

## **RESULT TYPES FOR CONDITIONAL DATA DISPLAY**

### **Cross Reference to Related Applications**

**[0001]** This application is a continuation of U.S. patent application Ser. No. 13/173,617, now U.S. Pat. No. 9,135,358, filed Jun 30, 2011, entitled “Result Types For Conditional Data Display.” which claims priority to U.S. Provisional Patent Application Serial No. 61/405,067, filed October 20, 2010, the entire content of which is hereby incorporated by reference, and is related to U.S. patent application, Ser. No. 13/173,435, titled “Customization of Display Templates,” filed on June 30, 2011, and U.S. patent application Ser. No. 13/173,313, titled “Templates for Displaying Data,” filed on June 30, 2011, the entirety of each of which are incorporated by reference herein. To the extent appropriate, a claim of priority is made to the above-recited applications.

### **Background**

**[0002]** Websites can include large numbers of resources. The resources in a website can belong to various types. For example, a website can include webpages, word processor documents, PDF documents, slide presentation documents, spreadsheet documents, audio files, video files, and other types of resources.

**[0003]** Because websites can have large numbers of resources, websites frequently include search functionality that enables users to search for desired resources. The search functionality allows a user to provide a search string. Upon receiving the search string, the search functionality identifies search results. The search results are resources in the website that satisfy the search string. After identifying the search results, the search functionality presents a search results interface. The search results interface contains information about the search results. Typically, the search results interface contains the same types of information about search results and presents the information about the search results in the same way, even if the search results belong to different types.

### **Summary**

**The invention claimed is:**

1. A method for configuring and using search functionality, the method comprising:

storing one or more resources of a website hosted by a server system;

receiving administrative input, the administrative input associating a first template module with a first result type and associating a second template module with the second result type, wherein the first result type and the second result type each define a set of properties to be displayed and the first template module and the second template module specify how the properties are to be displayed;

receiving a first search request, the first search request requesting a list of resources in the first website that satisfy a search string, wherein the list of resources includes a first resource having a first resource type and a second resource having a second resource type ;

determining that the first and second resources satisfy the first search string, the first and second resources being among the one or more resources of the first website;

determining that the first resource belongs to the first result type and the second resource belongs to the second result type; and

after determining that the first resource belongs to the first result type and the second resource belongs to the second result type, providing a dataset, the dataset comprising a first content resource object that contains properties regarding the first resource, a second content resource object that contains properties regarding the second resource, the first template module, and the second template module.

2. The method of claim 1, wherein a service provider entity operates the server system, the server system hosts the website and a plurality of other websites.

3. The method of claim 2, wherein the plurality of other websites include a given resource satisfying the first search string.

4. The method of claim 1,  
wherein the administrative input corresponds to data entry controls in one or more user interfaces ;

wherein the user interfaces include a type configuration interface, the type configuration interface comprising data entry controls for configuring result types;  
and

wherein receiving the administrative input comprises receiving values of the data entry controls.

5. The method of claim 4,  
wherein the data entry controls include a template selection control;  
wherein receiving the administrative input comprises receiving a first template selection input, the first template selection input corresponding to the template selection control, the first template selection input associating the first template module with the first result type; and

wherein the method further comprises:

after providing the dataset, receiving a second search request, the second search request requesting a list of resources in the first website that satisfy a second search string;

after receiving the second search request, determining that the first resource satisfies the second search string;

after determining that the first resource satisfies the second search string, sending a new dataset, the new dataset comprising a first content resource object that contains data regarding the first resource; and

sending a content generation script, the content generation script comprising instructions to generate a first presentation string by performing a first template execution operation on the first content resource object, the

first presentation string being renderable to present a first set of on-screen features describing the first resource.

6. The method of claim 5,

wherein performance of the content generation script causes a second template execution operation to be performed on a second content resource object, a second presentation string being generated by performing the second template execution operation on the second content resource object, the second presentation string renderable to present a second set of on-screen features describing the second resource, the second set of on-screen features including at least one feature not present in the first set of on-screen features.

7. The method of claim 1, further comprising:

receiving a request for the first and second template modules.

8. The method of claim 1,

wherein receiving the administrative input comprises receiving rule input, the rule input specifying a rule for the first result type; and

wherein determining that the first resource belongs to the first result type comprises determining that the first resource satisfies the rule for the first result type.

9. The method of claim 8,

wherein the rule for the first result type specifies a file name extension or a URL pattern; and

wherein determining that the first resource satisfies the rule for the first result type comprises determining that a file name extension of the first resource corresponds to the file name extension specified by the rule for the first result type or

determining that a URL of the first resource satisfies the URL pattern specified by the rule for the first result type.

10. The method of claim 8,

wherein the method further comprises storing a first entry in a table, the table having a plurality rows and columns that define an array of cells, the array of cells including cells associated with the first entry, different cells associated with the first entry specifying different properties of the first result type, the properties of the first result type including a rule property and a template module property, the rule property specifying the rule for the first result type, the template module property specifying the first template module; and

wherein determining that the first resource belongs to the first result type comprises accessing the first entry to retrieve additional data for the first result type, including retrieving one or more additional properties for display or one or more additional templates for rendering.

11. The method of claim 1, further comprising:

after receiving the first search request, determining that the first resource belongs to a plurality of applicable result types, the plurality of applicable result types including the first result type; and

performing a conflict resolution operation to select the first result type from among the plurality of applicable result types to which the first resource belongs.

12. The method of claim 11,

wherein a server system hosts a plurality of websites on behalf of a tenant, the plurality of websites organized as a scope hierarchy having multiple levels, the plurality of websites including the first website;

wherein the plurality of applicable result types includes the first result type and the second result type, the first result type associated with a first level of the

scope hierarchy, the second result type associated with a second level of the scope hierarchy, the second level being higher in the scope hierarchy than the first level; and

wherein performing the conflict resolution operation comprises: selecting the first result type instead of the second result type because the first result type is associated with a lower level in the scope hierarchy.

13. The method of claim 12,

wherein the plurality of websites includes a second website in addition to the first website, the first website and the second website belonging to a first site group;

wherein the user interfaces includes a first type configuration interface and a second type configuration interface, the first type configuration interface being in an administrative interface for the first website, the second type configuration interface being in an administrative interface for the first site group;

wherein receiving the administrative input comprises:

receiving input from the first type configuration interface to configure the first result type to be applicable within the first website;

receiving input from the second type configuration interface to configure the second result type to be applicable within the first site group; and

wherein the method further comprises:

receiving a second search request, the second search request requesting a list of resources in the second website that satisfy a second search string;

determining that the second resource belongs to the second result type, a second template module associated with the second result type, the second template module specifying a second template execution operation; and

after determining that the second resource belongs to the second result type, providing a second dataset, the second dataset comprising a content resource object, the content resource object comprising data regarding the second resource; and

providing a second content generation script, performance of the content generation script causing the second template execution operation to be performed on the second content resource object, a presentation string being generated by performing the template execution operation on the second content resource object, the presentation string being renderable to present a set of on-screen features describing the second resource.

14. A server system comprising:

a data storage system that stores computer-executable instructions and resources of a first website : , the data storage system comprising one or more computer storage devices; and

a processing system that reads the computer-executable instructions from the data storage system and executes the computer-executable instructions, execution of the computer-executable instructions by the processing system causing the server system to:

send admin interface data from the server system, the admin interface data representing one or more admin interfaces;

accept administrative input, the administrative input based on values set in controls in the admin interfaces, the administrative input associating a first template module with a first result type and associating a second template module with a second result type, wherein the first and second result types each define a set of properties to be displayed and the first and second template modules each specify how the properties are to be displayed;

receive a first request, the first request requesting resources in the first website;

determine that a first resource and a second resource satisfy the first request, the first resource belonging to the first result type, the second resource belonging to the second result type; and

send a dataset, the dataset comprising a first content resource object, a second content resource object, the first template module and the second template module, the first content resource object containing data regarding the first resource, the second content resource object containing data regarding the second resource.

15. The server system of claim 14, wherein execution of the computer executable instructions by the processing system causes the server system to accept property selection input, the property selection input indicating applicable properties for the first result type;

wherein the applicable properties of the first result type include properties of resources used when filling slots in the first template module,

the applicable properties of the second result type include properties of resources used when filling slots in the second template module, and

wherein the slots indicate locations into which data based on content resource objects in the dataset can be filled.

16. The server system of claim 14, wherein the first template module comprises Hypertext Markup Language (HTML), cascading style sheet (CSS), and scripting data.

17. The server system of claim 14, wherein the admin interface data is renderable by a web browser application to display the admin interfaces.

18. The server system of claim 14,

wherein the server system hosts a plurality of websites on behalf of a tenant, the plurality of websites including the first website and a second website;

wherein the admin interfaces includes a first type configuration interface and a second type configuration interface, the first type configuration interface being in an administrative interface for the first website, the second type configuration interface being in an administrative interface for the second website, the first result type associated with a rule for the first result type;

wherein the administrative input includes input from the first type configuration interface to configure the first result type to be applicable within the first website and includes input from the second type configuration interface to configure a third result type to be applicable within the second website, the third result type associated with a rule for the third result type and a third template module;

wherein execution of the computer-executable instructions by the processing system causes the server system to determine that the first resource belongs to the first result type by determining that the first resource satisfies the rule for the first result type;

wherein execution of the computer-executable instructions by the processing system causes the server system to:

accept a second request, the second request requesting resources in the second website;

determine that a third resource satisfies the second request, the third resource being in the second website, the third resource satisfying the rule for the first result type;

determine that the third resource belongs to the third result type by determining that the third resource satisfies the rule for the third result type; and

generate result data for the third resource, the result data for the third resource specifying the third template module and applicable properties of the third resource.

19. The server system of claim 14, wherein the first resource and the second resource are both word processor documents, slide presentation documents, webpages, PDF documents, spreadsheet documents, images, audio files, or video files.

20. A computer storage medium that stores computer-executable instructions, the computer storage medium not consisting of transitory signals, execution of the computer-executable instructions by a processing system of a server system causing the server system to:

receive a first template selection input, the first template selection input associating a first template module with a first result type defining a first set of properties, the first template module specifying how the first set of properties are to be displayed;

receive a second template selection input after receiving the first template selection input, the second template selection input associating a second template module with a second result type defining a second set of properties, the second template module specifying how the second set of properties are to be displayed.

receive a first search request, the first search request requesting resources that satisfy a search string;

determine that a first resource and a second resource satisfy the search string, the first resource belonging to the first result type, the second resource belonging to the second result type;

generate a dataset, the dataset comprising a first content resource object and a second content resource object, the first content resource object containing properties of the first resource, the second content resource object containing properties of the second resource; and

send the first template module, the second template module, and the dataset;