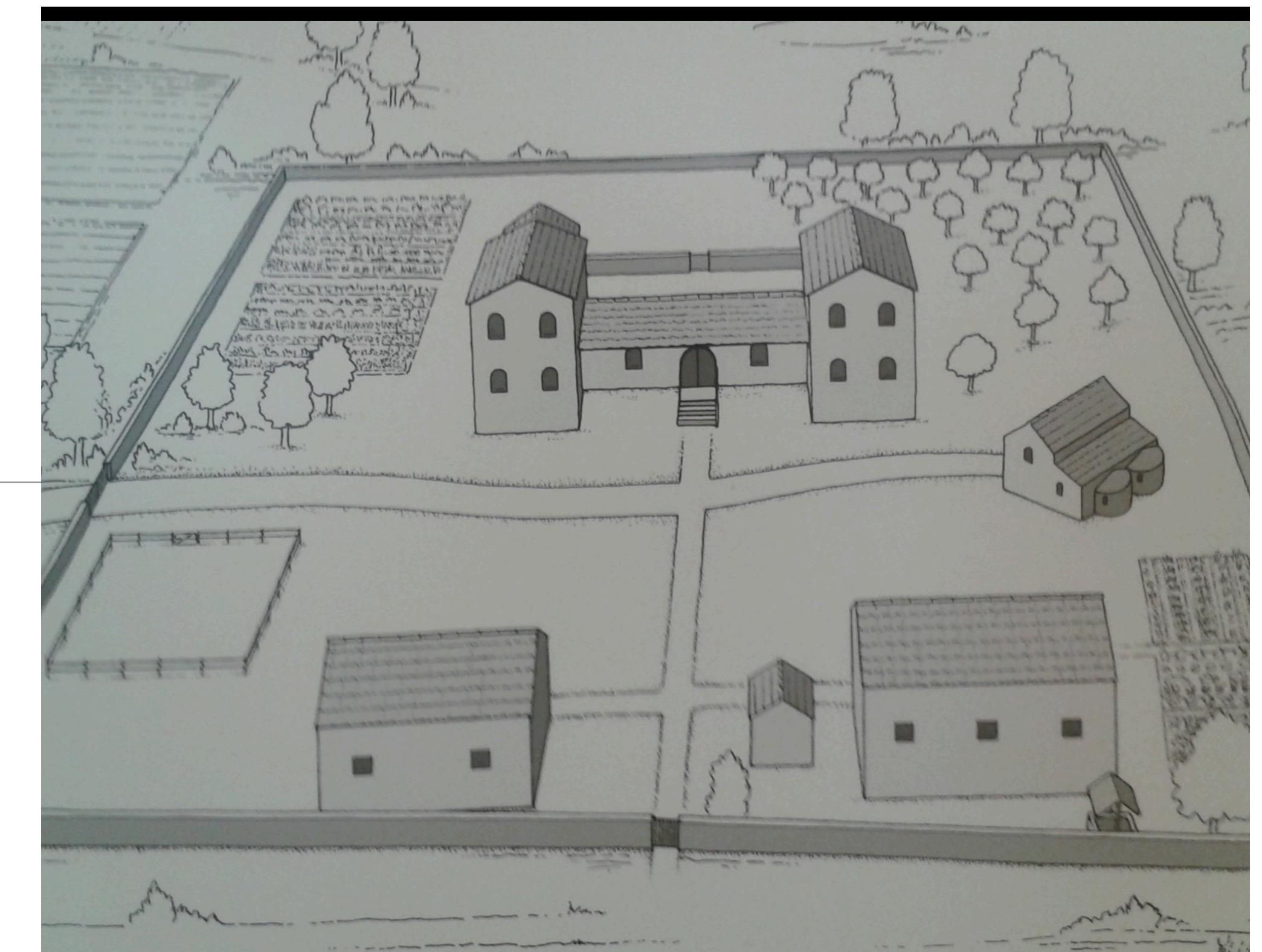


Project: Archaeological Fieldwork V2



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](#).^{[1][2]} As of 2017, the atlas has 4,147 entries, which the researchers believe to be all of the extant hillforts in Britain and Ireland.^{[1][3]} A printed [atlas](#) is also planned.^[4]

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

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

<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
Archaeological Sites of Interest

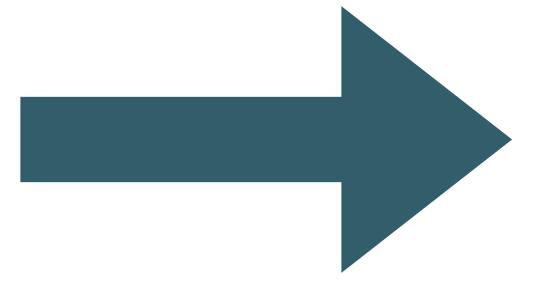
Users are archaeology students.

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

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

Students can add additional sites - which may be
uncharted

2 Versions



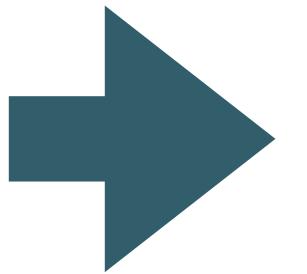
Version 1: Foundation

Version 2: Enhanced

Version 1: Foundation

App Components

1 Opening Screen / Splash Screen:



Suitable Image or Logo
Appears for limited period

2 Signup / Login

3 Toolbar

4 List of Sites

5 Create/Edit Site

6 Settings

App Components

1 Opening Screen / Splash Screen:

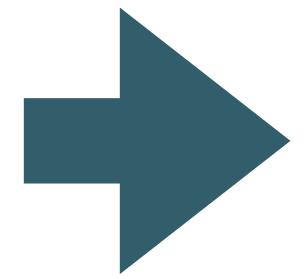
2 Signup / Login

3 Toolbar

4 List of Site

5 Create/Edit Site

6 Settings



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

App Components

1 Opening Screen / Splash Screen:

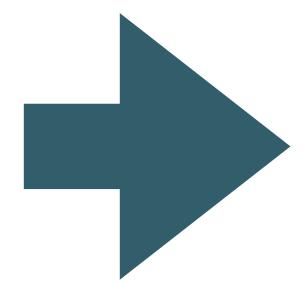
2 Signup / Login

3 Toolbar

4 List of Sites

5 Create/Edit Site

6 Settings



Context Sensitive Menu
options:

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

App Components

1 Opening Screen / Splash Screen:

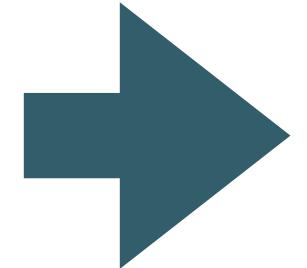
2 Signup / Login

3 Toolbar

4 List of Sites

5 Create/Edit Site

6 Settings



All Site, each Site:

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

App Components

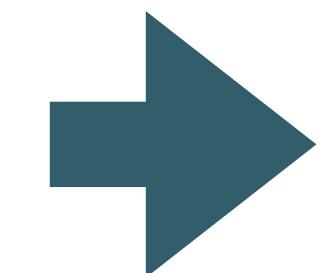
1 Opening Screen / Splash Screen:

2 Signup / Login

3 Toolbar

4 List of Sites

5 Create/Edit Site



6 Settings

Individual Site:

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

App Components

1 Opening Screen / Splash Screen:

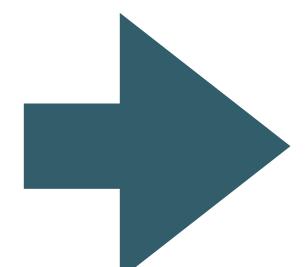
2 Signup / Login

3 Toolbar

4 List of Site

5 Create/Edit Site

6 Settings



Logged in user details

- Email
- Password
- Summary Statistics:
 - Total number of Sites
 - Number visited

Version 2: Enhanced

1 Opening Screen / Splash Screen:

2 Signup / Login

3 Toolbar

4 List of Hillforts

5 Create/Edit Hillfort

6 Settings

7 Search

8 Map

9 Track

10 Favourites



Enhance Existing Views
from Version 1

New to Version 2

1 Opening Screen / Splash Screen:

Enhancements

2 Signup / Login

- + • *Register/Authenticate with Cloud Service (Firebase)*

3 Toolbar

- + • *Access to new views (7-10 below)*

4 List of Hillforts

- + • *Retrieve/Store list from Cloud Service (Firebase)*

5 Create/Edit Hillfort

- + • *Set Location of Site from current phone location*

6 Settings

- + • *Rate Hillfort (1-5 stars)*
- *Share Hillfort Details (email or other)*
- *Mark Hillfort as Favourite*

New to Version 2

7 Search

- *Find site(s) based on some search criteria*

8 Map

- *Map of all Hillforts*

9 Navigator

- *Special view to show current lat/lng + map to guide student to precise location*

10 Favourites

- *Quick access to hillforts marked as favourite*

Features

Architecture

UX

Persistence

Git

	Features	Architecture	UX	Persistence	Git
Baseline	<ul style="list-style-type: none">- Map of all hillforts- Rate Hillfort	<ul style="list-style-type: none">- AndroidX + KTX	<ul style="list-style-type: none">- Landscape	<ul style="list-style-type: none">- Local Database (Room/Sqlite)	<ul style="list-style-type: none">- develop branch

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Good	<ul style="list-style-type: none"> - Mark as Favourite - Favourites View 	<ul style="list-style-type: none"> - Model View Presenter 	<ul style="list-style-type: none"> - Bottom navigation 	<ul style="list-style-type: none"> - Firebase authentication 	<ul style="list-style-type: none"> - feature branch

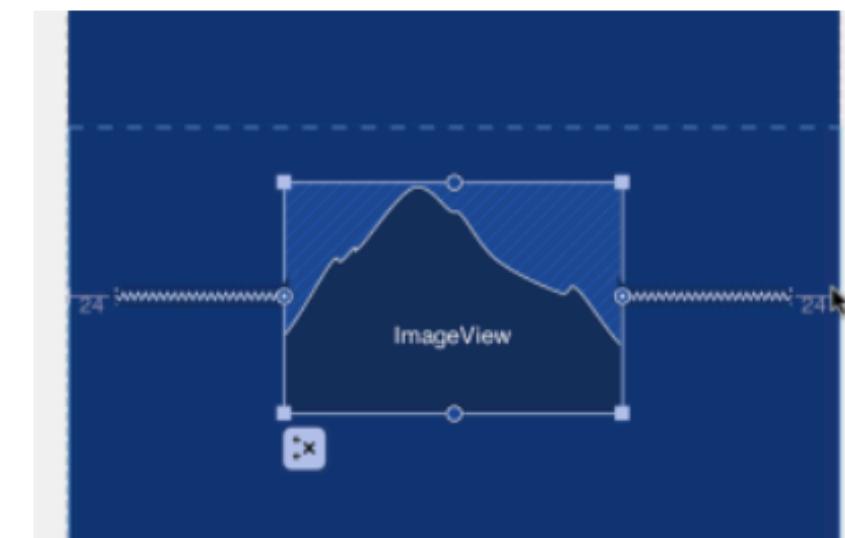
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Excellent	<ul style="list-style-type: none"> - Search - Current Location Detection 	<ul style="list-style-type: none"> - Navigation Architecture Component 	<ul style="list-style-type: none"> - Fragments - Swipe Support 	<ul style="list-style-type: none"> - Firebase db (images locally) 	<ul style="list-style-type: none"> - release branch

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Outstanding	<ul style="list-style-type: none"> - Navigator - Share Hillfort 	<ul style="list-style-type: none"> - Lifecycles/ Databinding/ Livedata 	<ul style="list-style-type: none"> - Images direct from Camera - Transitions 	<ul style="list-style-type: none"> - Firebase db + images 	<ul style="list-style-type: none"> - hotfix branch

Remaining Topics

	Features	Architecture	UX	Persistence	Git
Baseline	<ul style="list-style-type: none"> - Map of all hillforts - Rate Hillfort 	<ul style="list-style-type: none"> - AndroidX + KTX 	<div style="border: 2px solid black; padding: 5px; display: inline-block;"> Landscape </div>	<ul style="list-style-type: none"> - Local Database (Room/Sqlite) 	<ul style="list-style-type: none"> - develop branch
Good	<ul style="list-style-type: none"> - Mark as Favourite - Favourites View 	<ul style="list-style-type: none"> - Model View Presenter 	<div style="border: 2px solid black; padding: 5px; display: inline-block;"> Bottom navigation </div>	<ul style="list-style-type: none"> - Firebase authentication 	<ul style="list-style-type: none"> - feature branch
Excellent	<ul style="list-style-type: none"> - Search - Current Location Detection 	<ul style="list-style-type: none"> - Navigation Architecture Component 	<div style="border: 2px solid black; padding: 5px; display: inline-block;"> Fragments Swipe Support </div>	<ul style="list-style-type: none"> - Firebase db (images locally) 	<ul style="list-style-type: none"> - release branch
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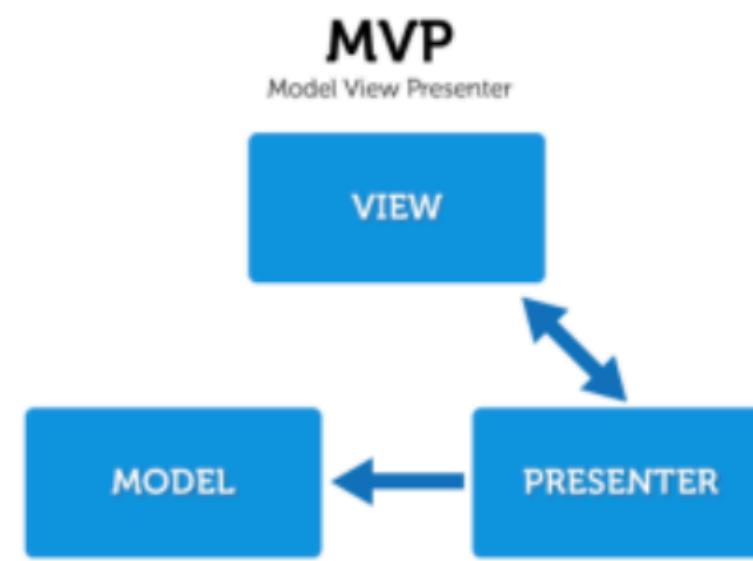
07: Layouts



Kotlin properties, fields, & interfaces. Constraint Layout. Introduce activity to display all placemark locations + details.

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08: Presenters



Introducing Model View Presenter - a pattern to enhance separation of concerns in the Activity classes

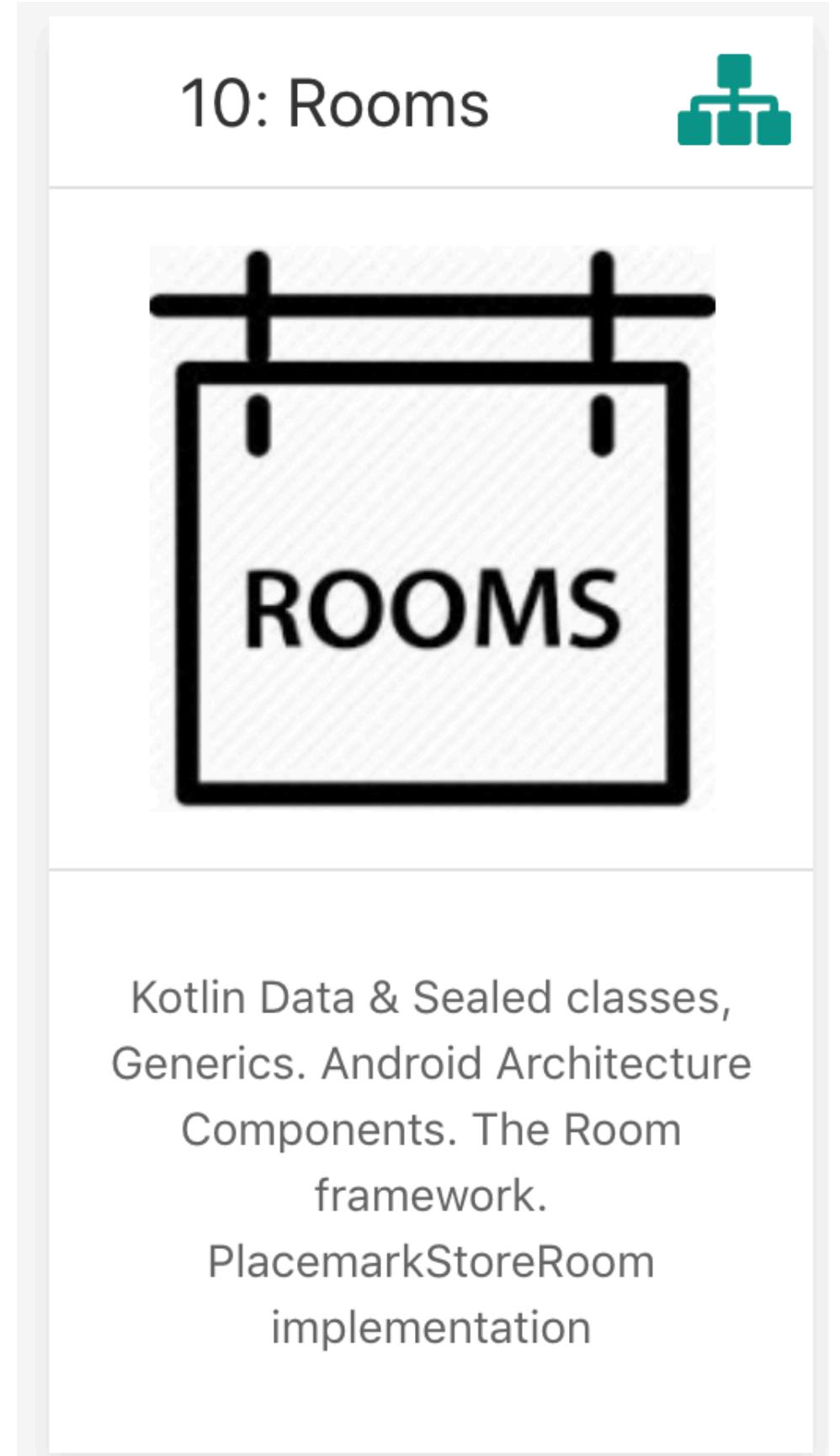
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09: Location

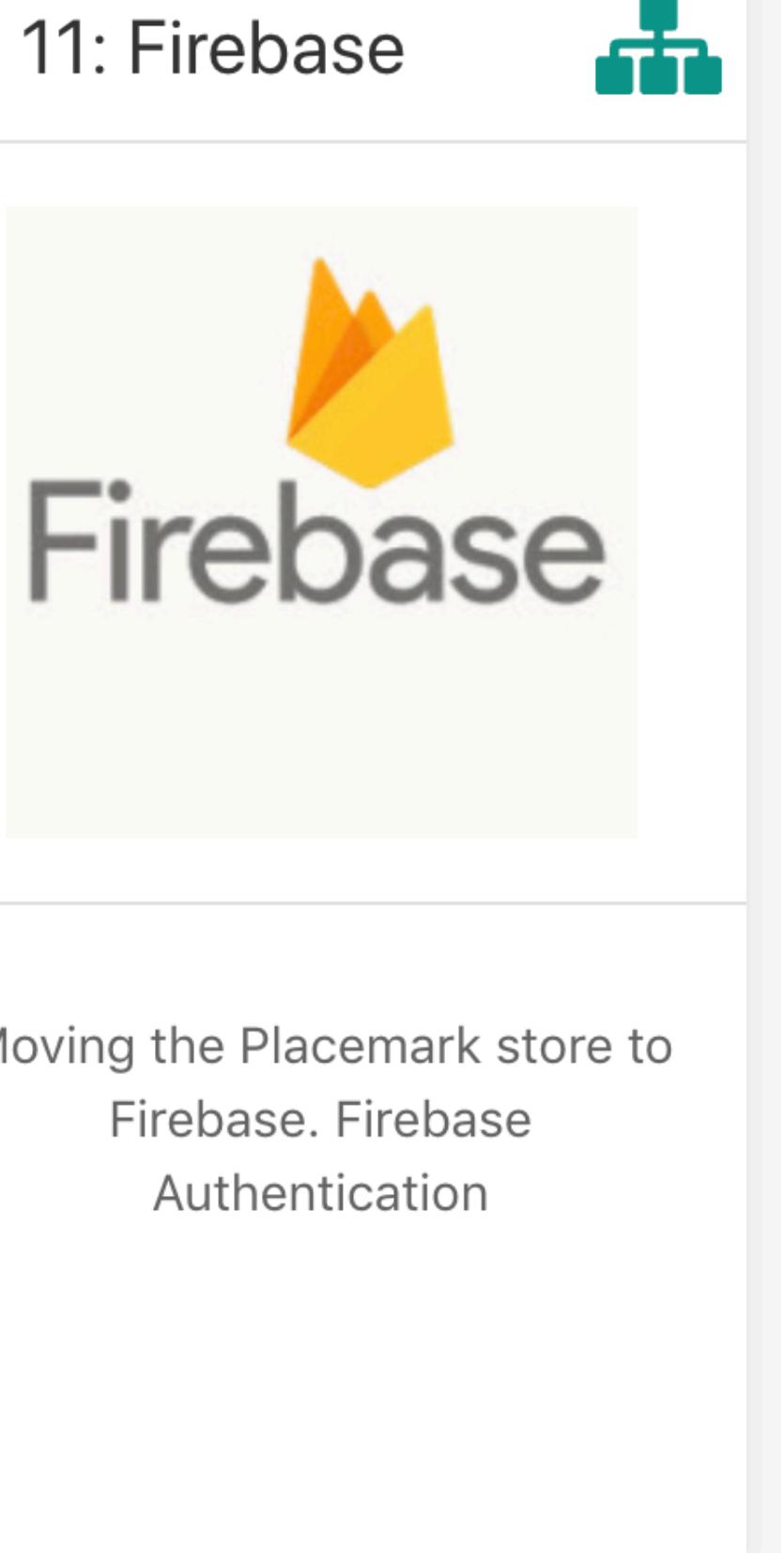


Kotlin visibility & extensions.
Determine the devices current
location & resolve in a map.

	Features	Architecture	UX	Persistence	Git
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07: Layouts



08: Presenters



09: Location



10: Rooms



11: Firebase



	Features	Architecture	UX	Persistence	Git
Baseline	- Map of all hillforts - Rate Hillfort	- AndroidX + KTX	- Landscape	Local Database (Room/Sqlite)	develop branch
Good	- Mark as Favourite - Favourites View	- Model View Presenter	- Bottom navigation	Firebase authentication	feature branch
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Moving the Placemark store to Firebase. Firebase Authentication

	Features	Architecture	UX	Persistence	Git
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Outstanding	<ul style="list-style-type: none"> - Navigator - Share Hillfort 	<ul style="list-style-type: none"> - Lifecycles/ Databinding/ Livedata 	<ul style="list-style-type: none"> - Images direct from Camera - Transitions 	Firebase db + images	hotfix branch

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Foundation

Foundation components provide cross-cutting functionality like backwards compatibility, testing and Kotlin language support.

Android KTX

Write more concise, idiomatic Kotlin code

AppCompat

Degrade gracefully on older versions of Android

Auto

Components to help develop apps for Android

Auto

Benchmark

Quickly benchmark your Kotlin-based or Java-based code from within Android Studio

Multidex

Provide support for apps with multiple DEX files

Security

Read and write encrypted files and shared preferences by following security best practices.

Test

An Android testing framework for unit and runtime UI tests

Architecture

Architecture components help you design robust, testable and maintainable apps.

Data Binding

Declaratively bind observable data to UI elements

Lifecycles

Manage your activity and fragment lifecycles

LiveData

Notify views when underlying database changes

Navigation

Handle everything needed for in-app navigation

Paging

Gradually load information on demand from your data source

Room

Fluent SQLite database access

ViewModel

Manage UI-related data in a lifecycle-conscious way

WorkManager

Manage your Android background jobs

Behavior

Behavior components help your app integrate with standard Android services like notifications, permissions, sharing and the Assistant.

CameraX

Easily add camera capabilities to your apps

Media & playback

Backwards-compatible APIs for media playback and routing (including Google Cast)

Notifications

Provides a backwards-compatible notification API with support for Wear and Auto

Permissions

Compatibility APIs for checking and requesting app permissions

Preferences

Create interactive settings screens

Sharing

Provides a share action suitable for an app's action bar

Slices

Create flexible UI elements that can display app data outside the app

UI

UI components provide widgets and helpers to make your app not only easy, but delightful to use. Learn about [Jetpack Compose](#), which helps simplify UI development.

Animation & transitions

Move widgets and transition between screens

Emoji

Enable an up-to-date emoji font on older platforms

Fragment

A basic unit of composable UI

Layout

Lay out widgets using different algorithms

Palette

Pull useful information out of color palettes

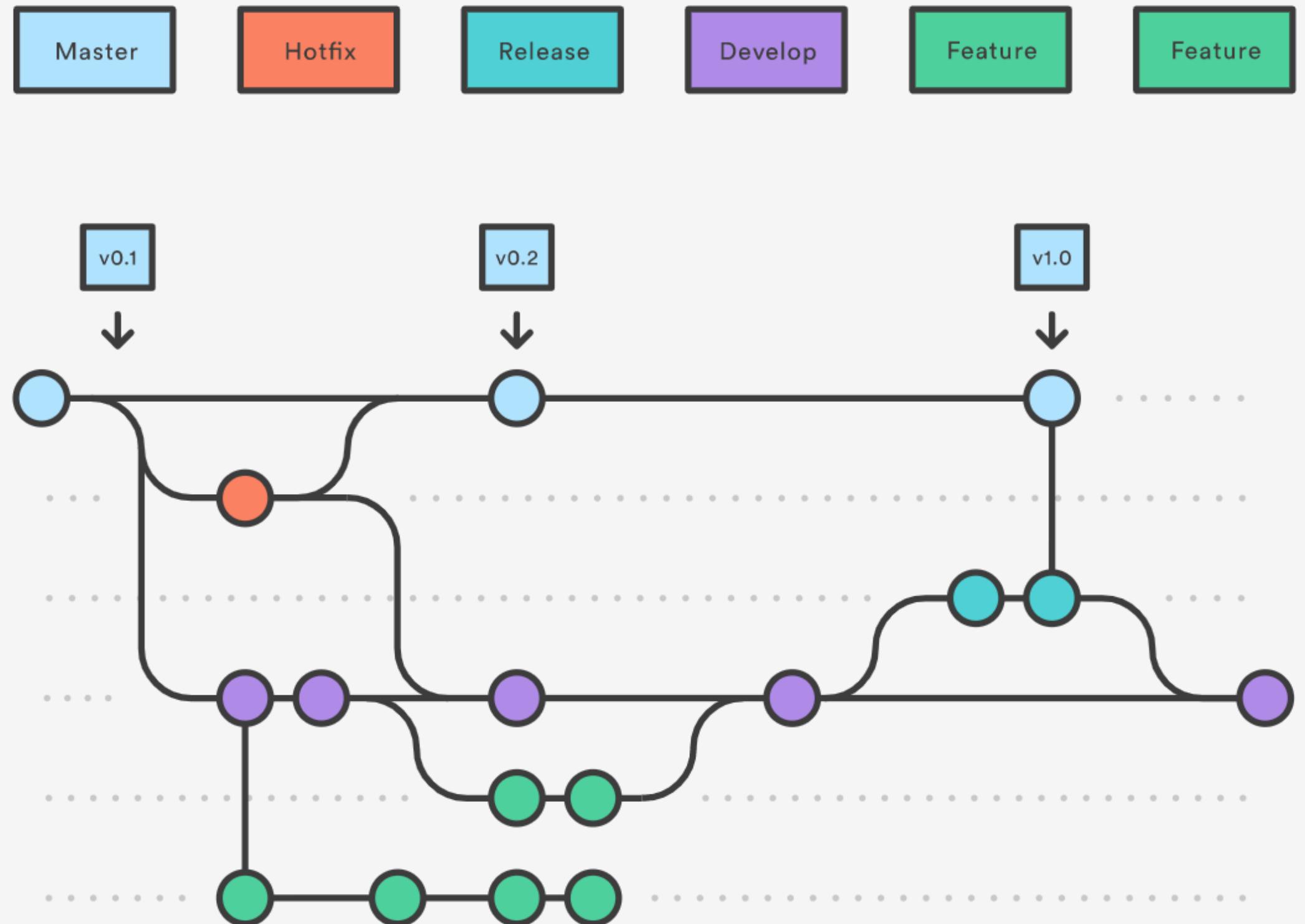
Android Jetpack Components

Android Jetpack components are a collection of libraries that are individually adoptable and built to work together while taking advantage of Kotlin language features that make you more productive. Use them all or mix and match!

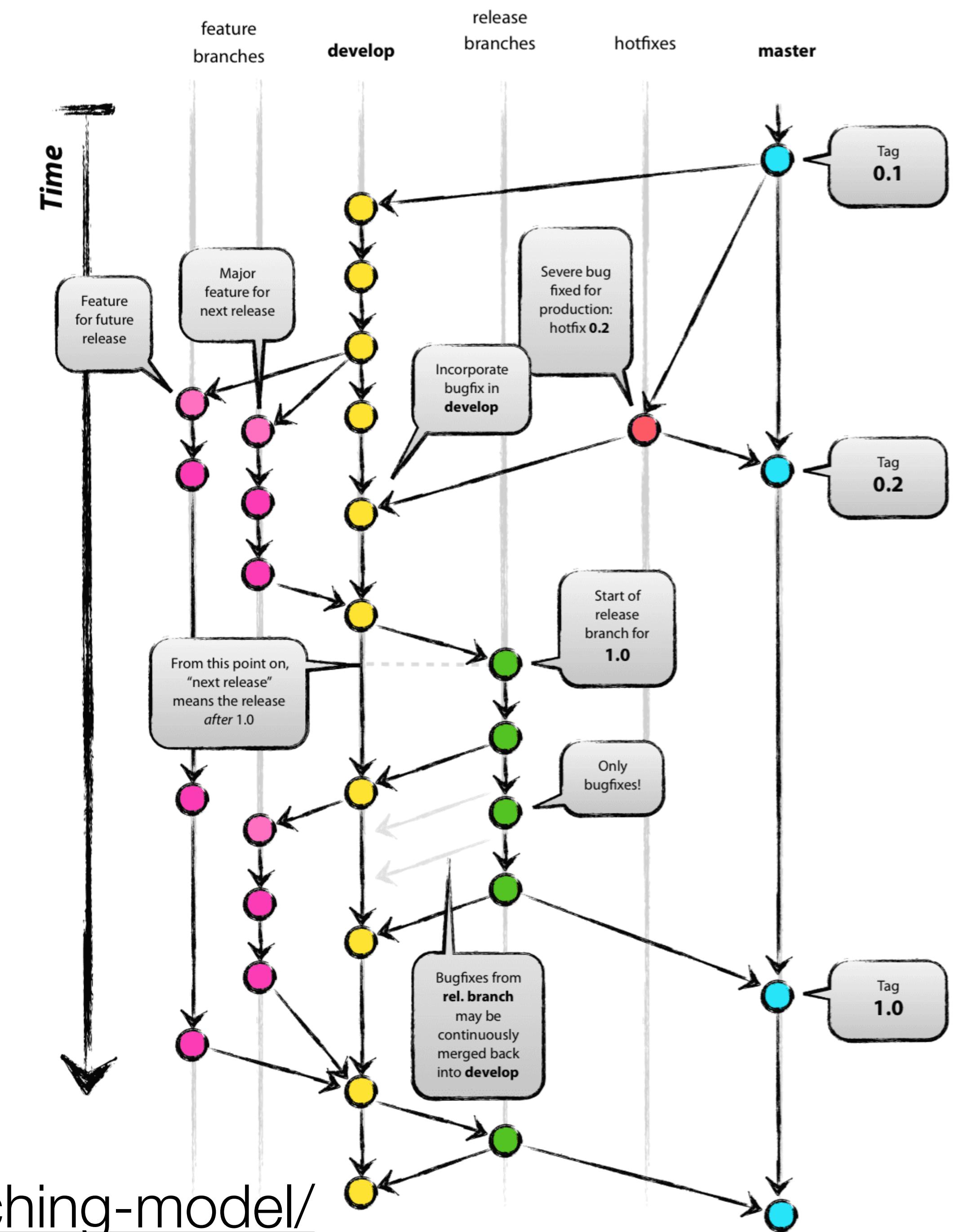
Gitflow Workflow

Gitflow Workflow is a Git workflow design that was first published and made popular by [Vincent Driessen at nvie](#). The Gitflow Workflow defines a strict branching model designed around the project release. This provides a robust framework for managing larger projects.

Gitflow is ideally suited for projects that have a scheduled release cycle. This workflow doesn't add any new concepts or commands beyond what's required for the [Feature Branch Workflow](#). Instead, it assigns very specific roles to different branches and defines how and when they should interact. In addition to feature branches, it uses individual branches for preparing, maintaining, and recording releases. Of course, you also get to leverage all the benefits of the Feature Branch Workflow: pull requests, isolated experiments, and more efficient collaboration.



Git Branching Model



<https://nvie.com/posts/a-successful-git-branching-model/>

2020		S	M	T	W	T	F	S	Modules
Semester 2									
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

Submission Guidelines

Deadline : January 9th - 11:00pm

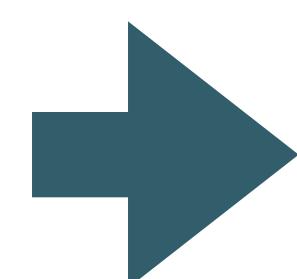
Submit
single
word
document

Student Name :
Demo Video URL :
Project Repo URL :

Grade Band	Features	Architecture	UX	Persistence	GIT
Baseline					
Good					
Excellent					
Outstanding					

Additional Comments:

Template On
Course Web



Project Submission Template

Student Name :
Demo Video URL :
Project Repo URL :

Grade Band	Features	UX	GIT
Baseline			
Good			
Excellent			
Outstanding			

Additional Comments:

An archive of a word document
to be submitted with
assignment 2

Short Video Demo (8 minutes max)

Student Name :
Demo Video URL :
Project Repo URL :

Github Repo (invite if private)

Template Structure

Grade Band	Geo	Features	UX	GIT
Baseline				
Good				
Excellent				
Outstanding				

Additional Comments:

Additional comments (optional)