

## DOCUMENTATION

The code reference is an online resource that can be accessed via *'frame8->Optimized ScrollView Adapter-> Code reference'* menu item.

For v3.0 and higher, there's a quick start video guide on youtube, which can be accessed via *'frame8->Optimized ScrollView Adapter-> Quick start video'*

## USAGE INSTRUCTIONS

**SRIA**, **BaseParams** and **BaseItemViewsHolder** are the 3 core classes in our small library dedicated to both optimize a Scroll View and programmatically manage its contents.

You can use it both for a horizontal or vertical ScrollView.

**SRIA** it's an abstract, generic MonoBehaviour, which you need to extend and provide at least the implementation of **SRIA.CreateItemViewHolder()** and **SRIA.UpdateItemViewHolder()**.

It's recommended to manually go through example code provided in **ScrollRectItemsAdapterExample.cs** and **SimpleTutorial.cs** in order to fully understand the mechanism. You'll find detailed comments in core areas. You may even use this script directly without implementing your own, in some simple scenarios.

***(Some may find it more easy to consult the example code+scene directly or the quick start video tutorial, without reading this document)***

## IMPLEMENTATION

*(Follow these steps while constantly looking at how it's done in the example code in **SimpleTutorial.cs** and optionally in **ScrollRectItemsAdapterExample.cs**)*

Here's the normal flow you'll follow after you've created a Scroll View using **GameObject->UI->ScrollView**:

1. create your own implementation of **BaseItemViewsHolder**, let's name it **MyItemViewsHolder**
2. create your own implementation of **BaseParams** (if needed), let's name it **MyParams**
3. create your own implementation of **SRIA<MyParams, MyItemViewsHolder>**, let's name it **MyScrollRectItemsAdapter**
4. override **Start()**, call **base.Start()**, after which:
5. call **MyScrollRectItemsAdapter.ResetItems(int count)** once (and any time your dataset is changed) and two things will happen:
  - 5.1. **CollectItemsSizes()** will be called (which you can optionally implement to provide your own sizes, if known beforehand)
  - 5.2 **CreateViewsHolder(int)** will be called for each view that needs creation. Once a view is created, it'll be re-used when it goes off-viewport

- `newOrRecycledViewHolder.root` will be null, so you need to instantiate your prefab), assign it and call `newOrRecycledViewHolder.CollectViews()`. Alternatively, you can call its `AbstractViewHolder.Init(..)` method, which can do a lot of things for you, mainly instantiate the prefab and (if you want) call `CollectViews()`

- after creation, only `MyScrollRectItemsAdapter.UpdateItemViewHolder()` will be called for it when its represented item changes and becomes visible

- this method is also called when the viewport's size grows, thus needing more items to be visible at once

5.3. `MyScrollRectItemsAdapter.UpdateViewsHolder(MyItemViewsHolder)` will be called when an item is to be displayed or simply needs updating:

- use `newOrRecycledViewHolder.ItemIndex` to get the item index, so you can retrieve its associated model from your data set (most common practice is to store the data list in your `Params` implementation)

- `newOrRecycledViewHolder.root` is not null here (given the view holder was properly created in `CreateViewsHolder(..)`). It's assigned a valid object whose UI elements only need their values changed (common practice is to implement helper methods in the view holder that take the model and update the views themselves)

`ResetItems()` is also called when the viewport's size changes (like for orientation changes on mobile or window resizing on standalone platforms)

## EXAMPLE SCENES & UTILITIES

All the example scenes & the utility scripts are provided on an "as-is" base. Their main purpose is to demonstrate the feature-set and show you the basic code-flow when implementing the adapter, following the recommended best-practices & conventions.

## KNOWN ISSUES

- Not actually related to the plugin itself, but worth mentioning: some lower-end devices have terrible performance with Open GL 3 and/or Auto Graphics API. If you experience oddly low FPS, untick Auto Graphics API and use Open GL 2 instead.

- In the `ContentSizeFitter` example scene: the prefab's Text will be oddly truncated if its "Vertical Overflow" property is set to "Truncate". So as a general rule, set it to "Overflow" when you have similar scenarios. Likewise, if you have a horizontal `ScrollView`, the "Horizontal Overflow" property is the one to be modified.