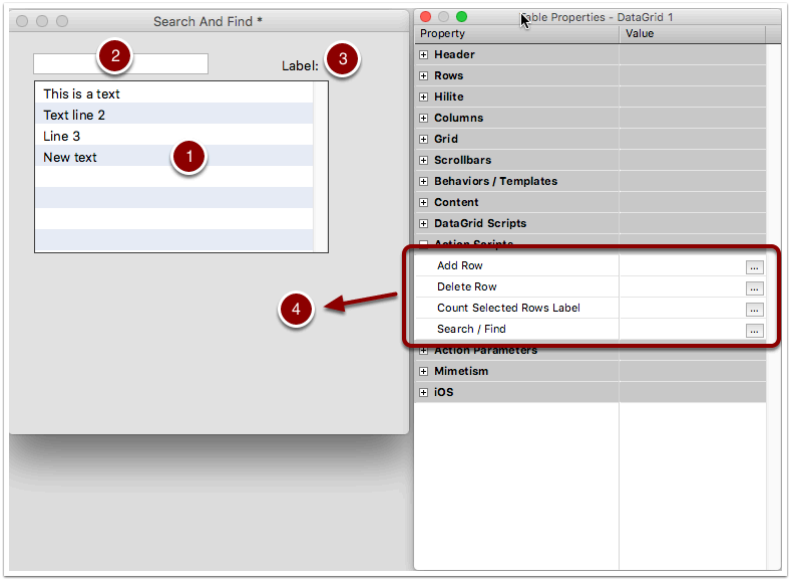
# How Do I Prepare My DataGrid Form for Search And Find Script?

DataGrid is a powerfull control for displaying and organising data. But once the DataGrid populated, how to find a value inside the datagrid or to filter the rows by using a query? This lesson will demonstrate you how DGH can help in these two ways: finding values inside the datagrid or filtering rows by only displaying the found lines, for usage in mobile lists. And this, in only a few clicks.

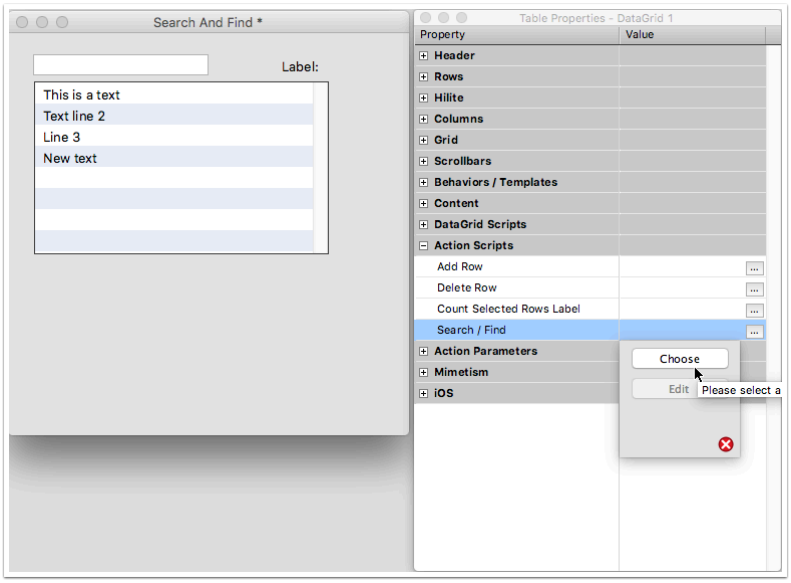
## Preparing the Required Controls in A Stack




In this example, we will have the need for:
- a datagrid form, for sure (1)
- an editable field. This field will allow us to input the value to find inside the datagrid (2)
- a label for displaying how many rows in the Datagrid are corresponding to the search value (3)

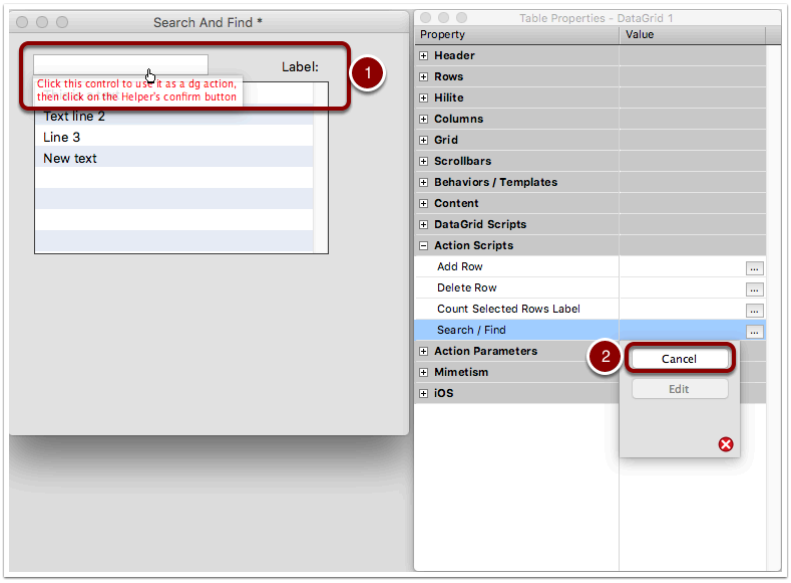
Once the controls created, we can open DGH and its "Action Scripts" group and going deeper in the lesson (4)

## Clicking on the Search and Find Three Dots Button



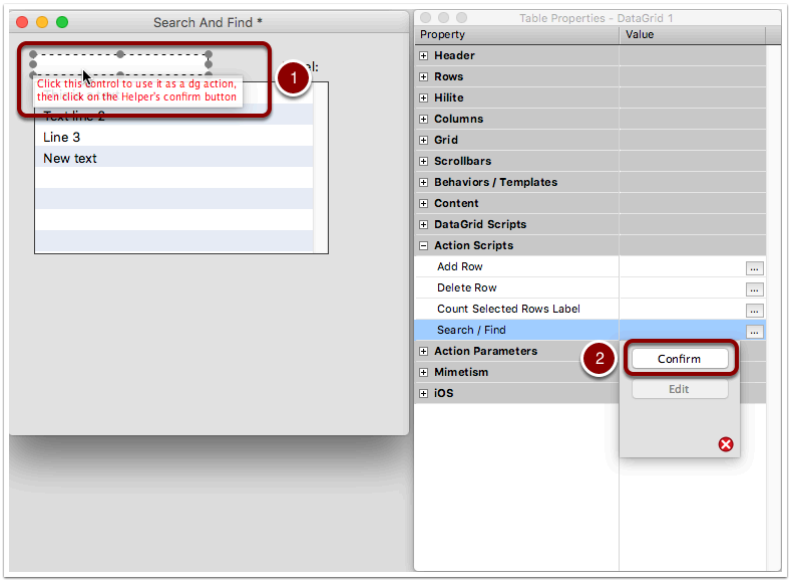

The first step is to select the editable field by using the DGH's "Control Picker". You can open this picker by clicking onto the three dots button associated to the "Search / Find" Property
This is open a window containing a choose button. Click onto this button.

## Moving the Mouse Over The Editable Field



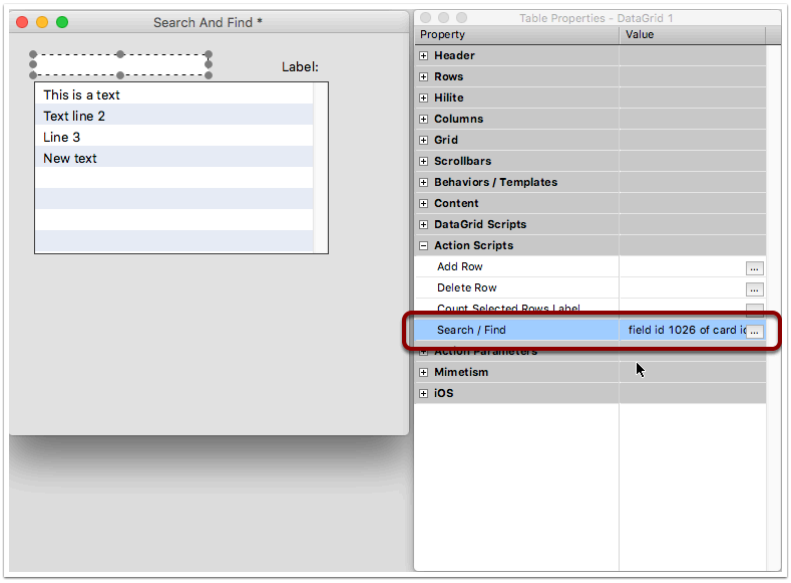

Place the mouse over the editable field. DGH informs you the editable field is eligible by displaying a tooltip. (1)
Note the state of the choose button which is now displaying a cancel label. (2)

## Selecting the Editable Field



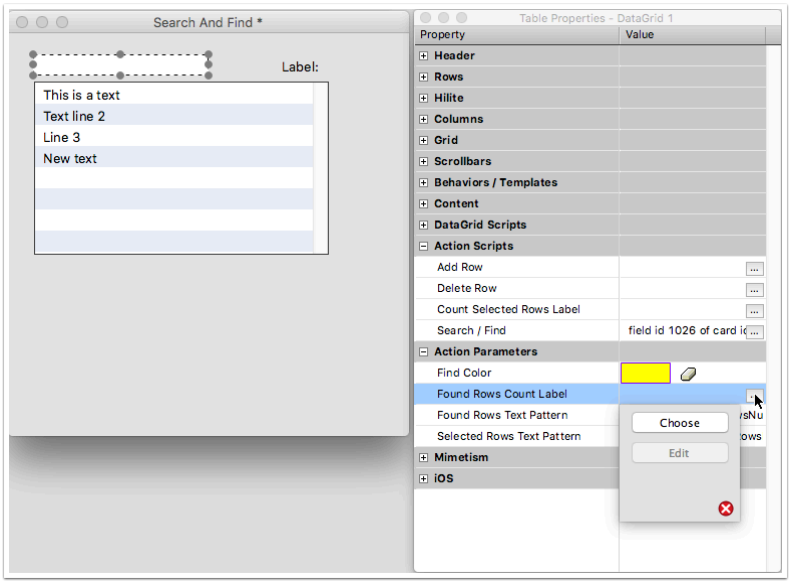

Click onto the field to select it. The picker window is now displaying a "Confirm" button. (1)
Then, click the "confirm" button to link the datagrid to the search field. (2)
Basically, this simple click has installed several handlers:

- in the field itself
- in the datagrid
- in the card
- and in the datagrid row behavior




The field id linked to the datagrid is now displayed inside the property for "Search / Find"

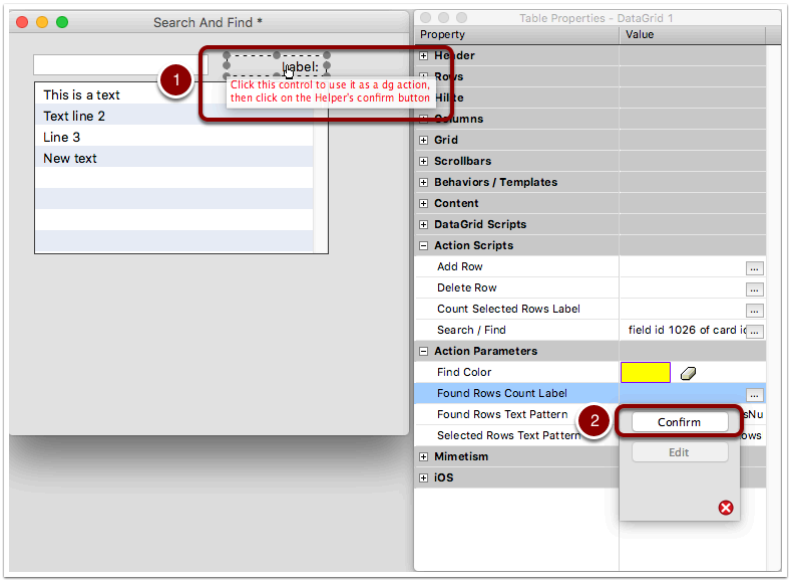
## Opening the Control Picker for Counting the Rows Found




The Find / Search feature installed by DGH is also capable to count how many rows are corresponding to the query field.

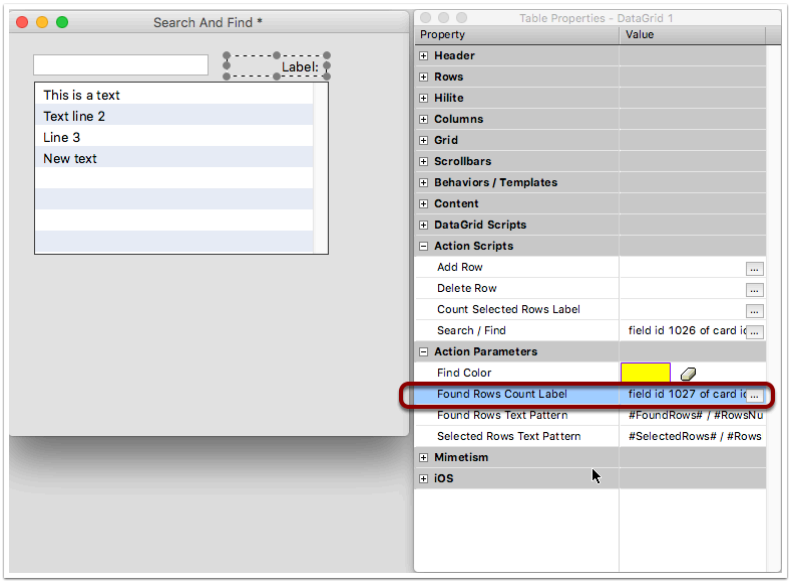
For accomplishing this, open the "Action Parameters" topic in the DGH property palette, then click the three dots button for the "Found Rows Count Label" line.

## Selecting the Label Field

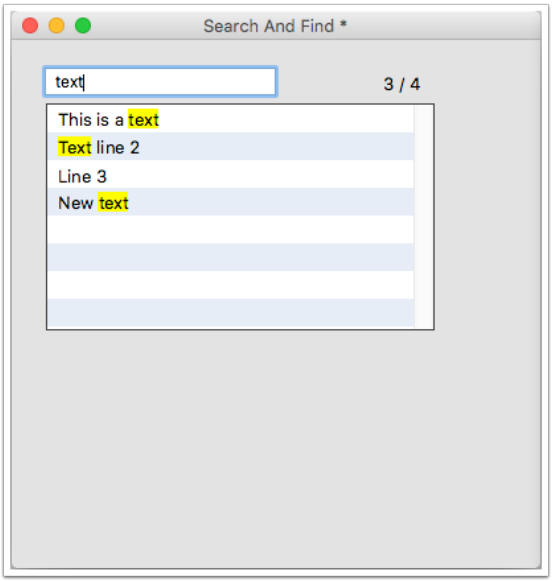



Exactly than previously, when we selected the editable field, select the label field (1), then click onto the confirm button (2)

The field is now selected and its id is now displayed inside the corresponding **DGH** property.

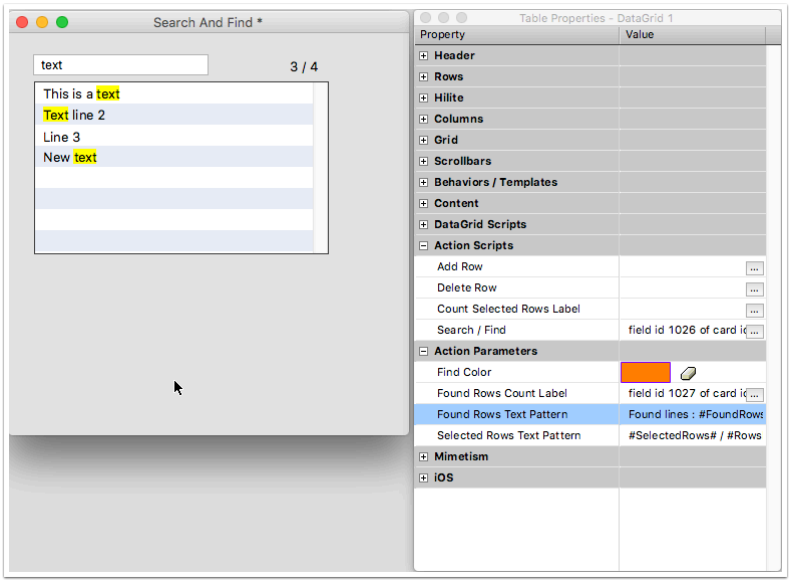


## Testing The Search Field and Its Information Label



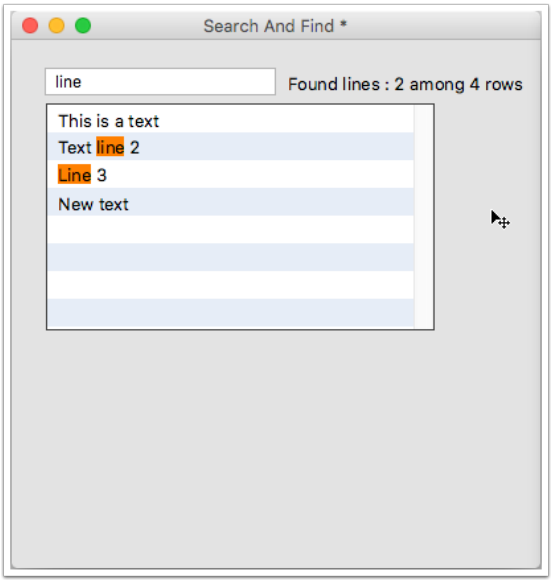

We can now test the search field by inputing a value (text) inside it and see if all is working a expected.
Thanks to DGH, the found values have a yellow background, and the label is informing us 3 rows have been found among the 4 rows residing inside the datagrid.

## Going Further: Editing the Action Parameters




Some parameters are available in DGH for the Search and Find feature:
- We can change the color of the text found, for example for the orange color.
- We can also change the found text pattern by something different:
Found lines : #FoundRows# among #RowsNumber# rows
Note #FoundRows# and #RowsNumber# are two place holders replaced by the DGH installed script, respectively by the rows found and the numbers of rows inside the datagrid.

Here is a preview of the changes, inside our datagrid example..




## Filtering the Rows Inside the Datagrid

By default only the find feature is activated and you must uncomment the search feature inside the DGH_Search_Launch handler located in the card script.
The reason of this, is the search script is requiring the dgData of your datagrid must be saved somewhere else, because the search script is changing the content of the datagrid by displaying the filtering rows only. So if the data is not saved somewhere, you have the risk to loose some data.
The line :
set the dghProp["dg is in search mode"] of grp pTheDGName to true,
should automatically save the dgData of your datagrid in a special property named "saved data", however this is preferable to keep the data saved in another place, for limiting risks.

For activating the search feature, open the card script, then in the DGH_Search_Launch handler, located the DGH_Search_FilterDGByIndexes line and uncomment it.

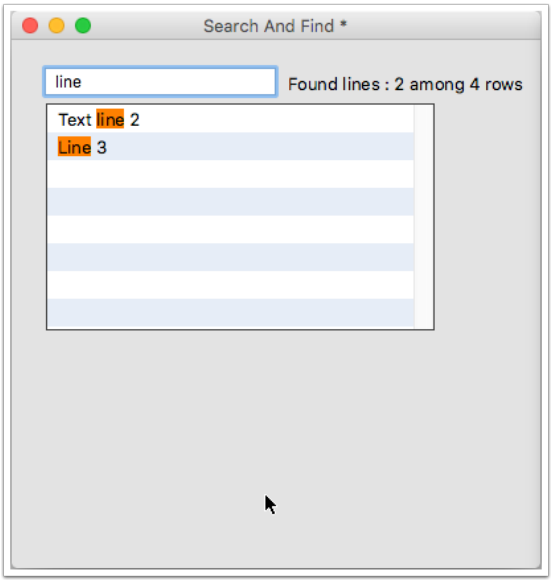
```
## Search Field Script
command DGH_Search_Launch pTheDgName, pTheString, pTheKeysList, pTheFilterOperator
   local tTheIndexFound

   if (pTheString is empty) then
      DGH_Search_Clear pTheDgName
      put "all" into tTheIndexFound
   else
      set the dghProp["dg is in search mode"] of grp pTheDGName to true
      DGH_Search_RowsByValue pTheDGName, pTheKeysList, pTheFilterOperator, pTheString
      put the result into tTheIndexFound
      ## DGH_Search_FilterDGByIndexes pTheDGName, tTheIndexFound -- Activate this line
for filtering the datagrid content. Data must be saved inside the dghProp["saved data"]
custom property of the datagrid
      set the dghProp["text to find"] of grp pTheDGName to pTheString
   end if
   DGH_Search_RowsCount pTheDGName, tTheIndexFound
```

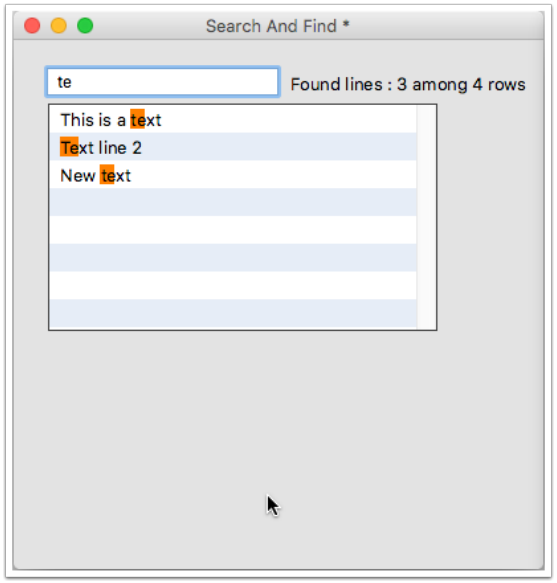
```
end DGH_Search_Launch
```

> DGH_Search_FilterDGByIndexes pTheDGName, tTheIndexFound -- Activate this line for filtering the datagrid content. Data must be saved inside the dghProp["saved data"] custom property of the datagrid

## Testing the Search Script




Once the line uncommented in the script, testing the search field will filter the rows inside the datagrid, by only displaying the found ones.




And if the search field content changes, the rows are filtered accordingly.

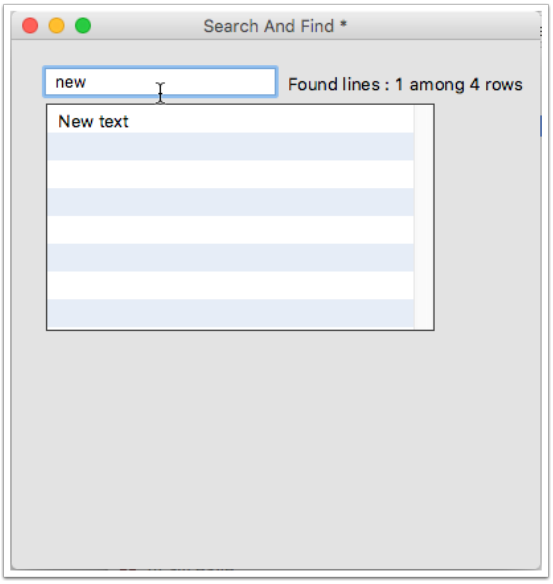
## Disabling The Find Feature

You can disable the find feature by commenting this line in the DGH_Search_Launch handler:
set the dghProp["text to find"] of grp pTheDGName to pTheString

```
## Search Field Script
command DGH_Search_Launch pTheDgName, pTheString, pTheKeysList, pTheFilterOperator
   local tTheIndexFound

   if (pTheString is empty) then
      DGH_Search_Clear pTheDgName
      put "all" into tTheIndexFound
   else
      set the dghProp["dg is in search mode"] of grp pTheDGName to true
      DGH_Search_RowsByValue pTheDGName, pTheKeysList, pTheFilterOperator, pTheString
      put the result into tTheIndexFound
      DGH_Search_FilterDGByIndexes pTheDGName, tTheIndexFound -- Activate this line for
filtering the datagrid content. Data must be saved inside the dghProp["saved data"]
custom property of the datagrid
      --set the dghProp["text to find"] of grp pTheDGName to pTheString
   end if
```

```
   DGH_Search_RowsCount pTheDGName, tTheIndexFound
end DGH_Search_Launch
```




So we have now the found row displayed, but without the found text marked in color.