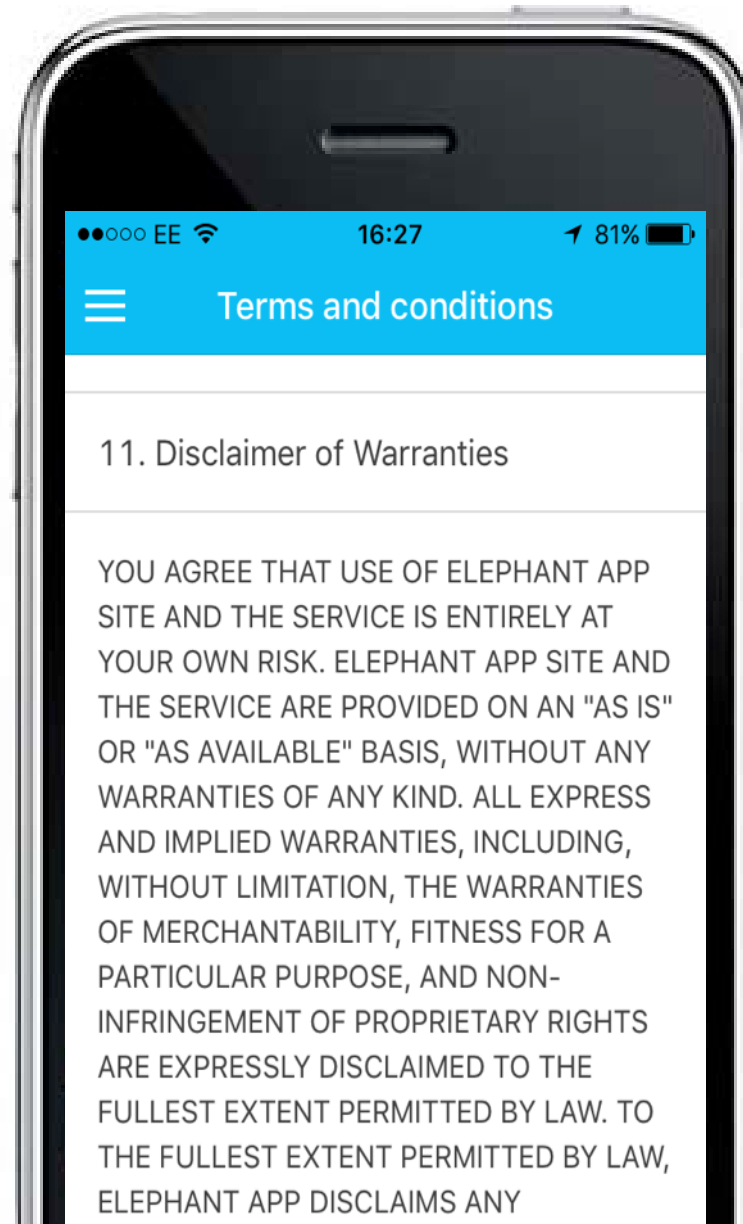
```
Part 1 failed.
(((calc_view_controller.displayField text)
isEqualToString:@"10"])) is true) failed - Part 2 failed.
/Users/jetbrains/Downloads/UnitTests/iOS_Calc
/iOS_Calc_ApplicationTests/iOS_CalcTests.m:80: error:
-[iOS_CalcTests testAddition] : (((calc_view_controller
.displayField text) isEqualToString:@"10"])) is true) failed
```


The legalities...



EST 1892

**London
South Bank
University**



Maintenance and support costs



Intellectual Property – who ‘owns’ an app?



Download time!

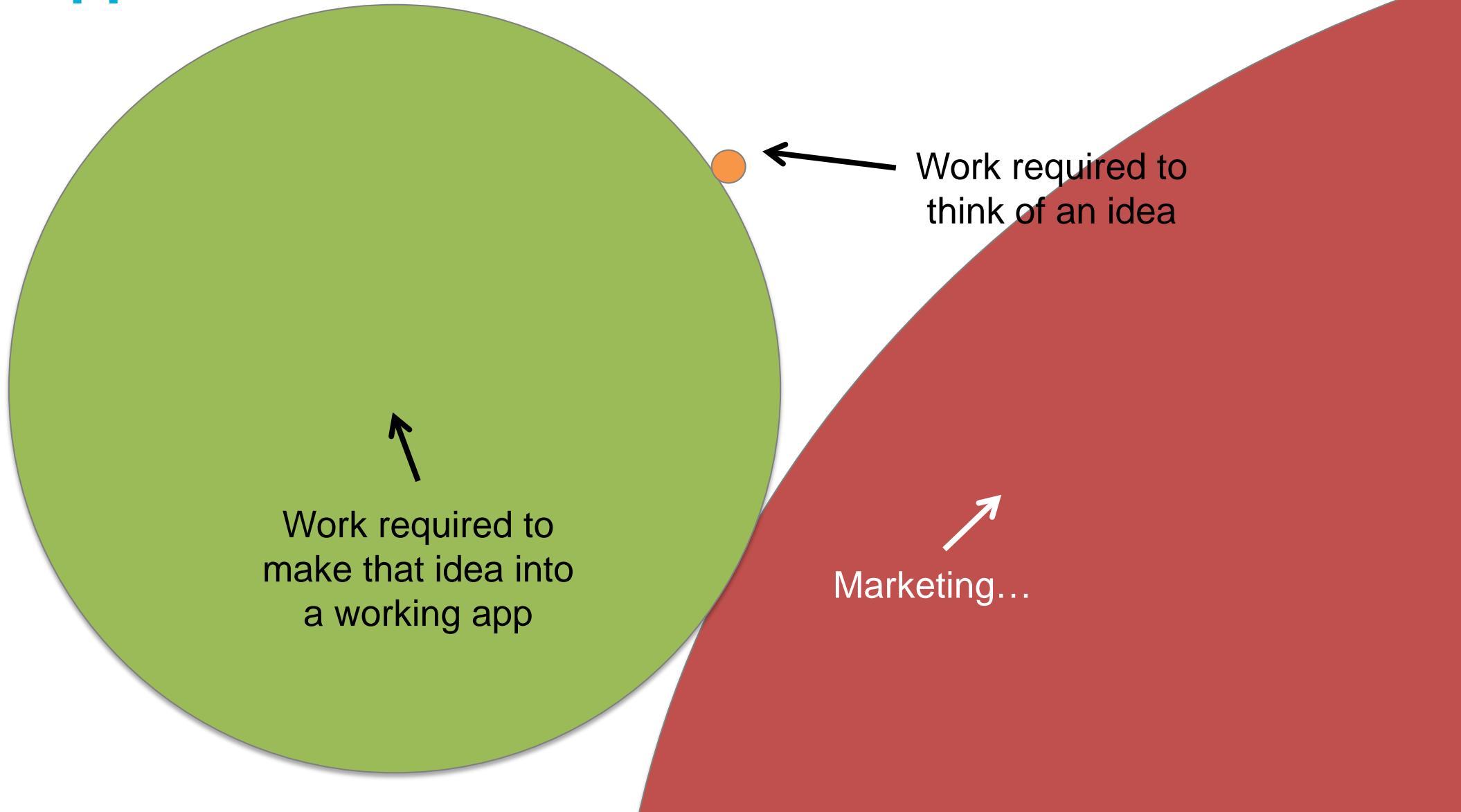


Search “LSBU elephant”



www.myelephant.xyz

Marketing...and you thought *making* an app was difficult...



Workshop session 1 (25 mins)



1. In groups, brainstorm these Sustainable Development Goals: what sustainability-related problem can you think of that could be addressed by an app?
2. Who is the target audience?
Who are the gate-keepers in your Institution?
3. How might you develop your idea? What ideas/stunts would you use to market your app (or something like the *elephant* app)?



Workshop session 2 (5 mins)



Assign a speaker for your group and **feedback**:

1. What ideas did you have?
2. What might your next step(s) be when you return to your Institution?
3. What sort of ideas have you come up with?

