

What is claimed is:

1. In a form-based development system, a method for assisting a user with creating an application program, the method comprising:
 - creating an ancestor form comprising a set of components, each component having a set of properties;
 - creating at least one descendant form, by inheriting said set of components from the ancestor form;
 - modifying said at least one descendant form by overriding a value stored for at least one property;
 - storing said at least one descendant form by storing values for only those properties which have been overridden;
 - modifying at least one component of the ancestor form; and
 - in response to said modifying step, propagating a property value from each property which has been modified to all said at least one descendant form.
2. The method of claim 1, further comprising:
 - filtering propagation of any property which has already been overridden by modifying its value at said at least one descendant form.
3. The method of claim 1, wherein said creating an ancestor form includes:
 - displaying a component palette including components which the user can select; and
 - receiving user input for placing components selected from the palette on the ancestor form.
4. The method of claim 1, further comprising:
 - creating a descendant form which itself descends from a selected one of said at least one descendant form, the created descendant form inheriting from the selected descendant form and further inheriting from the ancestor form.
5. The method of claim 1, wherein said step of inheriting said set of components from the ancestor form includes:
 - for each component of the ancestor, creating a corresponding component at a descendant, each component including property values derived from a corresponding ancestor component at the ancestor form.
6. The method of claim 5, wherein each derived component includes a unique name so that the component can be uniquely identified in a hierarchy of descendant forms.
7. The method of claim 1, wherein said set of properties includes properties specifying position and size for a component.
8. The method of claim 1, wherein said set of properties includes a property comprising a bitmap image.
9. The method of claim 1, wherein a particular component is associated with an event handler which processes an event occurring at the component.
10. The method of claim 9, wherein each component which inherits from the particular component inherits said event handler.
11. The method of claim 1, further comprising:
 - deleting an existing component from the ancestor form; and
 - in response to said deleting step, deleting at each descendant form a corresponding existing component.
12. The method of claim 1, wherein said overriding a value stored for at least one property includes:
 - receiving user input specifying a new value for a selected property.
13. In a form-based development system, a method for assisting a user with creating an application program, the method comprising:

- creating an ancestor form comprising a set of components, each component having a set of properties;
- creating at least one descendant form, by inheriting said set of components from the ancestor form;
- modifying said at least one descendant form by overriding a value stored for at least one property; and
- storing said at least one descendant form by storing values for only those properties which have been overridden;
- wherein said modifying step includes creating a property filter for blocking propagation from the ancestor form of said at least one property which has been overridden.
14. In a form-based development system, a method for assisting a user with creating an application program, the method comprising:
 - creating an ancestor form comprising a set of components, each component having a set of properties;
 - creating at least one descendant form, by inheriting said set of components from the ancestor form;
 - modifying said at least one descendant form by overriding a value stored for at least one property; and
 - storing said at least one descendant form by storing values for only those properties which have been overridden;
 - wherein each component which inherits from the particular component inherits said event handler, and wherein said event handler is associated with the particular component via a method pointer, and wherein said method pointer is treated as a property of the component for purposes of inheritance.
15. The method of claim 14, wherein said method pointer comprises a "this" pointer to a descendant form together with a function pointer to code implementing the event handler.
16. The method of claim 15, wherein the method pointer of each event handler which is propagated to a descendant form is modified so that its "this" pointer points to an object instance of the descendant form.
17. In a form-based development system, a method for assisting a user with creating an application program, the method comprising:
 - creating an ancestor form comprising a set of components, each component having a set of properties;
 - creating at least one descendant form, by inheriting said set of components from the ancestor form;
 - modifying said at least one descendant form by overriding a value stored for at least one property;
 - storing said at least one descendant form by storing values for only those properties which have been overridden;
 - modifying a component of the ancestor form;
 - in response to said modifying step, notifying each component of a descendant form which inherits from the modified component of the modification; and
 - in response to receiving a notification of the modification, updating each notified component of a descendant form with values for those properties of the ancestor form which have not been overridden at the descendant form.
18. In a form-based development system, a method for assisting a user with creating an application program, the method comprising:
 - creating an ancestor form comprising a set of components, each component having a set of properties;