CLAIMS

1. A computer-implemented method for specifying a first graphical user interface for configuring a computer-executable application, the method including:

receiving an identification of at least one configurable application;

identifying a set of one or more parameters associated with the at least one configurable application;

receiving, via a second graphical user interface displaying both a first portion representing the first graphical user interface and a second portion representing a plurality of graphical display elements, a user's drag-and-drop input with respect to the second graphical user interface, wherein the user's drag-and-drop input is indicative of both a selection of a graphical display element of the plurality of graphical display elements and a location at which to place the graphical display element within the first portion representing the first graphical user interface;

displaying the graphical display element in the first portion of the second graphical user interface representing the first graphical user interface at the location at which to place the graphical display element within the first portion representing first graphical user interface;

displaying, in the second graphical user interface, one or more representations of the set of parameters;

receiving, via the second graphical user interface, a mapping between a property of the graphical display element and a parameter of the set of parameters; and

storing a representation of the mapping and the location at which to place the graphical display element within the first graphical user interface.

2. The method of claim 1, further including testing whether a first data type associated with the property is compatible with a second data type associated with the parameter.

3. The method of claim 1, further including receiving at least one condition that must be satisfied to display the graphical display element to a user of the first graphical user interface.

4. The method of claim 1, further including receiving a mapping between a variable and an attribute of the graphical display element.

5. The method of claim 1, wherein the at least one configurable application comprises a dataflow graph, the dataflow graph comprising components and a plurality of links connecting the components, and wherein the method further comprises:

identifying a link of the plurality of links;

receiving a mapping between a property of a second graphical display element and the link, wherein the second graphical display element is configured to display a flow of data at the link to a user of the first graphical user interface.

6. The method of claim 1, wherein the at least one configurable application comprises an execution flow graph.

7. The method of claim 1, further comprising:

displaying, in a third portion of the second graphical user interface, a search interface for allowing users to search for parameter references and/or variable references;

receiving, via the search interface, an input search string;

generating, based on the input search string, search results including references to one or more parameters associated with the at least one configurable application and/or one or more variables; and

displaying the search results in the search interface.

8. The method of claim 7, further comprising:

dimming or blurring at least one element in the second graphical user interface not associated with the search results.

9. The method of claim 7, further comprising:

highlighting at least one element in the second graphical user interface associated with the search results.

10. The method of claim 1, further comprising:

displaying, in a third portion of the second graphical user interface, an error interface for displaying errors; and

in response to determining that a first data type associated with the property of the graphical display element does not match a second data type and a parameter of the set of parameters, displaying an indication of a type mismatch error in the error interface.

11. The method of claim 1, wherein the at least one configurable application comprises a dataflow graph, the method further comprising:

determining final parameter values for each parameter associated with the dataflow graph;

executing the dataflow graph using the final parameter values.

12. The method of claim 1, wherein the set of one or more parameters associated with the at least one configurable application comprises at least one parameter selected from the group consisting of: a parameter specifying how a sorting component sorts data, a parameter specifying location of a data source or a data sink on disk, a parameter specifying a record format, a parameter specifying how a rollup component operates, and a parameter specifying a filename.

13. The method of claim 1, wherein the user's drag-and-drop input indicates where to place the graphical display element by specifying the location at which to place the graphical display element within the first portion representing the first graphical user interface.

14. At least one non-transitory computer-readable storage medium storing instructions that, when executed by at least one processor, cause the at least one processor to perform a method for specifying a first graphical user interface for configuring a computer-executable application, the method comprising:

receiving an identification of at least one configurable application;

identifying a set of one or more parameters associated with the at least one configurable application;

receiving, via a second graphical user interface displaying both a first portion representing the first graphical user interface and a second portion representing a plurality of graphical display

elements, a user's drag-and-drop input with respect to the second graphical user interface, wherein the user's drag-and-drop input is indicative of both a selection of a graphical display element of the plurality of graphical display elements and a location at which to place the graphical display element within the first portion representing the first graphical user interface;

displaying the graphical display element in the first portion of the second graphical user interface representing the first graphical user interface at the location at which to place the graphical display element within the first portion representing first graphical user interface;

displaying, in the second graphical user interface, one or more representations of the set of parameters;

receiving, via the second graphical user interface, a mapping between a property of the graphical display element and a parameter of the set of parameters; and

storing a representation of the mapping and the location at which to place the graphical display element within the first graphical user interface.

15. The at least one non-transitory computer-readable storage medium of claim 14, wherein the method further includes testing whether a first data type associated with the property is compatible with a second data type associated with the parameter.

16. The at least one non-transitory computer-readable storage medium of claim 14, wherein the method further includes receiving at least one condition that must be satisfied to display the graphical display element to a user of the first graphical user interface.

17. The at least one non-transitory computer-readable storage medium of claim 14, wherein the method further includes receiving a mapping between a variable and an attribute of the graphical display element.

18. The at least one non-transitory computer-readable storage medium of claim 14, wherein the at least one configurable application comprises a dataflow graph, the dataflow graph comprising components and a plurality of links connecting the components, and wherein the method further comprises:

identifying a link of the plurality of links;

receiving a mapping between a property of a second graphical display element and the link, wherein the second graphical display element is configured to display a flow of data at the link to a user of the first graphical user interface.

19. A system for specifying a first graphical user interface for configuring a computer-executable application, the system including:

at least one processor configured to perform:

receiving an identification of at least one configurable application;

identifying a set of one or more parameters associated with the at least one configurable application;

receiving, via a second graphical user interface displaying both a first portion representing the first graphical user interface and a second portion representing a plurality of graphical display elements, a user's drag-and-drop input with respect to the second graphical user interface, wherein the user's drag-and-drop input is indicative of both a selection of a graphical display element of the plurality of graphical display elements and a location at which to place the graphical display element within the first portion representing the first graphical user interface;

displaying the graphical display element in the first portion of the second graphical user interface representing the first graphical user interface the location at which to place the graphical display element within the first portion representing first graphical user interface;

displaying, in the second graphical user interface, one or more representations of the set of parameters;

receiving, via the second graphical user interface, a mapping between a property of the graphical display element and a parameter of the set of parameters; and

storing a representation of the mapping and the location at which to place the graphical display element within the first graphical user interface.

20. The system of claim 19, wherein the at least one processor is further configured to perform testing whether a first data type associated with the property is compatible with a second data type associated with the parameter.

21. The system of claim 19, wherein the at least one processor is further configured to perform receiving at least one condition that must be satisfied to display the graphical display element to a user of the first graphical user interface.

22. The system of claim 19, further including receiving a mapping between a variable and an attribute of the graphical display element.

23. The system of claim 19, wherein the at least one configurable application comprises a dataflow graph, the dataflow graph comprising components and a plurality of links connecting the components, and wherein the method further comprises:

identifying a link of the plurality of links;

receiving a mapping between a property of a second graphical display element and the link, wherein the second graphical display element is configured to display a flow of data at the link to a user of the first graphical user interface.

24. The system of claim 19, wherein the at least one processor is further configured to perform:

displaying, in a third portion of the second graphical user interface, a search interface for allowing users to search for parameter references and/or variable references;

receiving, via the search interface, an input search string;

generating, based on the input search string, search results including references to one or more parameters associated with the at least one configurable application and/or one or more variables; and

displaying the search results in the search interface.

25. The system of claim 19, wherein the at least one processor is further configured to perform:

displaying, in a third portion of the second graphical user interface, an error interface for displaying errors; and

in response to determining that a first data type associated with the property of the graphical display element does not match a second data type and a parameter of the set of parameters, displaying an indication of a type mismatch error in the error interface.

26. The system of claim 19, wherein the at least one configurable application comprises a dataflow graph, and wherein the at least one processor is further configured to perform:

determining final parameter values for each parameter associated with the dataflow graph;

executing the dataflow graph using the final parameter values.

27. The system of claim 19, wherein the set of one or more parameters associated with the at least one configurable application comprises at least one parameter selected from the group consisting of: a parameter specifying how a sorting component sorts data, a parameter specifying location of a data source or a data sink on disk, a parameter specifying a record format, a parameter specifying how a rollup component operates, and a parameter specifying a filename.