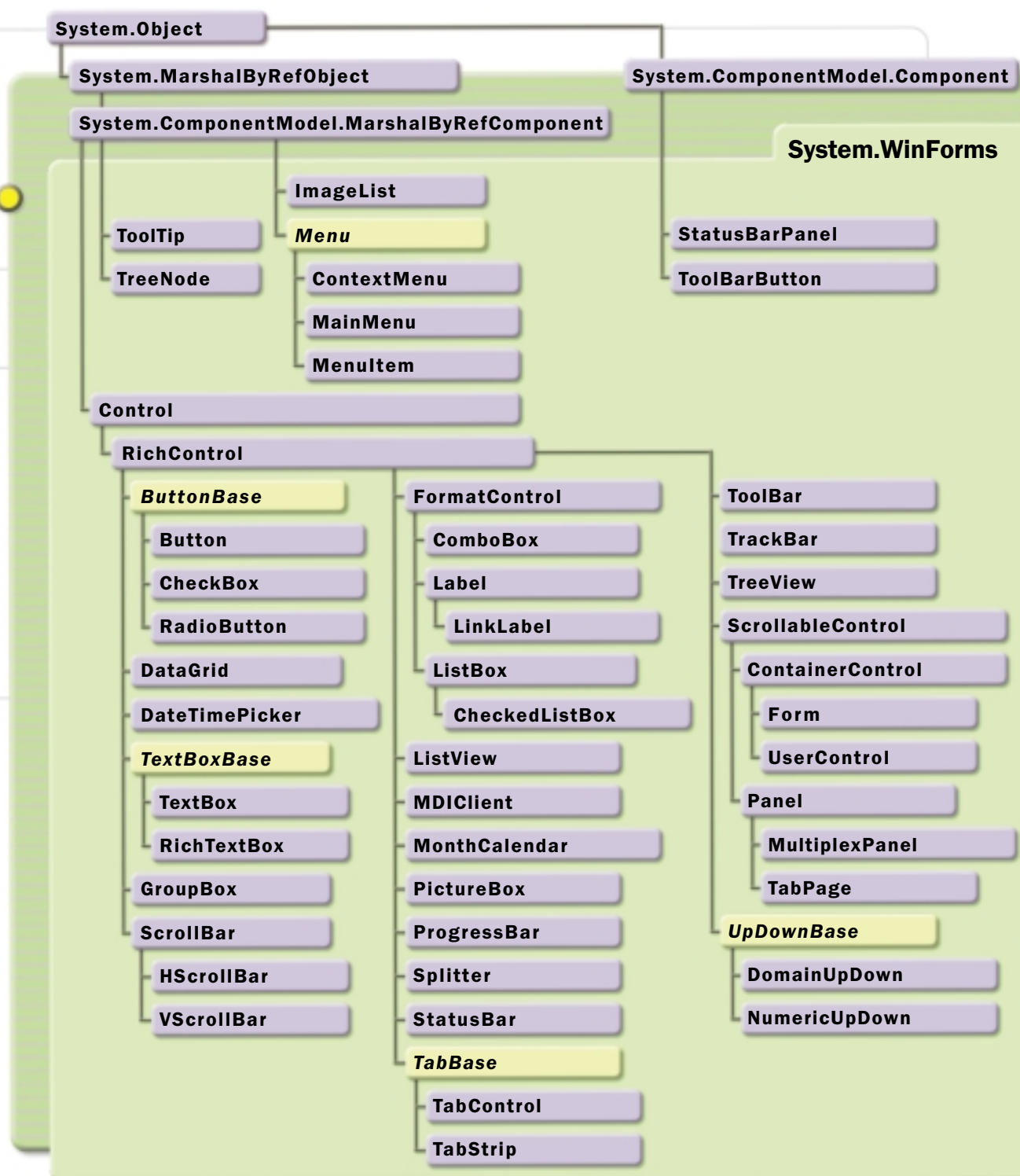


# .NET Forms



## WinForms



All Win Forms controls are contained in the **System.Windows.Forms** namespace.

Every Win Forms control derives from **System.Windows.Forms.Control**. Control implements the basic HWND functionality, and it handles most of the common WM\_XXXX messages.

**System.Windows.Forms.RichControl** adds layout logic and painting support. Most of the controls in the **System.Windows.Forms** namespace derive from **RichControl**. Controls that display UI by making calls to a **Graphics** object in the paint event are typically derived from **RichControl**. A **Chart** control is an example of such a control.

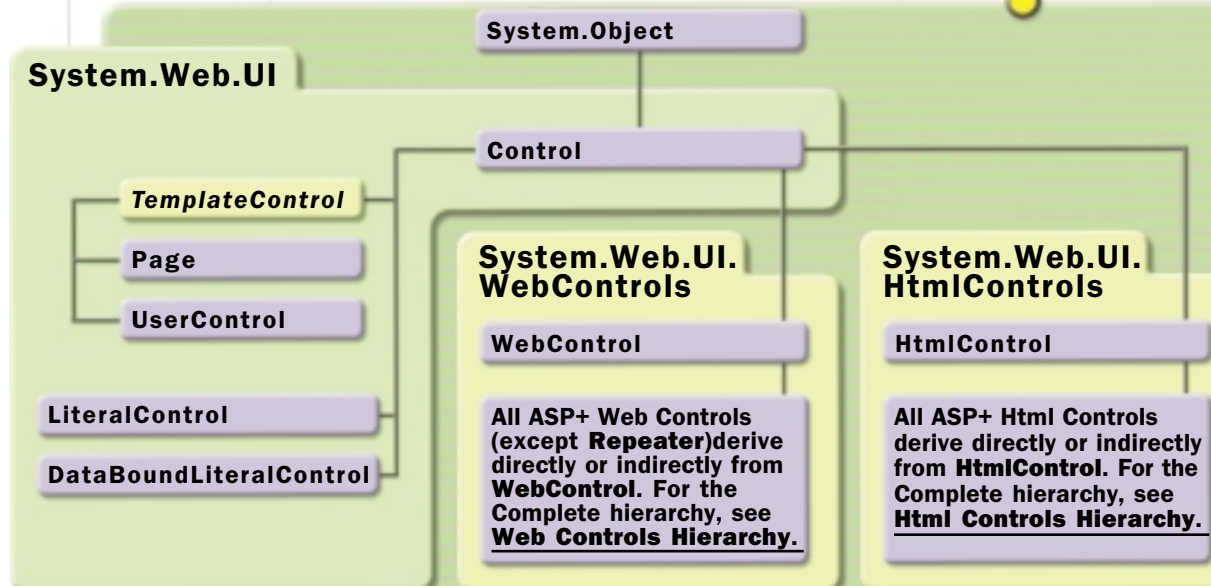
**System.Windows.Forms.ScrollableControl** adds support for scrolling the client area of a window. Typically, scrolling support is accessed through **System.Windows.Forms.ContainerControl**, which derives from **ScrollableControl** and adds support for managing child controls, focus, and keyboard handling.

**System.Windows.Forms.Form** represents a top-level window. You can use the **Form** class to create standard, tool, borderless, and floating windows. You can also use the **Form** class to create modal windows such as a dialog box or MDI window. **Form** has properties to control caption bars, system menus, non-rectangular windowing, default controls, and so on. When designing the user interface for your application, you typically create a class that derives from **Form**. You can then add controls to the form, set properties, create event handlers, and add programming logic to your form.

**System.Windows.Forms.UserControl** is designed to host other controls. A control that displays a customer address using **TextBox** controls is an example of a **UserControl**. You can reuse this "AddressControl" whenever you need to display an address.

**UserControl** and **Form** both have visual designers in Visual Studio.NET and you'll find project items for adding and designing classes derived from them.

## Web Forms



Every Web Forms control derives from **System.Web.UI.Control**. It implements common properties, such as the ID property and the functionality, to be a part of control hierarchy.

**System.Web.UI.Page** represents the top-level control associated with an .aspx file. It contains the control hierarchy representing the contents of the file. The **Page** class handles and processes requests issued from the client browser. A **Page** can contain programming logic, including event handlers. **Page** has an associated visual designer in Microsoft® Visual Studio®.NET.

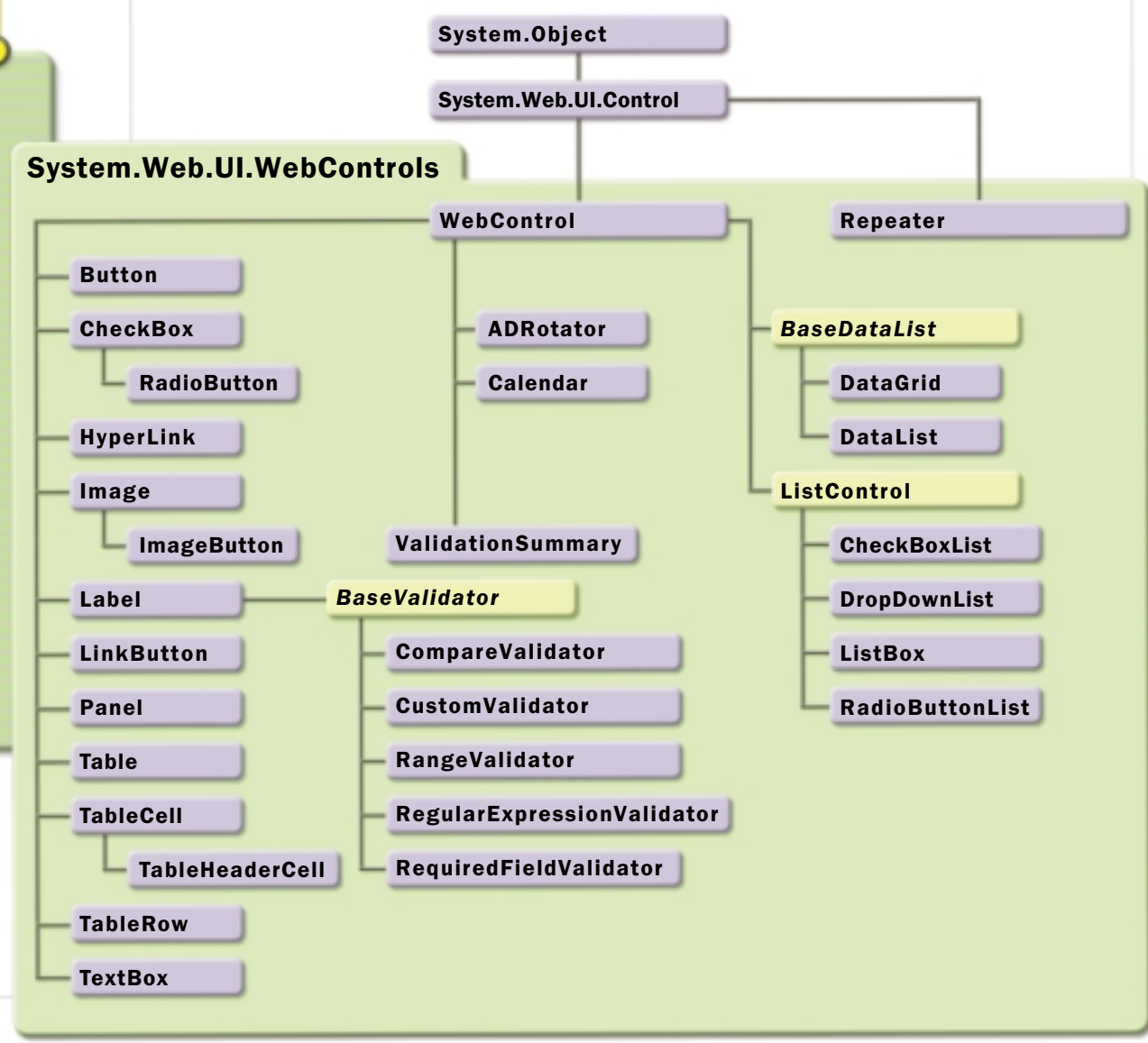
**System.Web.UI.UserControl** represents a declarative control (in Beta 1) defined in an .ascx file. A declarative control is compiled into a class deriving from **UserControl**, which contains the control hierarchy present in the .ascx file. A **UserControl** can also contain programming logic that defines the behavior of the control.

**System.Web.UI.LiteralControl** is used to represent static text with .aspx and .ascx files.

Web Forms server controls provide the user interface elements of a page and are organized into two separate namespaces: **System.Web.UI.HtmlControls** and **System.Web.UI.WebControls**.

All Web controls (with the exception of the **Repeater** control) derive directly or indirectly from the **System.Web.UI.WebControls.WebControl** base class. The set of Web controls contain both traditional form and HTML elements, as well as other higher-level abstractions that do not have HTML equivalents. In the figure to the right, the controls on the left, such as **Button** and **HyperLink**, map to HTML elements. The other controls in this set, such as **Calendar**, **DataGrid**, and validation controls, provide rich functionality.

The Web controls provide a Visual Basic®-like programming model and design-time experience.



Html controls derive directly or indirectly from the **System.Web.UI.HtmlControls.HtmlControl** base class. Html controls map straightforwardly to HTML elements, and provide an HTML-centric programming model on the server within ASP+ pages.

