

## **CARNIVAL SAMPLE NOTES**

May 07, 2016 Thomas Klähn, Wenhao Cai, Lisa Pawlows, Konrad Köppe



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## **SAMPLE SCENES:**

- 1. Copy the Carnival Samples folder onto your hard disk
- 2. Open Samples project in Unity

The sample scenes are provided to give you a quick idea how to make use of data from the Carnvial SDK in Unity. Each scene focuses on one particular feature. Samples are runnable in the Unity Editor and can be deployed to an Android device as well.

Note: The **Cardboard SDK** package is also included since **CardboardMain.prefab** is used in Carnival Samples to enable the VR view on the android device.

Sample Scene	Data/Events	Interaction	Remark	
Fingertip	Fingertip position	Recognized fingertips are used as hammers to play whack-a-mole game.	Other objects visible for sensor may also be recognized as fingertips.	
Hand	Hand position, hand openness	<ul> <li>Use closed hand to hold a ball</li> </ul>		
		<ul> <li>Open hand to throw it at cans</li> </ul>		
		<ul> <li>Throw at the reset button to restart the scene</li> </ul>		
Gesture	Swipe and clamp gesture events	<ul> <li>Use clamp (OK) gesture to hold a ring</li> </ul>		
		<ul> <li>Hold and move the clamp gesture to control the direction and force that is applied to the ring</li> </ul>	Make sure the "OK" sign is well visible to the sensor. The clamp recognition is based on the transition between an open hand and the "OK" sign. The event	
		<ul> <li>Release the clamp gesture to throw it at bottles</li> </ul>	fires when the fingers meet.	
		<ul> <li>Use the swipe gesture to rotate the fortune wheel</li> </ul>		

Sample Scene	Data/Events	Interaction	Remark	
Mesh	Hand mesh	Play a hand shadow game with the hand mesh	<ul> <li>Shadow quality depends your project's QualitySettings: Edit &gt; Project Settings &gt; Quallity &gt; Shadows</li> <li>The mesh is already filtered and smoothed by Carnival for better a hand visualization and separates from objects in the background</li> </ul>	
Point cloud	Raw point cloud data	Observe two alternatives for visualization of raw data:  • verticies colored with depth value	The point cloud represents the raw data that the sensor delivers. The depth confidence value is used in this sample to filter noise in the background.	
		<ul> <li>particles with light and shadow</li> </ul>		