Smart Importer Best Practices

- Introduction
- Recommended PSD Layers Structure for Smart Importer
- Usage example (Importing and assigning Control)

Introduction

The Smart Importer will allow you to easily and quickly import digital assets to your solution. With AI assistance, you can assign functional HMI controls to elements within your design in a straightforward manner. Several other useful features are included, such as layer merging or multi-scene support.

This document explains how to configure the layer structure on PSD file in order to effectively use Control mapping by Smart Importer.

The IVI sample, which is partially explained in this document, is attached on this PDF.

Recommended PSD Layers Structure for Smart Importer

When creating PSD files using Adobe Photoshop, it is recommended that the naming and structure of the Photoshop layer controls be pre-matched to SceneComposer. This will allow for smooth application of controls and their properties when importing with SmartImporter. The list below shows the Controls that will be assigned in Scene Composer via Smart Importer. Press the links on each Control to jump to the page showing the recommended layer structure in detail.

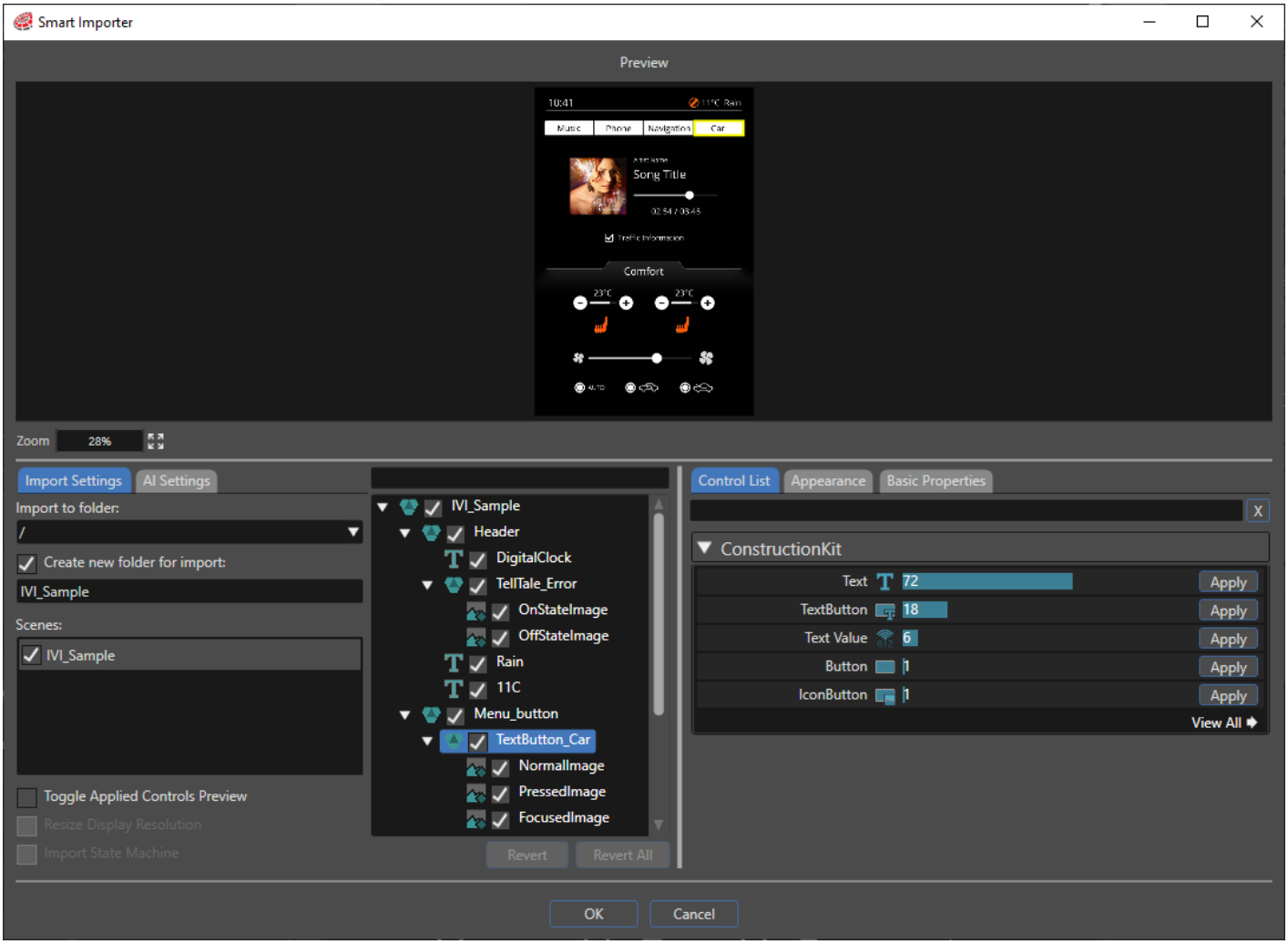
It is important to note that the Smart Importer cannot process effects, masks, filters in Photoshop. Therefore, if you want to use these features, please rasterize the images in advance.

Some Controls are included in the sample file "IVI_Sample.psd" and are explained with specific examples.

PSD layer settings for Control

In this section, the recommended layer configuration in PSD file is described for each control. And, you can confirm its configuration in the sample file about CheckBox, Gauge, IconButton, RadioButton, and TextButton.

- Setting Group name is optional, but it is recommended to use the Control name (as seen in Scene Composer)
- It is also recommended to use the property names (as seen in Scene Composer) as layer names (in Photoshop), but please don't use spaces in the layer names.

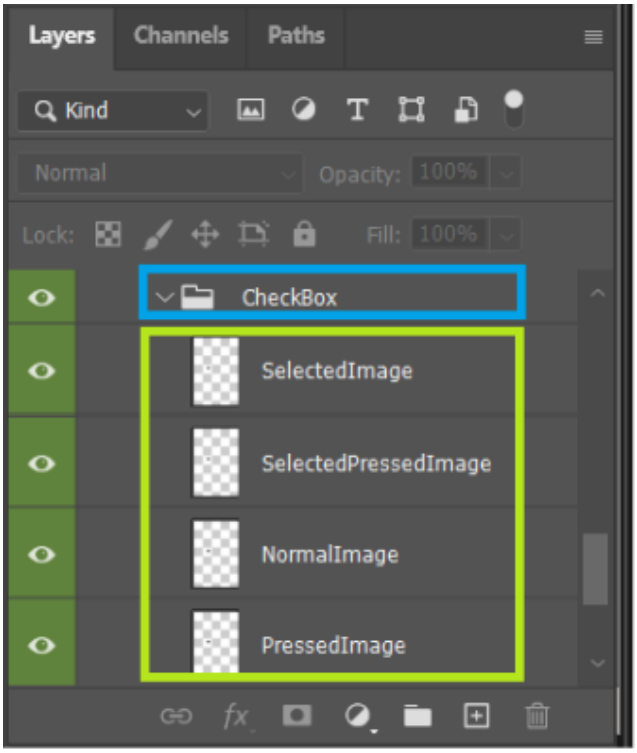


CheckBox

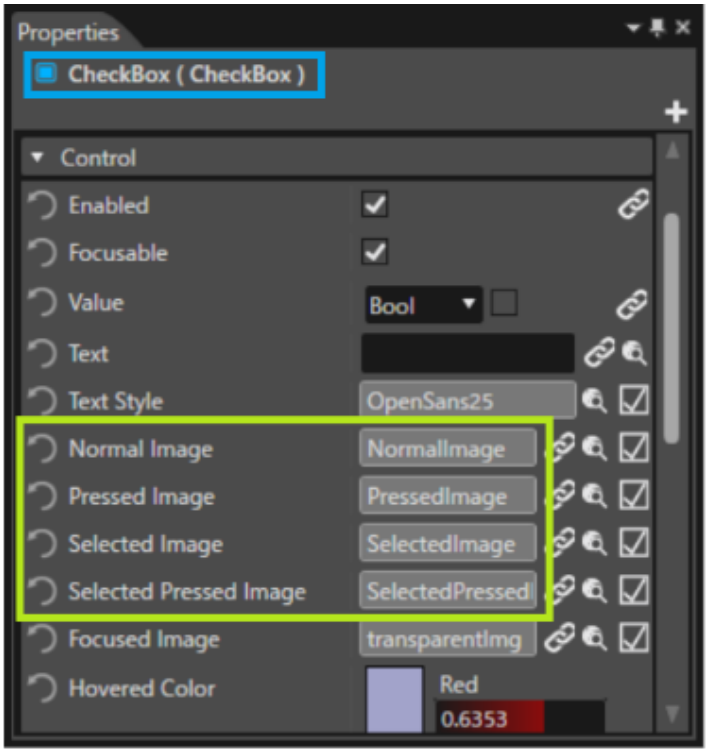
The CheckBox Control can easily be configured with a text, images for a normal and a pressed state as well as for a selected and a selected pressed state.



Group name	CheckBox
Layer	SelectedImage
	SelectedPressedImage
	NormalImage
	PressedImage



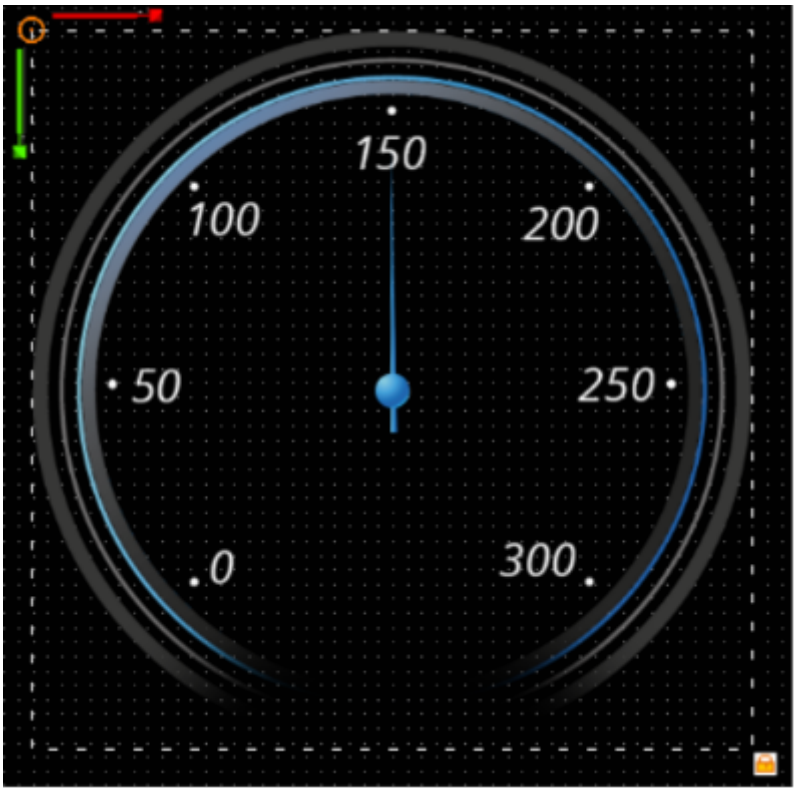
Layer structure in PSD



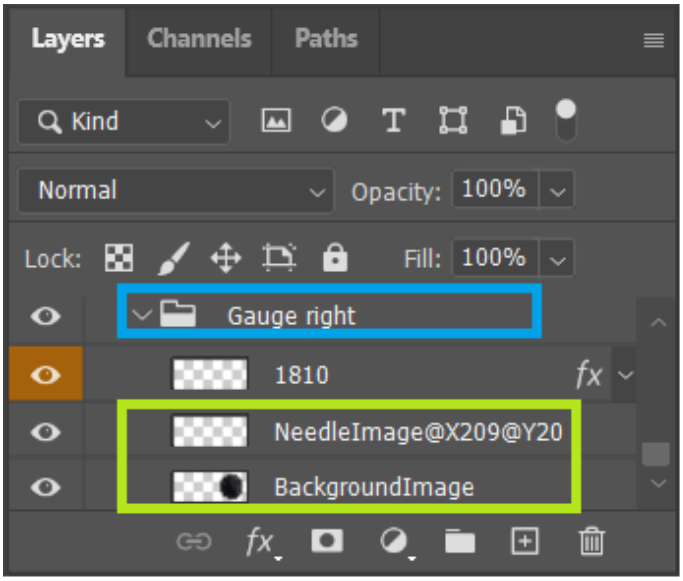
Properties on Scene Composer

Gauge

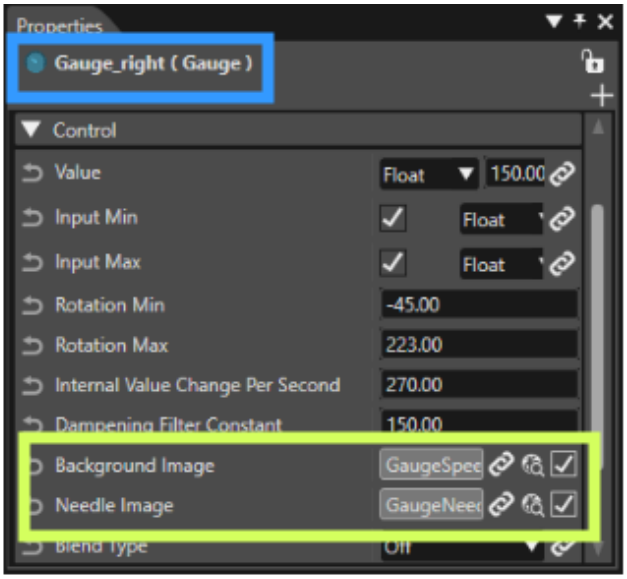
The Gauge allows to rotate a needle on a background according to its input value.



Group name	Gauge
Layer	NeedleImage
	BackgroundImage



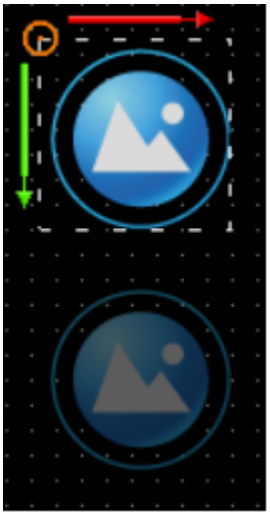
Layer structure in PSD



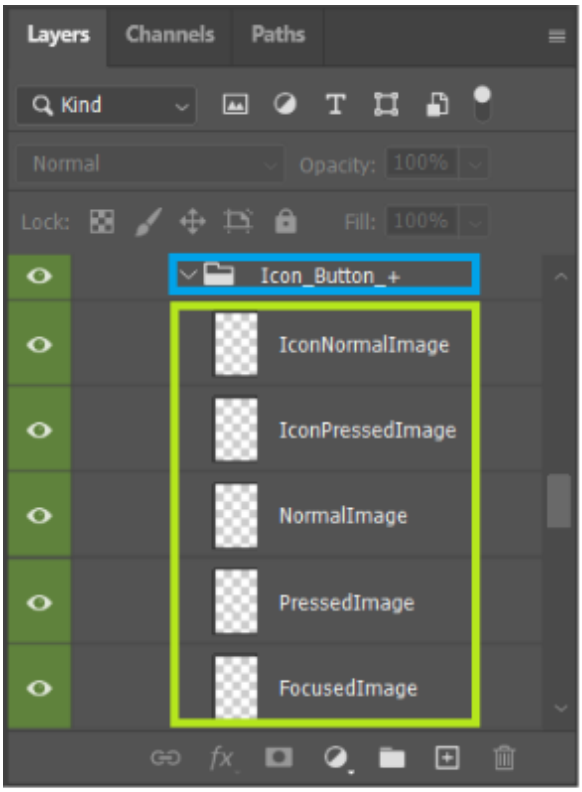
Properties on Scene Composer

IconButton

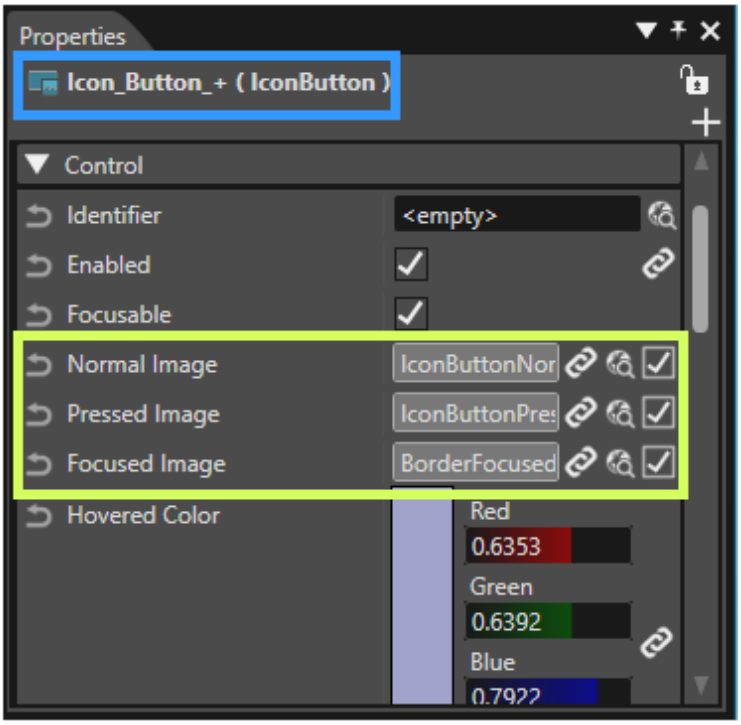
IconButton has similar functionality as the standard button, but in addition an icon (image) is placed on top of the button.



Group name	IconButton
Layer	NormalImage
	PressedImage
	FocusedImage
	IconNormalImage
	IconPressedImage



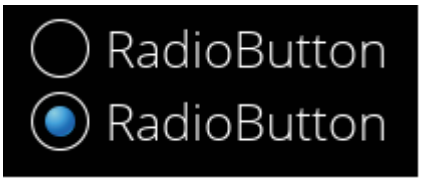
Layer structure in PSD



Properties on Scene Composer

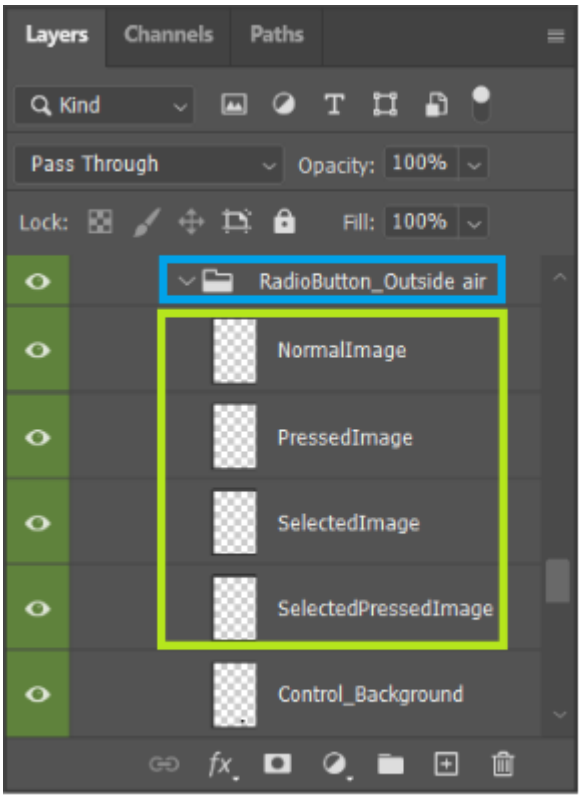
RadioButton

The RadioButton Control can easily be configured with a text, images for a normal and a pressed state as well as for a selected and a selected pressed state.

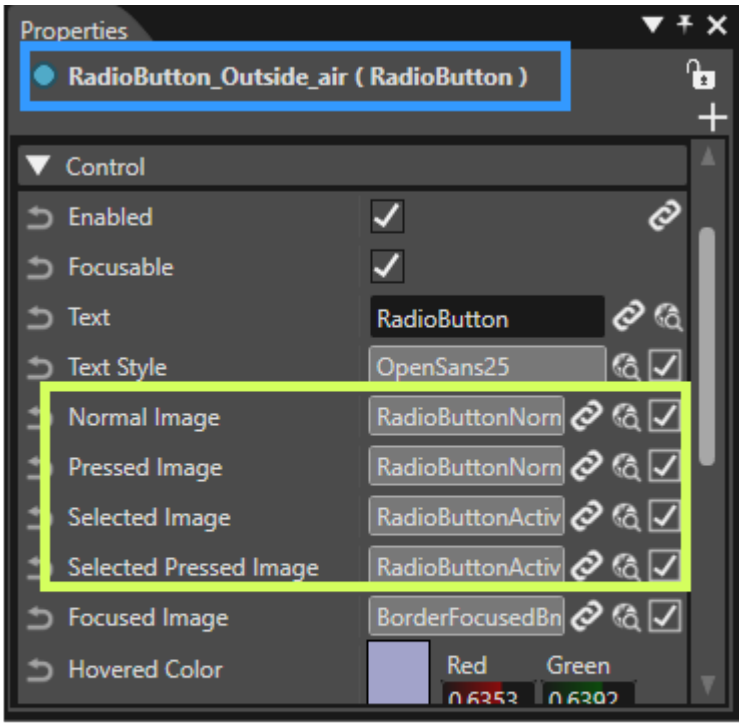


Group name	RadioButton
Layer	NormalImage
	PressedImage
	SelectedImage
	SelectedPressedImage
	FocusedImage

RadioButton (In the image, it is RadioButton_Outside_air to distinguish it.)



Layer structure in PSD



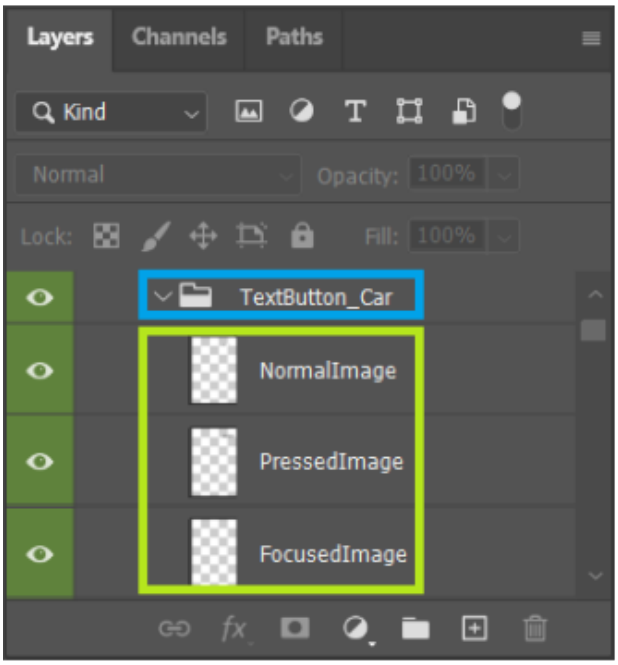
Properties on Scene Composer

TextButton

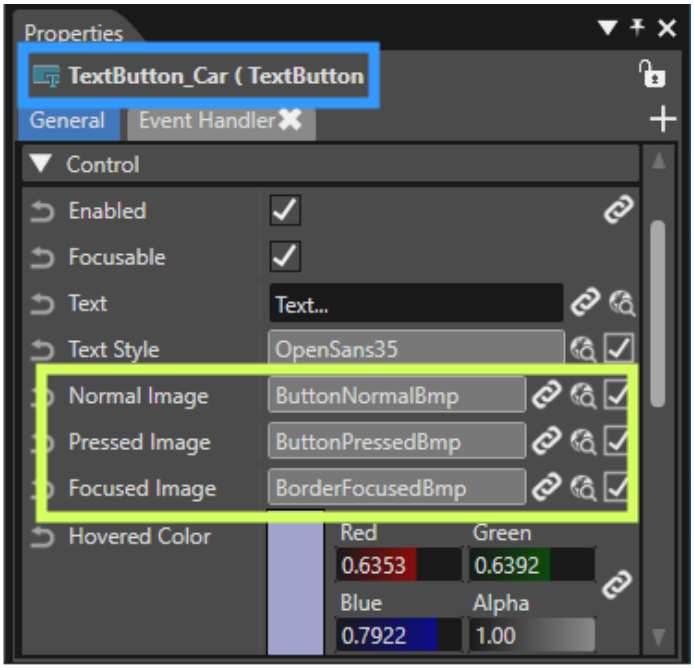
The TextButton Control offers an easy way to define all different states of a button and an action that is performed when clicking it.



Group name	TextButton
Layer	NormalImage
	PressdImage
	FocusedImage



Layer structure in PSD



Properties on Scene Composer

AnalogClock

An analog clock with images for the certain needles (hours, minutes, seconds).



Layer	SecondsNeedleImage
	MinutesNeedleImage
	HoursNeedleImage
	FaceImage

Breadcrumb

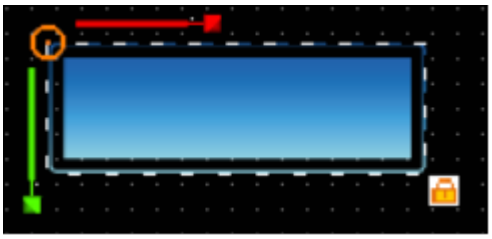
A Breadcrumb shows the history/flow through the screen hierarchy and allows user, for example, to navigate between scenes using breadcrumb's elements.



Group name	Breadcrumb
Layer	Name
	EllipsisText

Button

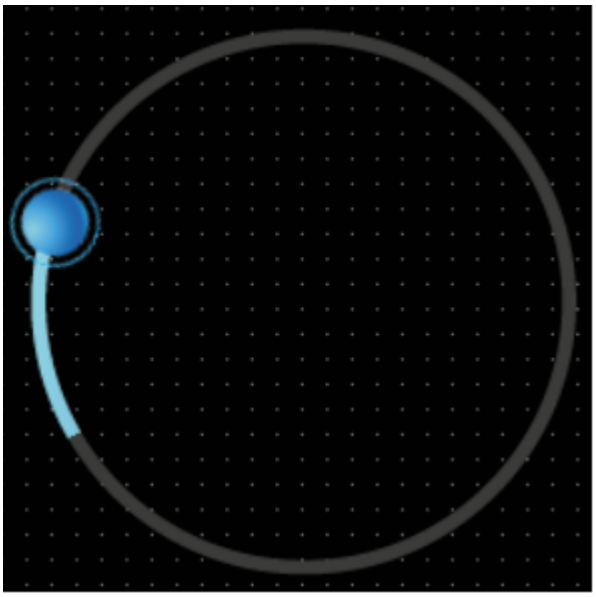
The Button Control offers an easy way to define all different states of a button and an action that is performed when clicking it.



Group name	Button
Layer	NormalImage
	PressedImage
	FocusImage

CircularSlider

Circular slider is a control that allows user to set the value using circular slide movement or directly indicate value on slider's bar.



Group name	CircularSlider
Layer	BackgroundImage
	ActiveImage
	ThumbImage
	ThumbImagePressed
	FocusImage

GroupBox

The GroupBox offers an easy way to combine RadioButtons to a RadioButtonGroup.

Group name	GroupBox
Layer	BackgroundImage

InputField

The InputField contains an editable text.

Group name	InputField
Layer	CaretImage
	BackgroundImage
	FocusedImage

Menu Icon

The MenuIcon Control is an “icon” like in graphical environments of most known operating systems.

Group name	MenuIcon
Layer	Image
	BackgroundImage

Menu Item

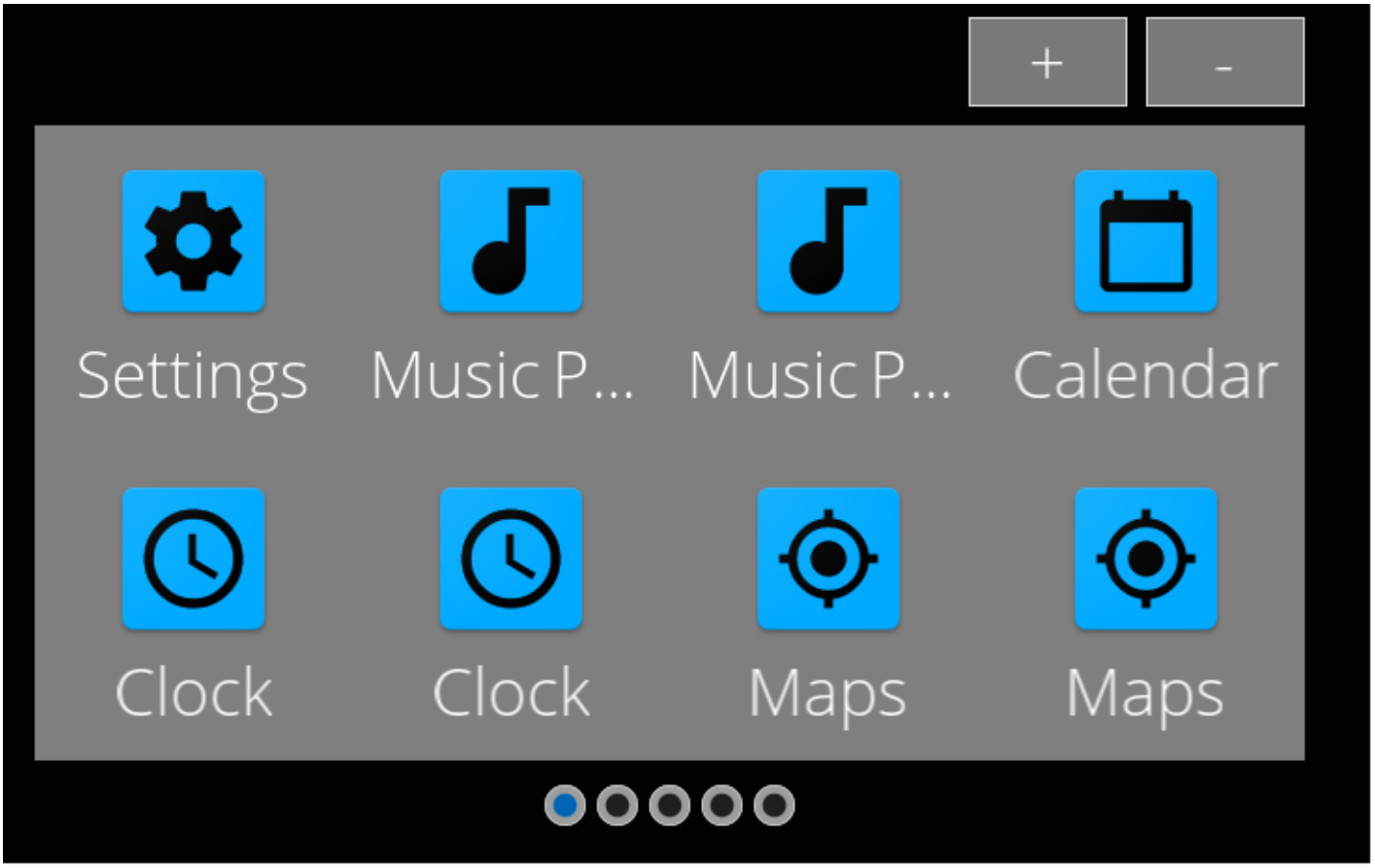
A MenuItem is a basic building block of MenuScreens. It can represent for example an application or a deeper level in a menu hierarchy.



Group name	MenuItem
Layer	FocusImageOnSelection
	FocusImageOnDragging
	DeleteButtonNormalImage
	DeleteButtonPressedImage
	Image

Menu Screen

The Control represents a menu in the form of a grid of icons (instances of the Menu Item Control).



Group name	MenuScreen
Layer	BackgroundImage
	FocusBorderImage

Mesh2D

Performs a perspective projection of a 3D rotated effect based on the configured origin, rotation and field of view.



Group name	Mesh2D
Layer	Image

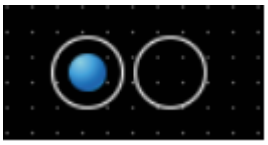
MultiStateButton

The MultiStateButton Control offers an easy way to define all different states of a button.

ButtonState2Bmp
ButtonState3Bmp
ButtonState4Bmp
FocusedImage

PageIndicator

A Page Indicator is a control that indicates currently visible page of set and provides method to switch to another page directly by click or if focused on a stepping manner using rotary action input.



Group name	PageIndicator
Layer	PressedImage
	SelectedPressedImage
	SelectedIndicatorImage
	IndicatorImage
	SelectedIndicatorPressedImage
	IndicatorPressedImage

Roll

The Control represents a vertical list of numeric values from a specified range with a specified step.



Group name	Roll
Layer	DecorationImage
	TextEditBackground

SpinBox

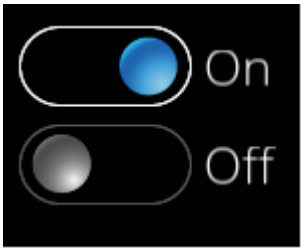
A spin box or spin button is a control that enables users to increase or decrease the number value by a specific increment via clicking an up or down arrow button.



ArrowDownNormalImage
ArrowDownPressedImage

ToggleButton

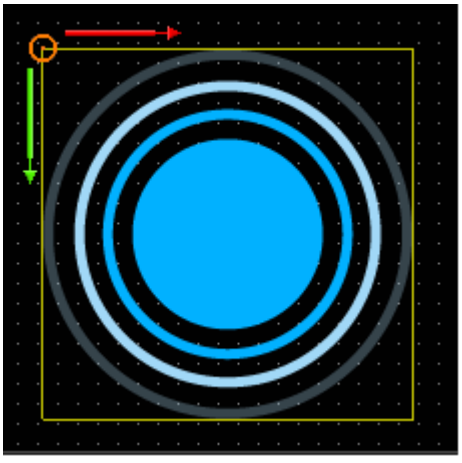
The ToggleButton Control offers an easy way to define all different states of a toggle button and an action that is performed when clicking it.



Group name	ToggleButton
Layer	FirstImage
	FirstPressedImage
	SecondImage
	SecondPressedImage
	FocusedImage

TouchIndication

The TouchIndication indicates the location of touch events.

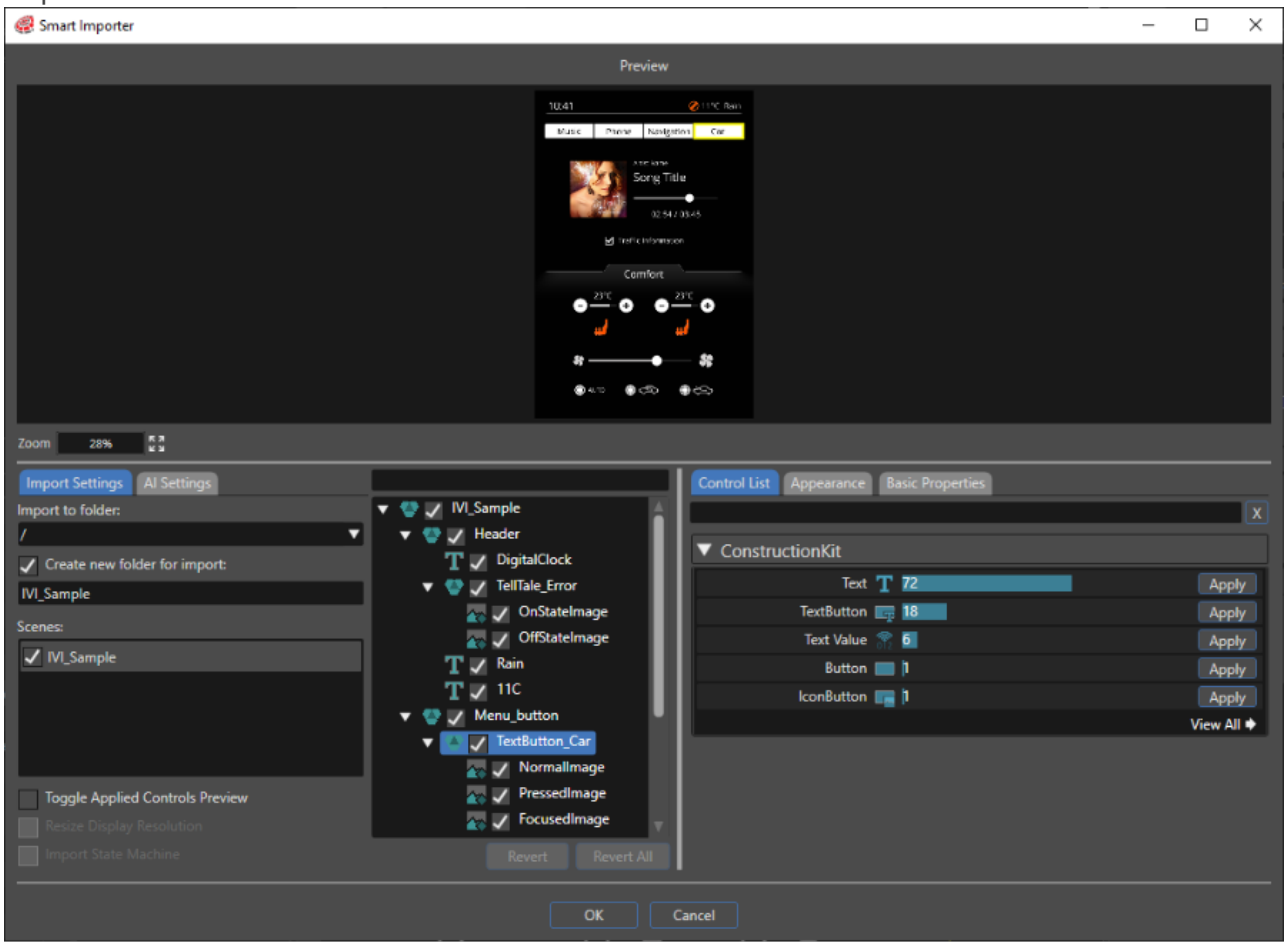


Group name	TouchIndication
Layer	Image

Usage example (Importing and assigning Control)

In this section describes the Control assignment procedure when importing a PSD file with the layer structure described in the previous chapter. The file to be imported on Scene Composer is the IVI sample attached to this document.

1. From the menu bar on Scene Composer, select Import > Smart Importer... on the menu bar and select a Photoshop file (IVI sample.psd).
2. Smart Importer dialog box appears.
3. Click on the group in the tree for which you want to set Control. In this example case, select TextButton_Car to assign TextButton Control.
4. Since its layer structure in Photoshop follows the structure of Textbutton Control, Smart Importer's AI detects "TextButton" Control.



5. From the ControlList, click Apply button on the far right of the TextButton control to assign that Control.

- Depends on its Control usage and/or Solution to be created, will set on "Appearance" and "Basic Properties" tabs.

As described above, you can efficiently import operations in Scene Composer by configuring the layer structure in Photoshop according to Controls you want to use.