# Instant Solution

The instant solution offers a methodology for developing Web enabling applications by providing the instant API and a variety of features that accelerate development.

● Instant Web Application Development Methodology

● Instant Features

## Instant Web Application Development Methodology

Following are some theoretical guidelines regarding development of ApplinX Instant Web Applications, using Instant Transformations and Screen Groups. For practical guidelines and tasks, refer to Getting Started with an ApplinX Instant Web Application.

● A Transformation (or Transform) is a code class (written in Java for the ApplinX Framework for JSP, and in C# or VB.NET for the .NET framework), that is executed on all host screens or on a specific group of screens (i.e. an ApplinX Screen Group) and modifies the rendered instant HTML page for the current host screen it is executed on.

   Transformations can be used to:

   ○ **Manipulate individual host fields:**

     For example, display a title field in an underlined, blue font or display an image instead of a description field.

   ○ **Manipulate entire screens:**

     For example, convert menu screens to a list of hyperlinks.

   ○ **Manipulate host characters:**

     For example, remove all unnecessary dots (.) or dashes (-) from the screen.

● Using transformations: Transformations should be used to manipulate all screens in the host application or groups of screens (using Screen Groups). To manipulate the contents of specific, individual screens, the recommended methodology is to identify the screen(s), generate a Web page for it (JSP or ASPX) and modify the generated page contents as necessary. Using a transformation for an individual screen is more complicated and unnatural, and therefore not recommended.

● Identifying screens: As a result, in order to use transformations it is not necessary to identify individual screens, but only screen groups (if needed), or not identify anything. This way, development effort is reduced and future maintenance becomes simpler.

● Mapping Fields to Screen Groups: The recommended methodology is to map all host fields that are common to several screens to a screen group that will be associated (implicitly or explicitly) with these screens. For example, an error message and title can be mapped to a screen group that will apply to all screens (or to specific screens), and should not be mapped repeatedly to individual screens. (Note that it is possible to override the mapping definition of the Screen Group in individual screens in which the field appears in a different position). If such mapping is not possible, refer to the

fields according to their position or a unique identifier (such as preceding text).

- Manipulating fields: Once fields are mapped to a screen group, it is possible to write Transformations manipulating them.

- Manipulating entire screens: Once screen groups have been defined for the relevant screens, it is possible to write a transformation that is executed for these screen groups. For example, in order to convert a menu screen into a list of hyperlinks, create a Screen Group that will implicitly apply to all menu screens in the host application, and then create a transformation that will be executed for the Menu screen group and will do the required conversion. Note that it is not recommended to create transformations for individual screens, but rather generate Web pages for them.

- Manipulate host characters: Manipulation of host characters usually applies to all screens in the host application, so the recommended methodology is to write a transformation that will manipulate the characters as desired and will be registered for all host screens. When not using the methodology above, it is also possible to create a screen group for the relevant screens and register the transformation only for the screen group.

# Instant Features

## Absolute HTML Rendering

The instant methodology renders the HTML tags in absolute terms. Rendering the HTML tags in absolute terms prevents indentation problems when trying to add or change elements or style sheets such as GUI elements, host windows and different fonts. In this version, each tag is rendered with corresponding top/left attributes which places the tag in the browser, in an exact position. The main advantage of this approach is that changing/adding tags/style sheets doesn't affect the neighboring tags of the modified tag. In addition, rendering in absolute terms saves the need to render empty spaces and only the relevant fields with content are rendered and not the entire screen. This significantly improves bandwidth performance since the HTML is much smaller.

## Instant Rendering API

The instant component opens the instant solution as an API. It provides you the abilities to register as many transformations (which are standard code classes) as you require. These transformations can manipulate the HTML output by adding, removing, replacing and changing the screen tag model using a rich library of tags and an easy-to-use API.