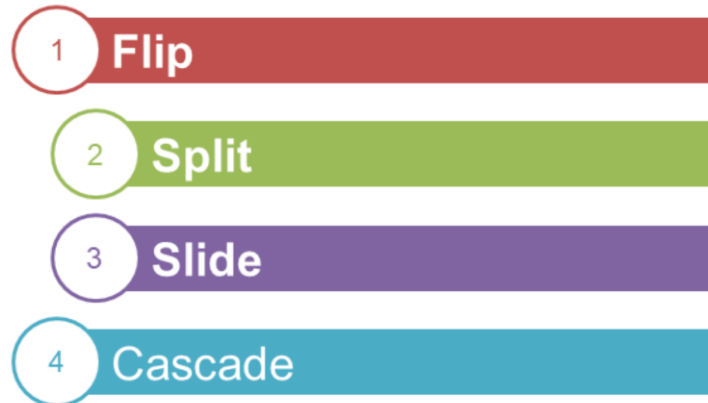# Navigation Styles

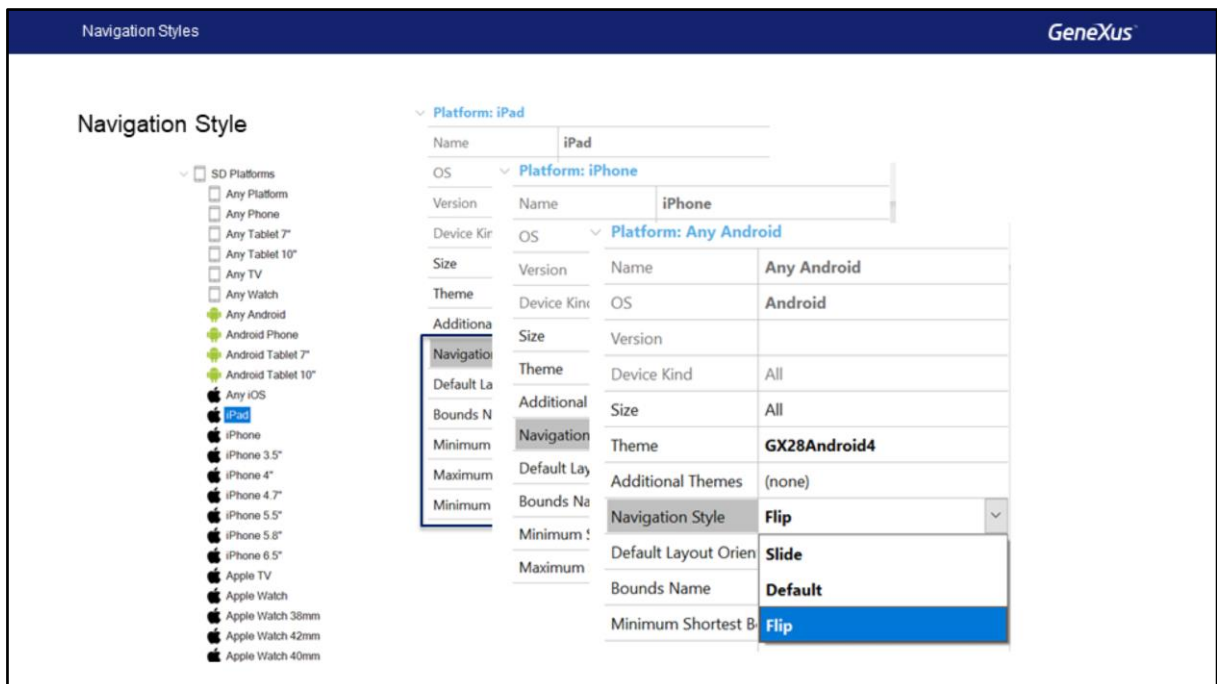User Experience & User Interface

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## Navigation Styles



In this video we will see the various navigation styles possible that this tool offers for navigating between the main menu and the screens that invoke one another, in addition to the way in which the style desired is to be set up.

The navigation styles we will be considering are:

- Flip
- Split
- Slide
- Cascade

Depending on the features of the device (Operating system, Size, Device type), we might want to vary the way in which the user interacts, and particularly the way in which the user navigates through our app.

To make this possible, GeneXus offers the **Navigation Style** property that enables us to change this behavior at the platform level.
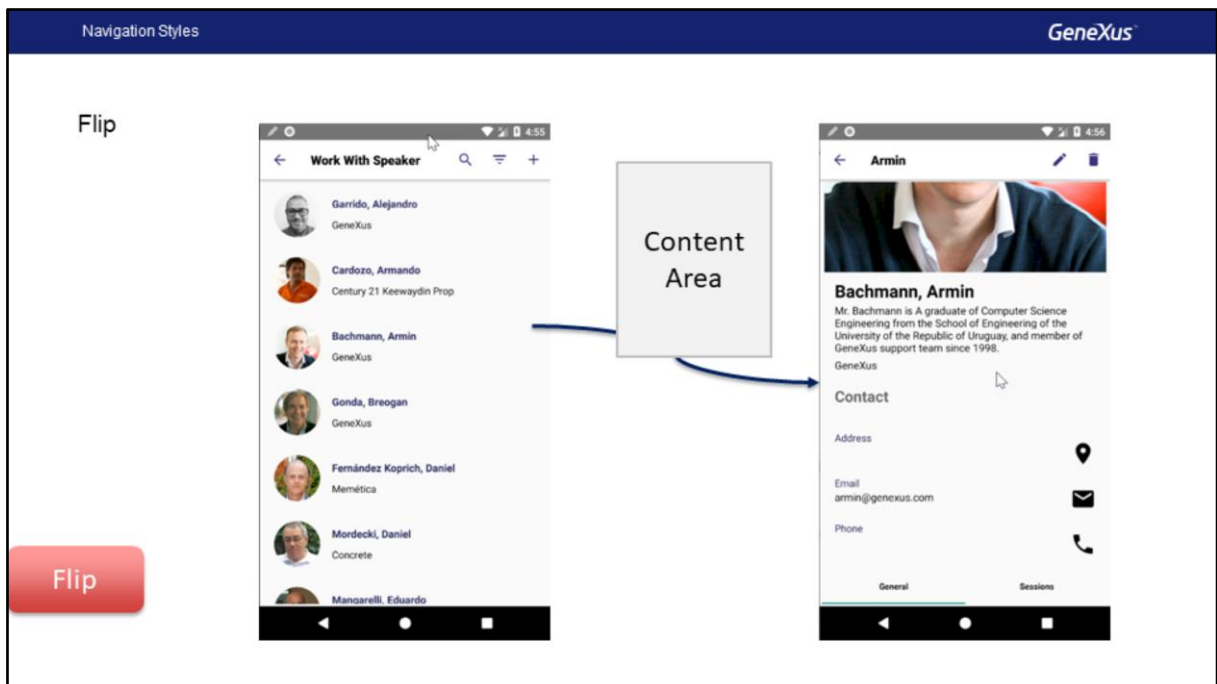It is important to point out that we may only define one Navigation Style in our application for each possible combination of the features.

The values we will have available will vary according to each platform. On screen, we see an example for an iPad, and we have possibilities for Cascade, Slide, Flip and Split. In this case, they are all the ones available with GeneXus.

But if we consider the case of an iPhone, we will see that we only have Cascade, Slide and Flip and we no do not have Split because this value is only available for Tablets (iPad or Android).

For the case of an Android Phone, we will only have Slide and Flip, and the rest is not available because not all devices support all types of navigation.
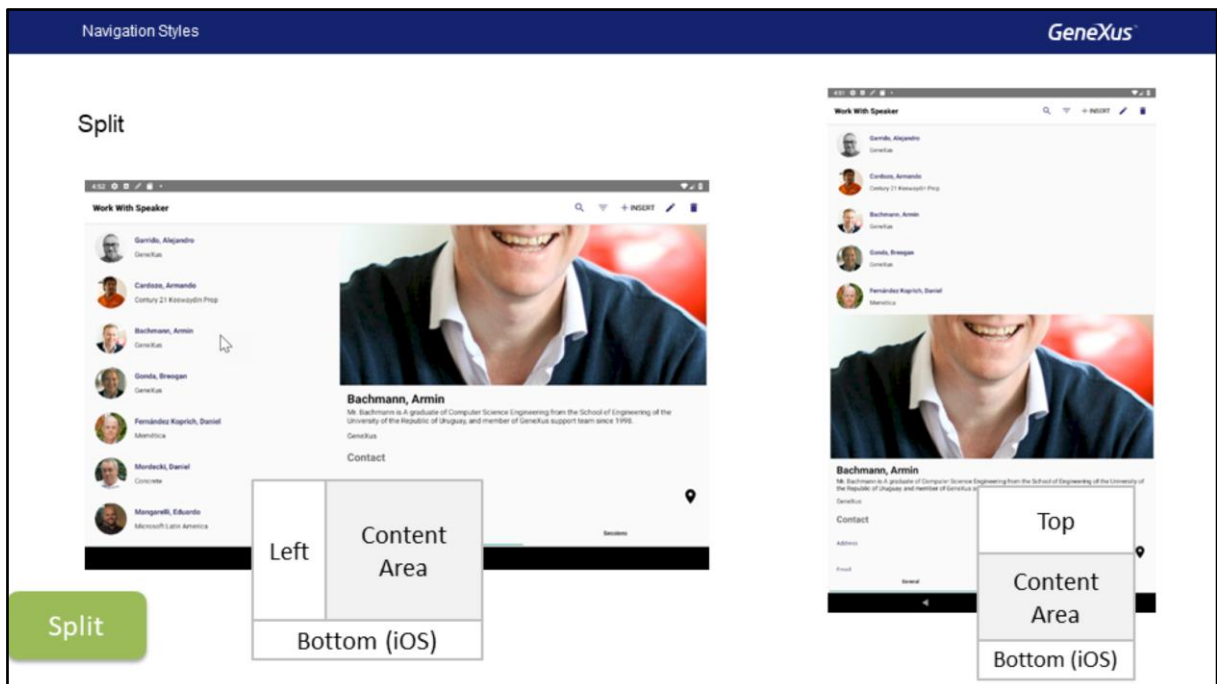We will be considering each of them and the differences between them.

Flip

Content Area

Flip

In the Flip navigation style, when we Access a screen, either from the main menu or from any other one, the new content will replace the previous content.

Concept wise, the area of the device will be only one, and all the content will be shown occupying the same area, which will be replaced in every call.

This is the default value in Telephones, and it is, in fact, the one we have been using so far in the application.
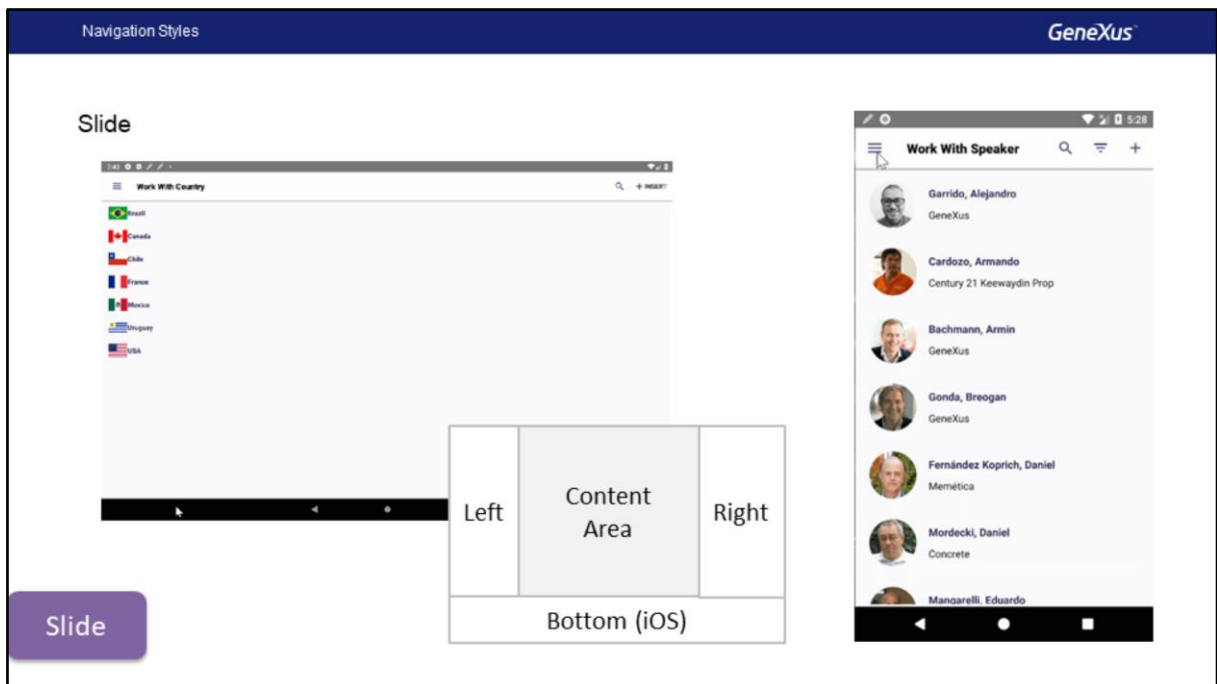
With Split, the content may be displayed in two sectors, one on the left, and the main sector for the content. Additionally, in iOS we may have a sector occupying the lower band on screen.

Using WorkWith for Smart Devices, the List is automatically displayed to the left and the Detail screens on the main sector known as Content Area in the case of Landscape orientation as in the image shown on the left. For the case of Portrait orientation, the left sector turns into an upper Upper sector, and the content is deployed below it, as shown on the right.

This is the navigation style predetermined for Tablets in Android and iOS.

Programmatically, we may indicate that an object be displayed in any of these sectors using the CallOptions properties that we will see in detail further ahead.
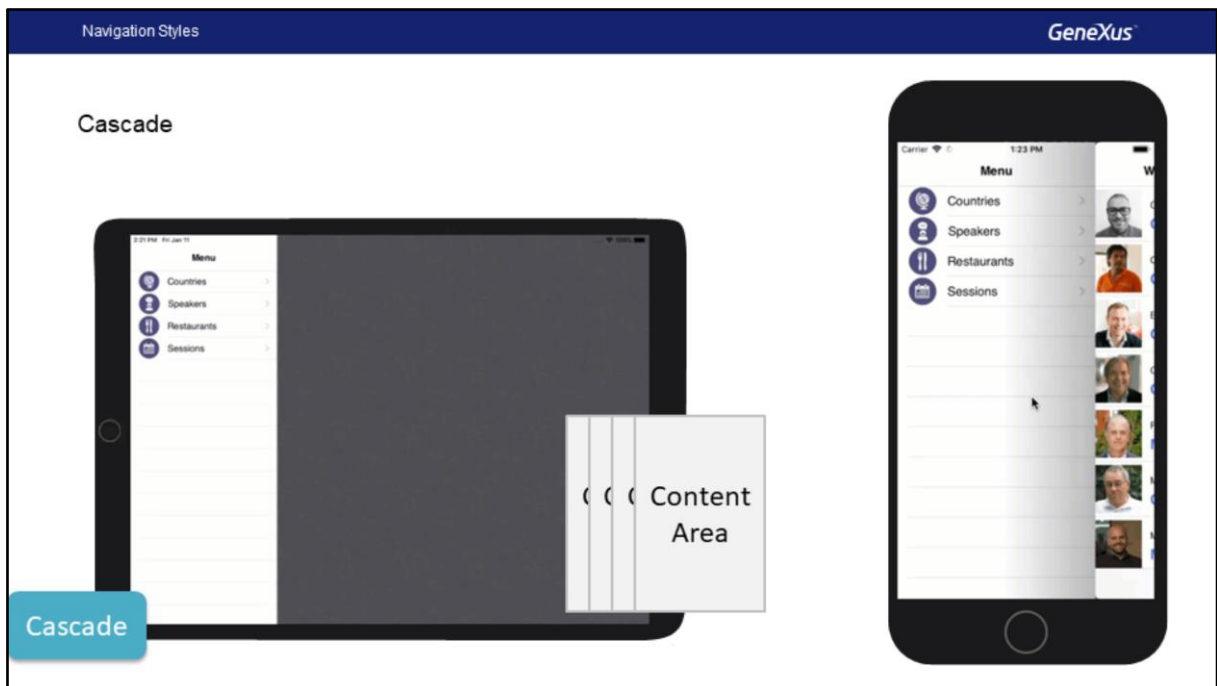
With the Slide navigation style we can always have the main menu available, either by sliding our finger from left to right, or with the hamburger button on the upper left. So, regardless of the deepness where we're navigating within the app, we may always access another option with just one step from the menu.

The first menu option is loaded automatically in the Content area. Later, we will see how to customize this. Additionally, when we call a new object from the Content sector, it is displayed in the same way, maintaining the Stack of calls, with the possibility of returning to the previous one with Back. But when we go to another option, the stack of calls is reinitiated.

Conceptually, we have the Content and Right sectors available to deploy content. The left sector will always contain the initial object, which may be a Menu for Smart Devices or a Panel for Smart Devices.

We may open objects in the right region of the content, or programmatically in the lower region, with the invocation options and the Navigation Api, the lower sector is available and valid for iOS.

In the Cascade style, the screen is divided into up to four sectors going from left to right. This style is only available for iOS platforms, and it's valid for phones and for tablets.

The different screens open up in cascade from left to right on the device, up to the fourth level. When the last level is reached, a replace starts and the option of going back is available in that case.

For the case of the WorkWith for Smart Devices, starting from the left we will have the main menu, then the List in the middle, and the Detail as the third sector. From the Detail, we have the chance of opening another screen, and from there, if we call another screen, it will occupy the same sector as the last one.

As in the Slide style, the Stack of calls is reset when we select another item from the menu.

GeneXus

Demo: Navigation Styles

Now we will see a small demo in GeneXus.

When we open the emulator we see that we have our application's Menu, where the default navigation style is for an Android phone is Flip. The screens are loaded on the only screen we have.

So we go to GeneXus to specify that the app will use the Slide navigation style, so this menu will be always available from the left.

If we go to Android, we will see that it has the navigation styles that it's indicating. In this case, the default, also in Android Phone, is Flip. We have the Slide, Default and Flip options for the case of Android Phone. If we look at Any Android, the values available are Slide, Default, and Flip, as in Android Phone.

For the case of 10-inch Android tablets, we have Slide, Default, Flip, and Split. This one is new, because it's only available for tablets. And, for example, in the case of iPad, we will see that we also have Cascade as a value that was not available in the other ones, and we have Slide, Flip, and Split, like in Android.

So, we go to Android Phone and we indicate the Slide value and we just run the app.

Note that we already have the menu, that was opened when I clicked on the hamburger icon. The first option is WorkWith Countries, so it opens up by default.

If we access Speakers, there we reset the Call Stack, and we may slide from the left to the

center of the screen to deploy the menu.

We might want to call a different object of the first option in the menu when the application is opened for the first time. How do we do that?
Let's go back to the introduction.

Navigation Styles: Start Event

```
Slide.Start
Split.Start
Cascade.Start
Flip.Start
Tabs.Start (only in
iOS)
```

```
Event Slide.Start
      TodayPanel()
endevent
```

We have some events that we may program at the main object level, which in our case is a Menu For Smart Devices, though it could be a Panel for Smart Devices, for example.
The events are these here: Slide, Split, Cascade, Flip, and Tabs dot (".") Start
So we may have a Start event associated with each navigation style.

Then, if we program, for example, Slide.Start and the application is being executed for an iPad with Cascade navigation style, the event will not be executed for that platform. It will only be executed for the Slide navigation style.

In our application, we may create a Panel for Smart Devices called "TodayPanel", including an image, so that the panel will only be executed in the Start event of the Slide navigation style, and only in that case.

Now let's go back to GeneXus to implement this.

Demo: Navigation Styles

We will create a Panel with the name TodayPanel, where we will show, in our application, information related to the day of the Event. For the time being, we will just include an image.
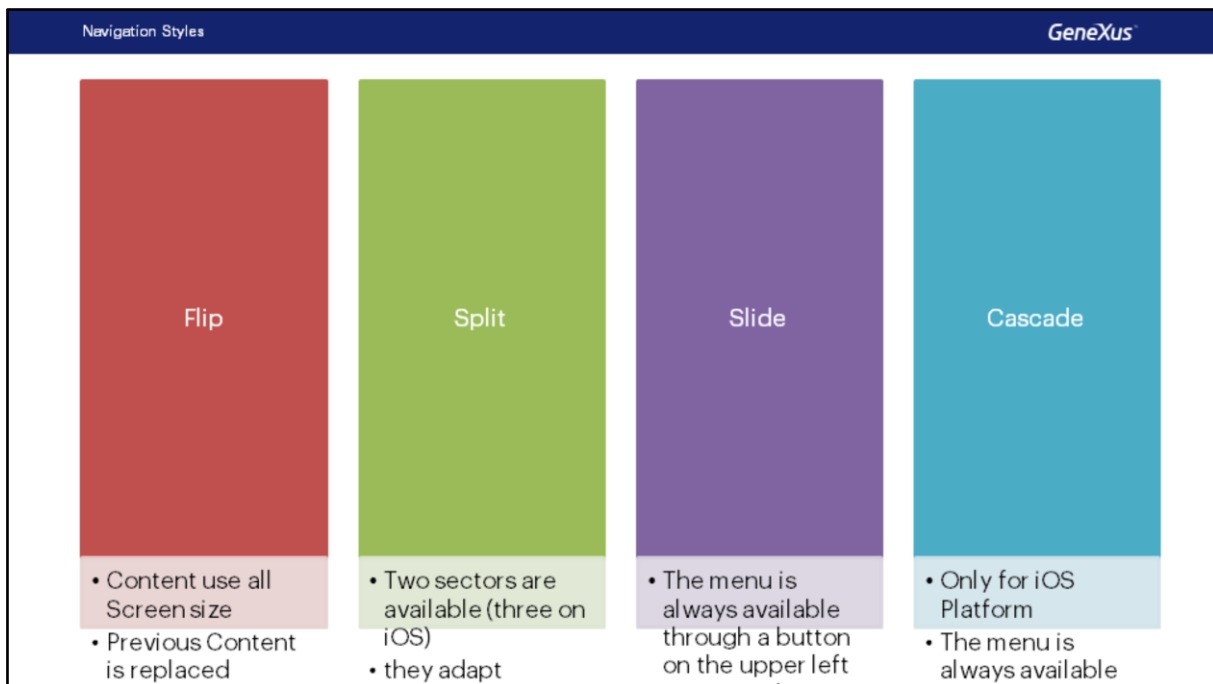
TodayPanel then, and we insert an image. The image already exists in the KB under the name GX28Image. We will associate class ImageWelcome to it. Now, in the main table we will indicate 180 dip for the row, and we will change the class in the table. We will use Table.

We will record this object and now we go to EventDay. First we take it to Panels so that we have it organized. We go to EventDay, and in the events we add a new event called Slide.Start, and here we do the call to TodayPanel(). Ready! We now close the event, we save, and we run the application.

Now, here, at the start, instead of the Workwith, it should show the panel we have created, that is: TodayPanel, as the default option of our application, without the need for it to be a menu option.

And, indeed, TodayPanel opens up, showing us the image, and we have the menu available.

So, now we go back to the presentation.

| Flip | Split | Slide | Cascade |
|---|---|---|---|
| • Content use all Screen size<br>• Previous Content is replaced | • Two sectors are available (three on iOS)<br>• they adapt | • The menu is always available through a button on the upper left | • Only for iOS Platform<br>• The menu is always available |

Now let's review what we have seen in the four navigation styles and the differences between them.

For Flip, we saw that the content takes up the whole screen and that the new content shown replaces the previous content. It is default for Telephones.

For the case of Split, we saw that there are several sectors (two for Android and three for the case of iOS). The setting adjusts to the orientation. It is default for Tablets, and to access the Right or the Bottom sectors we must use Call Options, which we will see later on.

For the case of Slide, we saw that the menu is always available and we have a special icon to show it –usually referred to as hamburger icon due to the three horizontal lines that comprise it. We may also access the menu by sliding our finger from the left border of the screen. With Slide, the first menu option opens up in a predetermined manner, and we will also have an independent navigation in the various menu options because the Call Stack is reset.

For Cascade, we saw that it is only available for iOS (in telephones and tablets). Here, the menu is also available at all times, and as in the case of Slide, the Call Stack is also reset between one menu option and another menu option. We saw that it is possible to show up to four levels: three plus the menu.

And this will be the end of this topic.