Building Dynamic Sort Columns

This technique allows you to dynamically sort a report by column by clicking on the column header. You can also change the sort order by repeating the click.
Follow these steps to create Dynamic Column Sorting:

1. Open a report to create the sort column.
2. Go to the Explorer Bar and click on your query.
3. Right-click on the data item you wish to use in your sort. Choose Copy, then Right-click and chose Paste.
4. Double-click the new data item and surround the contents of the Expression Definition with single quotes.
5. Go to the toolbox tab and drag a Data Item to the query.
6. In the Expression Definition, add the following code:
   a. if(#prompt('p_Direction','integer','1')#=1) then
      (#prompt('p_SortColumn','token','[MAJOR]'))#
   else ('0')
7. In the properties pane, rename the data item. In this example, use `major_sort_asc`. 

![Diagram showing data item properties](image-url)
8. Right-click on the data item and select Copy. Then right-click and select Paste.
9. Double-click on the field you just copied and in the Expression Definition, add the following code:
   
   a. \[ \text{if}(\#\text{prompt('p\_Direction','integer','1')}\#=-1) \text{ then} \]
      \[ (\#\text{prompt('p\_SortColumn','token','[MAJOR]')}\#) \]
      \[ \text{else} \ ('0') \]
10. In the properties pane, rename the data item. In this example, use **major_sort_dsc**.
11. Go to the toolbox tab, and drag a new data item to the query.
12. In the Expression Definition, enter the following code:
   a. -(#prompt('p_Direction','integer','1')#)
13. In the properties pane, rename the data item. In this example, use **Direction**.
15. Highlight any column on the report, click the Sort Icon and choose Advanced Sorting.
16. Drag over `major_sort_asc` to the Groups box, just under Detail Sort List. Drag over `major_sort_dsc` to the Groups box, just under `major_sort_asc`. Double-click the arrow on `major_sort_dsc` to change the sort direction.
17. Highlight the column for the sort. In this case **Major**.
19. Click the Add icon.
20. In the Report box, choose the report that you are working on. Under Actions, choose Run the report.
21. Click the Edit icon.
22. Under Method, choose Pass data item value for both parameters. Under Value, for parameter p_direction choose Direction. For parameter p_SortColumn choose, in this case, Major1.
23. On the report page, for the top menu, select Run, then Run Options.
24. De-select the Prompt checkbox and run the report.
25. Click column heading **MAJOR** to test.
## Students by Major Report

<table>
<thead>
<tr>
<th>NAME</th>
<th>MAJOR</th>
<th>MAJOR_DESC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson, Sarah</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>King, Jennifer</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>Thompson, William</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>Anderson, John</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>Brown, Emily</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>Davis, Michael</td>
<td>200L</td>
<td>Zoology</td>
</tr>
<tr>
<td>Taylor, Lisa</td>
<td>200L</td>
<td>Zoology</td>
</tr>
</tbody>
</table>
For additional information regarding Cognos, policies and access, or modifications to the ODS, contact the Business Intelligence Team at cognos@kent.edu. For technical assistance, contact the IS Help Desk at 672-HELP (4357).