PROJECT 3

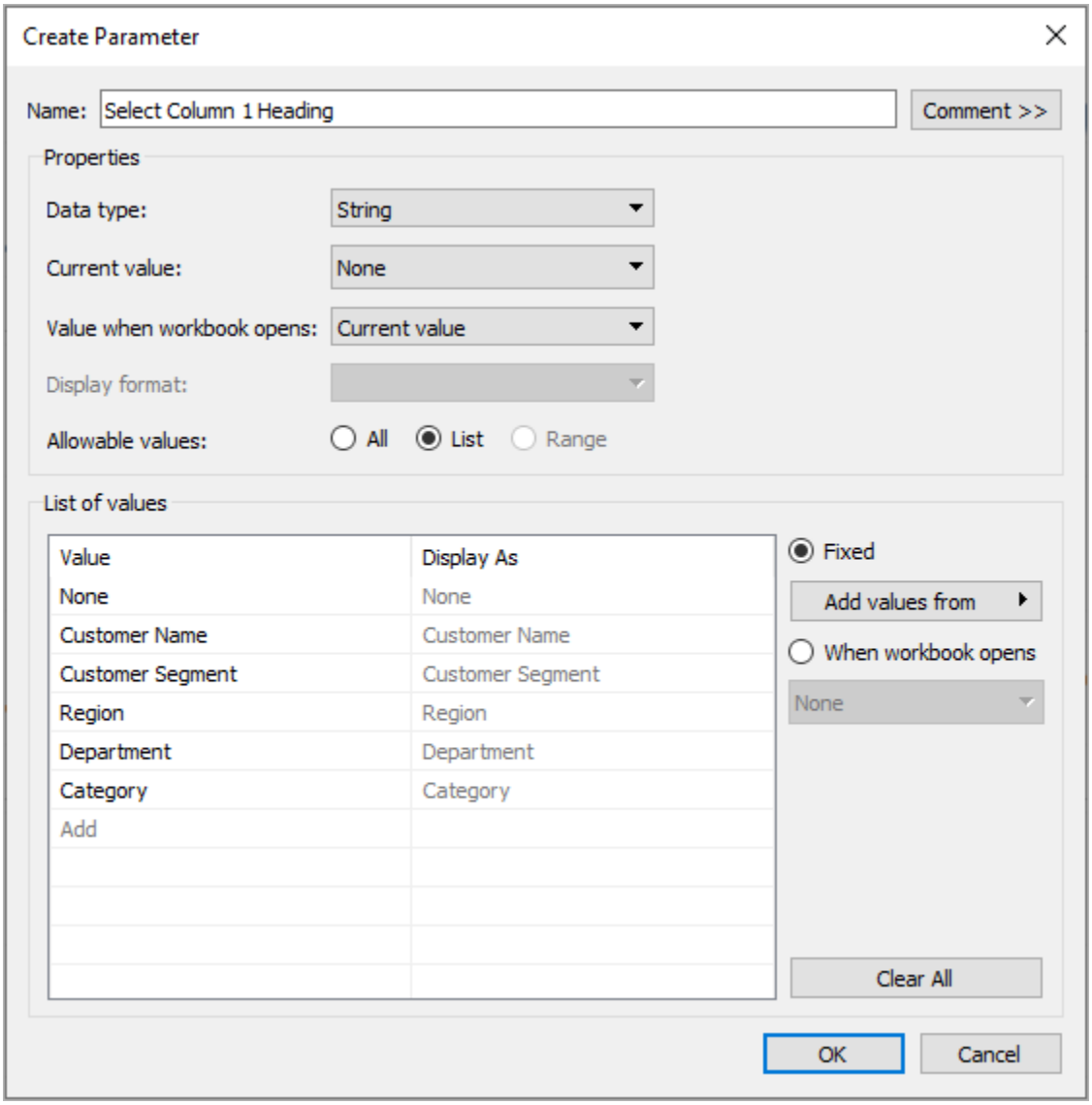
Use Parameters to Make Views More Interactive

Create the parameters

These steps use the Superstore sample to create new parameters.

1. In the Data pane, click the drop-down arrow in the upper right corner and select **Create Parameter**.
2. In the Create Parameter dialog box, complete the following steps:
    - Name the parameter so that viewers can tell what changing it will do. This example uses Select Column 1 Heading.
    - For Data type, select String.
    - For Allowable Values, select List, type None as the first value in the list, and then press Enter.
    - Complete the list by typing the names of the additional dimension fields that you want to expose through the parameter.
      Note: This example uses the customer name, customer segment, region, department, and category fields. These are all dimensions of the same data type (string). If you wanted to include a measure such as profit in this list, one option would be to convert the measure to a string value. You would do this when you build the calculated field, using the `STR()` function. This article covers only the single data type scenario.
      The Display As aliases default to the field name, and for this

exercise you can leave them as they are.



- Click OK to return to the Calculated Field dialog box.

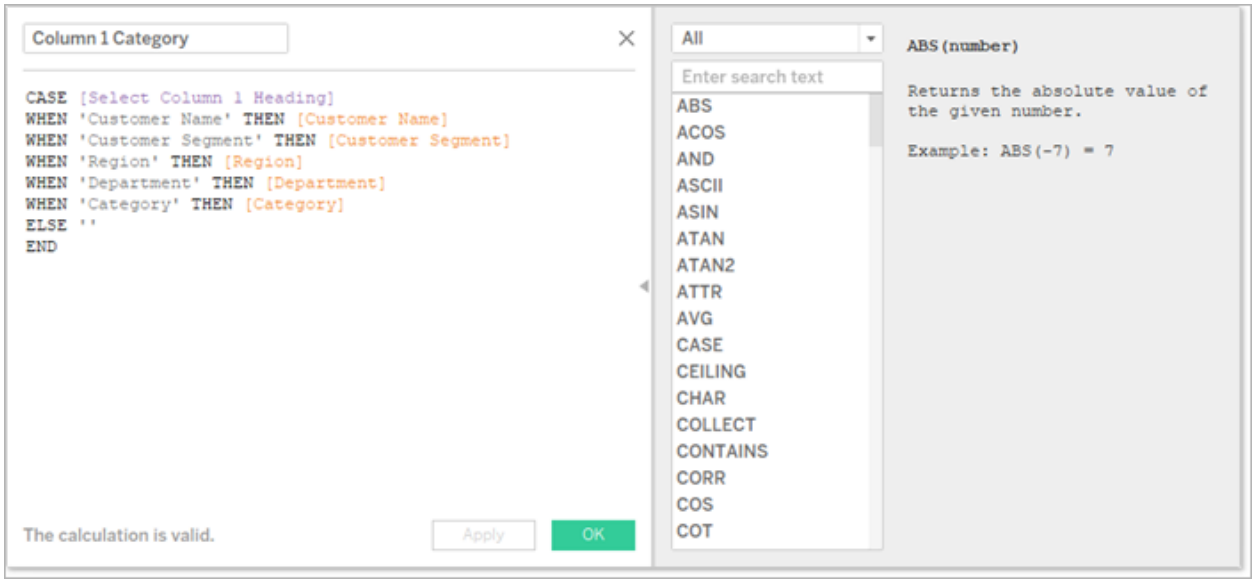
3. Repeat the previous step to create the following additional parameters:
   - Select Column 2 Heading
   - Select Row 1 Heading
   - Select Row 2 Heading
4. Tip: Instead of typing each value in the list, click Add values from > Parameters to add them from Select Column 1 Heading.

Create the calculated fields

These steps use the Superstore sample to build the calculated fields that will take advantage of your parameters.

1. In the Data pane, click the drop-down arrow in the upper right corner and select **Create Calculated Field**.
2. In the Calculated Field dialog box, for **Name**, type **Column 1 Category**.
3. In the Calculated Field dialog box, for Formula, build the following calculation:

```
CASE [Select Column 1 Heading]
WHEN 'Customer Name' THEN [Customer Name]
WHEN 'Customer Segment' THEN [Customer Segment]
WHEN 'Region' THEN [Region]
WHEN 'Department' THEN [Department]
WHEN 'Category' THEN [Category]
ELSE ''
END
```



   Confirm that the status message indicates that the formula is valid, and then click OK.

   Note: ELSE accounts for the None value that you included in the parameter, and it returns an empty string.

4. Create three more calculated fields, one for each of the additional parameters you created:

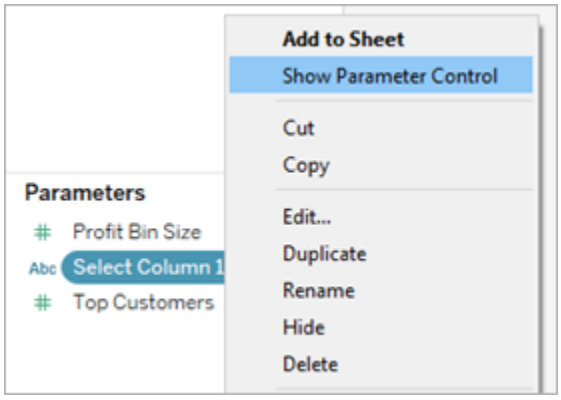
Parameter name	Calculated field name
Select Column 2 Heading	Column 2 Category
Select Row 1 Heading	Row 1 Category
Select Row 2 Heading	Row 2 Category

5. The basic formula for each calculated field is the same as in the previous step, except that you reference a different parameter in each `CASEstatement`.

Give viewers a way to interact with views

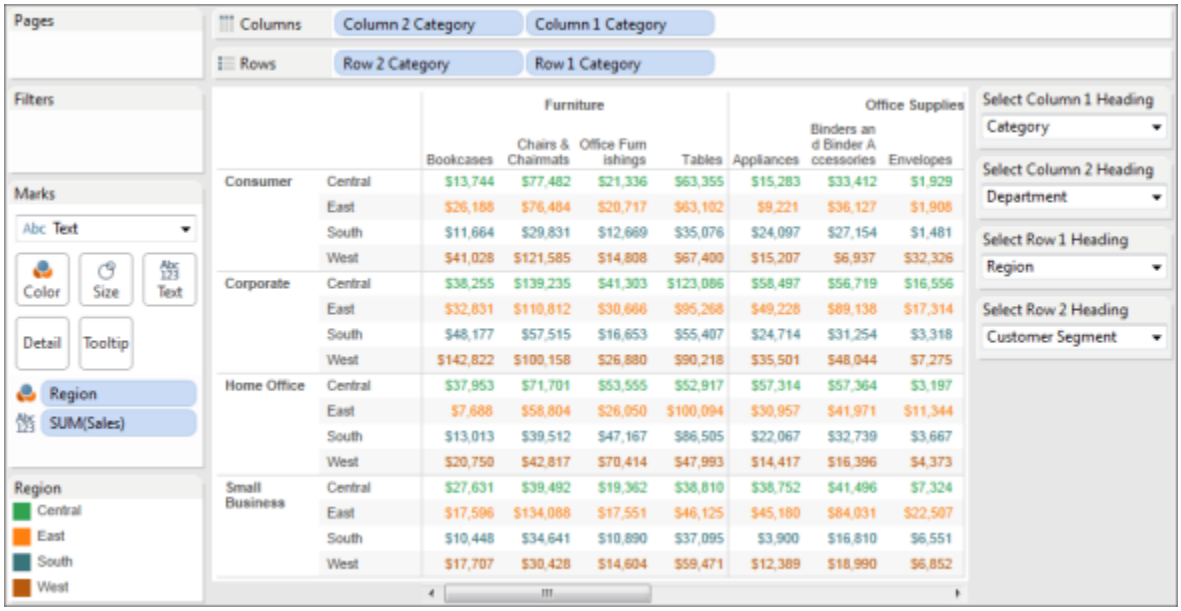
Next, expose the parameter control so users can select the categories they want to display.

1. For each parameter you created, do the following:
   Under Parameters, right-click the parameter and select Show Parameter Control.



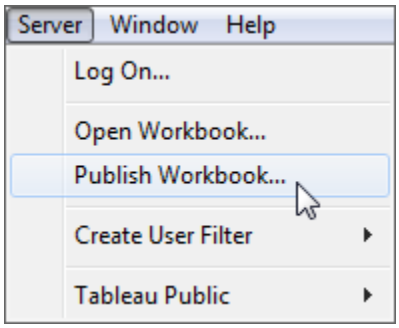
2. From the Data pane, drag the calculated fields you created to the Columns and Rows shelves.
3. From the Data pane, drag a measure to the view. In this example, Sales is placed on Label on the Marks card.

4. Test your parameters by selecting fields in the parameter controls.
   Tips:
   - Sort the dynamic dimension fields alphabetically.
   - Hide field labels for rows and columns.



5.

6. Reset all parameters to None and publish the workbook to Tableau Server.



Viewers can set up their own reports, save their parameter settings, and share views with others.