

ScrollSnap v1.0.0

Scroll Snap Component for Unity

July 2021

ScrollSnap is a focused UI component that helps you create an equally sized page based scroll area.

Main point of **ScrollSnap** is to look, work and feel like a native Unity component that gives you fundamental functionality and makes it easy to build upon.

[Discord](#)

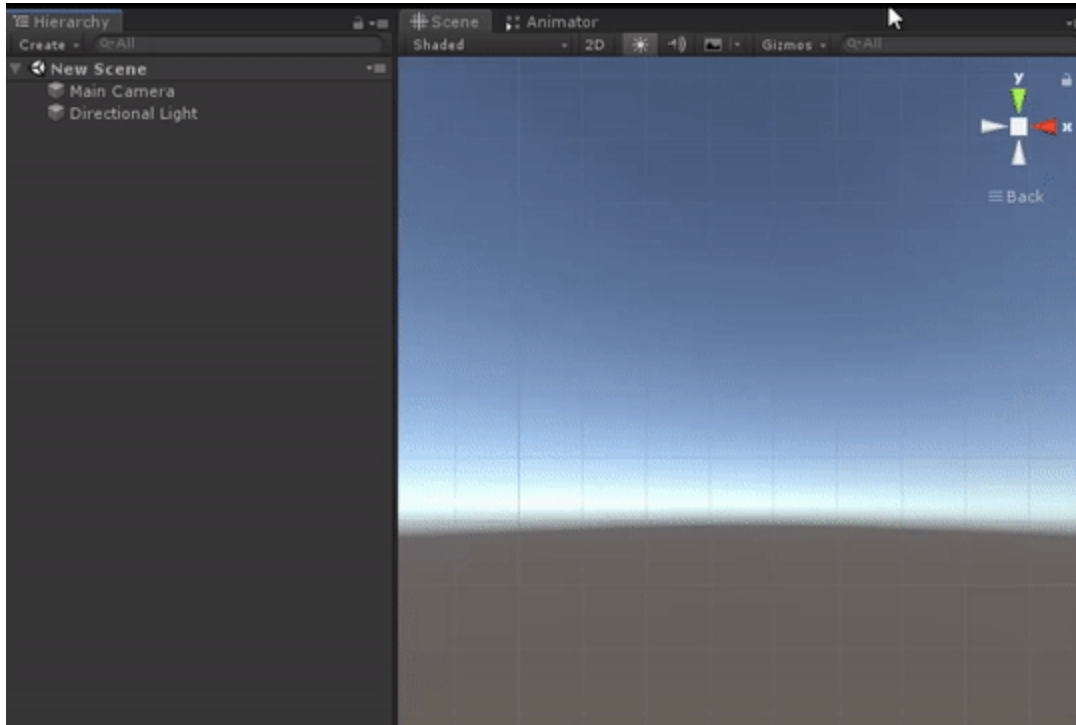
[Online Documentation](#)



Usage

You can create a ScrollSnap item already prepared for basic use just like any other Unity UI components. You can **right click** in the Hierarchy window, **select UI** and then **ScrollSnap** to create a ready to use object.

Alternatively you can add it to your UI game object from the **Components/UI/ScrollSnap** menu.



Features

- Simple, generalized and well documented code and UI.
- Infinite scroll component.
- 5 demo scenes with different use cases.
- Horizontal and Vertical scroll ability, supported by swipe gesture and buttons.
- Left/Right and Top/Bottom alignment.
- UI Gizmos to display immediate feedback about variable changes.
- Runtime layout change. Helps you add or remove pages in play mode.
- Ability to scroll out of the first and the last page within a given margin for elastic feeling.
- Custom scroll activation area to decide how early snap can be activated.
- Snap speed from slow to immediate page change.
- Page Changed event for notifying subjects.

ScrollSnap.cs

This script contains the logic of the UI component. From the inspector of it, you can change the components axis, alignment, scroll out margin, snap activation area and snap speed. Additionally you register the OnPageChanged event for receiving the changed index.

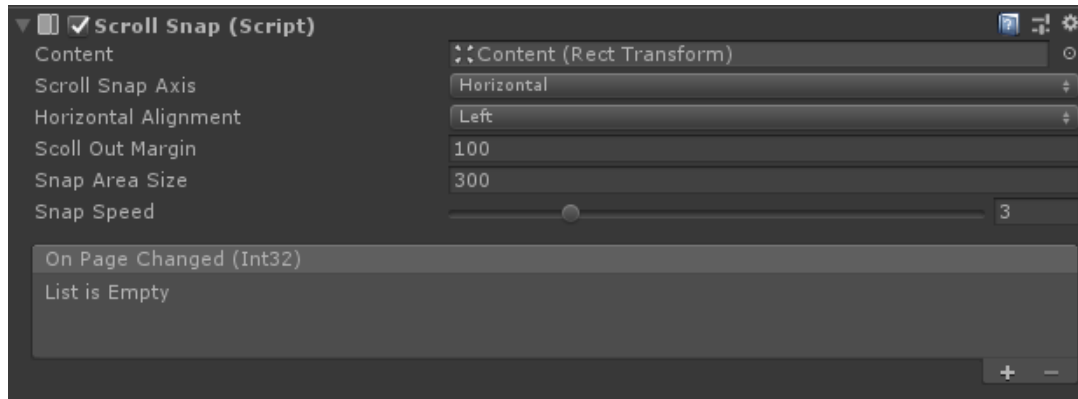


Figure 1: ScrollSnap Component interface.

Content

public RectTransform Content;
Container for scroll snap pages.

ScrollSnapAxis

public RectTransform.Axis ScrollSnapAxis;
Axis of the pages. Can be set Horizontal or Vertical.

VerticalPageAlignment

public VerticalAlignment VerticalPageAlignment;
Align the start of the pages to the top or to the bottom of the Content.

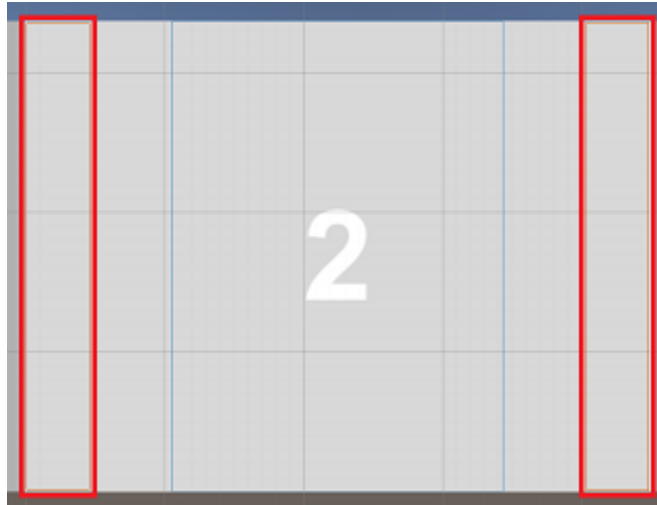
HorizontalPageAlignment

public HorizontalAlignment HorizontalPageAlignment;
Align the start of the pages to the left side or to the right side of the Content.

ScrollOutMargin

public float ScrollOutMargin;
Size of the side areas in pixels to scroll out of the first and the last pages. Used for giving an elastic feeling to the scrollable area.

Scroll out margins are shown with **orange** gizmos on the ScrollSnap component. Changing the value of it will be reflected immediately to let you know how far you can scroll out. Default value is 100 pixels.

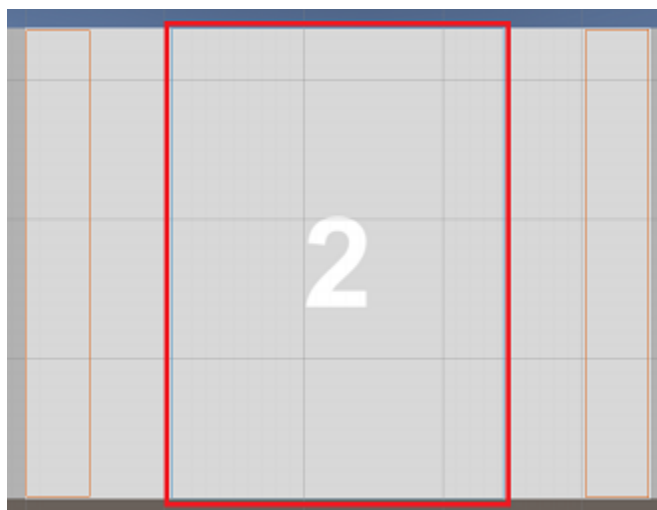


SnapAreaSize

public float SnapAreaSize;

Size of the center area in pixels, that is necessary for activating the snap. If the next page enters this range page will snap. Default value is 200 pixels.

Snap area is shown with **blue** gizmos on the ScrollSnap component. Changing the value of it will be reflected immediately to let you know when snap will be active. Default value is 200 pixels.



SnapSpeed

public float SnapSpeed;

Speed of the snap after swipe gesture stops. Minimum value is 1 and maximum value is 10. At maximum value page snap happens immediately.

CurrentPageIndex

public int CurrentPageIndex;

Index of the current page in the Content.

ScrollAmount

public float ScrollAmount;

Amount of the scroll from 0 to the number of pages.

OnPageChanged

public ScrollSnapEvent OnPageChanged;

Event called on page changes. Gives the changed index as a parameter to the callback.

PageWidth

public float PageWidth;

Width of the ScrollSnap page.

PageHeight

public float PageHeight;

Height of the ScrollSnap page.

ResetScrollSnapUI

public void ResetScrollSnapUI()

Resets the page size and position. Should be called if page count is changed during runtime.

ScrollSnapInfinite.cs

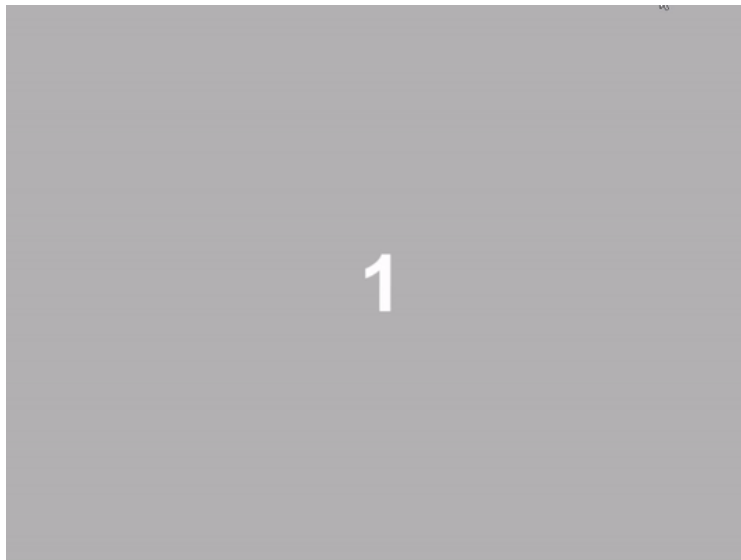
ScrollSnap comes with an infinite scroll component too. Only API difference of this component is not having **ScrollOutMargin** value since it is no more needed. Scroll Snap infinite component can be added from Context Menu **UI/Scroll Snap Infinite**.

Demos

Please find the demo example scenes under **Assets\Plugins\SGT3V\UI\Scroll Snap\Demos** folder.

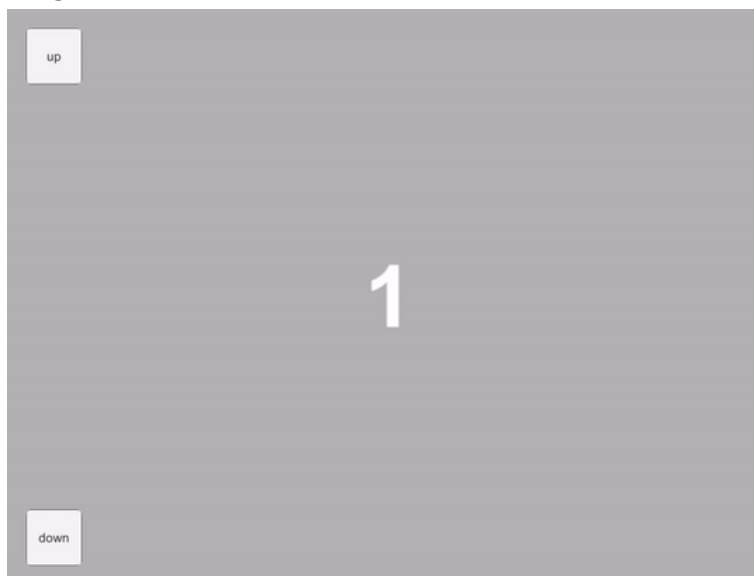
1 - Scroll Snap Basic

This is a basic implementation of the component and what you will get when you add it to your scene from Hierarchy **UI/ScrollSnap** context menu.



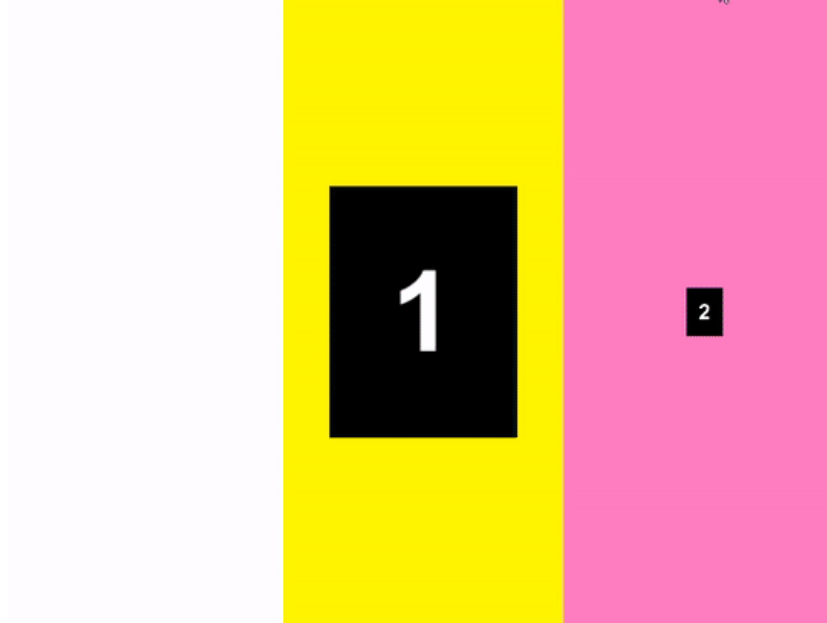
2 - Scroll Snap With Buttons

This example shows how to use ScrollSnap with button controls. Up button decrements the **CurrentPageIndex** and the down button increments it. Button functions are named due to the axis and alignment of the component in this example. You can refer to the **Demos/Scripts/ChangeIndex.cs** file to see the details.



3 - Scroll Snap Use ScrollAmount

Using **ScrollAmount** value can help you create smooth transform changes, animations and blending effects. This example shows a 3 page carousel with scale and color change. You can refer to the **Demos/Scripts/ResizeAndBlend.cs** file to see the details.



4 - Scroll Snap With Multiple Pages

Using the right alignment and sizes you can create a category and page structure in your game using ScrollSnap. One ScrollSnap component can be made to follow the changes on another one. You can refer to the **Demos/Scripts/FollowOnSnap.cs** file to see the details.



5 - Scroll Snap Infinite

Scroll Snap Infinite demo simply demonstrates a basic implementation of infinite scroll ability of the component.

