Collection Views

UITableViews, unchained Week 3 Day 3



Collection views: way more flexible

Table views **handle layout and view management**, leaving information to a data source and behaviour to a delegate.

Collection views only handle **view management**. They have a data source and delegate like table views, but they also get their layout information from another object. This makes them very customizable.



LIGHTHOUSE LABS

UICollectionViewLayout objects

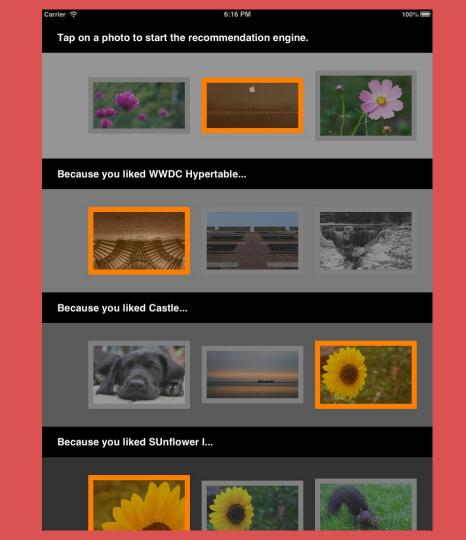
The UICollectionViewLayout object tells a collection view how large its content size is, what views are in a given rectangle inside of that content view, and the attributes for a view of a type and at a certain index path. It also can give details to create custom animation when cells are inserted, deleted, or moved.

UICollectionViewFlowLayout

There's a subclass of UICollectionViewLayout that already lays out items in rows (or columns) that wrap. It has some custom settings that allow you to customize things. It might get you very close to what you want, and you can still subclass it to get even more custom behavior.

3 types of views

- UICollectionViewCells are like table view cells. They show the central information.
- Supplementary views are things like section headers, that are not based on a particular item but still give information.
- Decoration views have no information relationship to the cells and are just there for appearance's sake.



We have to customize cells

Collection view cells don't have a text label or an accessory view or anything that we can use to display information. We need to add those views ourselves.

Transitions between layouts

You can transition between layouts with optional animation. You can also set up an interactive transition between two layouts using a third layout object. The degree of transition can be based on a slider, a gesture recognizer, anything than can go from 0 to 1.

CollectionView vs CollectionViewContoller

What is the difference between a CollectionView added to a UIViewController vs a CollectionViewController.