

Collection View

TIPS & TRICKS

What?



Why?

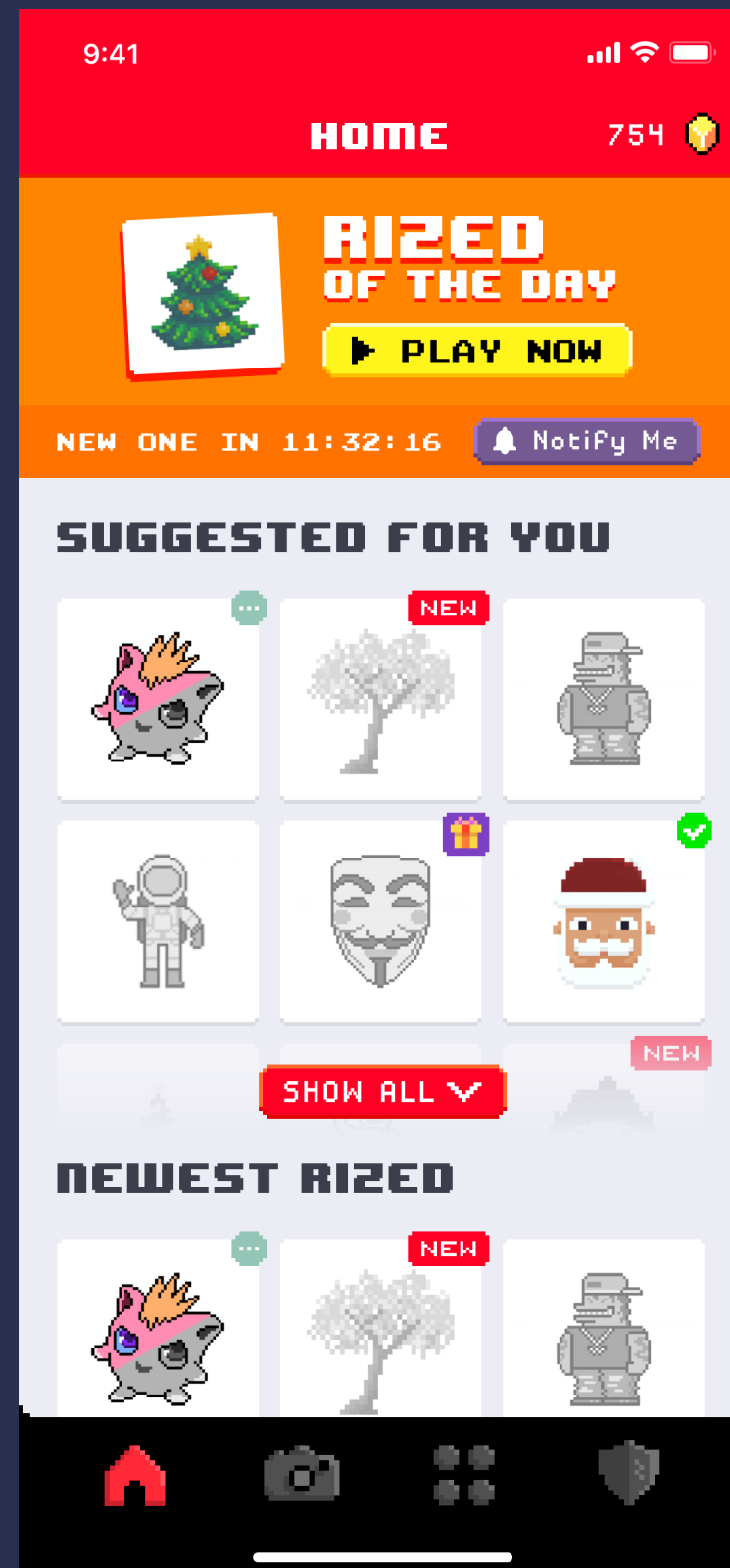


Collection Views, the basics



An object that manages an ordered collection of data items and presents them using customizable layouts.

— **Apple Documentation**



Header

Cells

**Collection
View**



The diagram consists of two rounded rectangular boxes on a dark blue background. The left box is teal and contains the text 'Collection View'. The right box is purple and contains the text 'Delegate'. There are no lines or arrows connecting the two boxes.

**Collection
View**

Delegate





**Collection
View**

Delegate

Data Source

Layout

Layout

The job of a layout object is to determine the placement of cells, supplementary views, and decoration views inside the collection view's bounds and to report that information to the collection view when asked. The collection view then applies the provided layout information to the corresponding views so that they can be presented onscreen.

— Apple Documentation

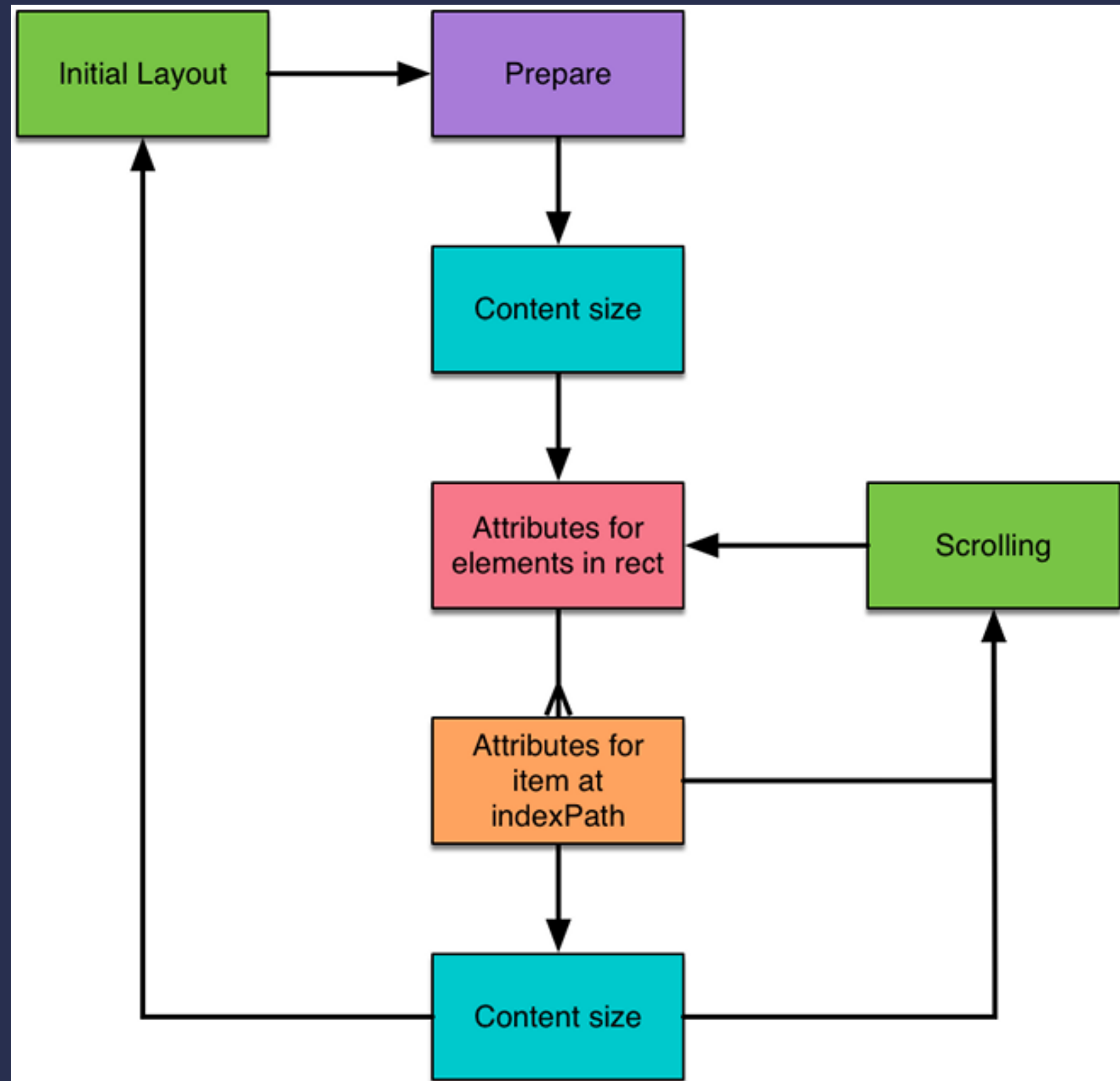
```
func prepare() {  
    // nothing by default  
}
```

```
var collectionViewContentSize: CGSize { get }
```

```
func layoutAttributesForElements(in rect: CGRect) -> [UICollectionViewLayoutAttributes]? {  
    // a very complex implementation here  
    return nil  
}
```

```
func layoutAttributesForItem(at indexPath: IndexPath) -> UICollectionViewLayoutAttributes? {  
    // a very complex implementation here  
    return nil  
}
```

```
func shouldInvalidateLayout(forBoundsChange newBounds: CGRect) -> Bool  
    return false  
}
```

UICollectionViewFlowLayout

You must subclass UICollectionViewLayout in order to use it. Before you consider subclassing, though, you should look at the UICollectionViewFlowLayout class to see if it can be adapted to your layout needs.

– Apple Documentation

Links

- ▶ <https://developer.apple.com/documentation/uikit/uicollectionviewlayout>
- ▶ <https://developer.apple.com/library/content/documentation/WindowsViews/Conceptual/CollectionViewPGforIOS/CreatingCustomLayouts/CreatingCustomLayouts.html>
- ▶ <https://www.objc.io/issues/5-ios7/collection-views-and-uidynamics/>