

Find Controls on a Form

Last Modified on 04/24/2017 7:39 am EDT

Use the API to find controls on a form.

```
using System;
using System.Collections.Generic;
using System.Web.UI;
using PNMsoft.Sequence.Forms.Web.UI;

namespace CustomCodeBehind
{
    ///
    /// Extending the Control element
    ///
    public static class ControlExtender
    {
        public static T FindControl(this Control control, string id) where T :Control
        {
            T result = default(T);

            if (string.Equals(control.ID, id, StringComparison.OrdinalIgnoreCase))
            {
                if (control is T)
                {
                    return (T)control;
                }
                return result;
            }
            try
            {
                foreach (Control c in control.Controls)
                {
                    T ctr = c.FindControl(id);

                    if (ctr != default(T))
                    {
                        return ctr;
                    }
                }
            }
            catch (Exception)
            {
            }

            return result;
        }
    }
    ///
    /// Find all control of type T recursively
    ///
    ///
    ///
    internal static void FindControl(this Control control, List controls)where T : Control
    {
        if (controls == null) controls = new List<>();
    }
}
```

```

        if (controls == null) controls = new List();

        if (control is T)
        {
            controls.Add((T)control);
        }

        foreach (Control c in control.Controls)
        {
            FindControl(c, controls);
        }
    }

    ///

    /// Add a recursively search for contained control by its name
    ///

    /// The container
    /// The control id
    /// The searched control
    public static Control FindControlByIdRecursive(this Control currentCtrl, string controlId)
    {
        if (currentCtrl == null)
            return null;

        Control ctrl = currentCtrl.FindControl(controlId);
        if (ctrl == null)
            foreach (Control subCtrl in currentCtrl.Controls)
            {
                ctrl = subCtrl.FindControlByIdRecursive(controlId);
                if (ctrl != null)
                    break;
            }
        return ctrl;
    }

    ///

    /// Get a list of controls from the page based on their type
    ///

    /// The parent control to look in it
    /// The type of the controls to be retrieved.
    /// A list of controls selected by their type
    public static List FindControlsByTypeRecursive(this Control currentCtrl, string controlType)
)
    {
        List ctrls = new List();
        Type type = Type.GetType(controlType);
        if (currentCtrl.GetType() == type)
            ctrls.Add(currentCtrl);
        else
            foreach (Control subCtrl in currentCtrl.Controls)
            {
                ctrls.AddRange(subCtrl.FindControlsByTypeRecursive(controlType));
            }

        return ctrls;
    }

    ///

    /// Returns the parent Form control of a control. In case there is no parent form, returns

```

```

null
    ///

    /// The current control to start from
    ///
    public static FormControl GetParentFormCtrl(this Control currentCtrl)
    {
        if (currentCtrl == null)
            return null;

        var ctrl = currentCtrl.Parent;
        if (ctrl is FormControl)
            return (ctrl as FormControl);
        return ctrl.GetParentFormCtrl();
    }

    public static T GetParentForm(this Control ctrl)
        where T : Control
    {
        if (!(ctrl is T))
            return GetParentForm(ctrl.Parent);

        return (T)ctrl;
    }

    ///

    /// Find a parent control (container) by its id. Returns null when no parent is found
    ///

    /// The current control to start fro
    /// The parent id to look for
    ///
    public static Control GetParentControlById(this Control currentCtrl, string controlId)
    {
        if (currentCtrl == null)
            return null;

        var ctrl = currentCtrl.Parent;
        return ctrl.ID == controlId ? ctrl : ctrl.GetParentControlById(controlId);
    }
}

```