

# Assignment 1

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Archaeological  
Fieldwork : Part I



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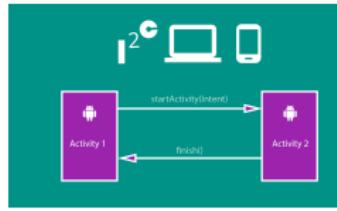
Specification, grading  
guidelines and schedule  
for Assignment 1

**00: Introduction**



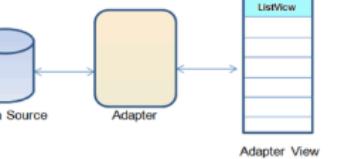
Android is a mobile operating system designed primarily for touchscreen devices

**01: Activities**



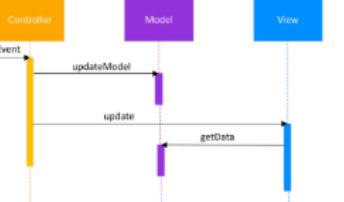
Activities are the fundamental building block of Android applications

**02: Adapters**



Application models are presented to activities using Adapters.

**03: Models**



Models capture the essential information realised by the application.

**04: Images**



Images can be selected and displayed from the device image gallery.

**05: Maps**



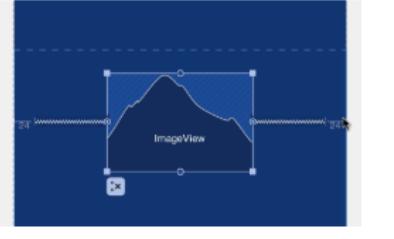
Google Maps can be integrated into an android app

**06: Persistence**



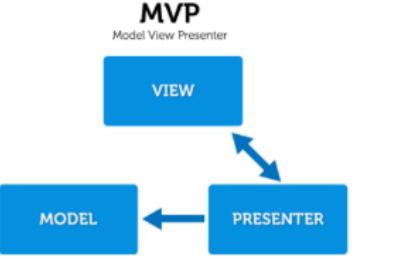
Models can be saved/recovered by the application.

**07: Layouts**



The UX is organised on screen by Layout components.

**08: MVP**



The Model View Presenter pattern organises the application structure

**09: Location**



An application can determine and track the device's current location.

**10: Rooms**



The Room framework is part Android Architecture Components

**11: Firebase**



Firebase provides Authentication and Storage cloud services

# Module Topics

## 00: Introduction



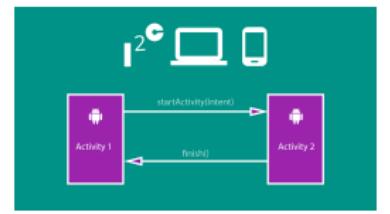
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## 04: Images



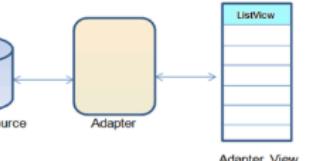
Images can be selected and displayed from the device image gallery.

## 01: Activities



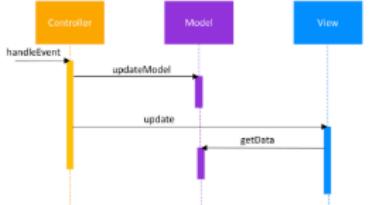
Activities are the fundamental building block of Android applications

## 02: Adapters



Application models are presented to activities using Adapters.

## 03: Models



Models capture the essential information realised by the application.

## 05: Maps



Google Maps can be integrated into an android app

## 06: Persistence



Models can be saved/recovered by the application.

Module Topics  
Completed by  
Assignment 1  
Deadline

# Assignment 1

2020

Semester 2		S	M	T	W	T	F	S	Modules
September	1		31	1	2	3	4	5	mobile app dev
	2	6	7	8	9	10	11	12	mobile app dev
	3	13	14	15	16	17	18	19	mobile app dev
	4	20	21	22	23	24	25	26	mobile app dev
October	reading-week	27	28	29	30	1	2	3	
	5	4	5	6	7	8	9	10	mobile app dev
	6	11	12	13	14	15	16	17	mobile app dev
	7	18	19	20	21	22	23	24	mobile app dev
November	reading-week	25	26	27	28	29	30	31	
	reading-week	1	2	3	4	5	6	7	
	8	8	9	10	11	12	13	14	mobile app dev
	9	15	16	17	18	19	20	21	mobile app dev
December	10	22	23	24	25	26	27	28	mobile app dev
	reading-week	29	30	1	2	3	4	5	
	11	6	7	8	9	10	11	12	mobile app dev
	12	13	14	15	16	17	18	19	mobile app dev
		20	21	22	23	24	25	26	
January		27	28	29	30	31	1	2	
		3	4	5	6	7	8	9	

## Assessment Schedule

Assignment 1  
Specification

Assignment 1  
Submission

Assignment 2  
Specification

Assignment 2  
Submission



# Project: Archaeological Fieldwork : Part I

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# Inspiration

## Atlas of Hillforts of Britain and Ireland

From Wikipedia, the free encyclopedia

The **Atlas of Hillforts of Britain and Ireland** is an online database of [hillforts](#)—fortified settlements built in the [Bronze Age](#) and [Iron Age](#)—in the British Isles. It was compiled by researchers from the [University of Edinburgh](#), the [University of Oxford](#) and [University College Cork](#), led by [Ian Ralston](#) and [Gary Lock](#).<sup>[1][2]</sup> As of 2017, the atlas has 4,147 entries, which the researchers believe to be all of the extant hillforts in Britain and Ireland.<sup>[1][3]</sup> A printed [atlas](#) is also planned.<sup>[4]</sup>

The data was collated from existing catalogues of archaeological sites such as the [National Monuments Records](#) and county [historic environment records](#).<sup>[4]</sup> Around 100 volunteers, described as "citizen scientists", also visited sites and contributed information and photographs to the atlas.<sup>[5][6]</sup> The researchers noted that despite the conventional name "hillforts", under their definition, many are "not on hills and are not really forts".<sup>[7]</sup> They included sites that are now only visible through [cropmarks](#).<sup>[4]</sup>

The online atlas is hosted by the [Arts and Humanities Research Council](#), which funded the project,<sup>[8]</sup> and makes use of [Esri's ArcGIS web map application](#) platform.<sup>[9]</sup> The project also collaborated with [Wikimedia UK](#) to make the information in the atlas available to [Wikipedia](#).<sup>[1]</sup>

<https://hillforts.arch.ox.ac.uk/>



Atlas of Hillforts

https://hillforts.arch.ox.ac.uk

Atlas of Hillforts | Find hillfort or place

IR1040 Knockmahon, Waterford

HER: Archaeological Survey of Ireland SMR Database WA025-065  
NMR: WA 025  
SM:  
NGR:  
Status: Confirmed  
[View Full Record](#)  
[View on WikiData](#)

**Summary:** This coastal promontory is located immediately SE of Bunmahon town in Co. Waterford. Known as C'Gullys Islands, this triangular grass-covered headland projects SW from the mainland into the Atlantic at an altitude of 5m OD. The landmass is cut off on the landward side by an eroded earthen bank which runs in an E-W direction for c. 35m. It is 6m in width and has an external height of 1.2m. An external ditch measures 8m in width and has a depth of 0.35m. An Ogham stone was recovered from the ditch in the 1980s while another was found in the 1990s (Manning 1989). There is no recorded entrance through the defences. In addition to the area on the mainland, it is likely that the interior once incorporated two off-shore sea stacks that have been separated by the erosion of collapsed sea arches; if so the interior of the fort may have measured in the order of 90m in length and may have extended to 0.18ha. There are no recorded internal features.

Related tables:

References >  
Investigations >  
Entrances >  
Dating Evidence >

Zoom to ...

-7.134 52.106 Degrees

0 1 2km

POWERED BY esri

Earthstar Geographics | The online version of the Atlas of Hillforts of Britain and Ireland...

## Application Concept

Develop an application supporting an exploration  
of Hillforts

Users are archaeology students.

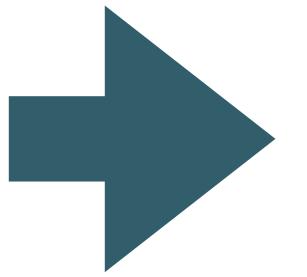
App should contain a list of Hillforts they have  
been assigned to visit.

Users visit site, take photos + notes which  
augment the information on the hillfort provided by  
the app.

Students can add additional Hillforts - which may  
be uncharted

## App Components

1 Opening Screen / Splash Screen:



Suitable Image or Logo  
Appears for limited period

2 Signup / Login

3 Toolbar

4 List of Hillforts

5 Create/Edit Hillfort

6 Settings

## App Components

1 Opening Screen / Splash Screen:

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2 Signup / Login

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3 Toolbar

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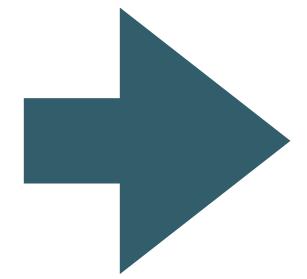
4 List of Hillforts

---

5 Create/Edit Hillfort

---

6 Settings



Standard signup / login screen  
2 Fields: Email Address + Password

## App Components

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2 Signup / Login

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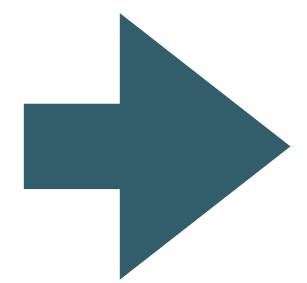
4 List of Hillforts

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5 Create/Edit Hillfort

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6 Settings



Context Sensitive Menu  
options:

- Up
- Logout
- Add
- Cancel
- Delete
- Settings

# App Components

1 Opening Screen / Splash Screen:

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2 Signup / Login

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3 Toolbar

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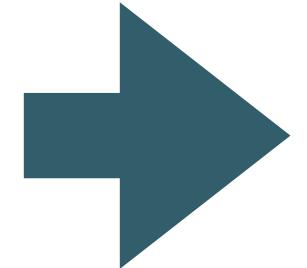
4 List of Hillforts

---

5 Create/Edit Hillfort

---

6 Settings



All Hillforts, each hillfort:

- Name
- Single image
- Location (lat/lng)
- Visited (checked/unchecked)

# App Components

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2 Signup / Login

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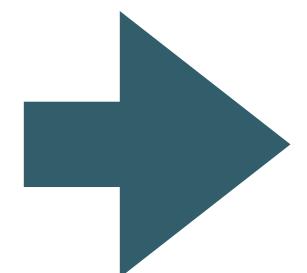
4 List of Hillforts

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5 Create/Edit Hillfort

---

6 Settings



Individual Hillfort:

- Name
- Description
- Up to 4 Images
- Location (lat/lng) (select from map)
- Visited (checked/unchecked)
- Date Visited
- Additional Notes

# App Components

1 Opening Screen / Splash Screen:

---

2 Signup / Login

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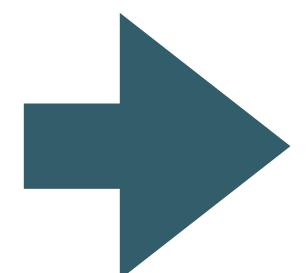
4 List of Hillforts

---

5 Create/Edit Hillfort

---

6 Settings



Logged in user details

- Email
- Password
- Summary Statistics:
  - Total number of Hillforts
  - Number visited
  - Other stats

Grade Band	Components	Hillfort Features	Toolbar	Persistence	Git
Starter	- Hillfort List - Hillfort Edit	- Name - Description - Single Images - Location (lat/lng) (select from map)	- Cancel - Delete	None	Single Commit
Baseline	- Splash Screen - Hillfort Create	- Up to 2 Images	- Up - Add	Placemark (JSON)	Commit History
Good	- Signup/Login - Settings (email/password only)	- Up to 4 Images - Visited checkbox	- Logout - Settings	User (JSON)	Tagged Releases
Excellent	- Settings (with stats)	- Date Visited - Additional notes	- Navigation Drawer	Unified (JSON)	Branching Model

## Assessment Weightings

Assignment 1: 35%

Assignment 2: 65%