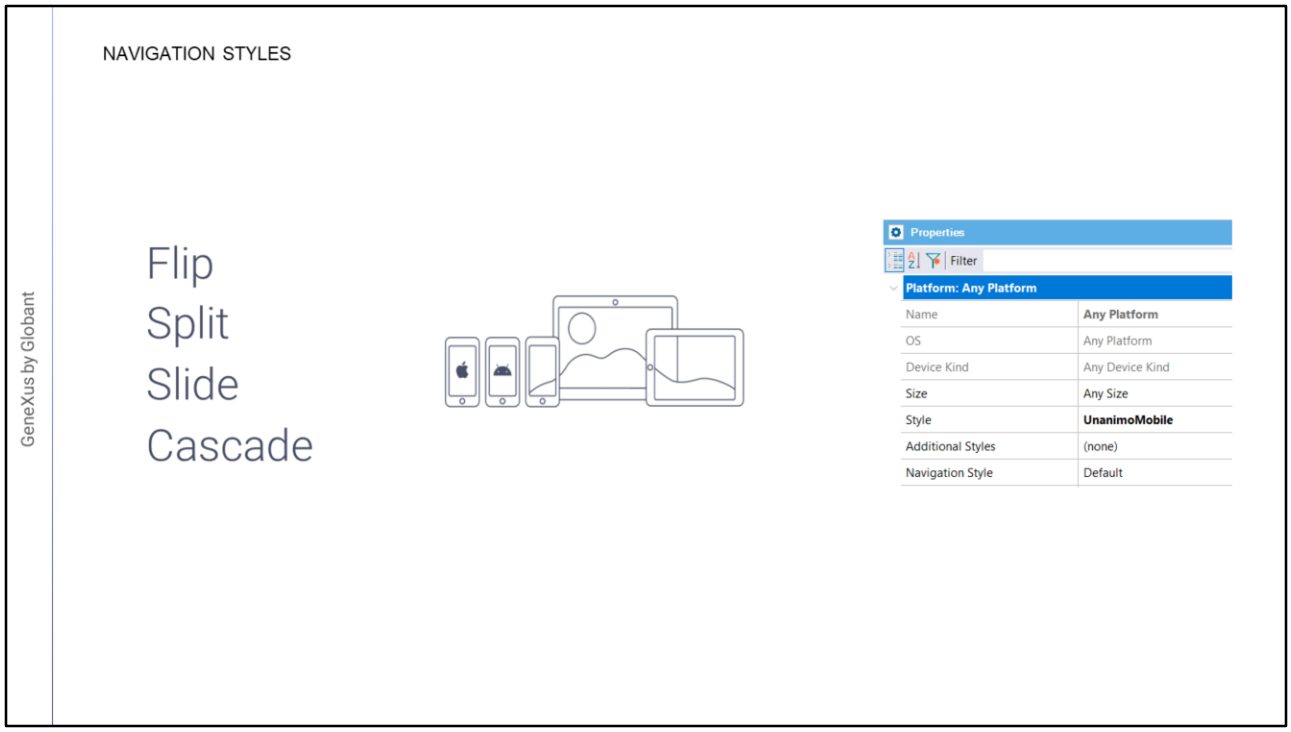
GeneXus by Globant

Navigation Styles of a Mobile Application

Diego Marranghello

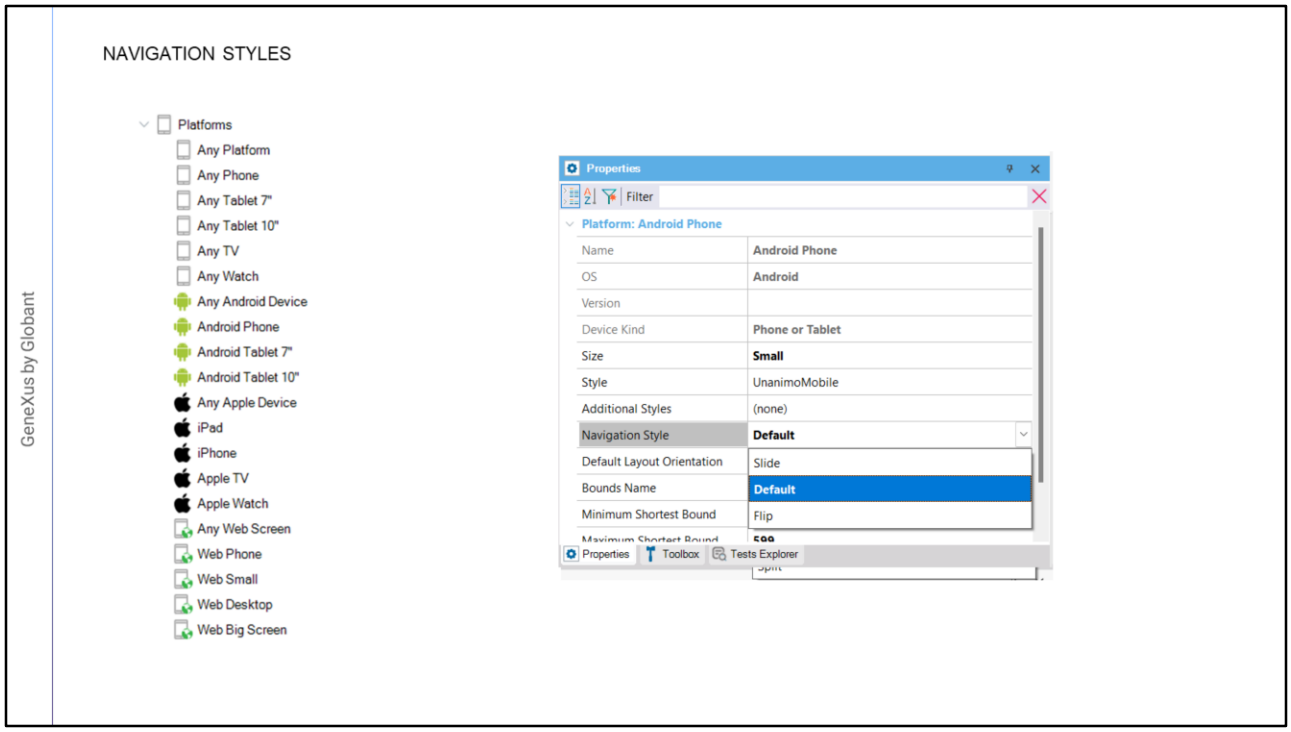


In this video, we will see the different possible navigation styles offered by GeneXus to navigate a mobile application and how to configure the desired style. We will see the following navigation styles:

- Flip
- Split
- Slide
- Cascade

Depending on the device characteristics, such as operating system, size, device type, etc., we may want to vary the way the user navigates our application.

To achieve this, GeneXus provides the Navigation Style property for changing this behavior at the platform level. It is important to note that we can only define one Navigation Style per device type, and we will see that in a moment.



The values available vary according to the platform. On the screen we are viewing an example for an iPad; in addition to the default option, the Cascade, Slide, Flip and Split options are offered, which are all the styles in GeneXus.

If we look at an iPhone, there is only Cascade, Slide and Flip. Split is no longer available, as this value is only available for Tablets (iPad or Android).

In the case of an Android Phone, we will only have Slide and Flip. The rest are not available, and this is because not all devices support all types of navigation.
Let's see each of them and their differences.

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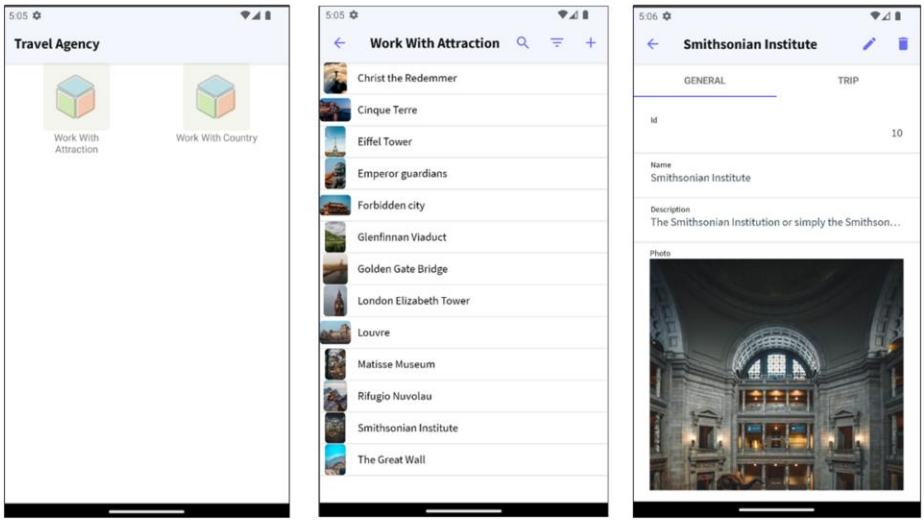
FLIP



With the Flip navigation style, when a screen is accessed, either from the main menu or from any other screen, the new content replaces the previous one. Conceptually, the device area will be a single area and the whole content will be displayed and will take up the same area, which will be replaced with every call. This is the default value in Phones when we create a mobile application.

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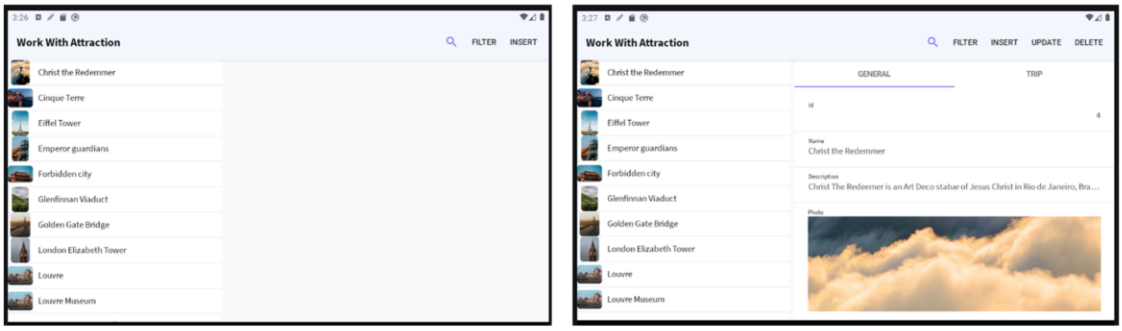
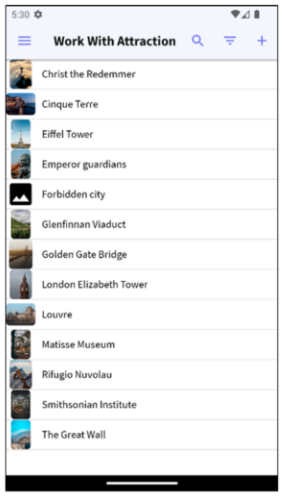
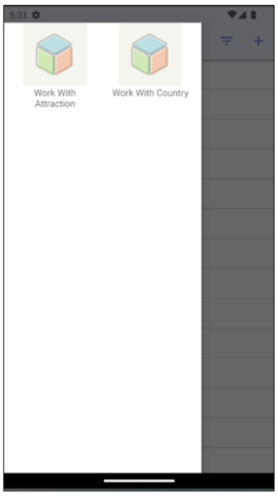
SPLIT



With the Split navigation style, the content can be displayed in two sectors, a left sector and a main sector. In iOS there is also a sector that occupies the lower part of the screen. When using the WorkWith pattern, if the device orientation is horizontal (Landscape), the List is automatically displayed in the left sector, and the Detail screens are displayed in the main sector called Content Area. If the orientation is vertical (Portrait), the Left sector is turned into a Top sector and the content is displayed below it. This navigation style is the default for iPad and Android Tablets.

SLIDE





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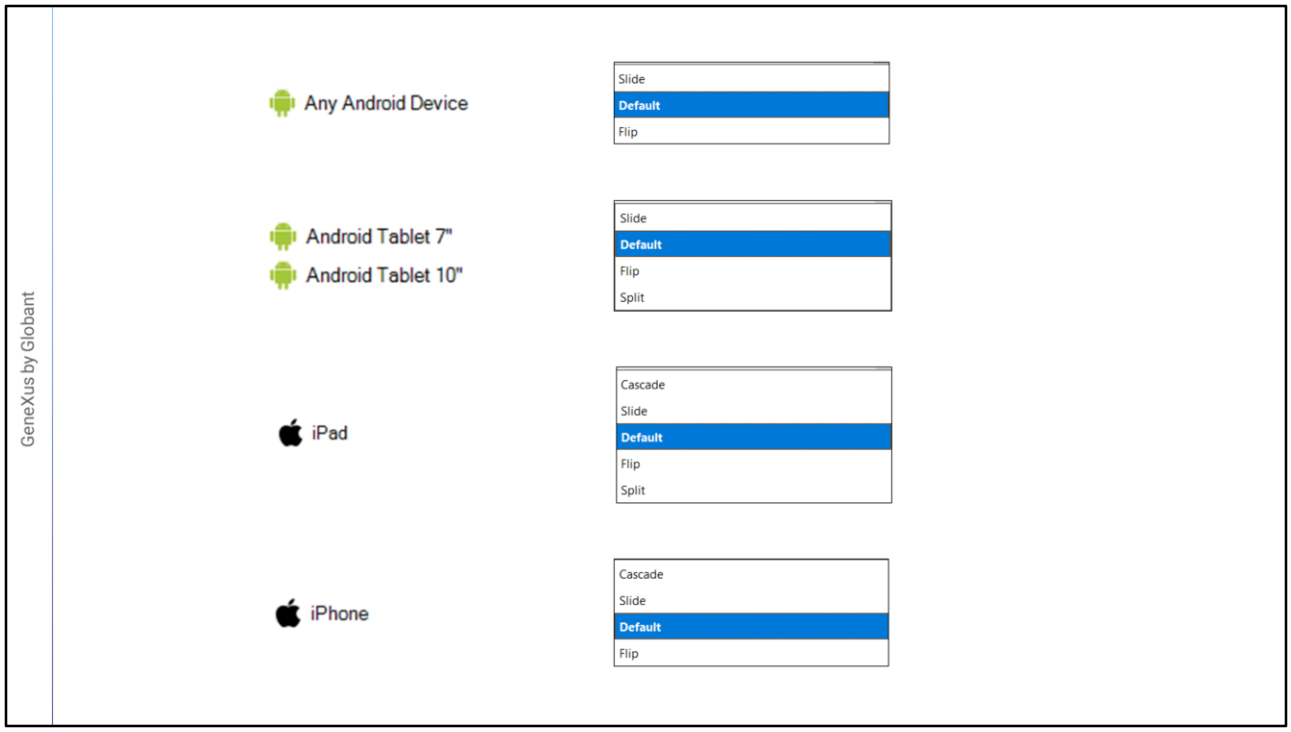
With the Slide navigation style we can always have the main menu available either with the gesture of swiping from left to right, or from a hamburger style button located at the top left. We can always access the menu regardless of where in the application we are browsing.

The first menu option is automatically loaded in the Content area, and we will see how to customize this.

The last navigation style is Cascade, which divides the screen into up to four sectors from left to right. This style is only available for iOS platforms and is valid for phones and tablets.



Now we are going to make a small demo in GeneXus.

We have generated part of an application for a travel agency; in it we have a Menu object declared as startup object, and as Items the WorkWith patterns of Attraction and Country that we have already generated.

If we run it, the menu shows that the default navigation style of our application for an Android phone is Flip; that is, the different screens are loaded on the only screen we have.

We return to GeneXus and specify that the application uses the Slide navigation style; that is to say, the menu is always available from the left.

From the Platforms node, if we go to all Android devices, we see the possible navigation styles. In this case it is by default, also in Android Phone devices; as we said, in this type of devices the default navigation is Flip, but for example in tablets, the default navigation will be Slide.

We have the Slide, Default and Flip options in the case of Android Phone. In the case of Tablets –7-inch and 10-inch Android– we have Slide, Default, Flip and Split; the latter is only available for tablets.

In the case of iPad, we also have Cascade as a value that was not available in the others, and we have Slide, Flip and Split as in Android. The same on iPhone devices.

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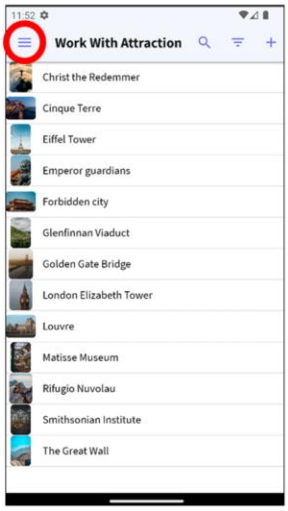
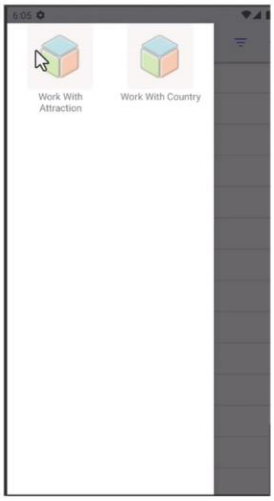
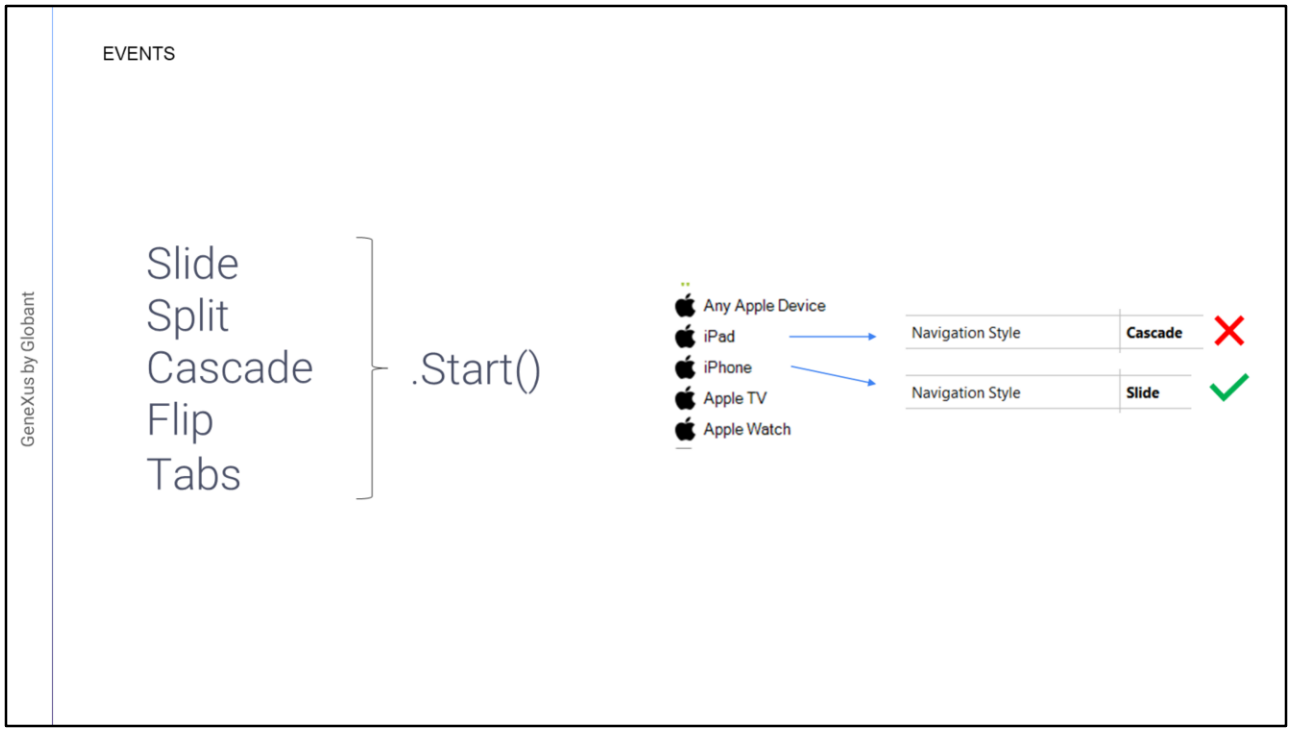




Now we will go to Android Phone, change the value to Slide, and run the application.

Note that it doesn't start with the menu, but with one of the options, in this case WorkWithAttraction. Using a hamburger icon we can go to the different options available. We can also swipe from the left to the center of the screen to display the menu.



There are certain events that can be programmed at the main object level, which in our case is a Menu object.

The available events are the ones shown here: Slide, Split, Cascade, Flip, and Tabs period (“.”) Start. In this way, we can have a Start event associated with each navigation style.

This means that, for example, if we program Slide.Start and the application is running for an iPad that has the Cascade navigation style, that event, for that platform, will not be executed; it will be executed only when the navigation style is Slide.

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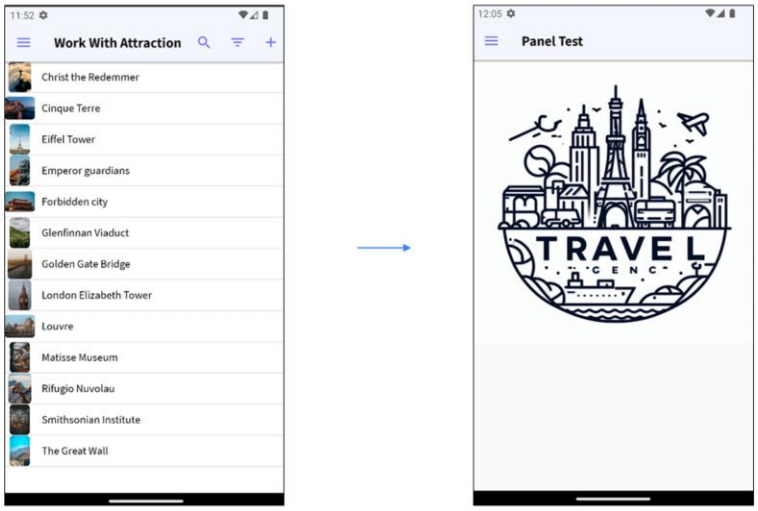
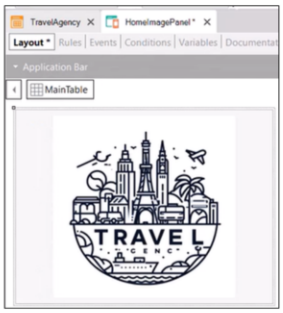


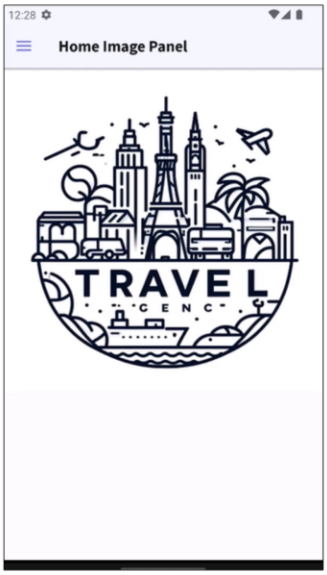
In our application we can create a Panel with an image, so that this panel is only executed on the Start event of the Slide navigation style.

We may want that, when running our application, instead of displaying one of the WorkWith that we have in the menu, a new screen appears, for example, with an image.




```
Event Slide.Start
      HomeImagePanel()
EndEvent
```

RUN



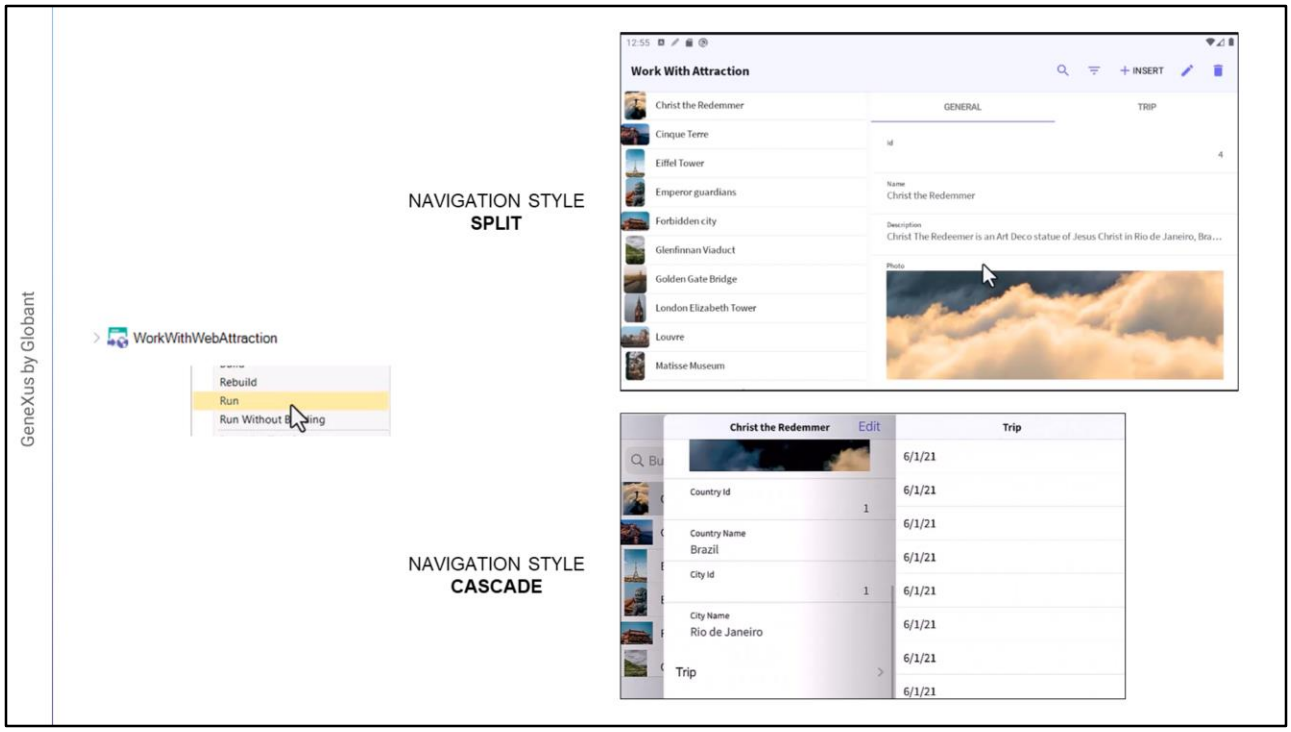
Let's return to GeneXus to implement this.

We will create a Panel named HomeImagePanel where for now we are simply going to place an image. We will insert an image that in this case we have already uploaded to the KB, and set the auto grow property to true so that it is adjusted.

We save and go to the TravelAgency Menu object. In the events we add a new event called Slide.Start and here we make the call to HomeImagePanel(). We save and run the application.

Instead of showing the WorkWith, now the panel that we have created should appear as a default option of our application without the need for it to be a menu option.

Indeed, the panel that we have just created opens. It shows the image that we entered and the menu is available.



Let's now try the other two we haven't seen yet: Split and Cascade. Both of them are more used for large devices, such as tablets.

Let's configure, for example, a 7-inch Android tablet with Split mode; to test this, we will run the WorkWithAttraction panel directly.

Note that it divides the information into two sectors: a left sector with the list of records, and the right and main sector with the detailed information of what we have selected.

Now let's try the Cascade mode, which is exclusive for IOS devices. Although it is more used in iPad devices, let's configure this navigation mode for an iPhone device; just like in Split mode we run the WorkWithAttraction panel directly.

As for its behavior, the information is divided in up to four sectors, generating a cascade effect, and compressing the sectors to the left when a new one is opened.

This is the end of this short summary of the navigation types that we can use in mobile applications.

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