

PUBLIC

SAP ANALYTICS CLOUD, ANALYTICS DESIGNER, IN ACTION

ANA362

Exercises / Solutions

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BEFORE YOU START

Due to time constraints during the Hands-on session, it is recommended that you first take a look at the different exercises and then decide which ones you want to work through first.

Exercise 1: ANA362_Exercise_1

Estimated Duration: **[90] minutes**

With this exercise you are going to create a simple responsive analytical application and embed it into a HTML page and run it with your mobile phone.

Exercise 2: ANA362_Exercise_2

Estimated Duration: **[45] minutes**

With this exercise you will be able to explore and use the Generic Template.

With this template you will have the possibility to select and modify your Data Set using the available functionalities.

Exercise 3: AIN362_Exercise_3

Estimated Duration: **[45] minutes**

Here you are going to create a simple feedback to ask user to enter the rating of a web page and then calculate the average score of this web page.

You are going to leverage the responsive capability of analytics designer and integration with SAC planning capability to implement this scenario.

All the exercises are independent from each other. You can choose the exercise to work on based on your knowledge and interest.

Connect to Sap Analytics Cloud

you can directly type the following address in your Google Chrome:

<https://ANA362.eu10.hcs.cloud.sap>

ANA362 EXERCISE 1

Overview

Estimated time: [60] minutes

Objective

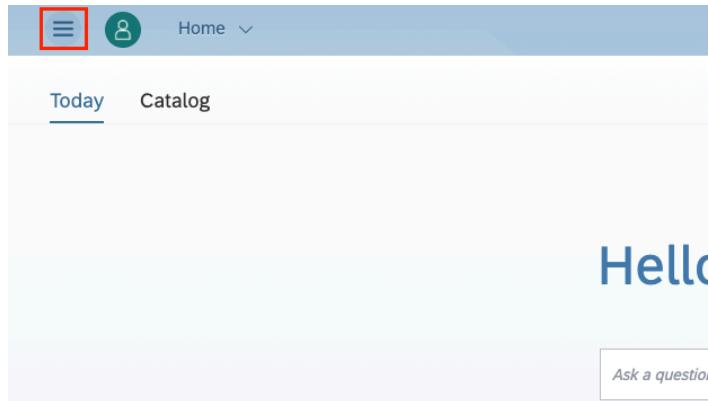
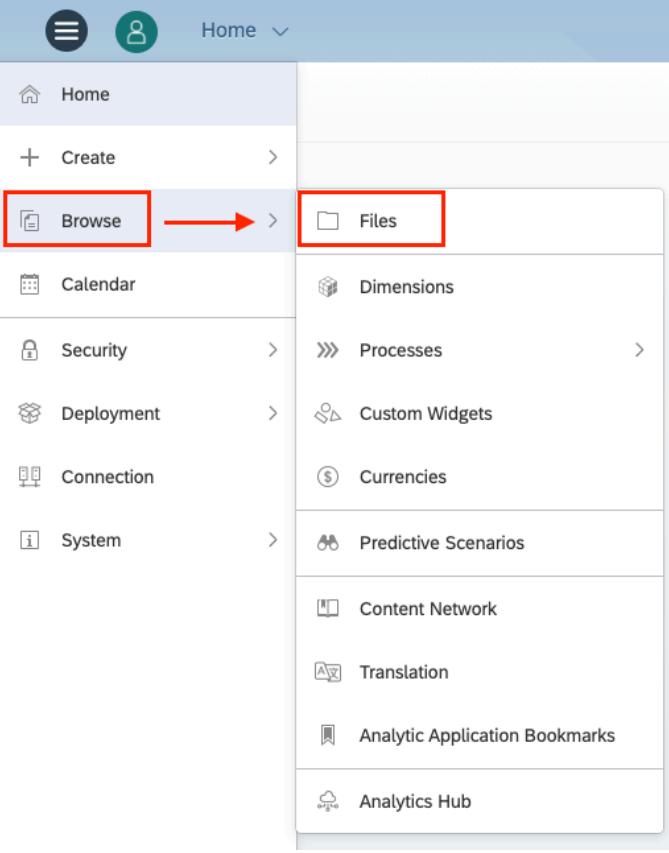
With this exercise you will be able to learn the basic workflow of creating a simple responsive analytical application with SAC Analytics Designer.

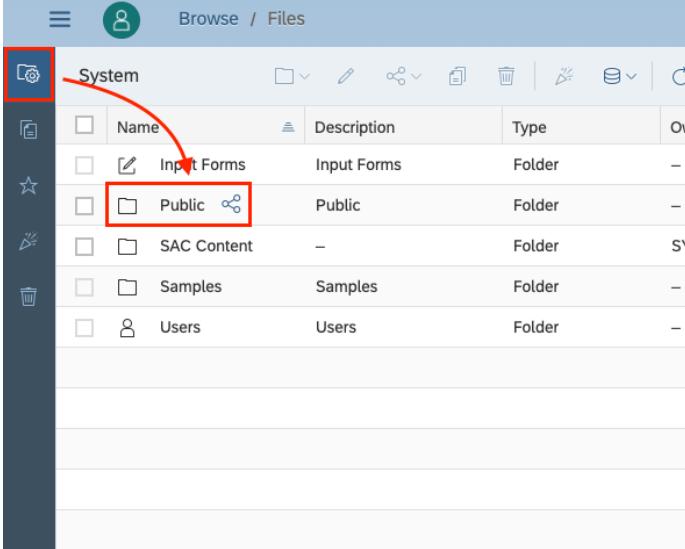
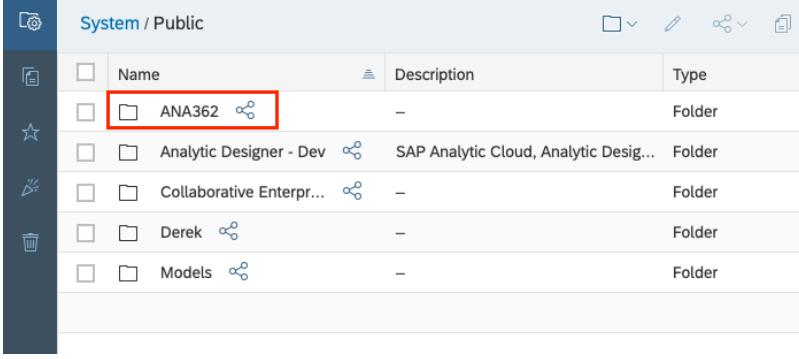
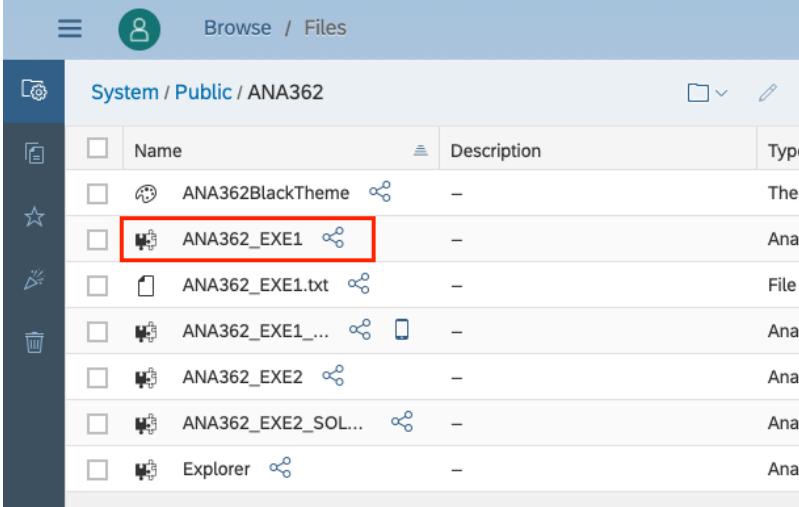
Exercise Description

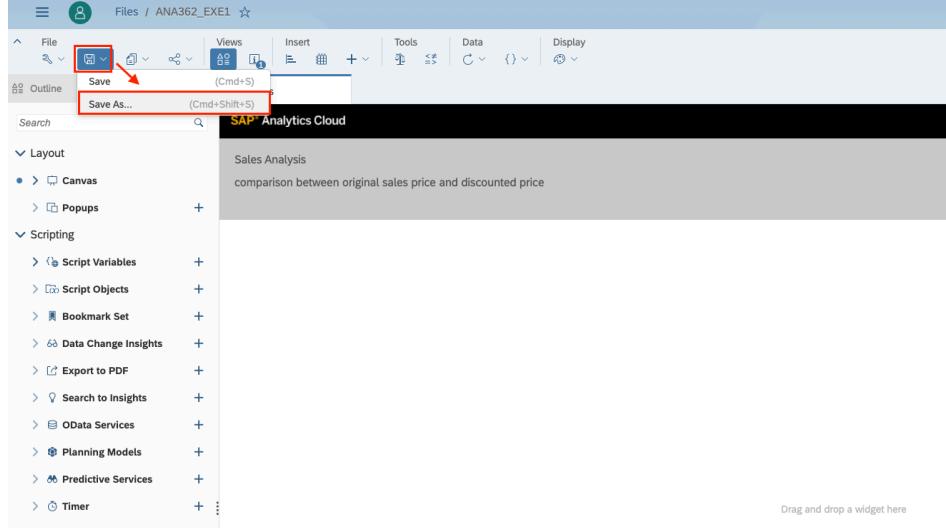
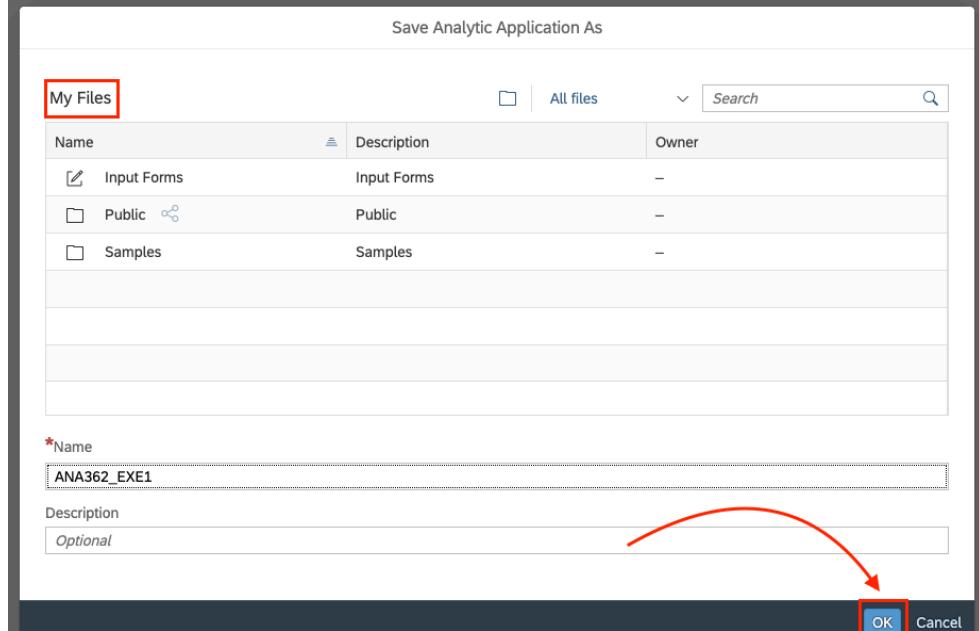
You are going to execute the following steps within this exercise:

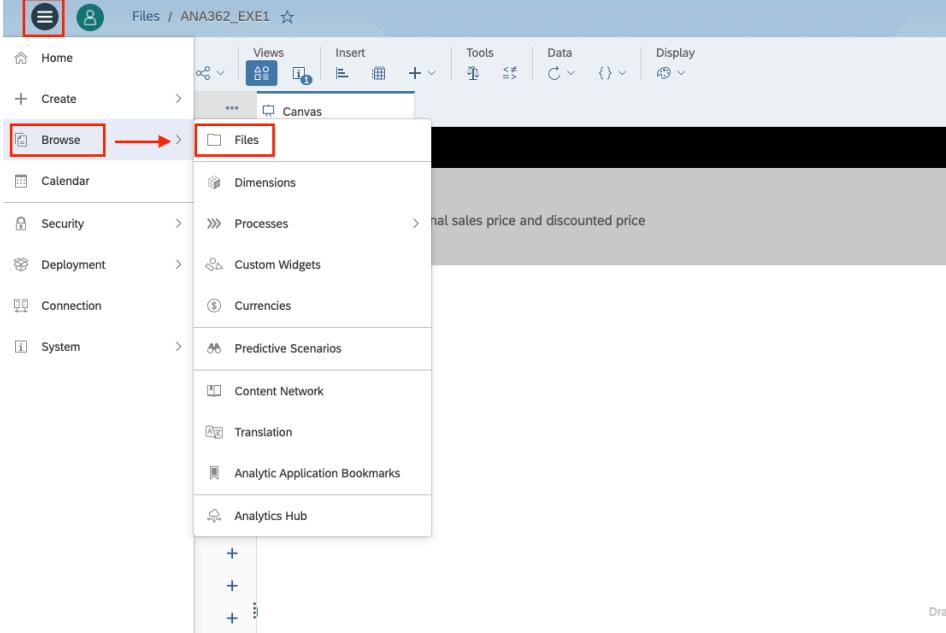
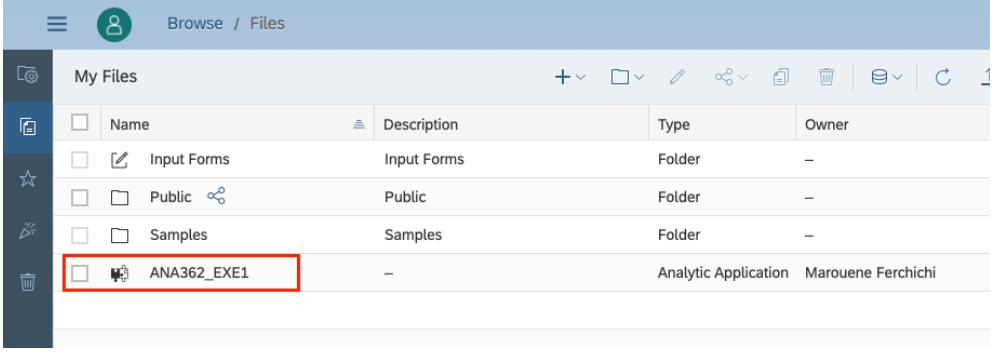
- Add flow panel, charts, table, slider, click event to canvas, configure above objects
- Define Global Script Variable
- Use Global Script Variable for calculated measures
- Set the application to mobile enabled
- Create a theme ANA362_XXBLACKTHEME, Assign application to theme
- Download SAC iOS Mobile APP and run the application
- Embedding: Add windows post message and post message received, adjust html, and run the application within HTML5

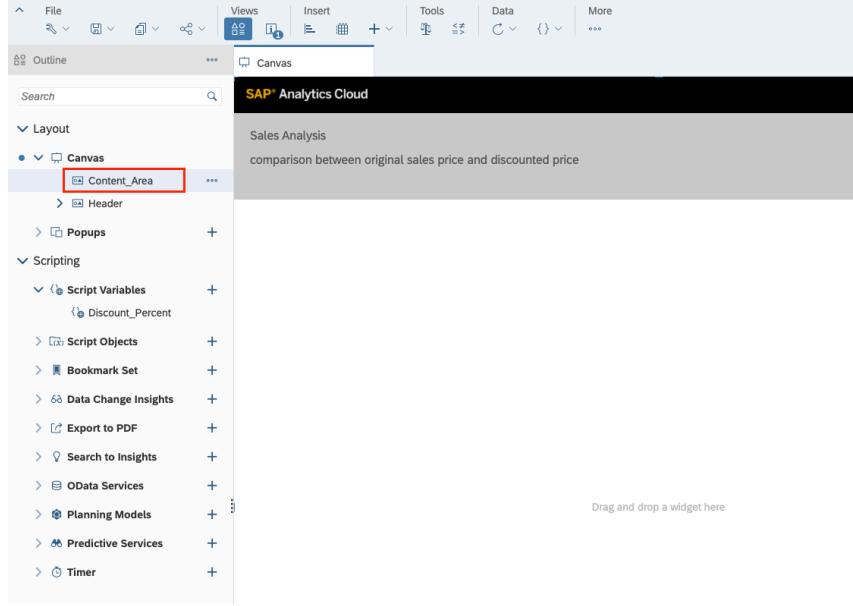
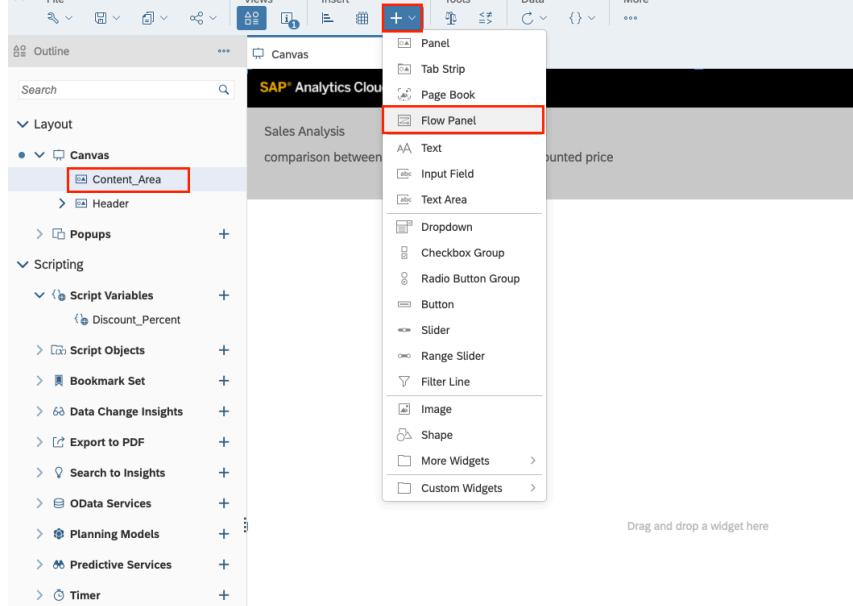
Part 1: Add Flow Panel, Slider, Text to the Canvas & Create a Script Variable

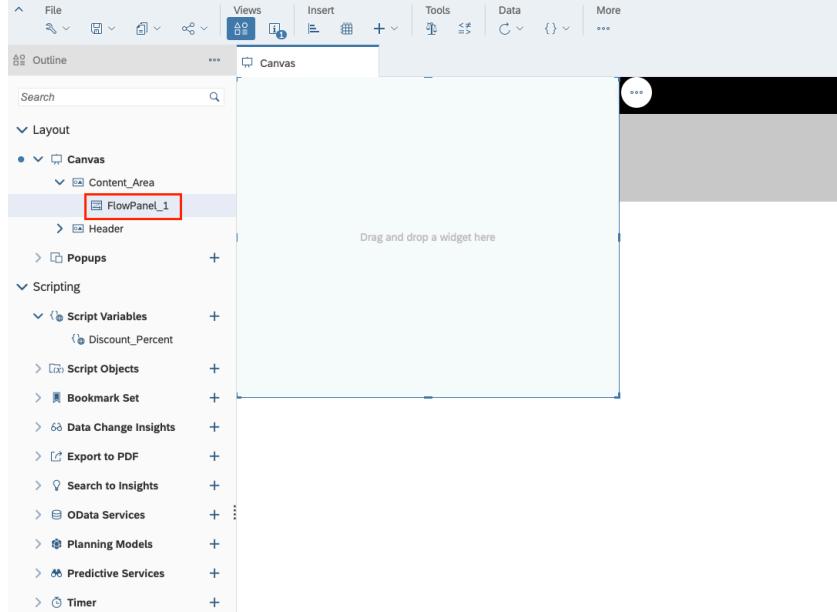
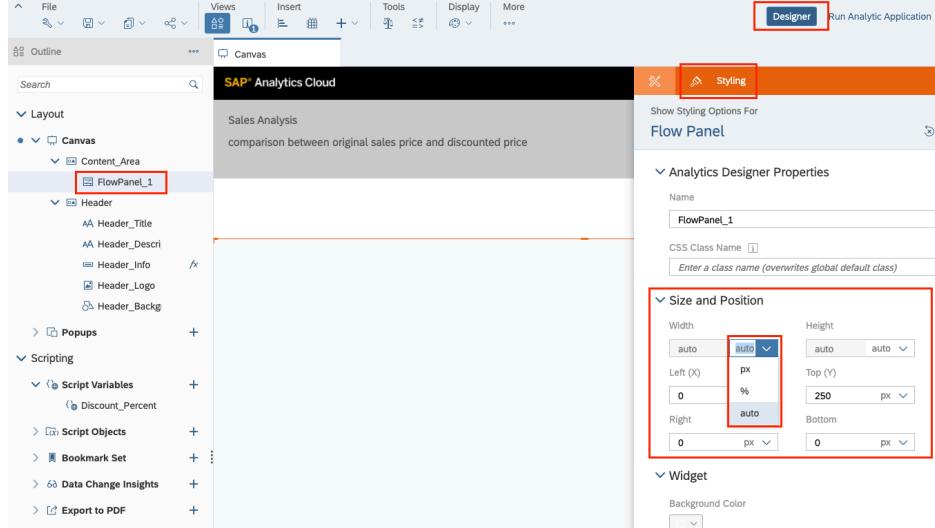
Explanation	Screenshot
1. Click on the Main Menu icon	 <p>The screenshot shows the main menu interface. The top navigation bar includes a main menu icon (three horizontal lines), a user profile icon, and the text "Home". Below the navigation bar, there are two tabs: "Today" (underlined) and "Catalog". A large blue banner with the word "Hello" is visible. At the bottom right, there is a button labeled "Ask a question".</p>
2. Select Browse and then Files to be able to select your analytical applications.	 <p>The screenshot shows the main menu interface with the sidebar expanded. The "Create" section has a red box around the "Browse" option. An arrow points from "Browse" to the "Files" option, which is also highlighted with a red box. The sidebar lists various categories: Home, Create, Browse, Files, Calendar, Security, Deployment, Connection, System, Dimensions, Processes, Custom Widgets, Currencies, Predictive Scenarios, Content Network, Translation, Analytic Application Bookmarks, and Analytics Hub.</p>

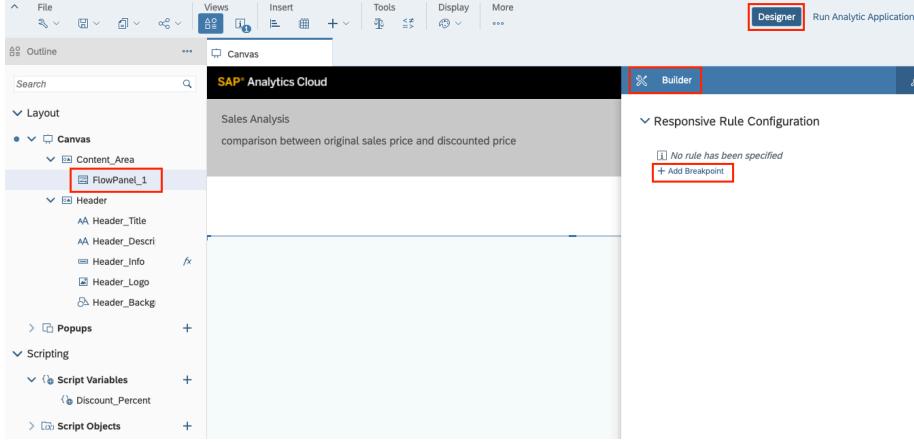
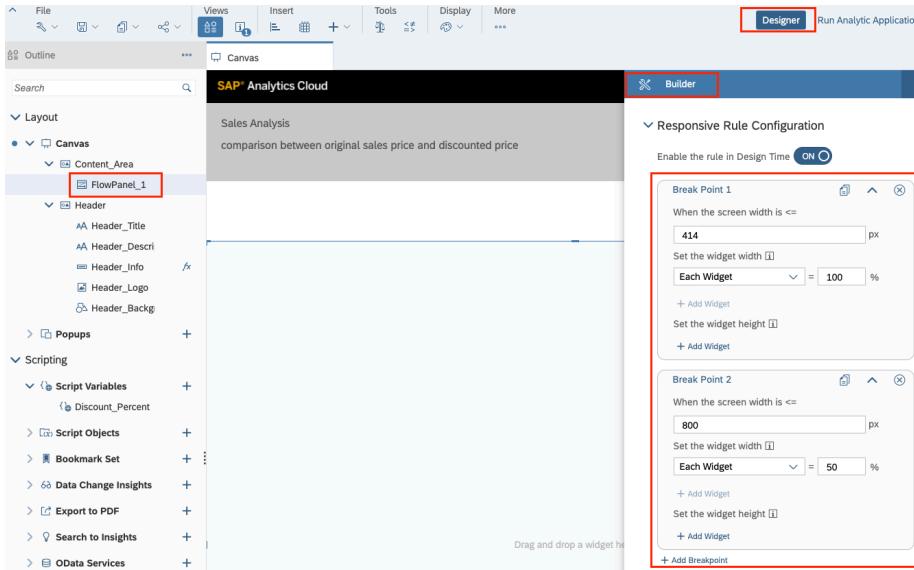
Explanation	Screenshot																								
<p>3. Select the icon System, and then open the folder Public.</p>	 <p>The screenshot shows the SAP Fiori Launchpad with the 'System' icon highlighted in red. A red arrow points from the 'System' icon to the 'Public' folder in the list below. The 'Public' folder is also highlighted with a red box.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>Input Forms</td> <td>Input Forms</td> <td>Folder</td> </tr> <tr> <td>Public</td> <td>Public</td> <td>Folder</td> </tr> <tr> <td>SAC Content</td> <td>—</td> <td>Folder</td> </tr> <tr> <td>Samples</td> <td>Samples</td> <td>Folder</td> </tr> <tr> <td>Users</td> <td>Users</td> <td>Folder</td> </tr> </tbody> </table>	Name	Description	Type	Input Forms	Input Forms	Folder	Public	Public	Folder	SAC Content	—	Folder	Samples	Samples	Folder	Users	Users	Folder						
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<p>4. Navigate to the folder ANA362</p>	 <p>The screenshot shows the SAP Fiori Launchpad with the 'ANA362' folder highlighted in red.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362</td> <td>—</td> <td>Folder</td> </tr> <tr> <td>Analytic Designer - Dev</td> <td>SAP Analytic Cloud, Analytic Desig...</td> <td>Folder</td> </tr> <tr> <td>Collaborative Enterpr...</td> <td>—</td> <td>Folder</td> </tr> <tr> <td>Derek</td> <td>—</td> <td>Folder</td> </tr> <tr> <td>Models</td> <td>—</td> <td>Folder</td> </tr> </tbody> </table>	Name	Description	Type	ANA362	—	Folder	Analytic Designer - Dev	SAP Analytic Cloud, Analytic Desig...	Folder	Collaborative Enterpr...	—	Folder	Derek	—	Folder	Models	—	Folder						
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<p>5. Click on the exercise ANA362_EXE1 to open it and then you will save it with My Files folder.</p>	 <p>The screenshot shows the SAP Fiori Launchpad with the 'ANA362_EXE1' file highlighted in red.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362BlackTheme</td> <td>—</td> <td>Theme</td> </tr> <tr> <td>ANA362_EXE1</td> <td>—</td> <td>Anal...</td> </tr> <tr> <td>ANA362_EXE1.txt</td> <td>—</td> <td>File</td> </tr> <tr> <td>ANA362_EXE1_...</td> <td>—</td> <td>Anal...</td> </tr> <tr> <td>ANA362_EXE2</td> <td>—</td> <td>Anal...</td> </tr> <tr> <td>ANA362_EXE2_SOL...</td> <td>—</td> <td>Anal...</td> </tr> <tr> <td>Explorer</td> <td>—</td> <td>Anal...</td> </tr> </tbody> </table>	Name	Description	Type	ANA362BlackTheme	—	Theme	ANA362_EXE1	—	Anal...	ANA362_EXE1.txt	—	File	ANA362_EXE1_...	—	Anal...	ANA362_EXE2	—	Anal...	ANA362_EXE2_SOL...	—	Anal...	Explorer	—	Anal...
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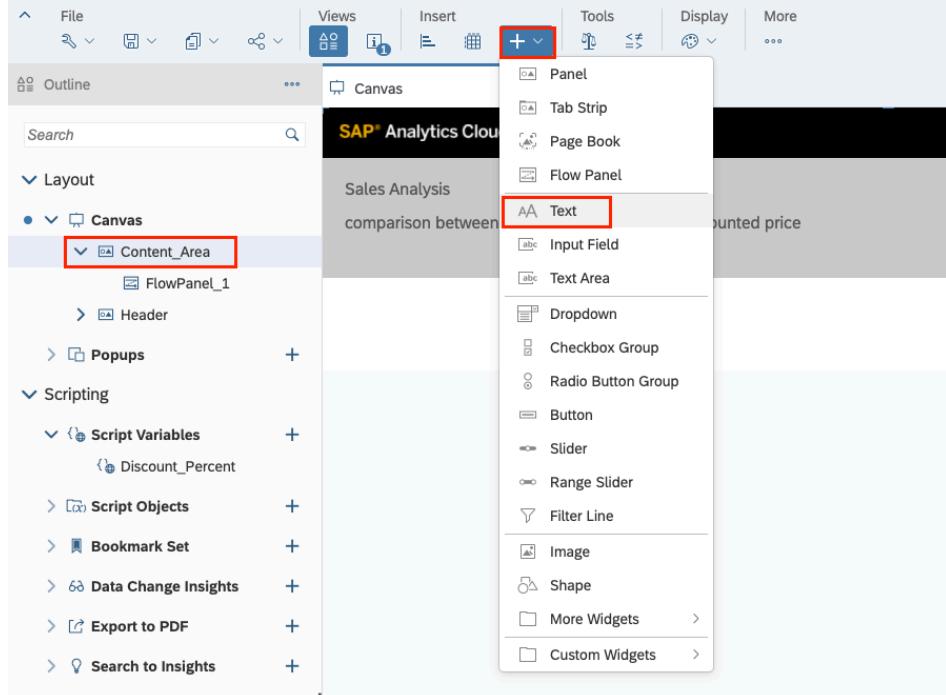
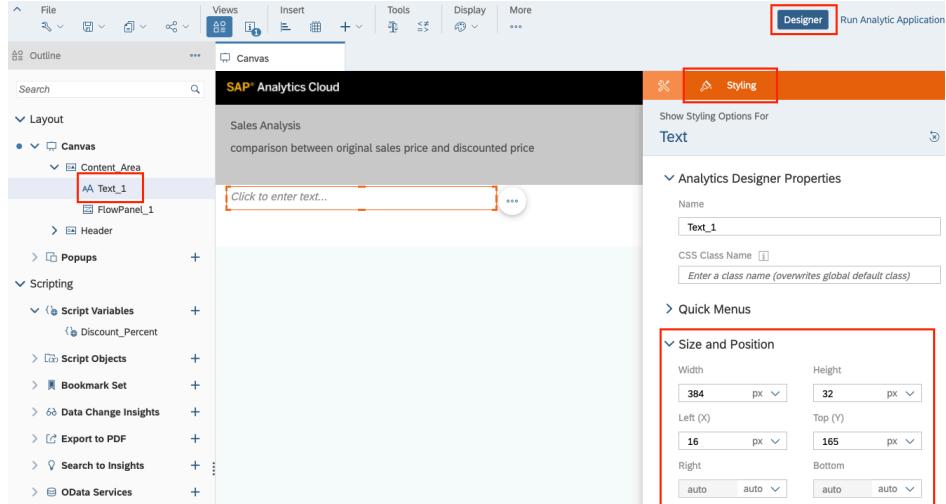
Explanation	Screenshot
<p>6. Before you start the different steps of the exercise, first of all YOU SHOULD save the application under My Files and rename it so you can work on your own application.</p> <p>Click on the Save icon → Save As</p>	
<p>7. Be sure that you are under the folder My Files.</p> <p>Press OK and the application will be saved under your private folder My Files</p>	

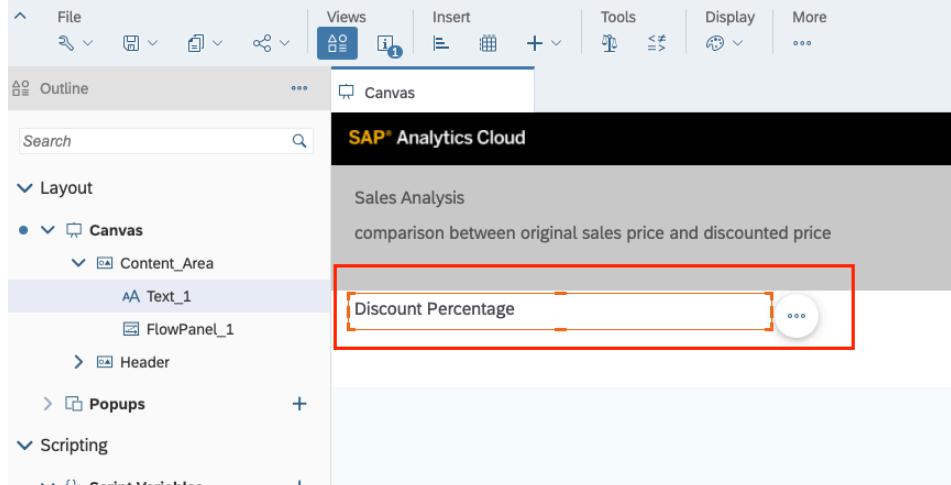
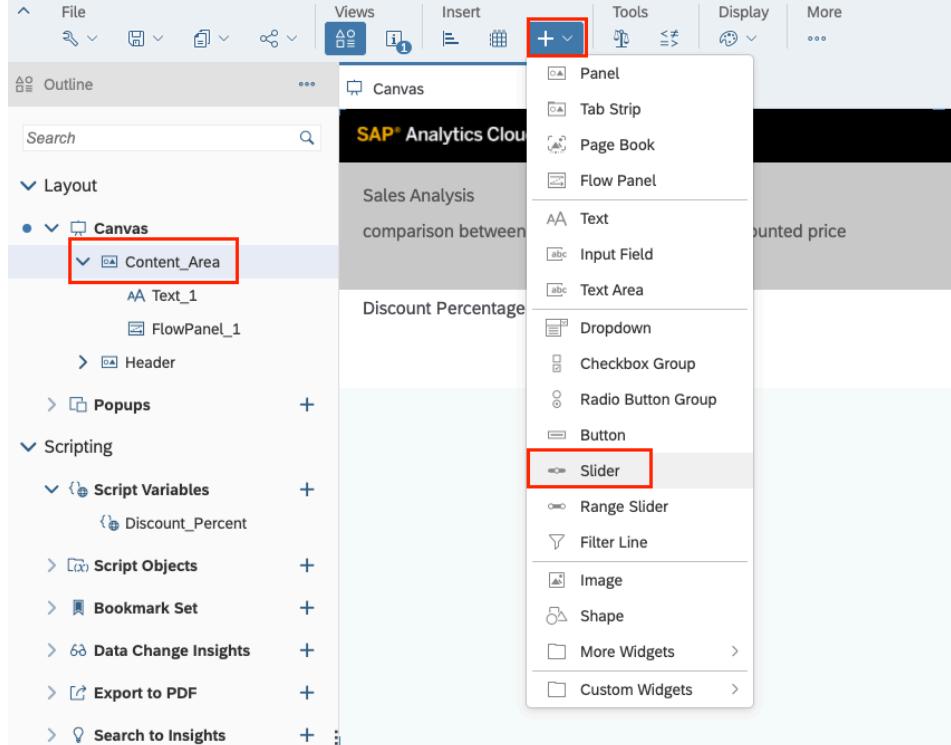
Explanation	Screenshot
<p>8. Now you can navigate back to My Files again in order to see your application.</p>	 <p>The screenshot shows the SAP Fiori Launchpad interface. On the left, there's a navigation bar with icons for Home, Create, Browse, Calendar, Security, Deployment, Connection, and System. The 'Browse' icon is highlighted with a red box and has a red arrow pointing to it. On the right, there's a list of items under 'Views': Canvas, Files (which is also highlighted with a red box), Dimensions, Processes, Custom Widgets, Currencies, Predictive Scenarios, Content Network, Translation, Analytic Application Bookmarks, and Analytics Hub. Below this is a section with three '+' buttons and a 'Drag' placeholder.</p>
<p>9. Click on the exercise ANA362_EXE1 to open it within My Files folder.</p>	 <p>The screenshot shows the 'My Files' list view. It has a header with columns: Name, Description, Type, and Owner. There are four entries: 'Input Forms' (Folder, Owner -), 'Public' (Folder, Owner -), 'Samples' (Folder, Owner -), and 'ANA362_EXE1' (Analytic Application, Owner: Marouene Ferchichi). The 'ANA362_EXE1' entry is highlighted with a red box.</p>

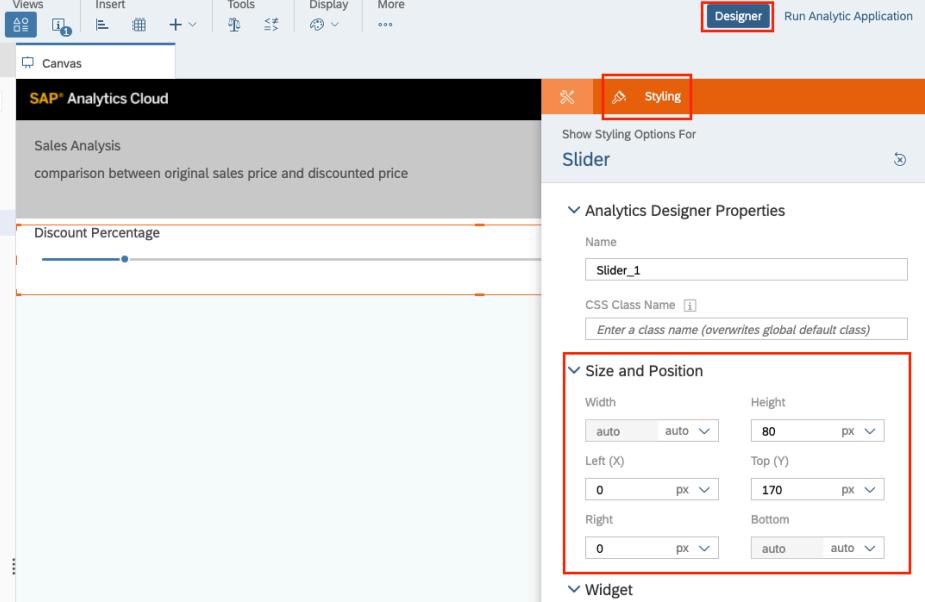
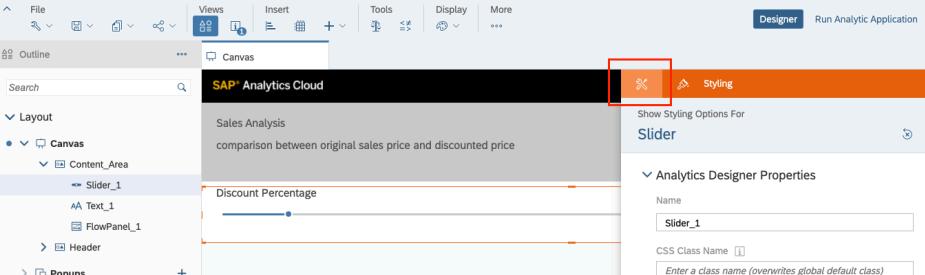
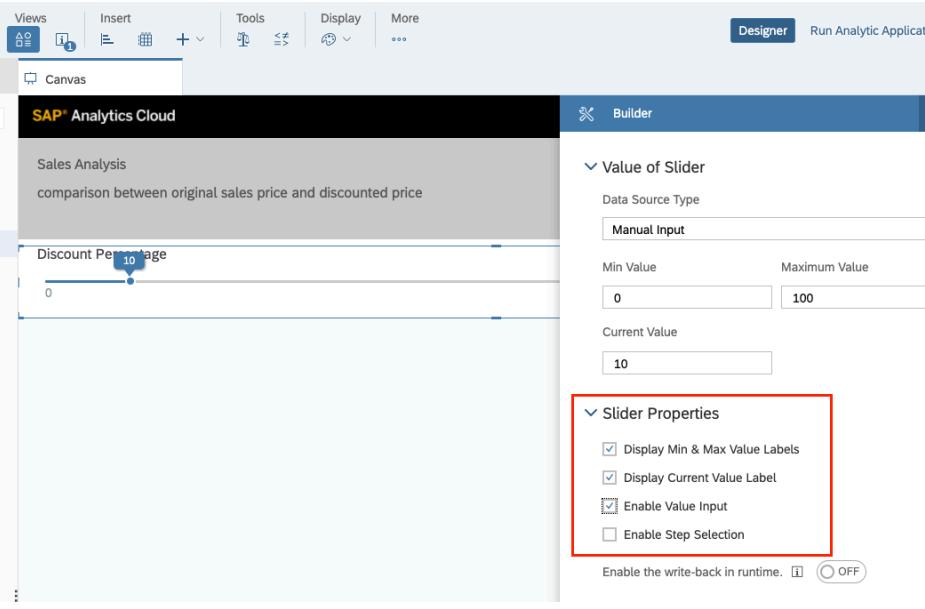
Explanation	Screenshot
<p>10. Now you will add a Flow Panel widget to the canvas under the Content Area. Please switch to the Content Area by clicking on Content_Area from the layout panel on the left.</p>	
<p>11. Move to insert from the toolbar and click on the + sign, then select the widget Flow Panel.</p>	

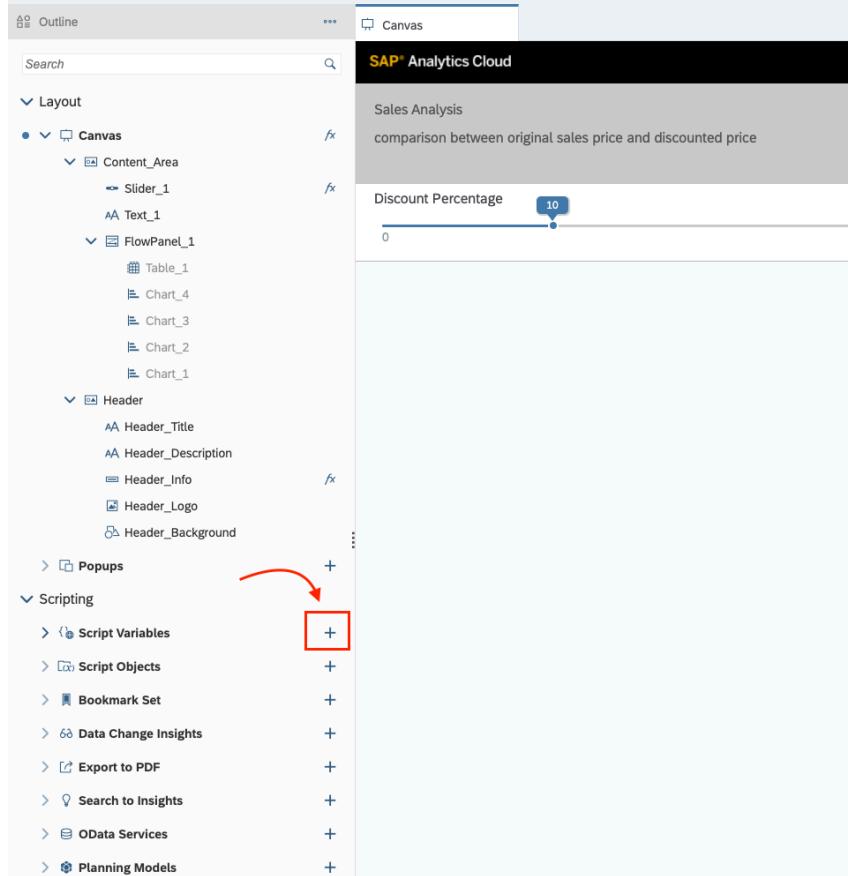
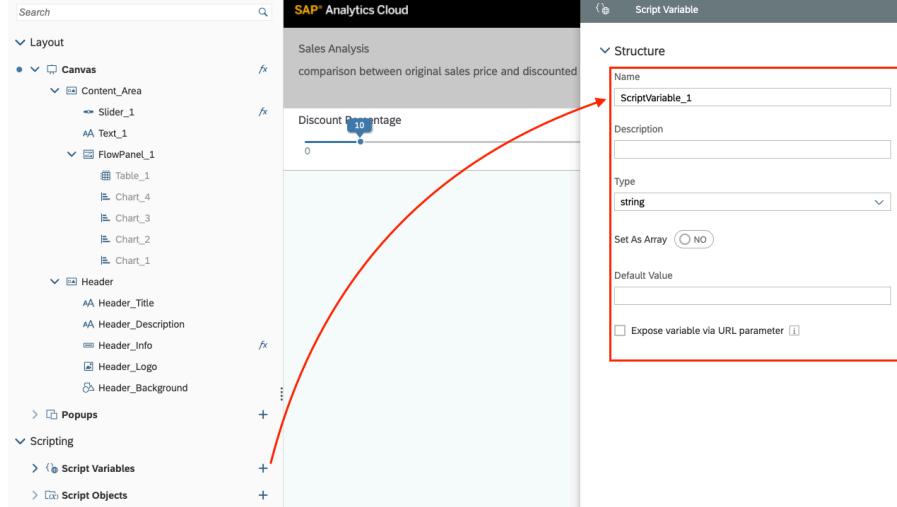
Explanation	Screenshot
<p>12. As you can see that the new widget (Flow Panel) was added as a new component in the Layout under Content Area.</p> <p>Please pay attention, FlowPanel_1 should be under the Content Area.</p>	
<p>13. Define the layout configuration of the Flow Panel by opening the designer panel then to Styling.</p> <p>Change the default configuration to:</p> <p>Width: auto Height: auto Left: 0 px Top: 250 px Right: 0 px Bottom: 0 px</p>	

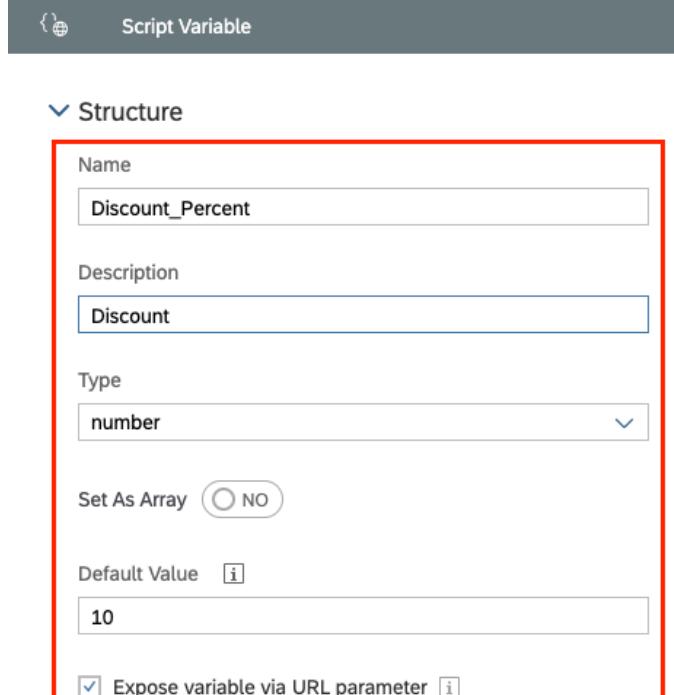
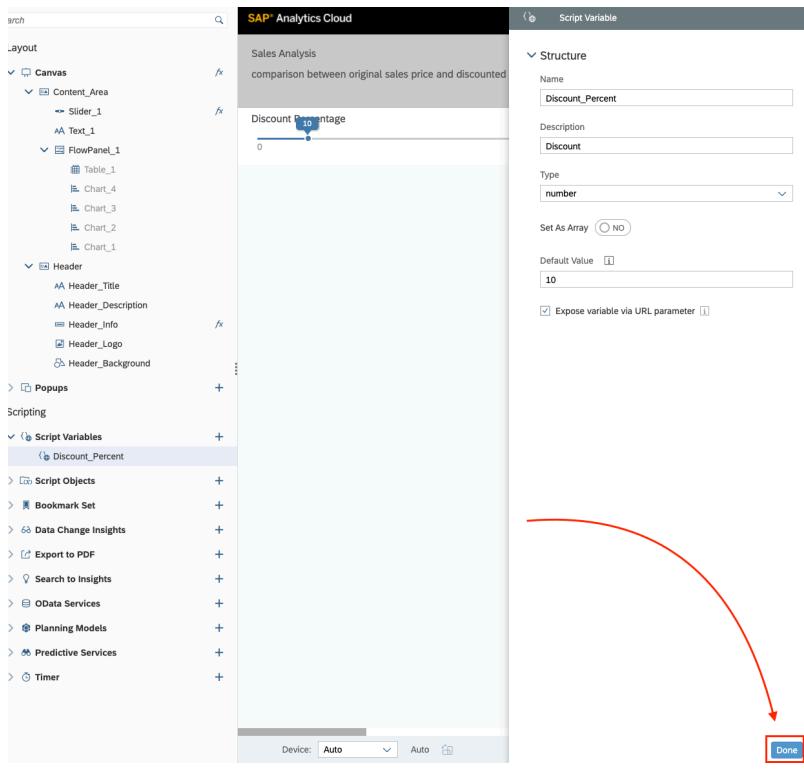
Explanation	Screenshot
<p>14. Define the responsive rule configuration of the Flow Panel by adding 2 Break point in order to set the behave of the widget with the different screen size.</p>	
<p>15. Define the break points as shown in the screenshot:</p> <p>Break Point 1: Screen Width: 414 px Widget width: Each widget = 100%</p> <p>Break Point 2: Screen Width: 800 px Widget width: Each widget = 50%</p>	

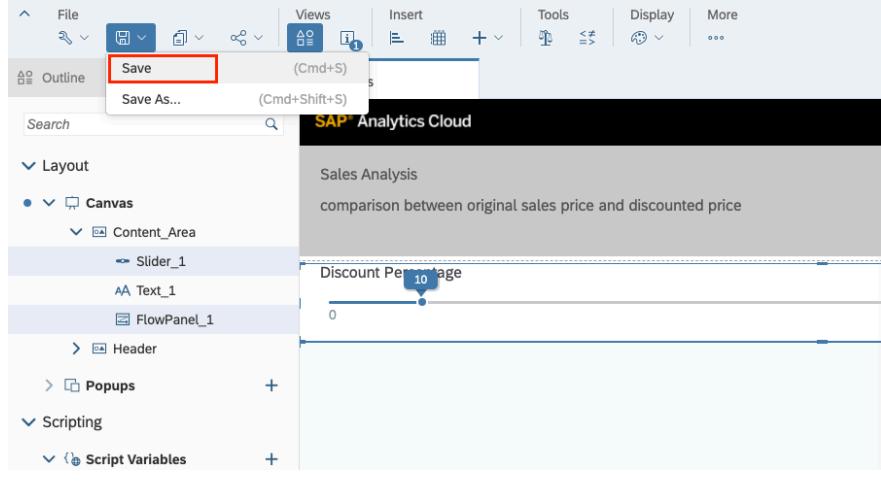
Explanation	Screenshot
<p>16. Let's add a Text Widget.</p> <p>This widget will be used as a description for the Slider that we will insert later.</p> <p>Click on the (+) sign from the insert toolbar and then select Text.</p> <p>You should select Content_Area from the Outline Panel in order to have the Text Widget under Content Area.</p>	
<p>17. Define the layout configuration of the Text widget:</p> <p>Width: 384 px Height: 32 px Left: 16 px Top: 165 px Right: auto Bottom: auto</p>	

Explanation	Screenshot
<p>18. Enter Discount Percentage in the text field.</p>	
<p>19. Now we will add a Slider widget to the Content Area.</p> <p>Click on the plus sign again (+) to insert the Slider.</p>	

Explanation	Screenshot
<p>20. Define the layout configuration of the Slider widget:</p> <p>Width: auto Height: 80 px Left: 0 px Top: 170 px Right: 0 px Bottom: auto</p>	
<p>21. Toggle the Designer panel to the Builder panel.</p>	
<p>22. Select the following options for the Slider:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Display Min & Max Value Labels <input checked="" type="checkbox"/> Display Current Value Label <input checked="" type="checkbox"/> Enable Value Input <input type="checkbox"/> Enable Step Selection 	

Explanation	Screenshot
<p>23. With the previous step we defined the Slider as widget. Now, we are going to define a script variable to represent the current selected (via slider) discount value.</p> <p>Go to Scripting → Script Variable View. Click on the icon + to add a new Variable.</p>	
<p>24. As next a new Panel will be opened. Let's Configure our Script Variable.</p>	

Explanation	Screenshot
<p>25. Let's enter some configurations:</p> <p>Name: Discount_Percent</p> <p>Description: Discount</p> <p>Type: number (because the variable should represent numerical values)</p> <p>Default Value: 10</p> <p>Check the: "Expose variable via URL parameter" (This option enables you to pass script variable values via a URL parameter.)</p>	 <p>The screenshot shows the SAP Analytics Cloud interface with the 'Script Variable' configuration panel open. The 'Structure' section is highlighted with a red box. It contains fields for Name (Discount_Percent), Description (Discount), Type (number), Default Value (10), and a checked checkbox for 'Expose variable via URL parameter'. The 'Set As Array' option is set to 'NO'.</p>
<p>26. Click the button Done to close the configuration panel.</p>	 <p>The screenshot shows the SAP Analytics Cloud interface with the configuration panel closed. A red arrow points from the previous screenshot to the 'Done' button at the bottom right of the configuration panel.</p>

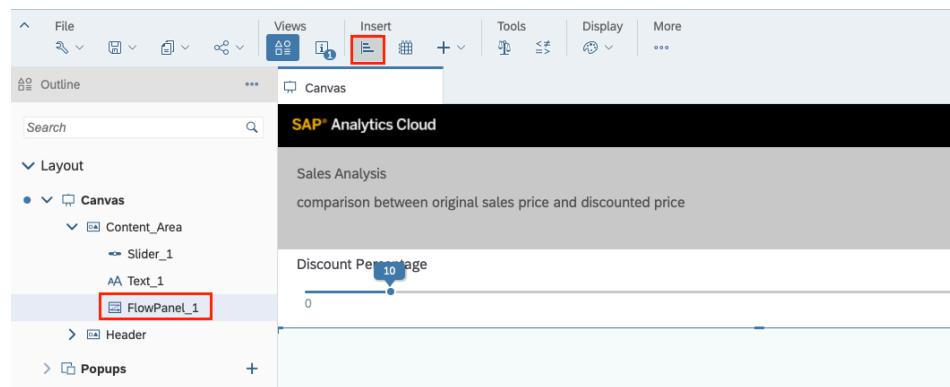
Explanation	Screenshot
27. Click on the floppy disk icon, then select Save from the display options.	 A screenshot of the SAP Analytics Cloud interface. The top navigation bar includes 'File' with a floppy disk icon, 'Views', 'Insert', 'Tools', 'Display', and 'More'. A dropdown menu is open under 'File' with 'Save' highlighted by a red box. Below the menu is a search bar and the text 'SAP Analytics Cloud'. The main workspace shows a title 'Sales Analysis' and a subtitle 'comparison between original sales price and discounted price'. On the left, a tree view shows 'Content_Area' with 'Slider_1', 'Text_1', and 'FlowPanel_1'. A slider widget labeled 'Discount Percentage' has its value set to 10. The bottom left corner of the slide shows the number 17.

Congratulations! You just finished the part 1 of Exercise 1.

In the **Part 2** of the exercise we are going to add different type of charts and table widget to the Canvas, also writing simple script for widgets

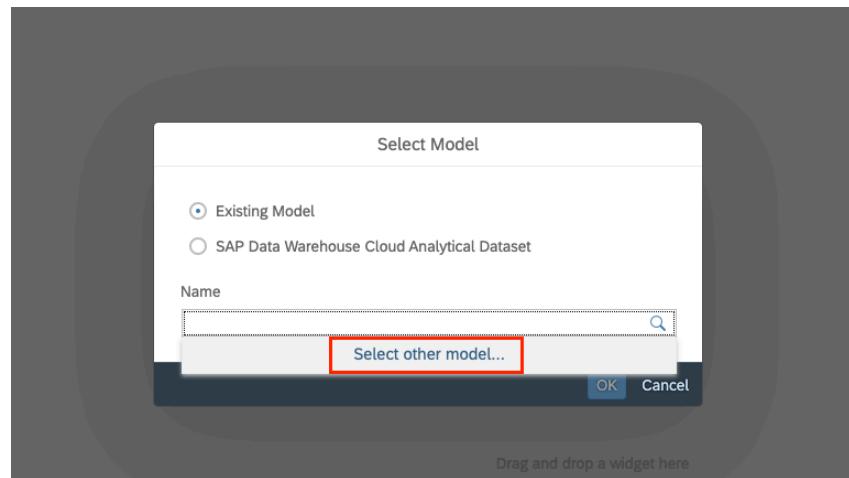
Part 2: Add Charts, Table & Script to Widgets

- Click on the **Chart icon** to add a **Chart (bar chart)** to the canvas under **FlowPanel_1** which should be selected from the outline panel.



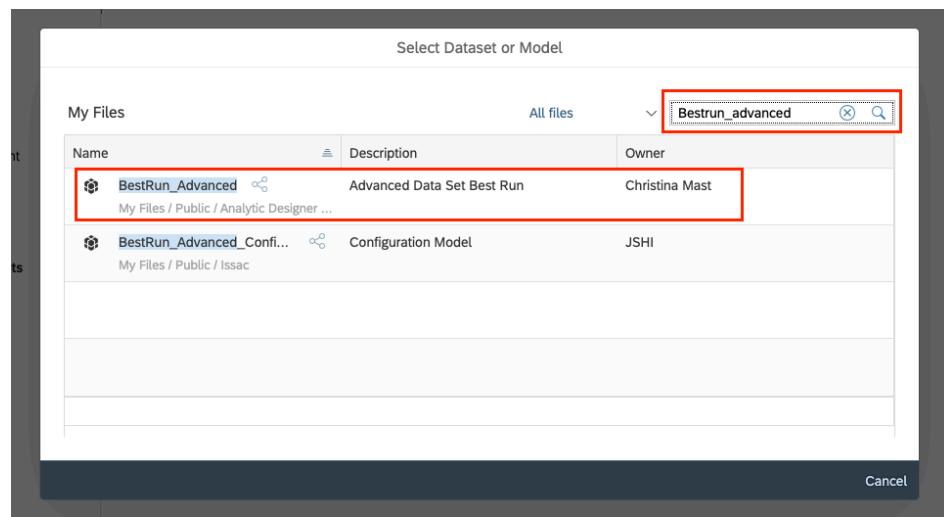
- Now you need to select a data source for the Chart widget. Please use **BestRun_Advanced** as a data source.

To find the data source click on **Select other model**



- Use the **search bar** on the top right from the Pop up to search for our data source as shown on the screenshot:

After you find the data source **BestRun_Advanced** Please select it



4. Toggle to the **Builder** panel to add measure(s) and dimension(s)

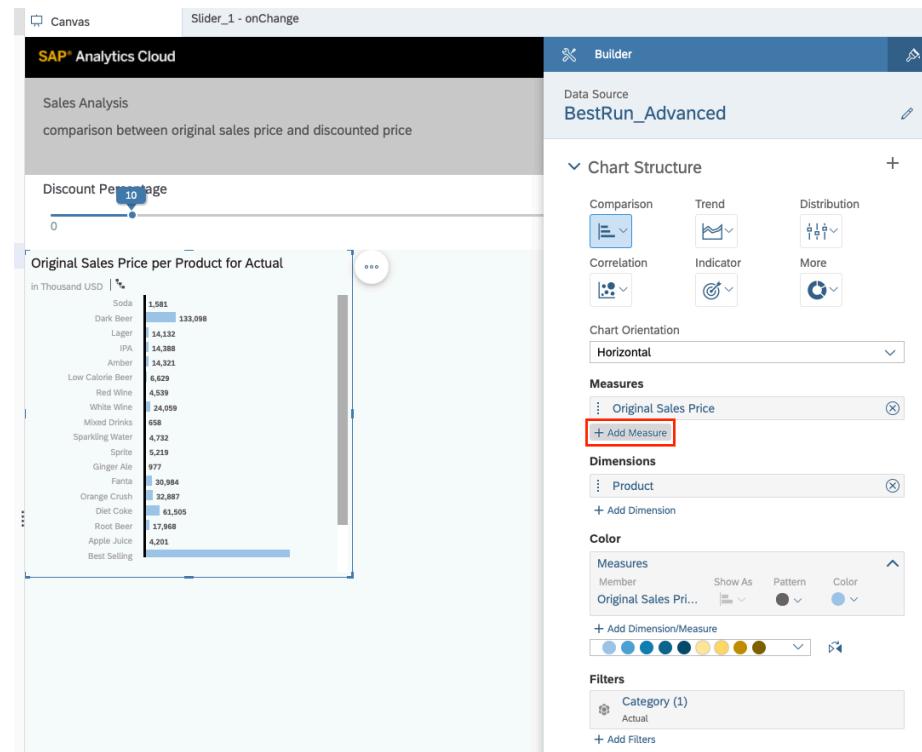
5. Select **Product** as a dimension

6. Select **Original Sales Price** as a measure via Add Measure

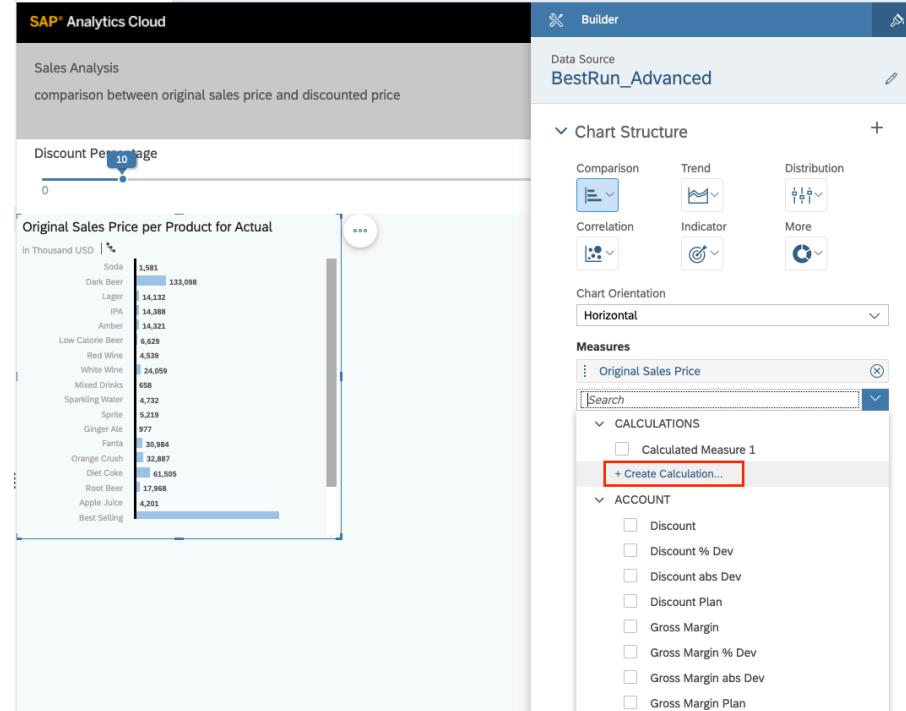
Measure	Value
Original Sales Price	133,098
Dark Beer	14,132
Lager	14,388
IPA	14,321
Amber	6,429
Low Calorie Beer	4,539
Red Wine	24,059
White Wine	658
Mixed Drinks	4,732
Sparkling Water	5,219
Sprite	977
Ginger Ale	30,984
Fanta	32,887
Orange Crush	61,505
Diet Coke	17,968
Root Beer	4,201
Apple Juice	
Best Selling	

7. Let's add a **Calculated Measure** based on the script variable which we already defined in the previous part of the exercise.

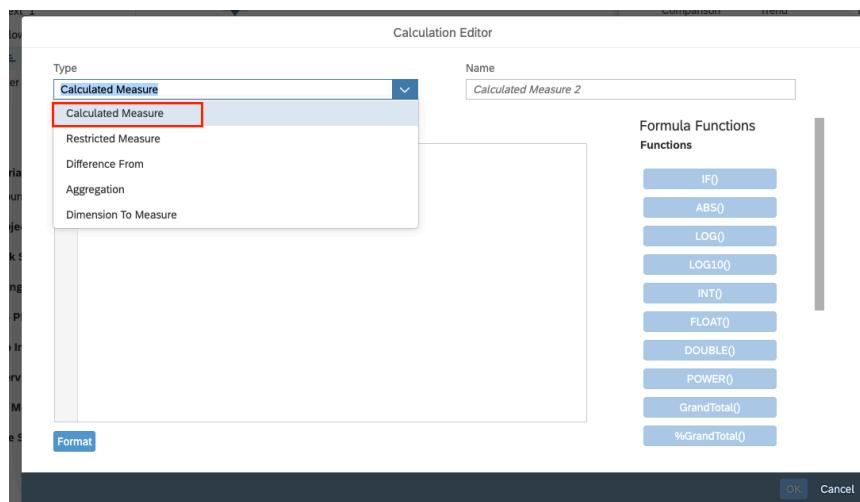
Click add Measure



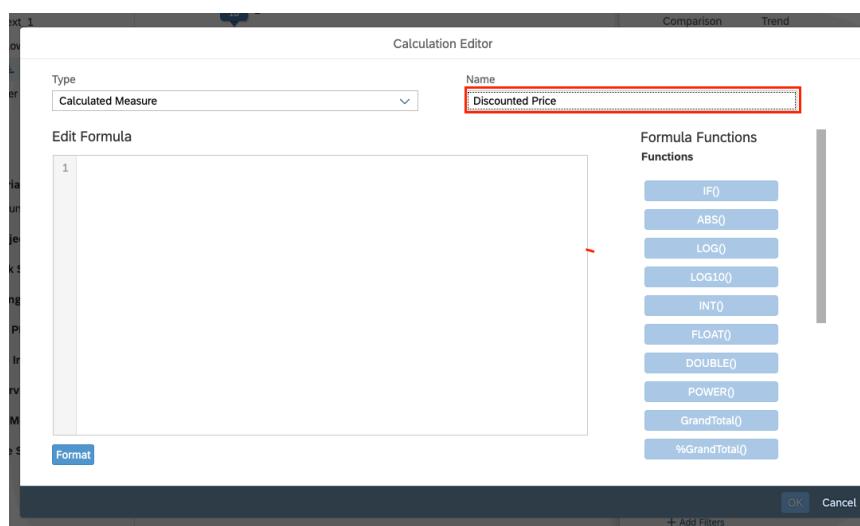
8. Click on **Create Calculation ...**



9. Select **Calculated Measure** as Type.



10. Enter the name of the calculated measure: **Discounted Price**

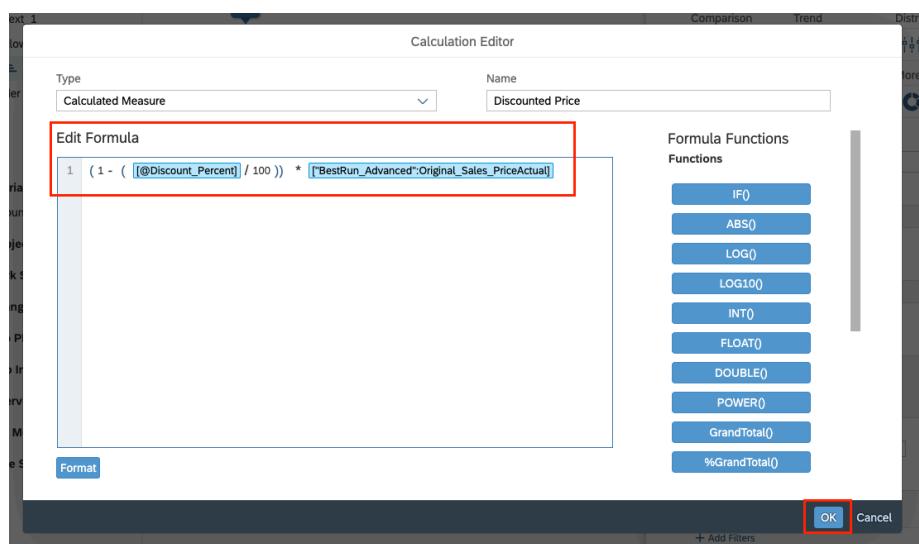


11. Edit the formula and enter:

$(1 - (@Discount_Percent) / 100) * ["BestRun_Advanced":Original_Sales_PriceActual]$

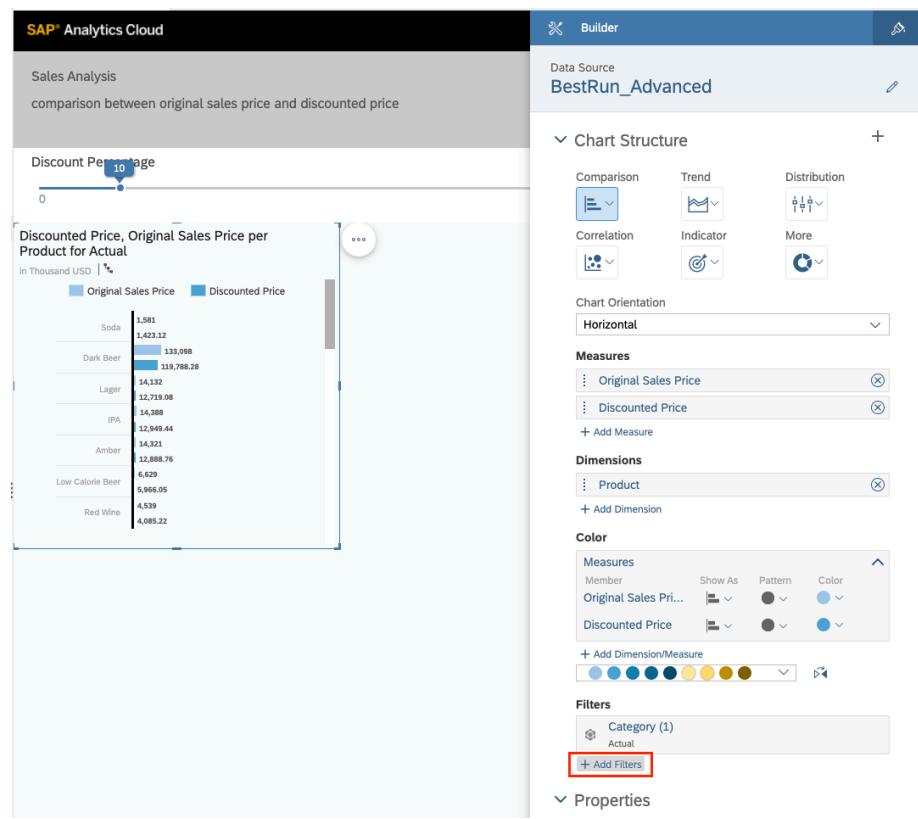
$["BestRun_Advanced":Original_Sales_PriceActual]$

Press **OK** to confirm and to close the Calculation editor as well.

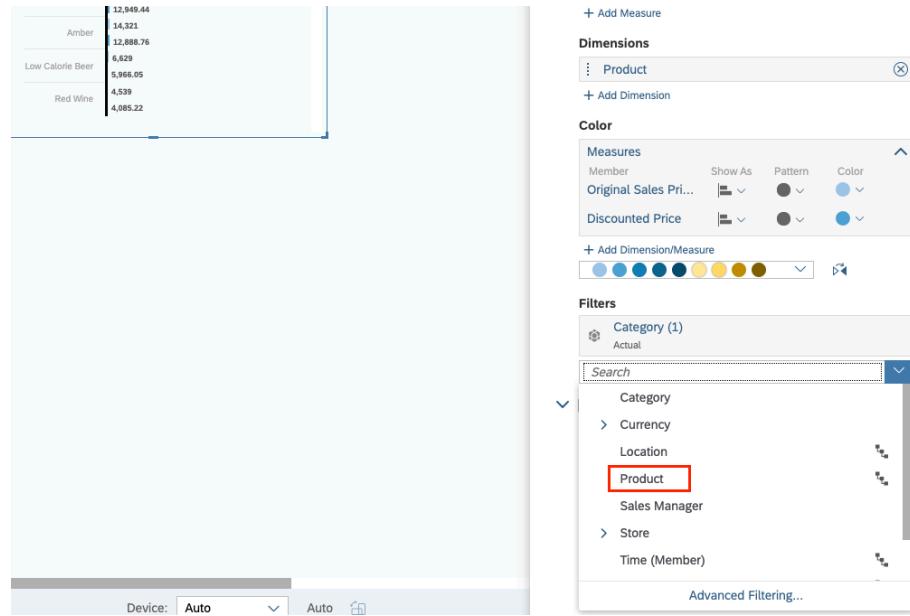


12. After we added 2 measures and 1 dimension, let's add a **filter** in order to show only some specific set of data in the Chart. In that case we will filter on the **Product**:

Click on **Add Filter**

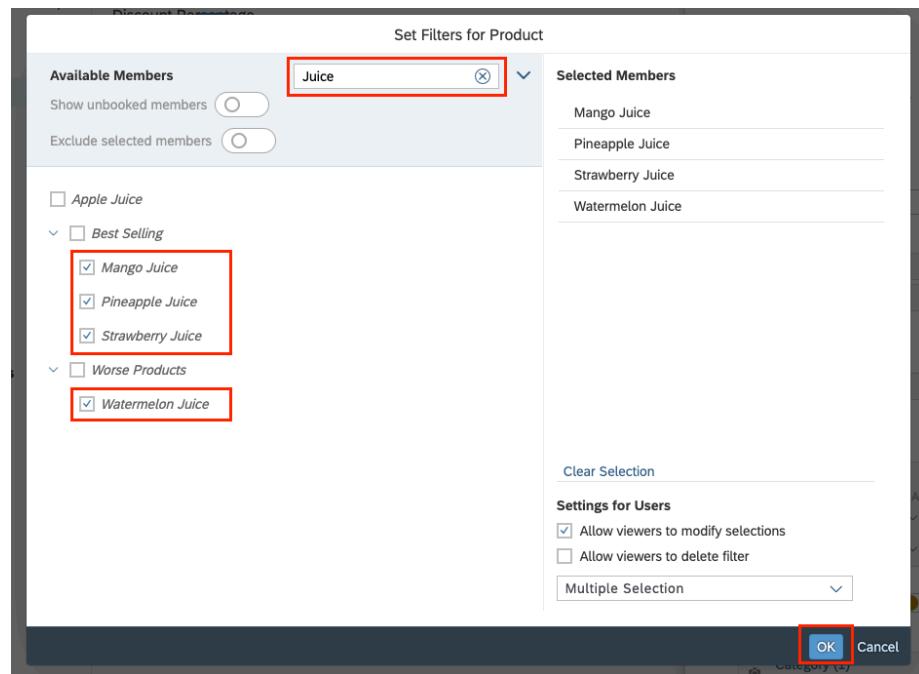


13. Click on **Product**, we want to filter on the Product dimension.

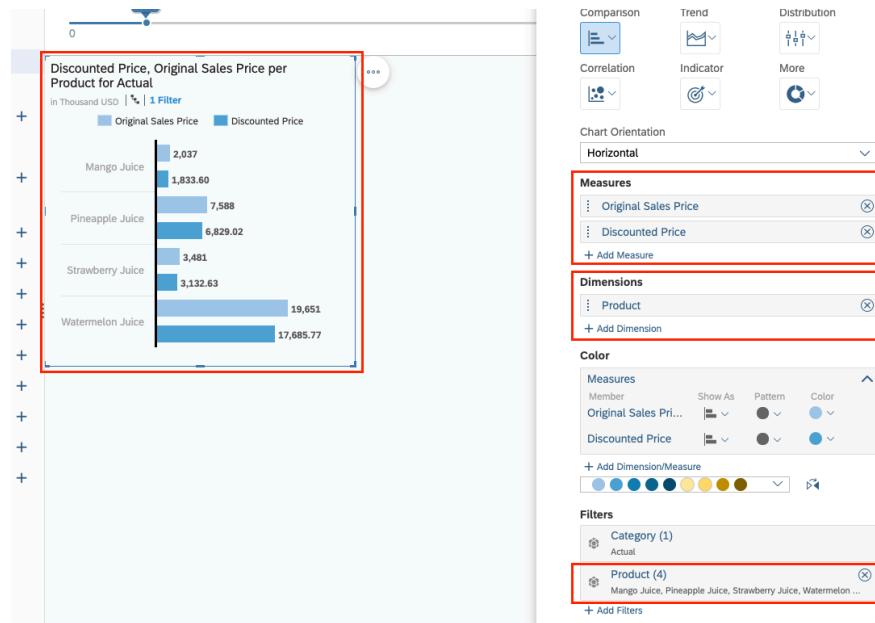


14. Search for Juice.

Select **Mango Juice**, **Pineapple Juice**, **Strawberry Juice** and **Watermelon Juice**.

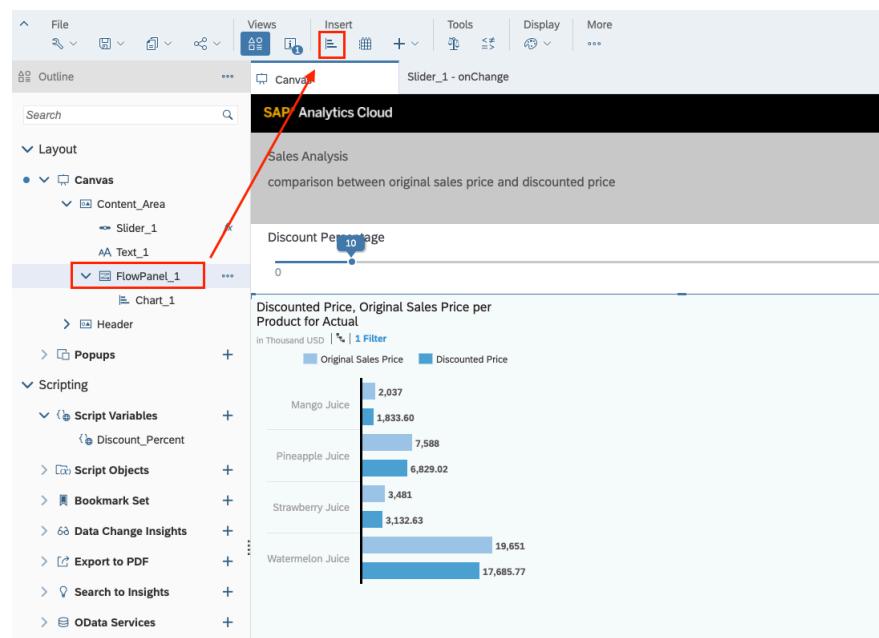
15. Click **OK** to confirm.

16. As you can see the result, we have now built a chart based in 1 dimension which is Product (only Juice Product) and 2 measures:



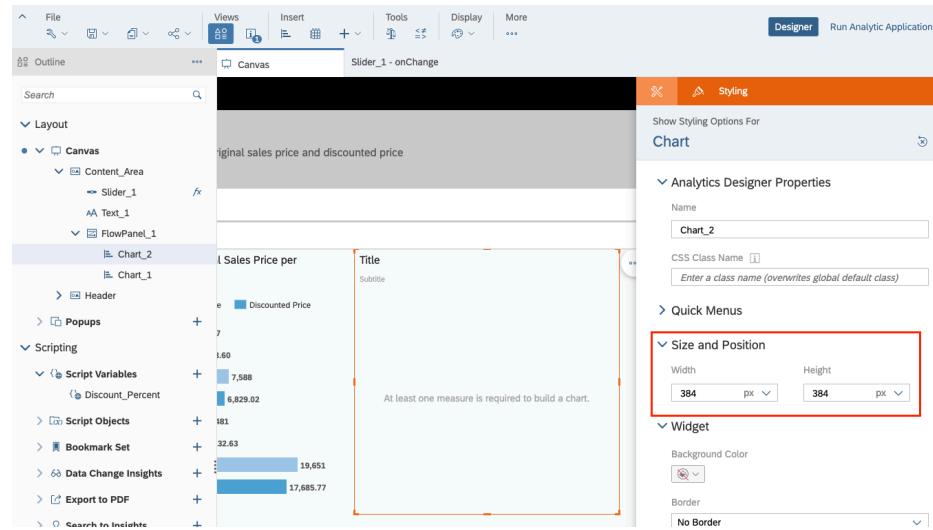
17. Let's add another type of chart a **Tree Map Chart**. Click on the icon **Chart** in order to add another chart widget.

Don't forget to select always the **FlowPanel_1** from the outline before adding the widget.



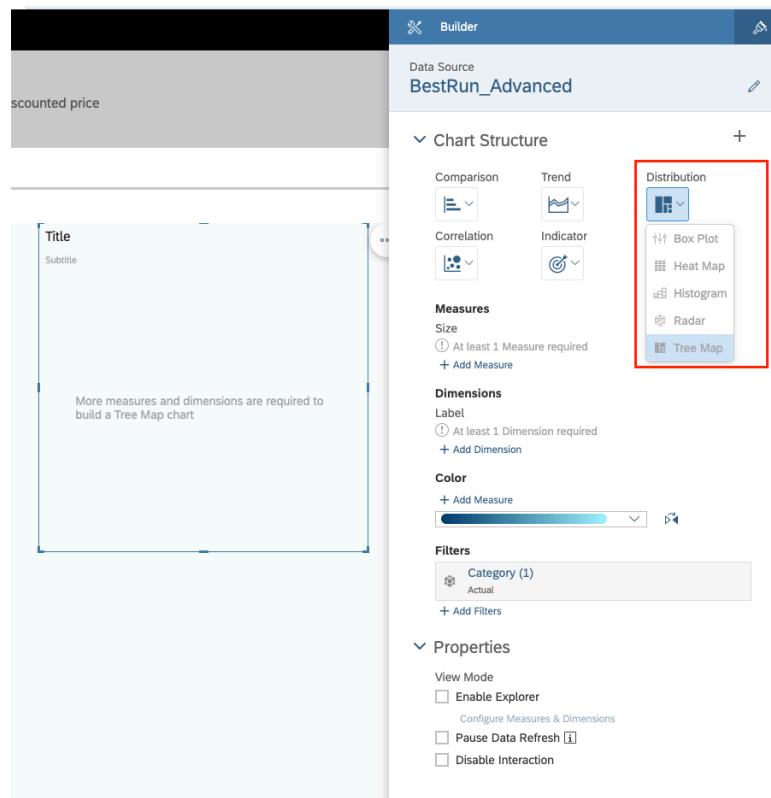
18. Keep the default layout configurations for the chart widget:

Width: 384 px
Height: 384 px



19. Toggle to the **Builder** panel in order to modify the default **Chart Structure** to Tree Map.

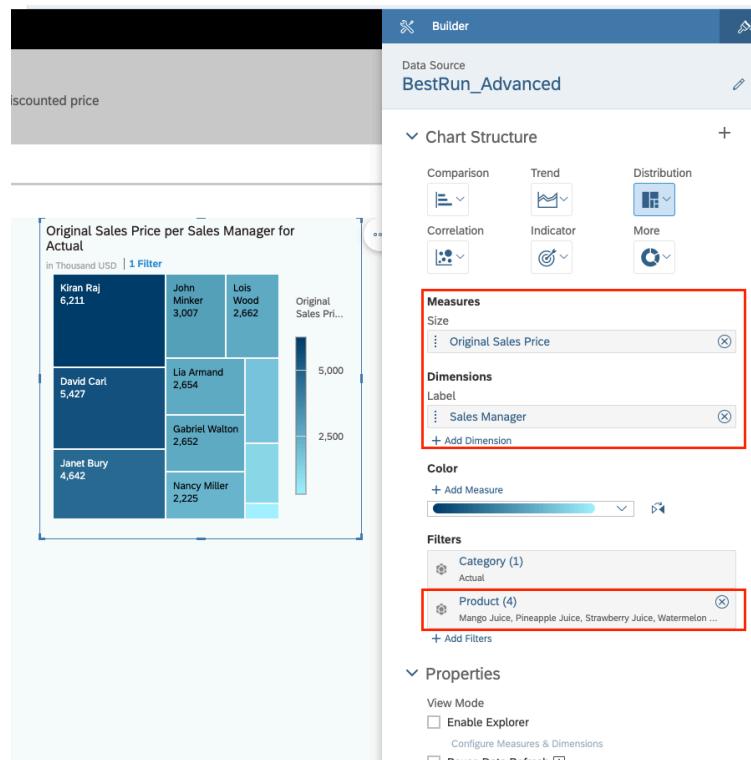
Under Chart Structure → Distribution → Tree Map



20. Add **Original Sales Price** as a Measure

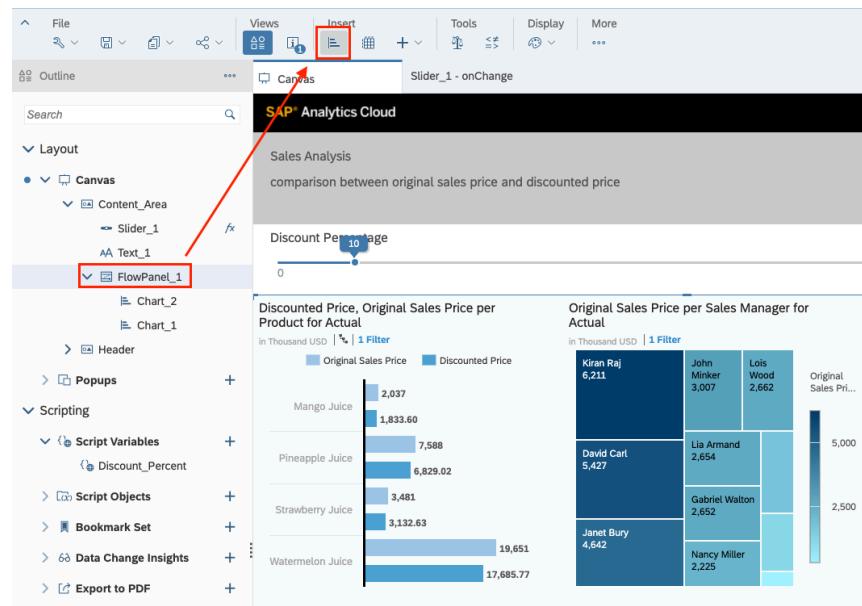
21. Add **Sales Manager** as a Dimension

22. Add the same filter as the previous chart.
(Steps: 15/16/17)



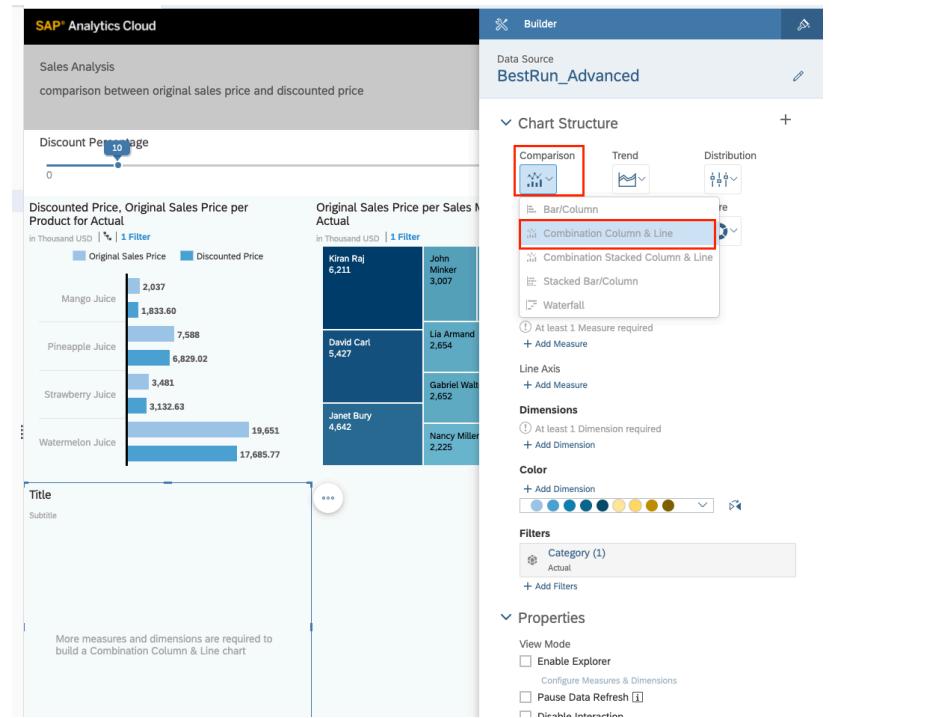
23. Let's add another type of chart a **Combination Column & Line**. Click on the icon **Chart** in order to add another chart widget.

Don't forget to select always the **FlowPanel_1** from the outline before adding the widget.



24. Toggle to the **Builder** panel in order to modify the default **Chart Structure** to **Combination Column & Line**.

Under Chart Structure → Comparison → Combination Column & Line

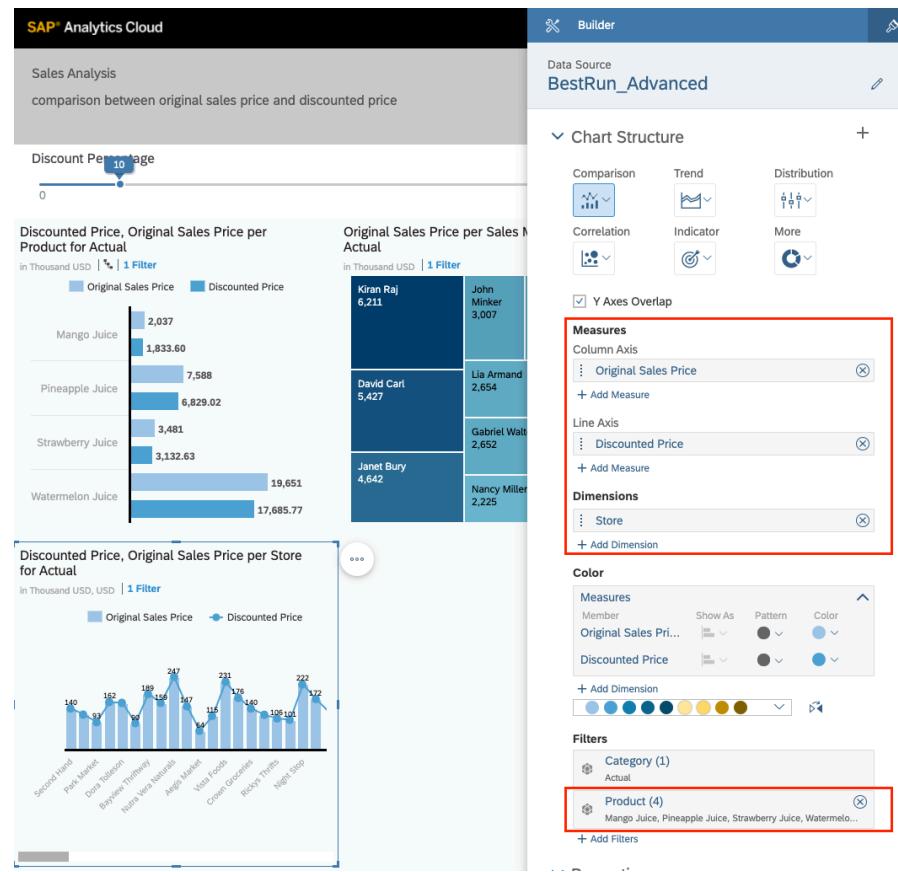


25. Add **Original Sales Price** as a Measure (Column Axis)

26. Add **Discount Price** as a Calculated Measure (Line Axis)

27. Add **Store** as a Dimension

28. Add the same filter as the previous chart. (Steps: 15/16/17)

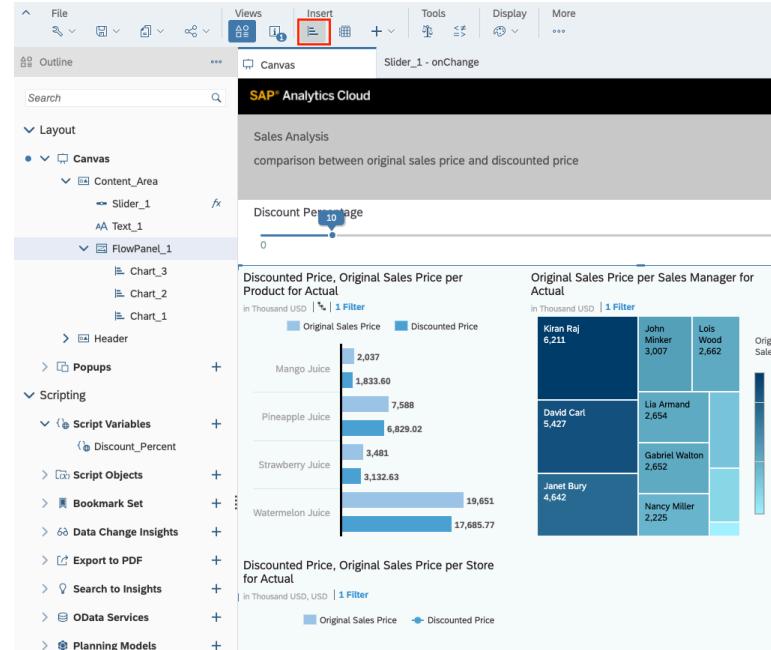


29. Let's add another type of chart a **Stacked Bar/Column**. Click on the icon **Chart** in order to add another chart widget.

Don't forget to select always the **FlowPanel_1** from the outline before adding the widget.

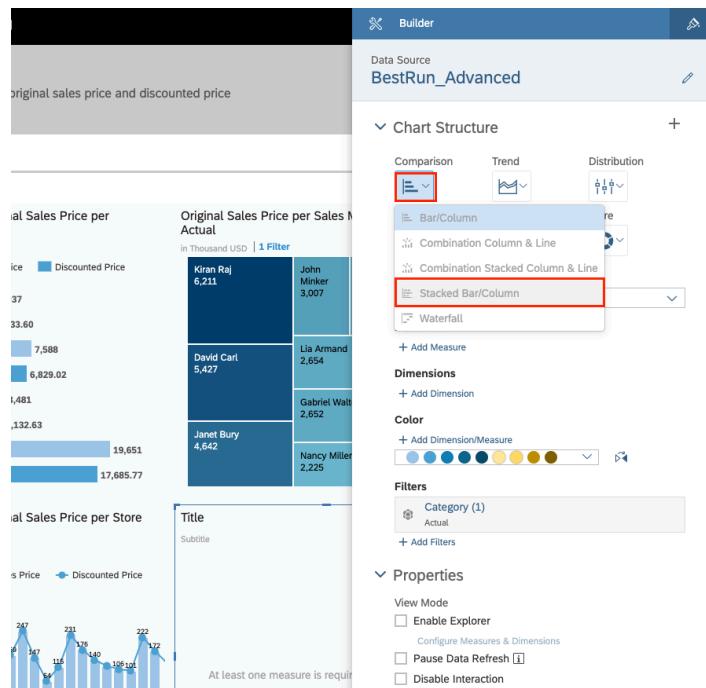
30. Keep the default layout configurations for the chart widget as the previous charts:

Width: 384 px
Height: 384 px



31. Toggle to the **Builder** panel in order to modify the default **Chart Structure** to **Stacked Bar/Column**.

32. Under Chart Structure → Comparison → Stacked Bar/Column.

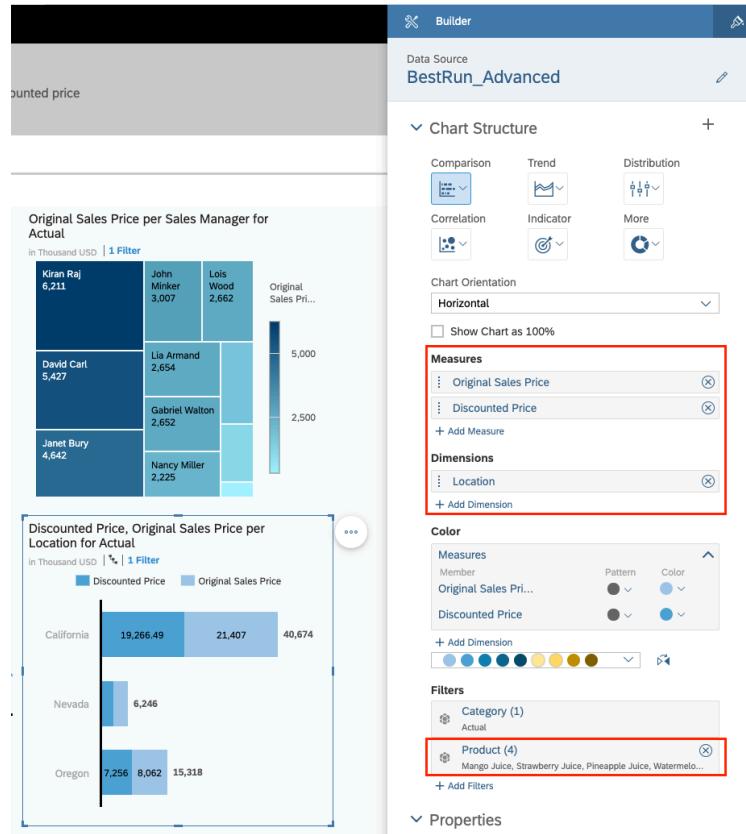


33. Add **Original Sales Price** as the first Measure.

34. Add **Discount Price** as a Calculated Measure.

35. Add **Location** as a Dimension

36. Add the same filter as the previous chart. (Steps: 15/16/17)



37. Let's add now a Table. Click on the icon **Table** under the insert toolbar.

Don't forget to select always the **FlowPanel_1** from the outline before adding the widget.

The screenshot shows the SAP Analytics Cloud interface. The top navigation bar includes File, Views, Insert (with a red arrow pointing to the Table icon), Tools, Display, and More. The main area is titled "Sales Analysis" with the subtitle "comparison between original sales price and discounted price". It features a slider labeled "Slider_1 - onChange" set to 10. Below the slider are two charts: "Discounted Price, Original Sales Price per Product for Actual" and "Original Sales Price per Sales Manager for Actual". A third chart, "Discounted Price, Original Sales Price per Store for Actual", is partially visible. To the right, there is a table titled "Discounted Price, Original Sales Price per Location for Actual". The outline panel on the left shows the structure of the page, with "FlowPanel_1" selected.

38. Toggle to the **Styling** panel to set some properties for the Table.

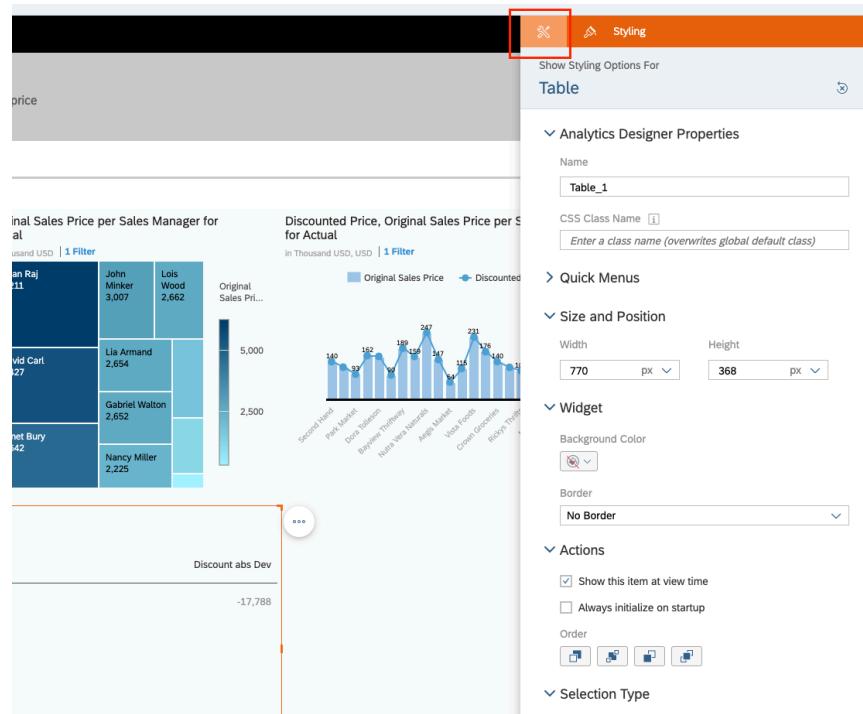
This screenshot shows the SAP Analytics Cloud interface with the styling panel open. The "Table_1" widget is selected in the outline. The styling panel on the right contains sections for Table Structure, Rows, Columns, and Filters. A red box highlights the "Size and Position" section, which shows "Width: 770 px" and "Height: 368 px". Other sections include Background Color, Border (set to "No Border"), Actions (checkboxes for "Show this item at view time" and "Always initialize on startup"), Order (button icons), Selection Type (set to "Default"), and Table Properties (Template set to "Default").

39. Define the layout configurations for the **Table** widget:

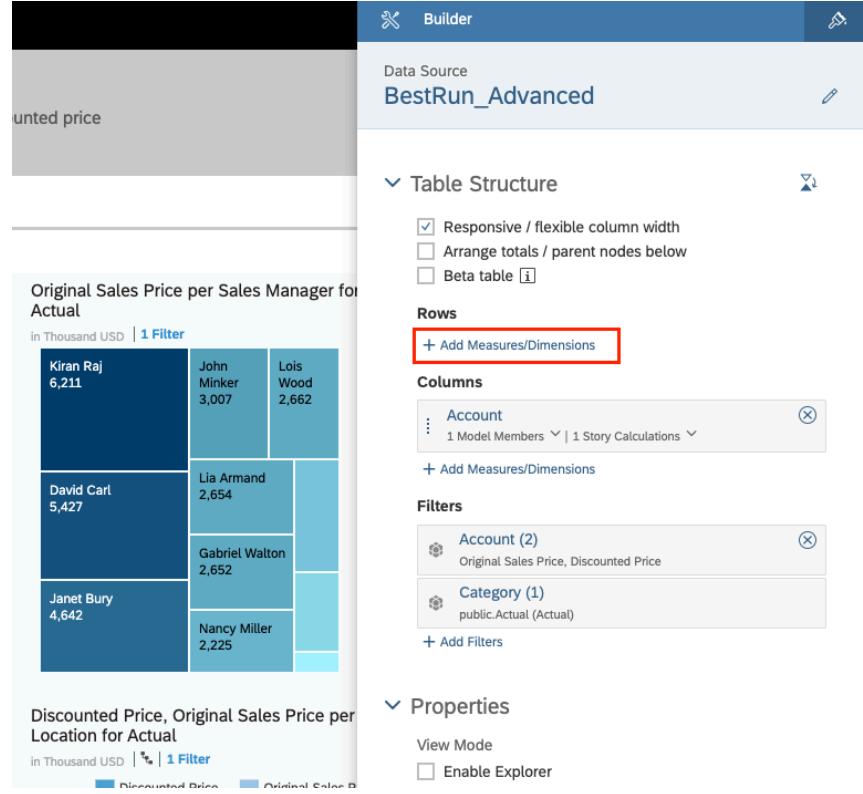
Width: 750 px
Height: 368 px

This screenshot shows the SAP Analytics Cloud interface with the styling panel open. The "Table_1" widget is selected in the outline. The styling panel on the right contains sections for Background Color, Border (set to "No Border"), Actions (checkboxes for "Show this item at view time" and "Always initialize on startup"), Order (button icons), Selection Type (set to "Default"), and Table Properties (Template set to "Default"). A red box highlights the "Size and Position" section, which shows "Width: 770 px" and "Height: 368 px".

40. Switch to **Builder Panel**, we are going to add measure(s) and dimension(s) to this table



41. Let's start by adding a dimension to our Table



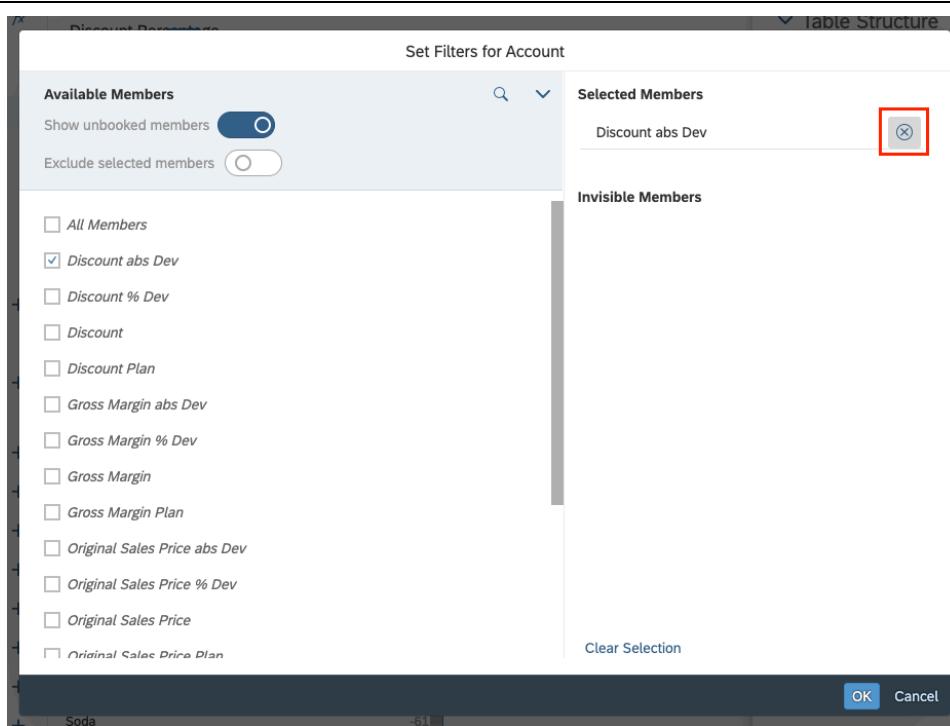
42. Select **Product** as a dimension.

The screenshot shows the Tableau Data Builder interface. The top section displays a dashboard with two visualizations: a treemap chart titled "Original Sales Price per Sales Manager for Actual" and a bar chart titled "Discounted Price, Original Sales Price per Location for Actual". The bottom section, titled "Table Structure", shows a list of dimensions. The "Product" dimension is highlighted with a red box and selected, indicated by a checked checkbox. Other dimensions listed include Account, Category, Currency, Location, Sales Manager, Store, Time, and Version. There are also checkboxes for "Responsive / flexible column width", "Arrange totals / parent nodes below", and "Beta table".

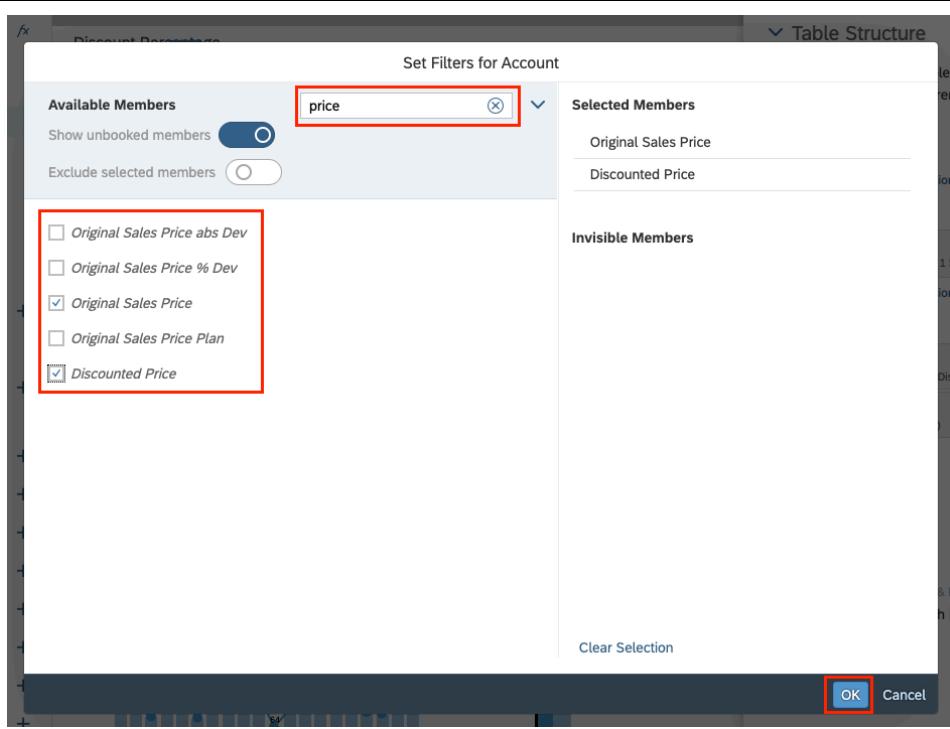
43. Let's manage the **Columns** of the table by clicking the **filter icon** in order to select the proper Members and calculation.

The screenshot shows the Tableau Data Builder interface with the "Table Structure" section expanded. The "Columns" section contains a dropdown menu for "Account" with a red box highlighting the filter icon (a small circular arrow icon). Below this, there are buttons for "+ Add Measures/Dimensions" and "+ Add Filters". The "Filters" section lists "Account (2)" and "Category (1)". The "Properties" section at the bottom includes options for "View Mode", "Enable Explorer", "Configure Measures & Dimensions", "Pause Data Refresh", and "Disable Interaction".

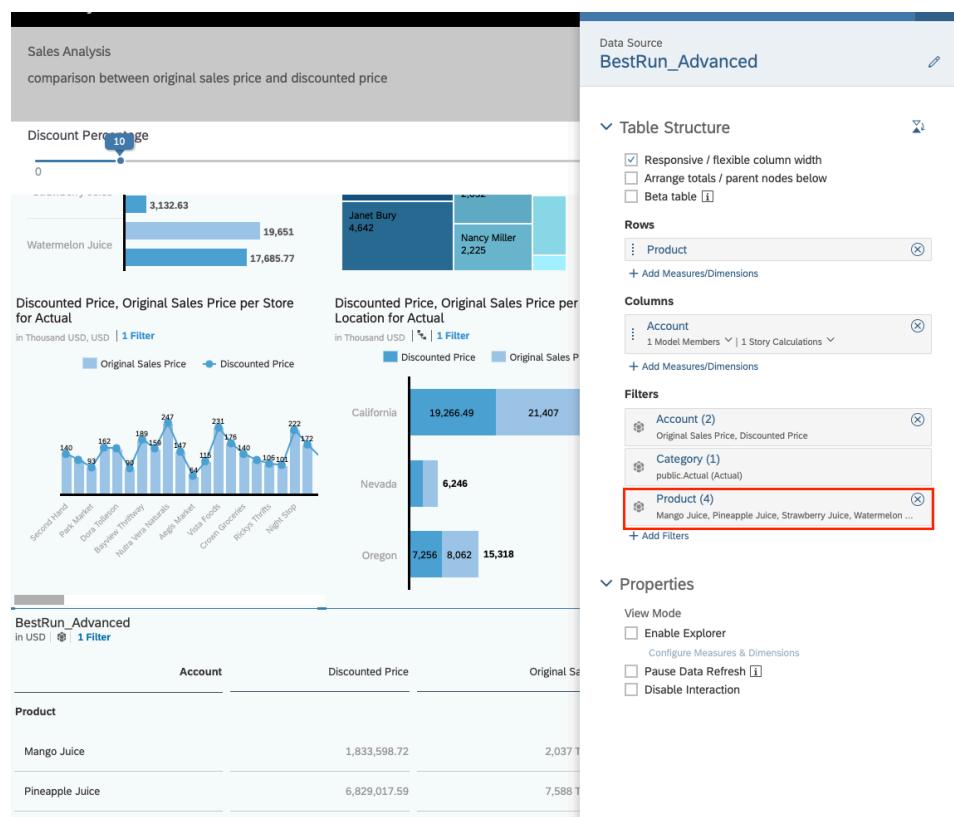
44. First of all, delete the default selected member.



45. Use the **search bar** to search for the **Original Sales Price** and **Discounted Price**, then click **OK** to confirm.



46. Add the same filter as the previous Charts to the Table.
Check steps 15/16/17

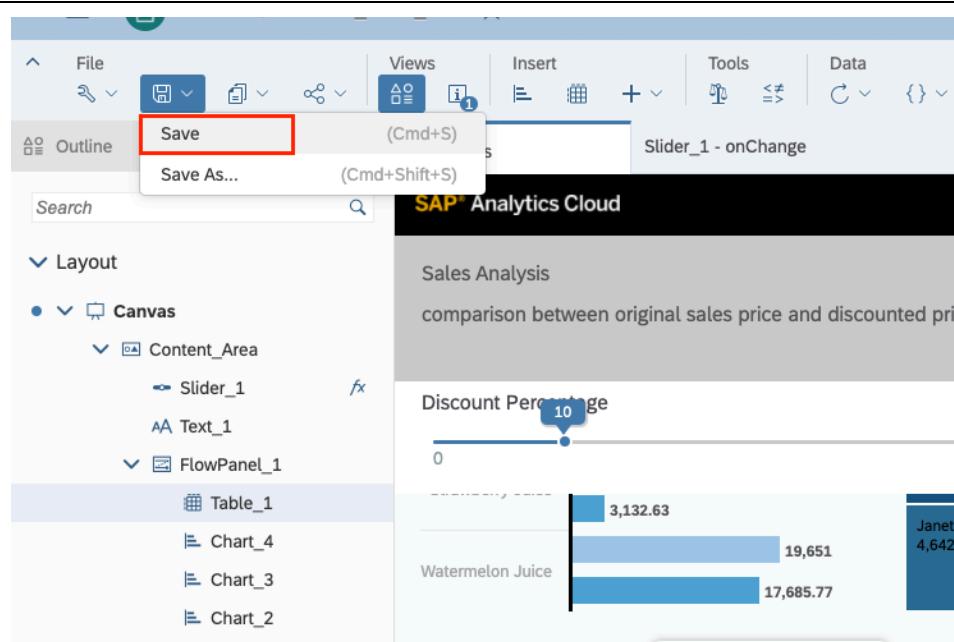


The screenshot shows the SAP Analytics Cloud interface with the following details:

- Data Source:** BestRun_Advanced
- Table Structure:**
 - Responsive / flexible column width (checked)
 - Arrange totals / parent nodes below
 - Beta table (1)
- Rows:** Product
- Columns:** Account (2) - Original Sales Price, Discounted Price
- Filters:**
 - Account (2) - Original Sales Price, Discounted Price
 - Category (1) - public:Actual (Actual)
 - Product (4) - Mango Juice, Pineapple Juice, Strawberry Juice, Watermelon ... (highlighted with a red box)
- Properties:**
 - View Mode
 - Enable Explorer
 - Configure Measures & Dimensions
 - Pause Data Refresh (unchecked)
 - Disable Interaction

The dashboard displays several charts including a bar chart for Watermelon Juice and a stacked bar chart for Discounted Price vs. Original Sales Price across locations like California, Nevada, and Oregon.

47. Click on the Floppy Disc icon and choose Save.



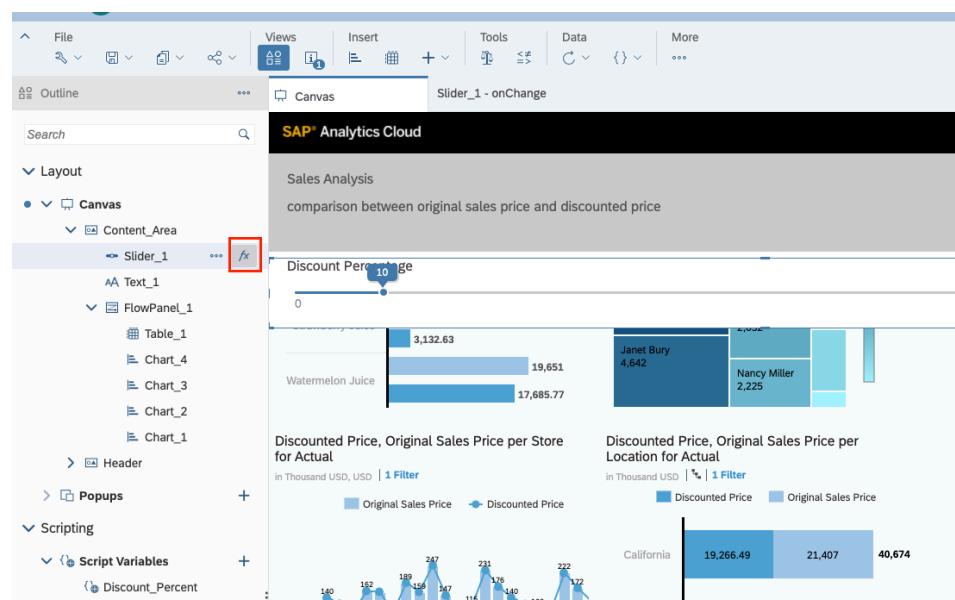
The screenshot shows the SAP Analytics Cloud ribbon menu with the "Save" option highlighted (boxed in red). The menu also includes "Save As..." and keyboard shortcuts (Cmd+S and Cmd+Shift+S).

The main workspace shows a Sales Analysis dashboard with a "Discount Percentage" slider set at 10, and a bar chart for Watermelon Juice.

The left sidebar shows the layout structure with components like Canvas, Content_Area, Slider_1, Text_1, FlowPanel_1, Table_1, Chart_4, Chart_3, and Chart_2.

48. As next, let's define the **onChange** event for the Slider widget that we defined in the beginning of the exercise.

Please position on the **Slider_1** and click on the **fx** icon.



49. You can see that a Tab **Slider_1.onChange** is open next to the Canvas Tab. Within this Tab we will add the Script. The coding should cover the following logic:
Assign the value of the current selection of the slider to script variable **Discount_Percent**. You can use the scripting wizard to write the command or you can copy and paste this line of code:

Discount_Percent=Slider_1.getValue();

```

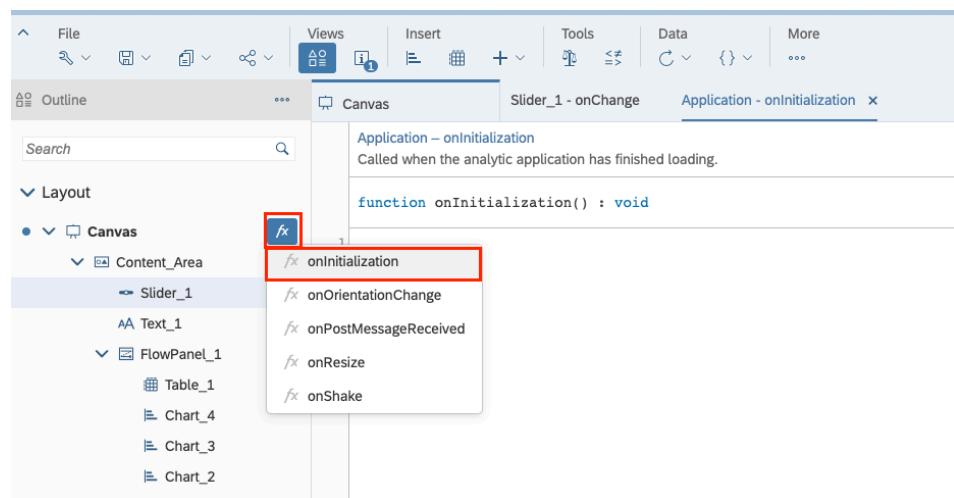
Slider_1 - onChange
Called when the slider doesn't have the focus anymore.

function onChange() : void
1 Discount_Percent=Slider_1.getValue();
2

```

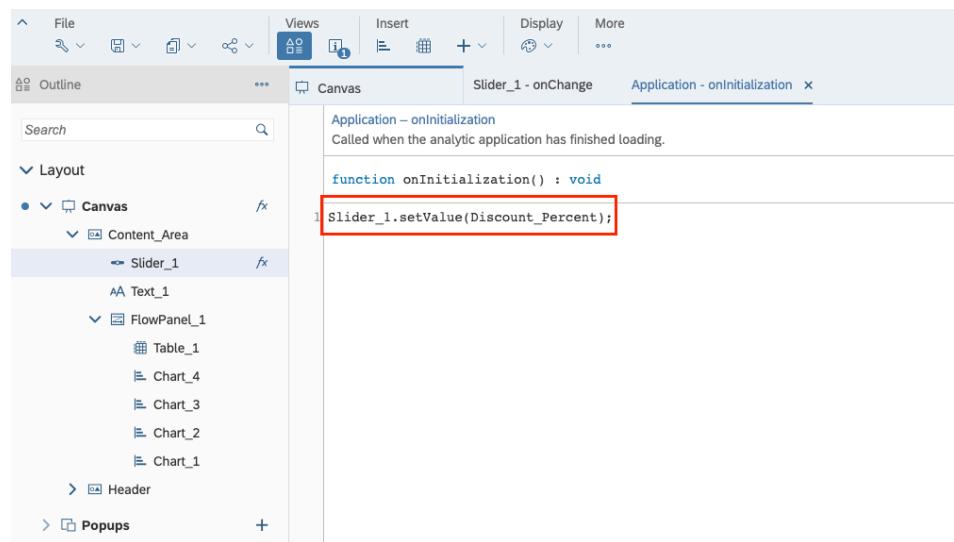
The screenshot shows the SAP Analytics Cloud scripting interface with the 'Slider_1 - onChange' tab selected. It contains a single line of code: 'Discount_Percent=Slider_1.getValue();'. A red box highlights this line of code.

50. The last step is tracking what happens when the application is initialized. This is done through the **onInitialization** function of the Canvas itself. To write the responsible script, please hover over the **Canvas** in the layout outline panel and click on the **fx** icon, then select **onInitialization**.

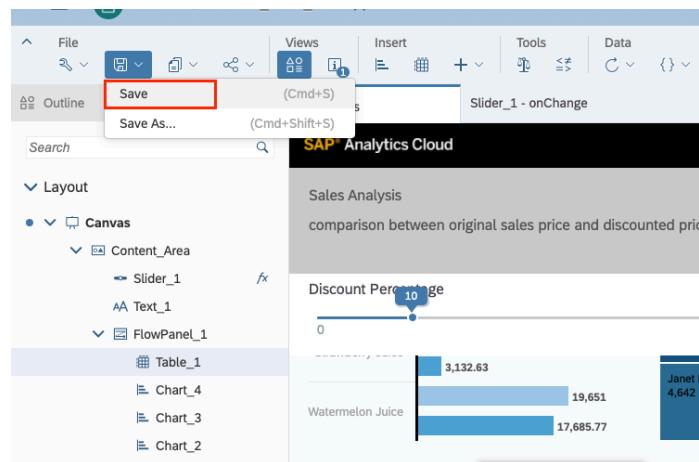


51. Now we need to define the script to set the variable value in the slider.

Enter the code below:
Slider_1.setValue(Discount_Percent);

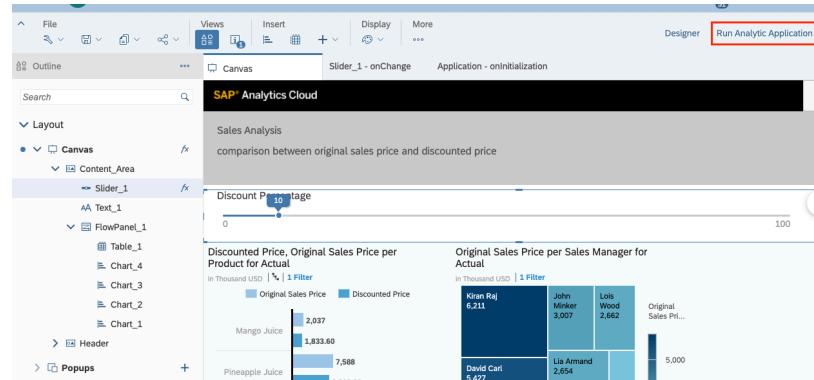


52. Click on the **Floppy Disc** icon and choose **Save**.



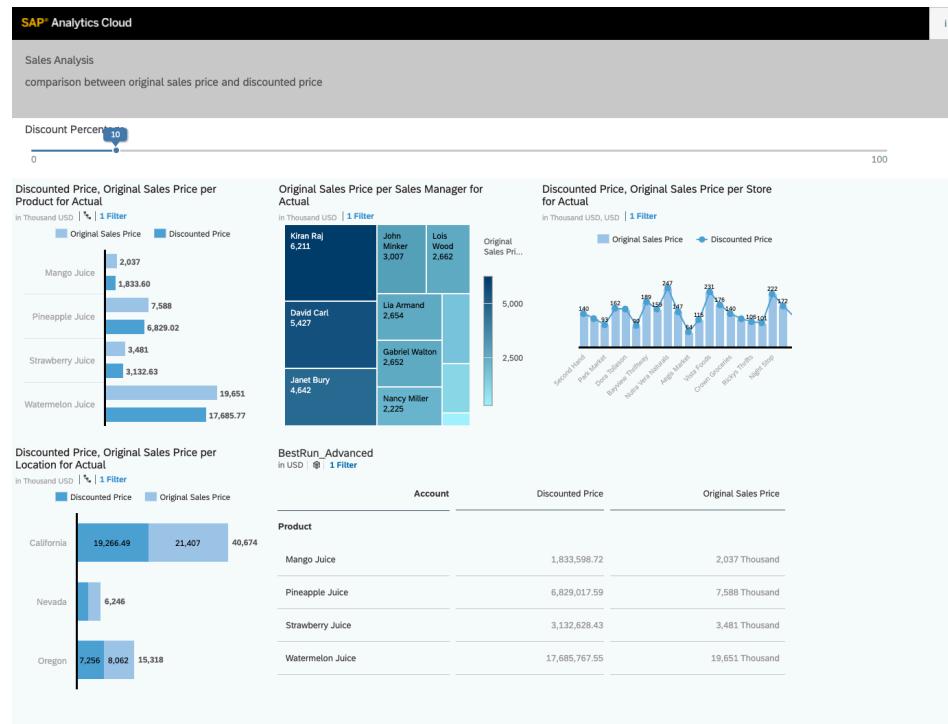
53. It's time to show how this application is working at runtime.

For that please click **Run Analytical Application**.

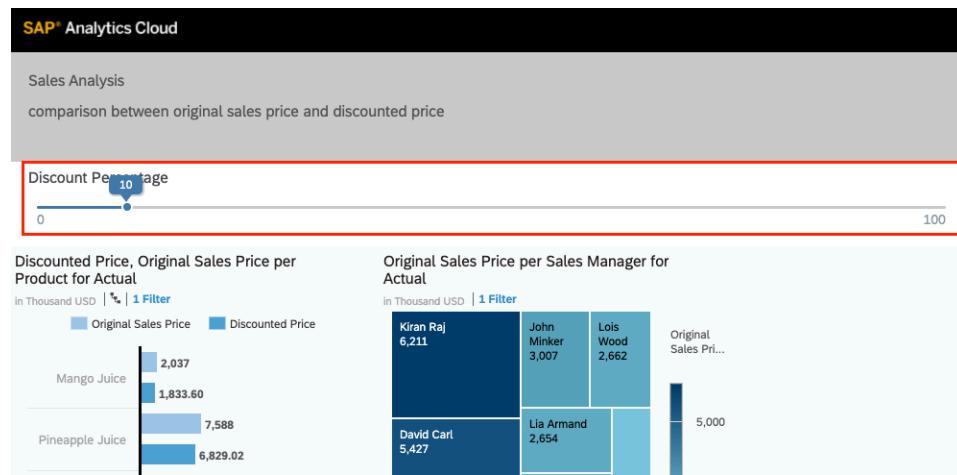


54. As you can see, you built an Analytical application which composed of different widgets (different type of Charts/ Table/ Slider) within a responsive frame which is the Flow Panel feature.

Try to reduce the size of your browser in order to see how the Flow Panel that we used will behave.



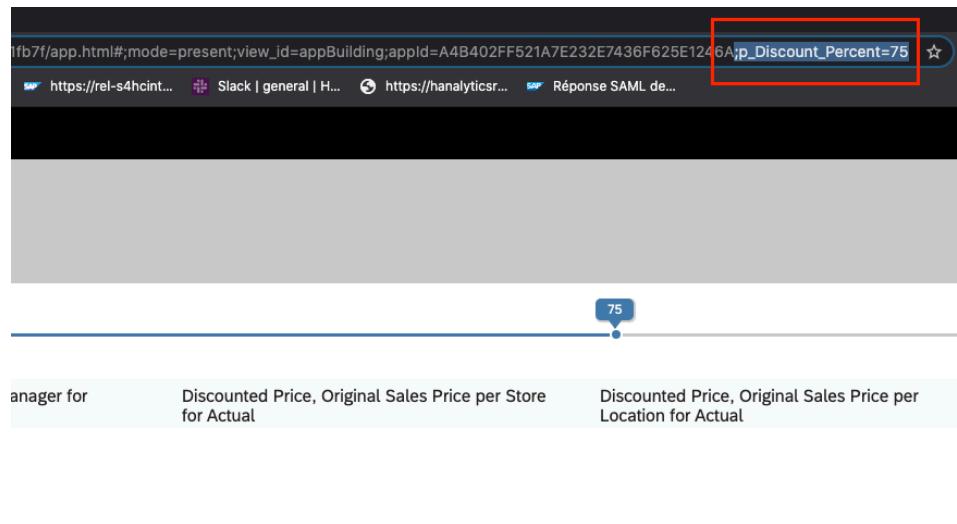
55. As next, please change the value in the Slider and check the charts and table behaviors.



56. You can try to enter at the end of the URL:

```
:p_Discount_Percent=75
```

In the definition of the script variable, we selected the option **Expose Variable via URL Parameter**. This make possible to set the variable value via URL. In the URL of the analytic application, just enter a new parameter that starts with "p_" and is followed by the script variable's name:
:p_Discount_Percent=75



Congratulations! You just finished the part 2 of Exercise 1.

Theme provides application designer an efficient and reusable way to define the style of the application.
When you choose a theme, you change the app's look and feel instantly.
In the **Part 3** of the exercise, we will show you how to use a theme.

Part 3: Changing Theme

1. Go back to the application and click on the **Themes** icon

SAP Analytics Cloud

Sales Analysis
comparison between original sales price and discounted price

Discount Percentage: 10%

Original Sales Actual
in Thousand USD | 1 Filter

Mango Juice: Original Sales Price 2,037, Discounted Price 1,833.60

Kiran Raj 6,211

2. Choose **Browse for More Themes ...**

SAP Analytics Cloud

Sales Analysis
comparison between original s

Discount Percentage: 10%

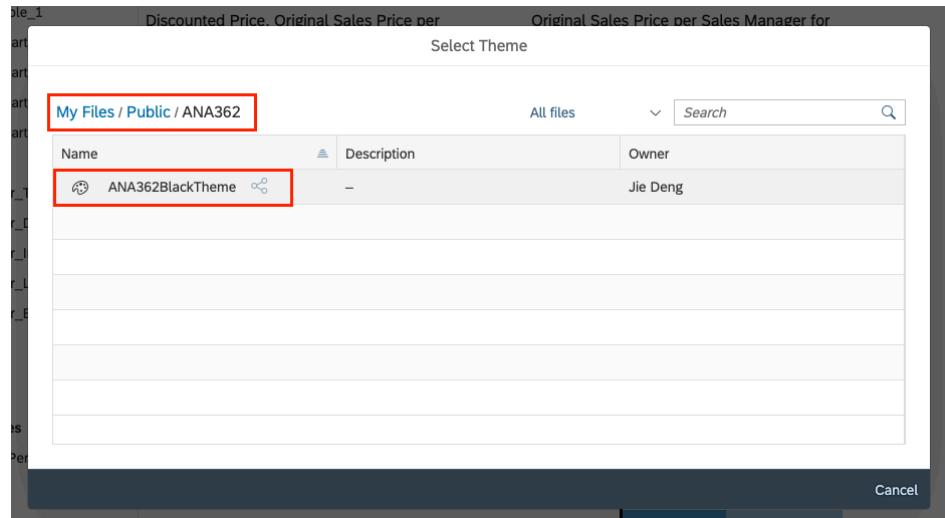
Original Sales Actual
in Thousand USD | 1 Filter

Mango Juice: Original Sales Price 2,037, Discounted Price 1,833.60

Kiran Raj 6,211

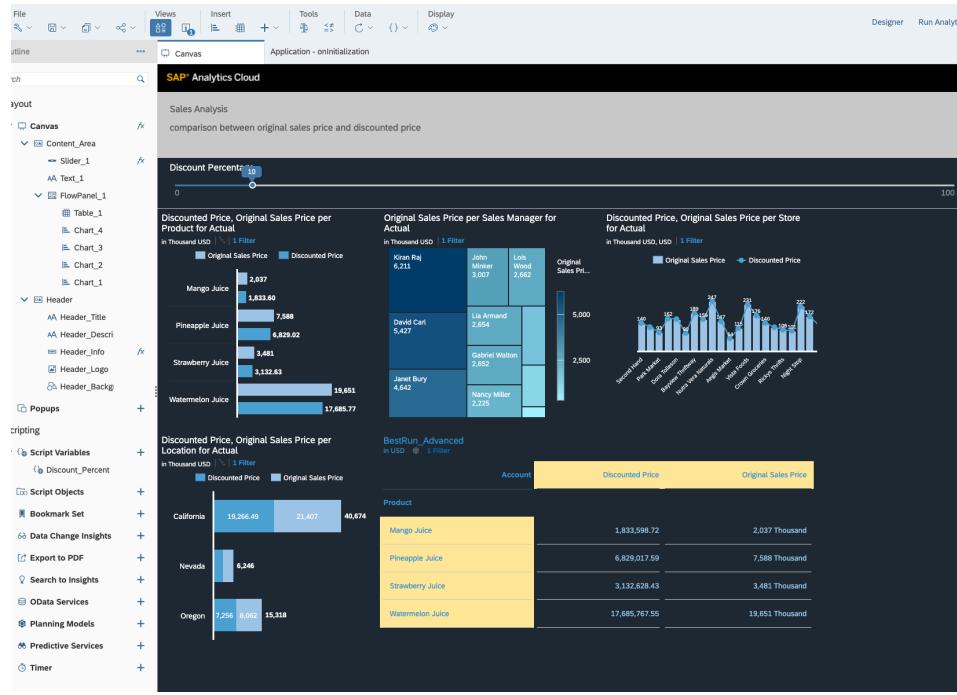
Browse for More Themes...

3. Redirect to the folder **My Files → Public → ANA362**, then choose the theme **ANA362BlackTheme**

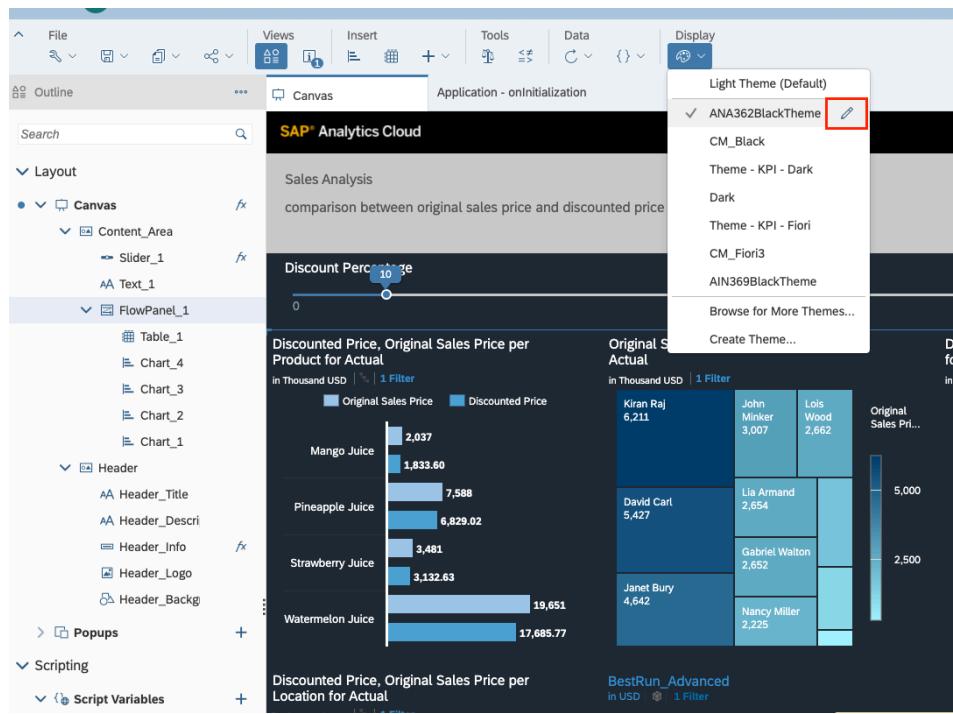


4. You can see now that the Theme changed.

As next we will show which themes preferences can be changed

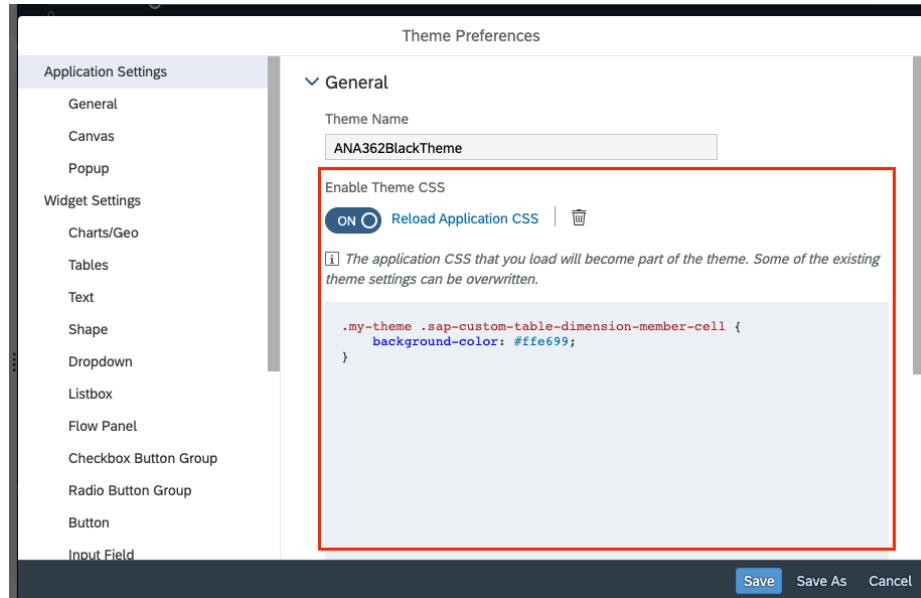


5. Hover over the active theme **ANA362BlackTheme** and click on the **Pencil** icon

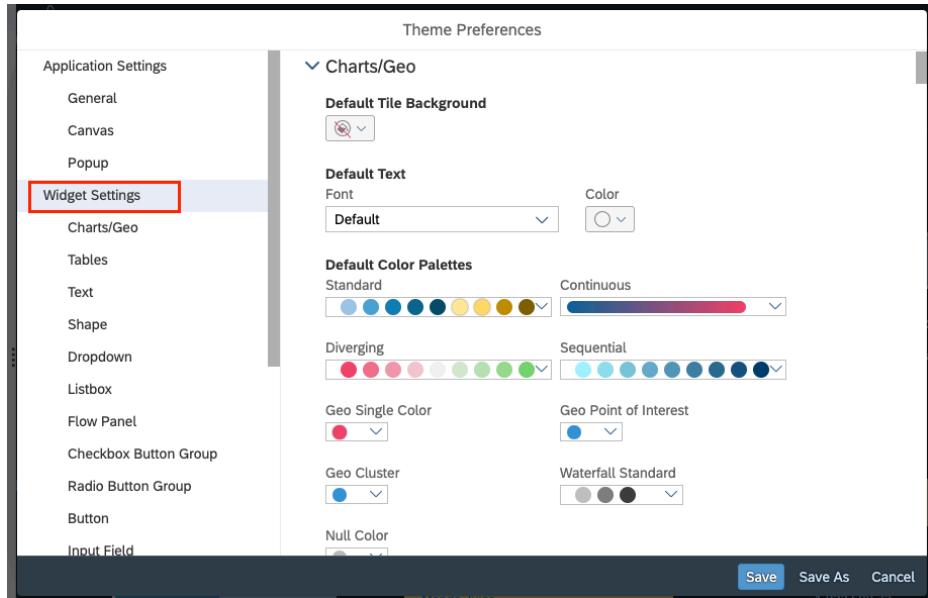


6. As you can see, the **CSS script** used for this theme. With **Analytical Application** you have the possibility to write and load your specific **CSS script**.

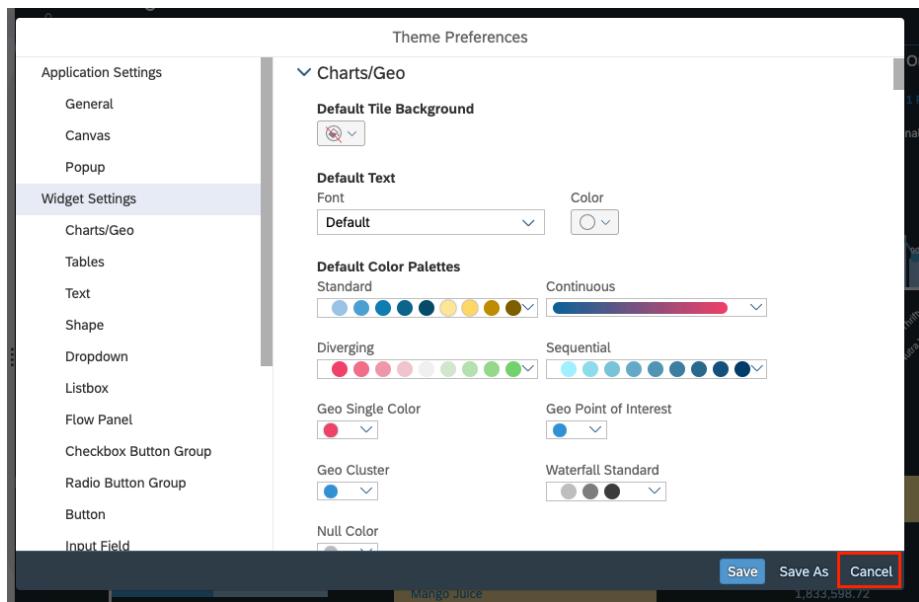
You can as well explore the different options available; you can change the **Theme Preferences** of any **widgets** available on your application.



7. For example, choose **Widget Settings** in order to see the different **Theme Preferences**.

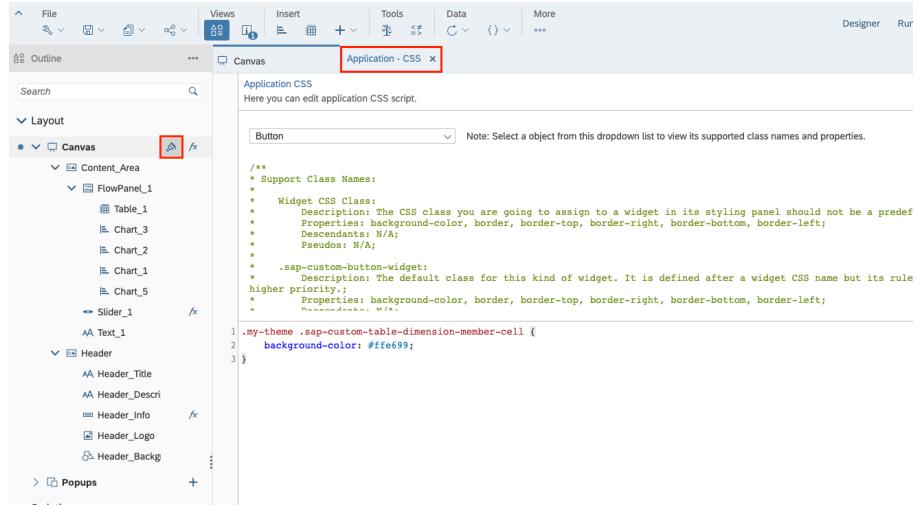


8. Click **Cancel** to exit the Theme Preferences pop up

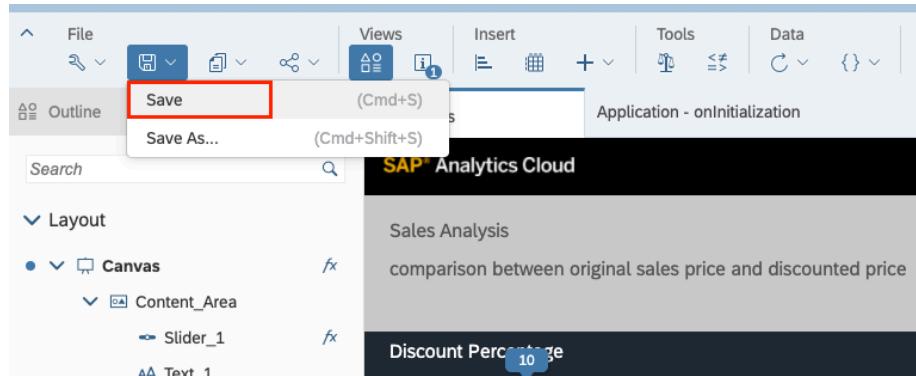


9. By hover over the **Canvas** from the **outline** panel you can click the **styling icon** in order to edit the **application CSS** code.

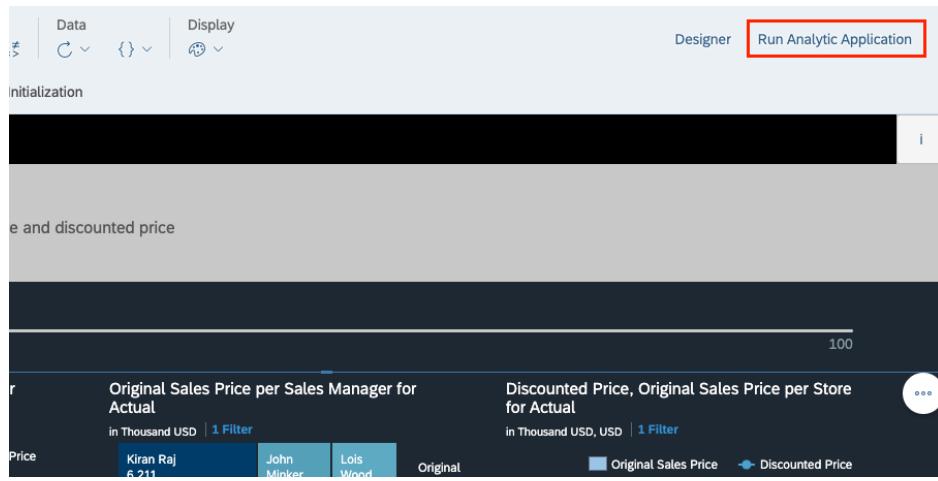
As shown a new tab called **Application-CSS** appeared where you can start editing the **CSS code** based on the supported Class Name.



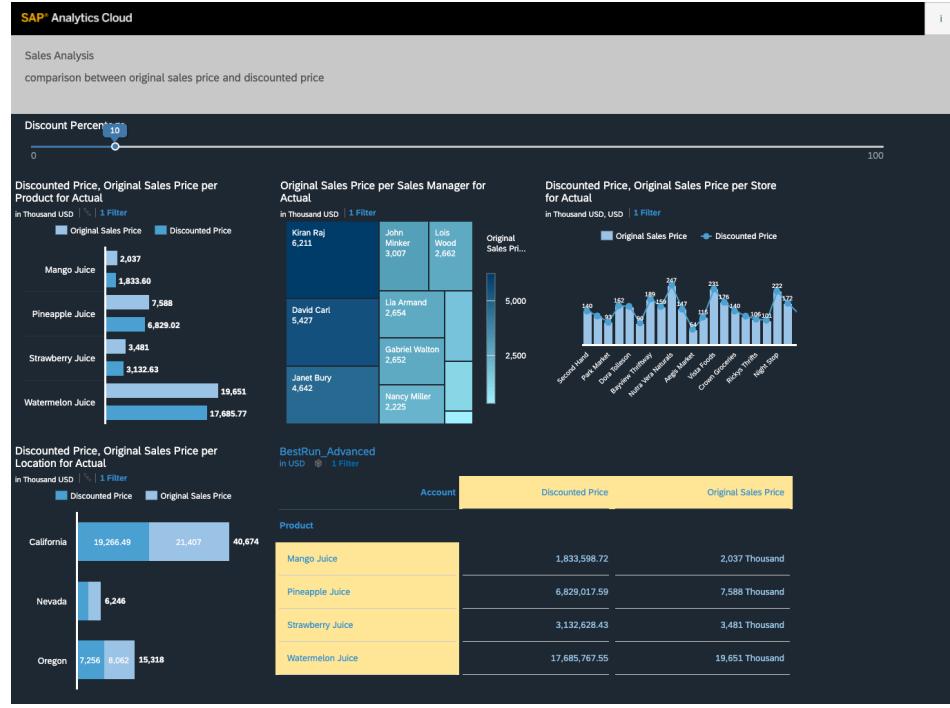
10. Click on the **Floppy Disc** icon and select **Save**.



11. Click **Run Analytic Application** to see how the new selected theme look like in the runtime.



12. Congratulations! You added the theme successfully.

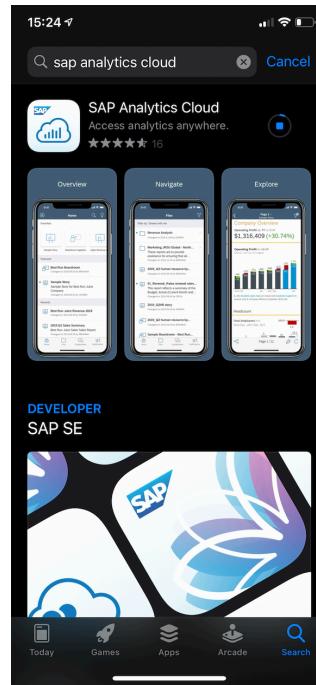


Congratulations! You just finished the part 3 of Exercise 1.

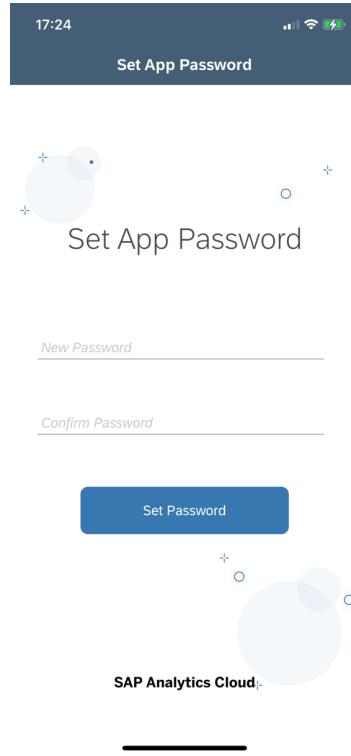
In the **Part 4** of the exercise you will download the SAC mobile app from Apple Store and run it with your Device.

Part 4: Download SAC app from Apple Store and run the application

1. Open the Apple Store and search for the SAC app and press Download, the same as you will download another app with your phone.



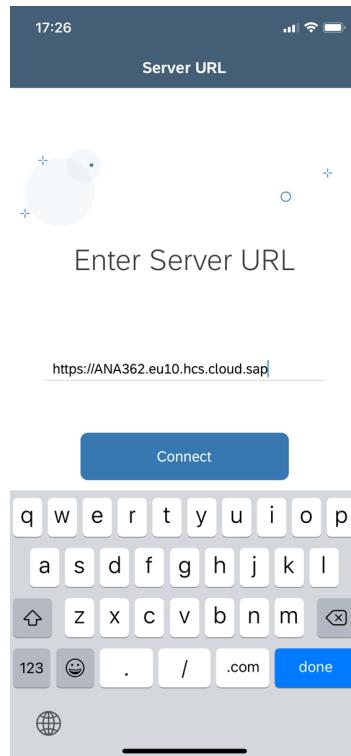
2. As next, open the app and create a **Password** for the app



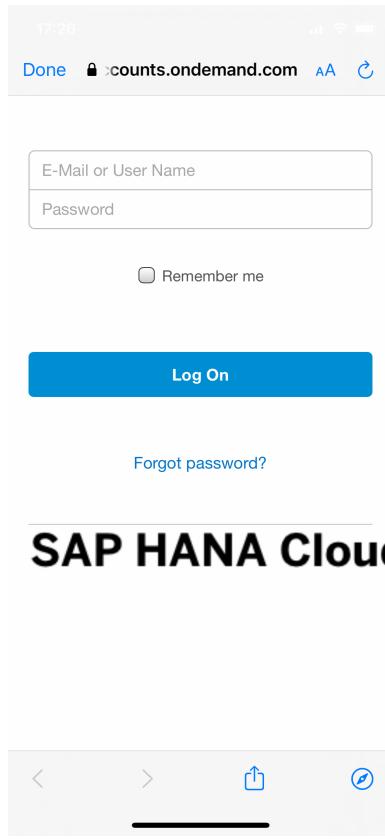
3. Next step you have to enter the **Server URL**:

ANA362.eu10.hcs.cloud.sap

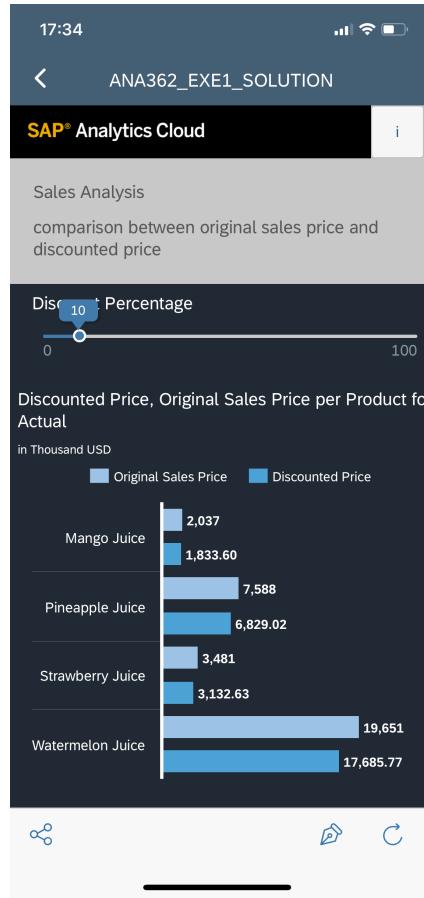
Press **Connect** afterwards.



4. Use your Credential to connect to the tenant in order to find your application and run it on the your Mobile.



-
5. Open your private folder and select the application in order to run it in the mobile device.



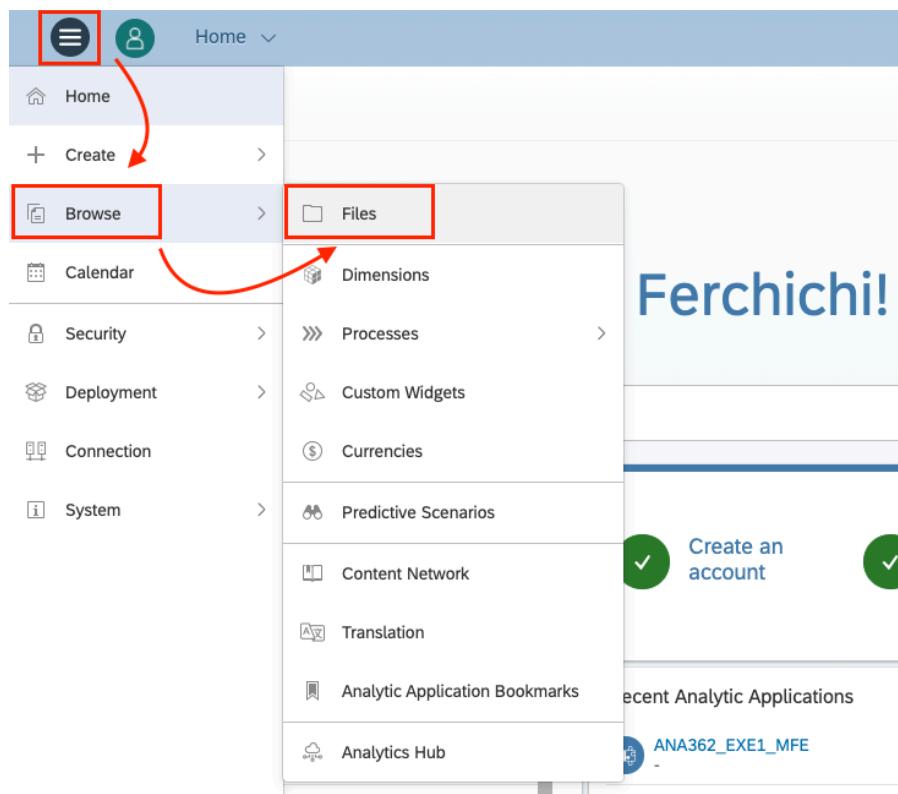
Congratulations! You just finished the part 4 of Exercise 1.

In the **Part 5** of the exercise you will use the Post Message capability of the SAC to embed your analytical application into a HTML Page.

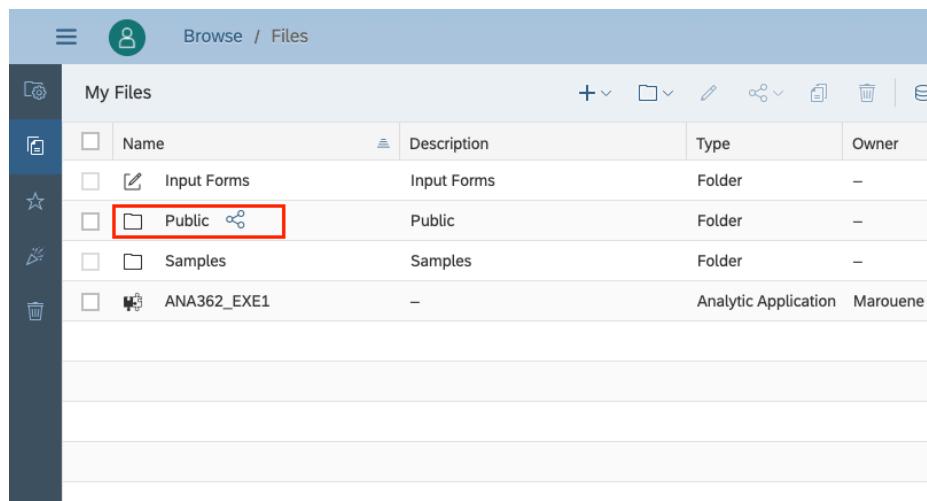
Part 5: Embedding into a HTML page

- Let's open the ANA362 to download our TXT file that we will modify and use for this part of the exercise.

Click **File**

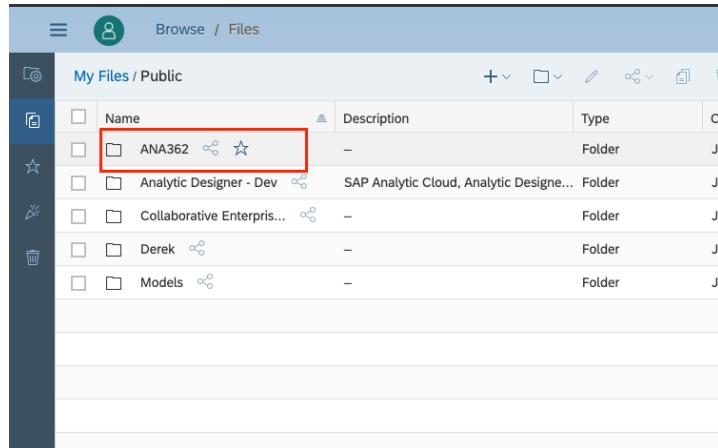


- Then open the Folder **Public**

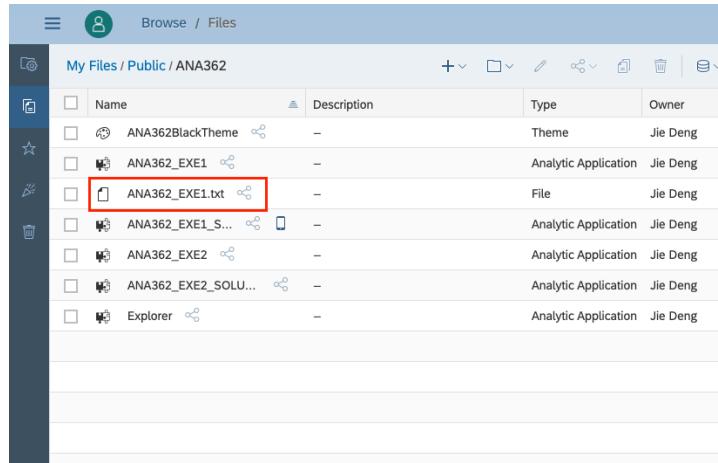


ANA362

3. Click the folder **ANA362** to open it.

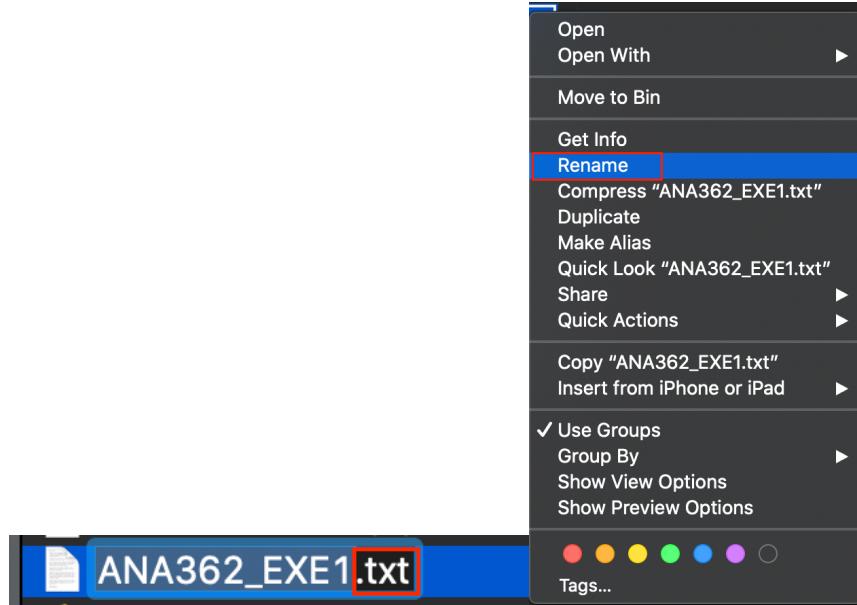


4. Just Click the **ANA362_EXE1.txt** to download the Text file.

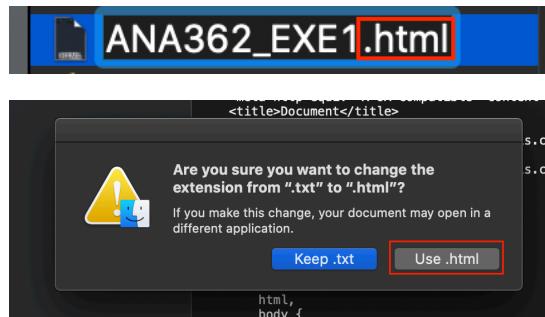


5. As next, when the download is finish, open the folder where the file was downloaded and change the extension from: **.txt** to **.html**

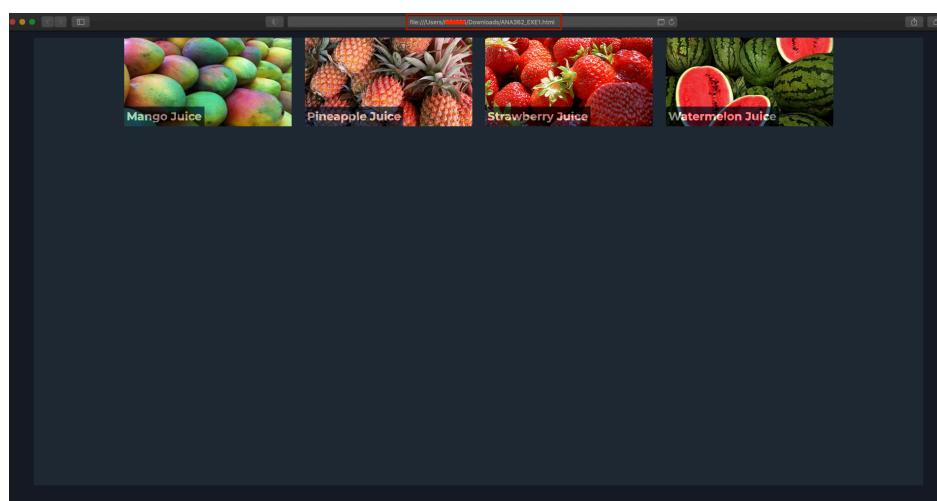
6. Right Click on the file and select **Rename**



7. Delete .txt and replace it by .html



8. Afterwards Double Click on the **HTML** file in order to open it with your browser.



9. Here is a HTML page. We should now integrate the analytic application created before into this HTML page.

There are bi-directional integrations:

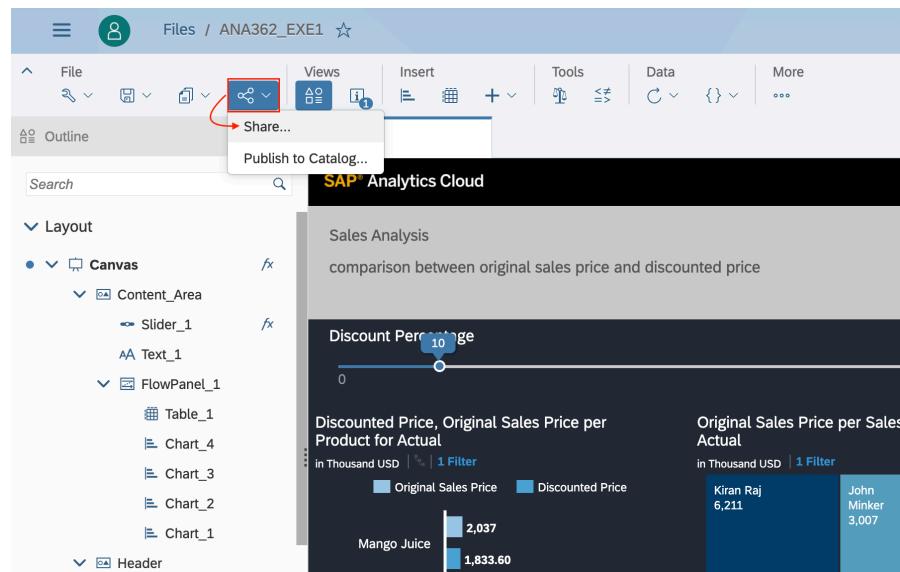
- 1) If user selects the juice type on the html page, this information should be used for filtering the charts in analytical applications
- 2) If user changes the discount percentage value by slider in analytical application, then this parameter should be transferred to html page for calculating the discounted price

For these interactions, you need to do the following steps:

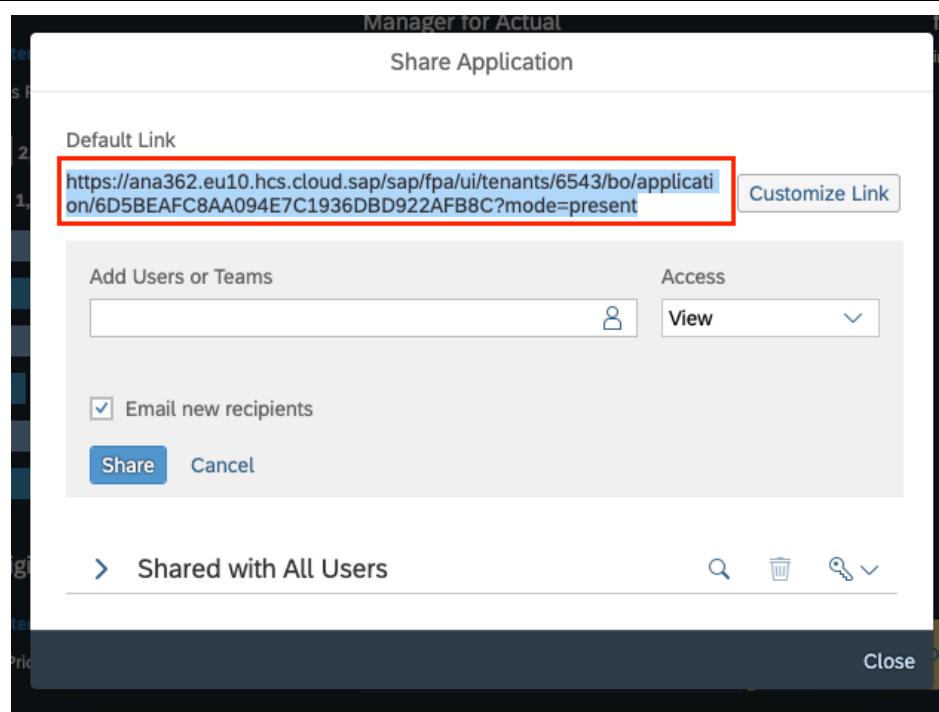
- 1) adapt the application name in html page
- 2) add the PostMessageReceived event in the analytical application
- 3) add the post message API to On Click event for the Slider (pass the parameter discount percentage to html page)
- 4) add the post message API to OnInitialization event (pass the original sales price to html page)

10. Go back to your SAP Analytics Cloud application.

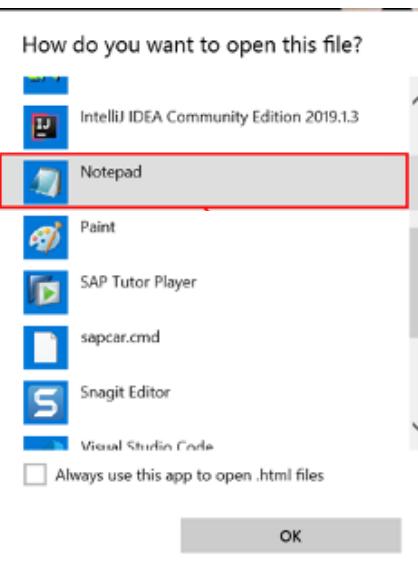
Click **Share** to get the application URL



11. Copy the application ID of your application
ANA362_EXE1



12. As next, go back to the **HTML** file and right click on: **ANA362.html**



13. Click on “**Open With**” and select **Notepad** or another file editor that you have.

14. Please scroll down until you find the default **URL**.

15. Delete the existing one and replace it with your **URL** that you copied in **STEP 10**, press **CTRL + V** and **CTRL + S** to save the changes.

16. As next, copy the tenant path:
<https://ana362.eu10.hcs.cloud.sap> from the Application ID that you used in **Step 14**

```
<!-->
<figure id="watermelon">
  
  <figcaption>
    <h3>Watermelon Juice</h3>
  </figcaption>
  <span></span>
  <span></span>
</figure>
</div>
<iframe style="width: 1440px; height: 1120px;" src="https://ana362.eu10.hcs.cloud.sap/sap/fpa/ui/tenants/6543/bo/application/A4B04AFF4A4D60DB6F7C3DE7AD3C69A3?mode=present"></iframe>
```

```
<span></span>
<span></span>
</div>
<iframe style="width: 1440px; height: 1120px;" src="https://ana362.eu10.hcs.cloud.sap/sap/fpa/ui/tenants/6543/bo/application/6D5BEAFC8AA094E7C1936DBD922AFB8C?mode=present"></iframe>
```

17. Paste the tenant path in the place of the 'XXXXXXXXXXXX'

```
</div>
<iframe style="width: 1440px; height: 1120px;"  
src="https://ana362.eu10.hcs.cloud.sap/sap/fpa/ui/tenants/6543/bo/application/6D5BEAFC8AA094E7C1936DBD922AFB8C?mode=p  
</div>

<script>  
document.addEventListener("readystatechange", (ev) => {  
    if (document.readyState === "interactive") {  
        addClickHandler();  
    }  
});  
  
function addClickHandler() {  
    document.querySelector("#mango").addEventListener("click", () => {  
        window.frames[0].postMessage('mango', 'XXXXXXXXXXXXXX');  
    });  
    document.querySelector("#pineapple").addEventListener("click", () => {  
        window.frames[0].postMessage('pineapple', 'XXXXXXXXXXXXXX');  
    });  
    document.querySelector("#strawberry").addEventListener("click", () => {  
        window.frames[0].postMessage('strawberry', 'XXXXXXXXXXXXXX');  
    });  
    document.querySelector("#watermelon").addEventListener("click", () => {  
        window.frames[0].postMessage('watermelon', 'XXXXXXXXXXXXXX');  
    });  
  
    window.addEventListener("message", e => {  
        // ...  
    });  
}
```

18. Your file should look like that after your paste the tenant path

```
if (document.readyState === "interactive") {  
    addClickHandler();  
}  
});  
  
function addClickHandler() {  
    document.querySelector("#mango").addEventListener("click", () => {  
        window.frames[0].postMessage('mango', 'https://ana362.eu10.hcs.cloud.sap');  
    });  
    document.querySelector("#pineapple").addEventListener("click", () => {  
        window.frames[0].postMessage('pineapple', 'https://ana362.eu10.hcs.cloud.sap');  
    });  
    document.querySelector("#strawberry").addEventListener("click", () => {  
        window.frames[0].postMessage('strawberry', 'https://ana362.eu10.hcs.cloud.sap');  
    });  
    document.querySelector("#watermelon").addEventListener("click", () => {  
        window.frames[0].postMessage('watermelon', 'https://ana362.eu10.hcs.cloud.sap');  
    });  
  
    window.addEventListener("message", e => {  
        if (e.data[0] !== "{}") return;  
    });  
}
```

19. Save the changes by pressing **CTRL + S**

20. Go back to your Analytical application
ANA362_EXE1

21. Open the **fx** of the **Canvas** in order to write some script

22. Select **OnPostMessageReceive** d event.

The screenshot shows the SAP Analytics Cloud interface. On the left, the canvas editor displays a hierarchy of components: Canvas, Content_Area, FlowPanel_1, and various charts and tables. A red box highlights the 'fx' icon next to 'Content_Area'. A red arrow points from the 'onPostMessageReceived' event in the context menu (which is also highlighted with a red box) to the 'onPostMessageReceived' event in the canvas tree.

23. In this part, we are passing the message (mango, pineapple etc.) into the application to apply the product name as filter to chart.

Please enter (or copy & paste) the following scripting for the **onPostMessageReceivedEvent**:

```

if (message === "mango") {
    Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
    Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
    Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
    Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
    Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
}

if (message === "pineapple") {
    Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
    Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
    Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
    Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
    Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
}

if (message === "strawberry") {
    Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
    Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
    Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
    Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
    Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
}

if (message === "watermelon") {
    Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
    Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
    Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
    Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
    Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
}

```

The screenshot shows the 'Application - onPostMessageReceived' script editor. The code block is highlighted with a red box. It contains logic to filter data based on messages received from a host page or embedded page.

```

function onPostMessageReceived(message: string, origin: string) : void
1 if (message === "mango") {
2     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
3     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
4     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
5     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
6     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
7 }
8
9
10 if (message === "pineapple") {
11     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
12     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
13     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
14     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
15     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
16 }
17
18 if (message === "strawberry") {
19     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
20     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
21     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
22     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
23     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
24 }
25
26 if (message === "watermelon") {
27     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
28     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
29     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
30     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
31     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
32 }

```

24. Let's also add some script on the Slider.

Click **fx**

The screenshot shows the 'Application - onPostMessageReceived' script editor. The 'Slider_1' node in the Layout tree is selected, indicated by a red box around its 'fx' button. The code block is identical to the one in the previous screenshot.

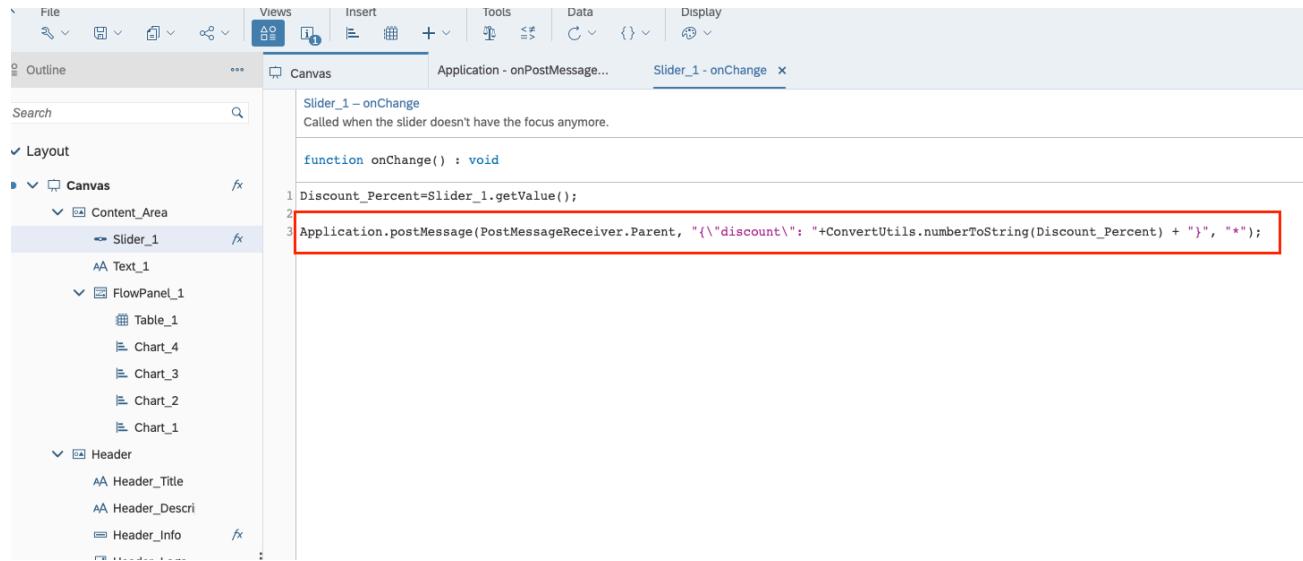
```

function onPostMessageReceived(message: string, origin: string) : void
1 if (message === "mango") {
2     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
3     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
4     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
5     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
6     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD14]");
7 }
8
9
10 if (message === "pineapple") {
11     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
12     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
13     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
14     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
15     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD15]");
16 }
17
18 if (message === "strawberry") {
19     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
20     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
21     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
22     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
23     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD18]");
24 }
25
26 if (message === "watermelon") {
27     Chart_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
28     Chart_2.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
29     Chart_3.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
30     Chart_4.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
31     Table_1.getDataSource().setDimensionFilter("Product_3e315003an", "[Product_3e315003an].[ABC].&[PD16]");
32 }

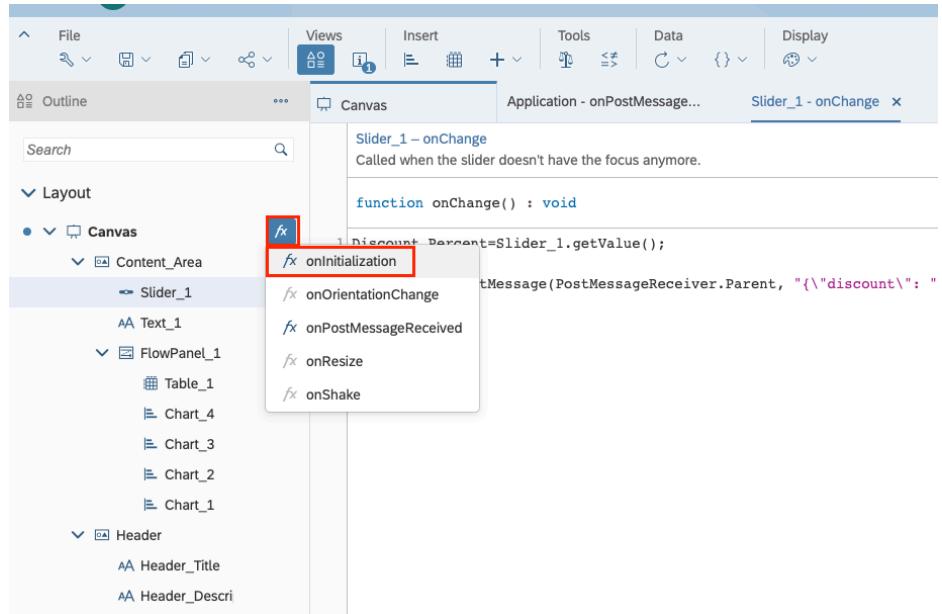
```

-
25. Add (or copy & paste) the following scripting for the on click event of **Slider_1**:

```
Application.postMessage(PostMessageReceiver.Parent, "{\"discount\":\n\"+ConvertUtils.numberToString(Discount_Percent) + \"", \"*\"});
```

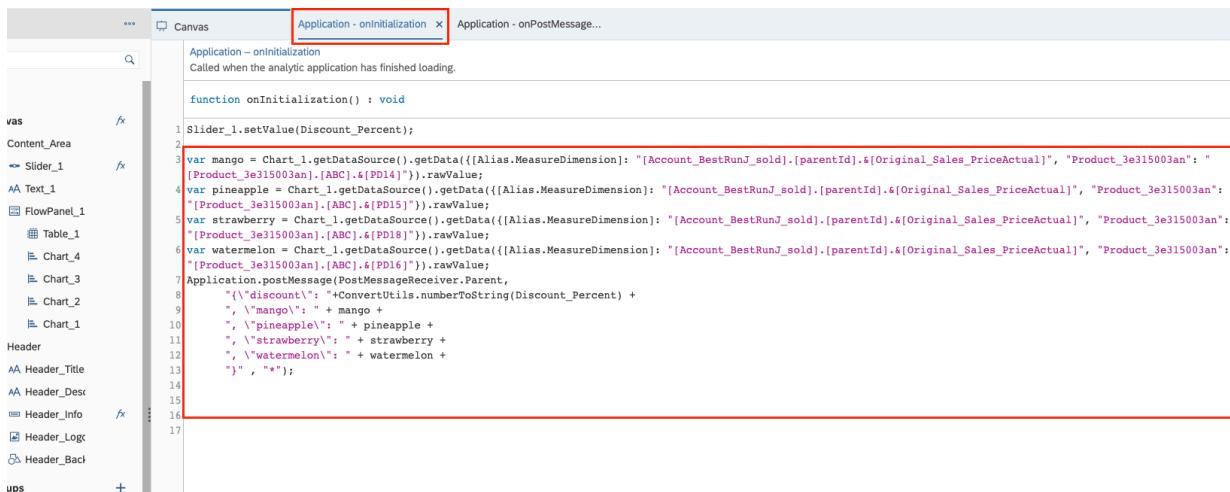


26. Select **onInitialization** event of the **Canvas**

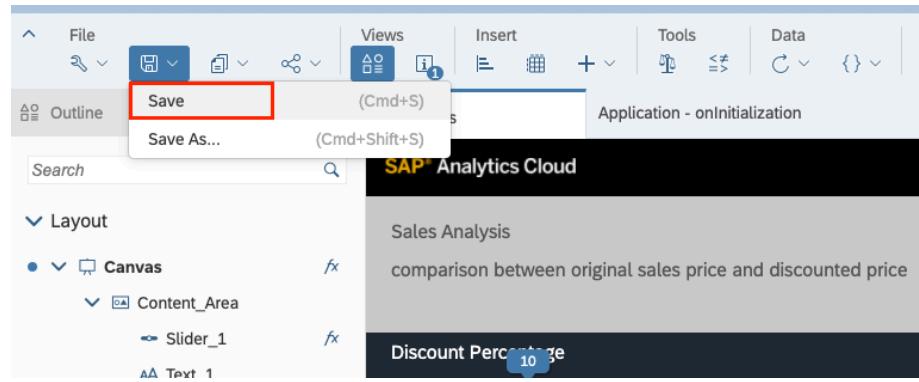


27. Add the following scripting APIs for the **onInitialization** event:

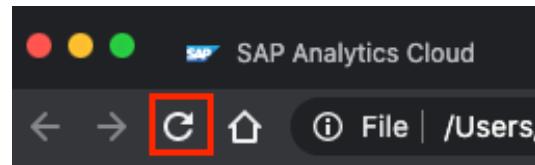
```
var mango = Chart_1.getDataSource().getData({[Alias.MeasureDimension]: "[Account_BestRunJ_sold].[parentId].[Original_Sales_PriceActual]", "Product_3e315003an": "[Product_3e315003an].[ABC].[PD14]"}).rawValue;
var pineapple = Chart_1.getDataSource().getData({[Alias.MeasureDimension]: "[Account_BestRunJ_sold].[parentId].[Original_Sales_PriceActual]", "Product_3e315003an": "[Product_3e315003an].[ABC].[PD15]"}).rawValue;
var strawberry = Chart_1.getDataSource().getData({[Alias.MeasureDimension]: "[Account_BestRunJ_sold].[parentId].[Original_Sales_PriceActual]", "Product_3e315003an": "[Product_3e315003an].[ABC].[PD18]"}).rawValue;
var watermelon = Chart_1.getDataSource().getData({[Alias.MeasureDimension]: "[Account_BestRunJ_sold].[parentId].[Original_Sales_PriceActual]", "Product_3e315003an": "[Product_3e315003an].[ABC].[PD16]"}).rawValue;
Application.postMessage(PostMessageReceiver.Parent,
  {"discount": "+ConvertUtils.numberToString(Discount_Percent) +
  ", \"mango\": " + mango +
  ", \"pineapple\": " + pineapple +
  ", \"strawberry\": " + strawberry +
  ", \"watermelon\": " + watermelon +
  "}" , "*");
```



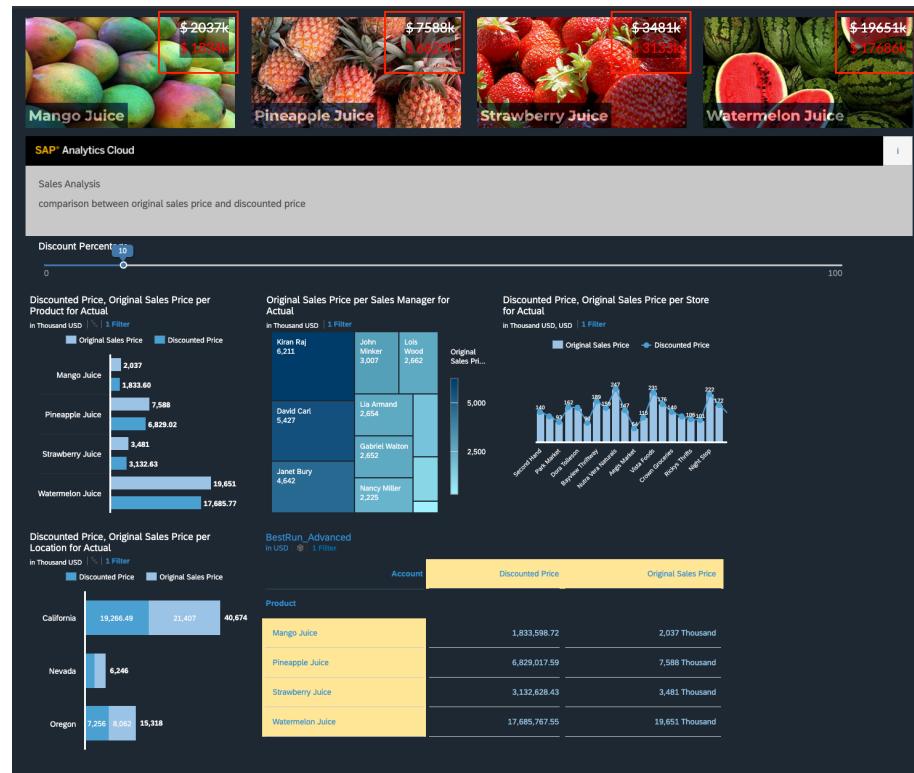
28. Click on the Floppy Disc icon and select **Save**.



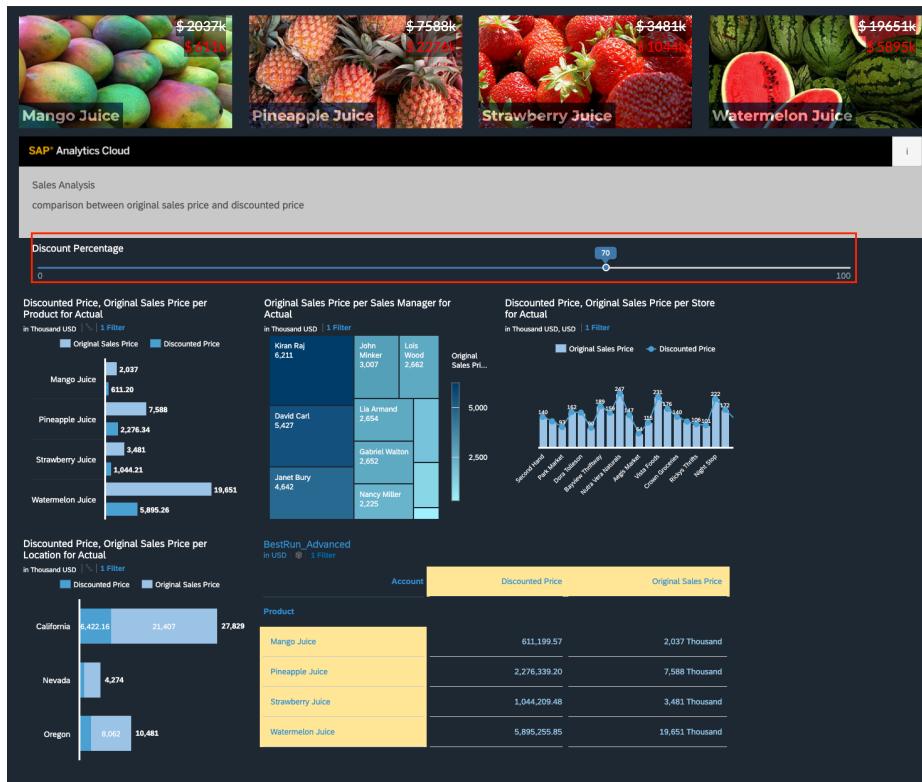
29. Click **C** on the previously opened ANA362_EXE1.html page or enter the web address again.



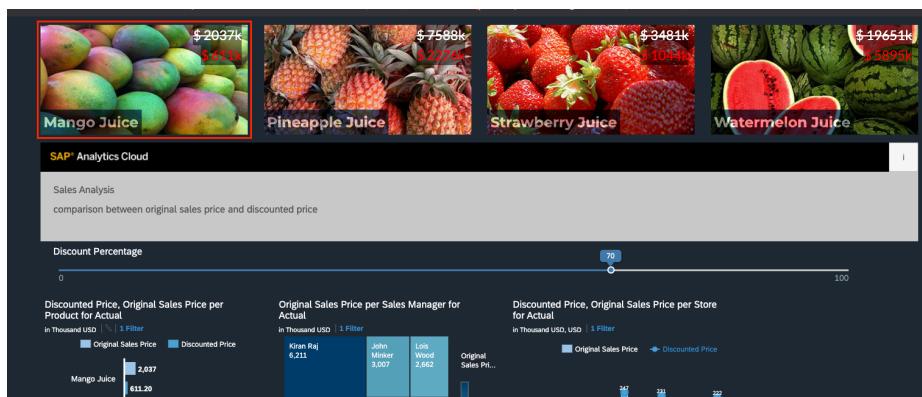
30. You can see all these prices when the application is initialized.



31. change the discount percentage to 70 via Slider

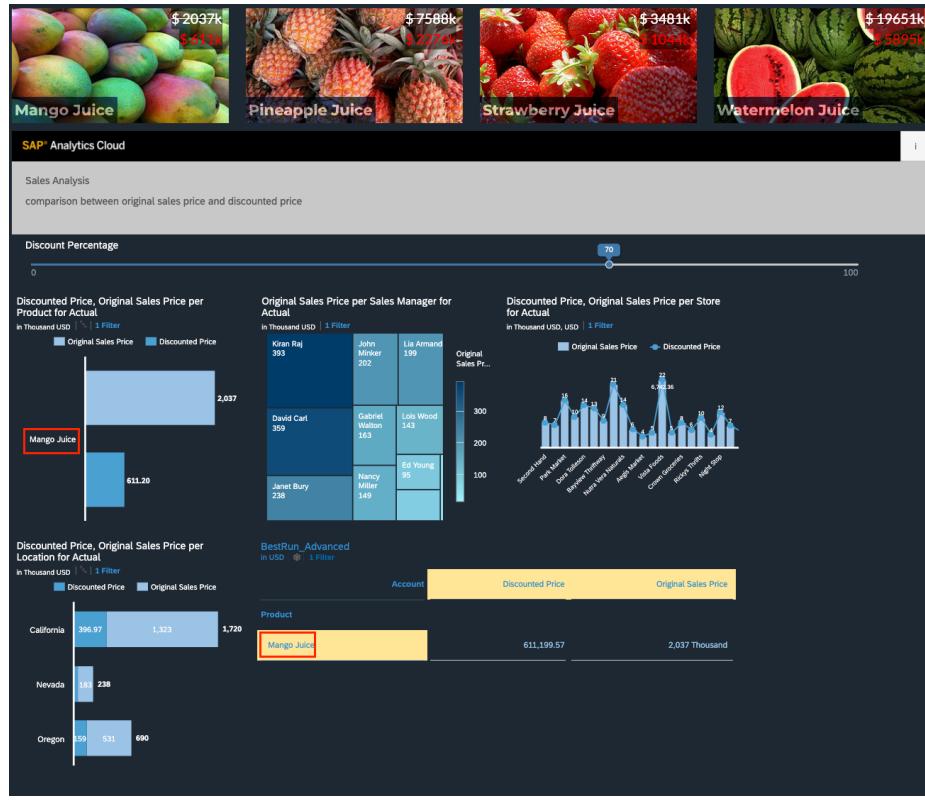


33. Now please select **Mango Juice**



34. Now you can see that on Mango Juice is displayed on the different Widgets. In fact, we have sent the message from HTML page “**mango juice**” to analytical application to set the filter on the Widgets. So here we can see the message exchange from **html page to analytical application**.

You can select another type of Juice to see that chart is filtered with the Juice name.



Congratulations! You Have completed the Exercise 1.

Summary

You Have Successfully Completed the Exercise!

You are now able to:

- Know the basic workflow of creating an Analytical Application
- Configure Table and Charts
- Understand the capability of script variable (with URL parameter)
- Get the basic concept of scripting capability
- Know how to use theme via CSS code
- Use post message to embed an analytic application into a HTML page
- Set an application to mobile enabled

ANA362 EXERCISE 2

Overview

Estimated time: [45] minutes

Objective

With this exercise you will be able to explore your dataset in real time via the Generic Template.

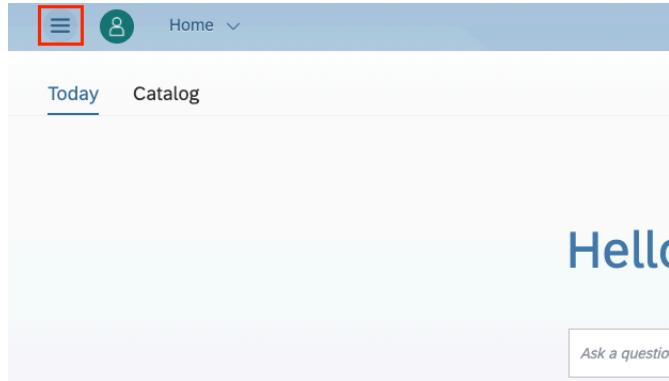
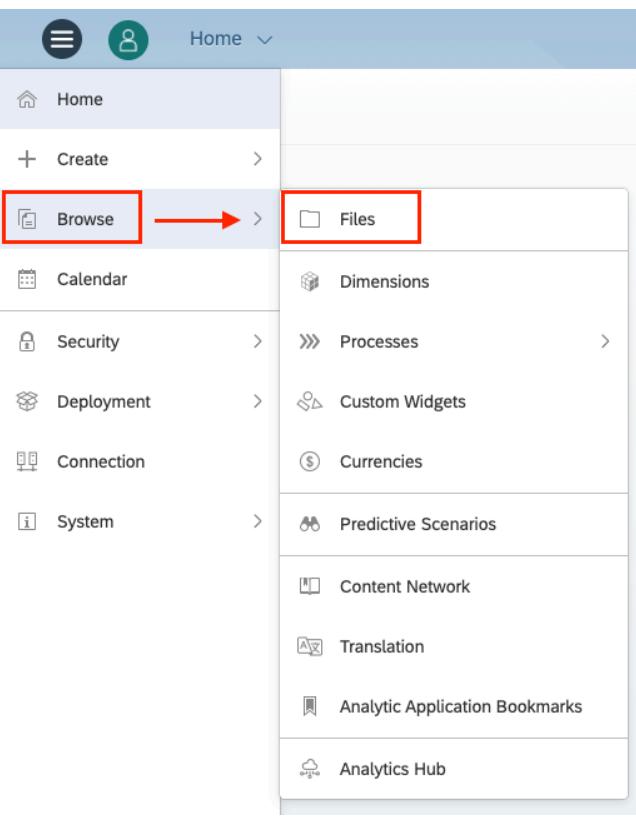
With this template you will have the possibility to select and modify your Data Set using the available functionalities.

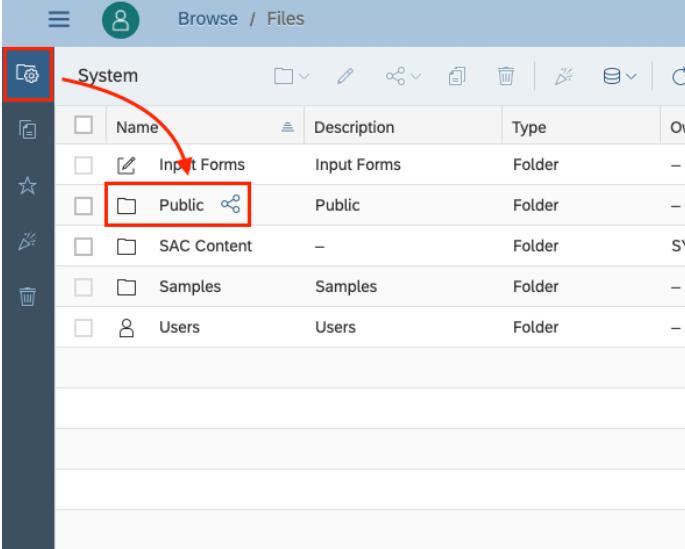
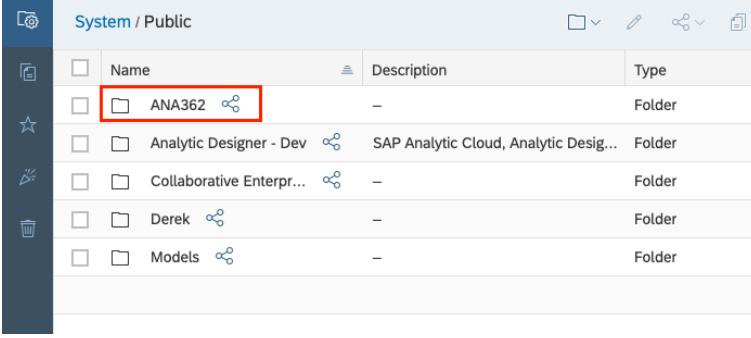
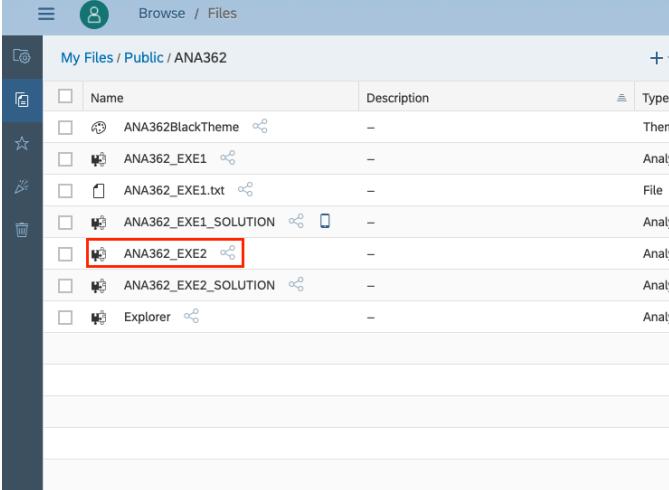
Exercise Description

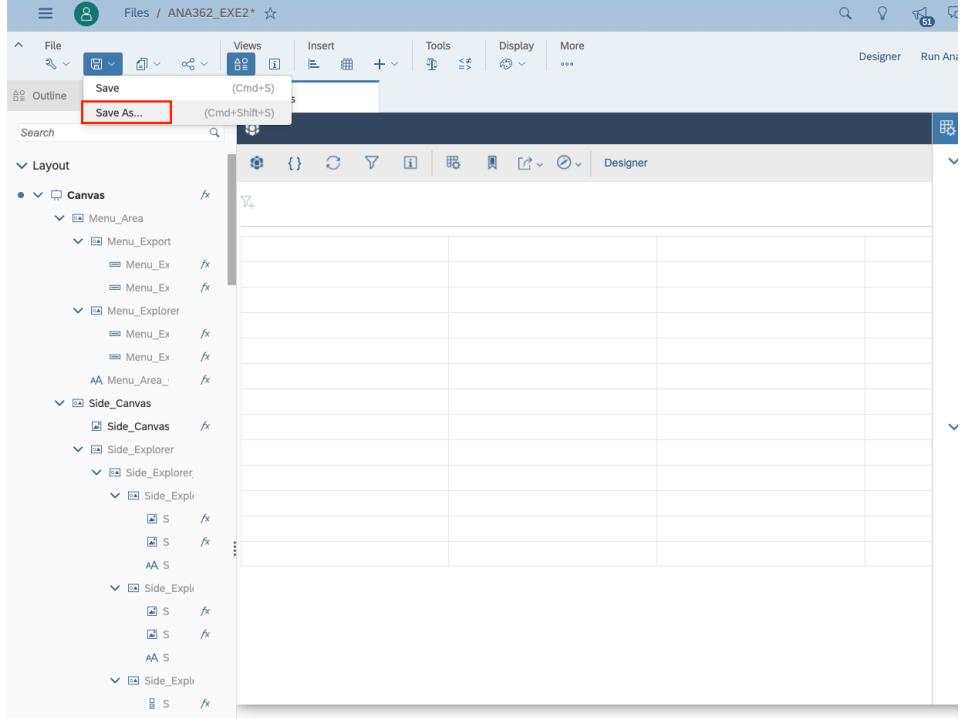
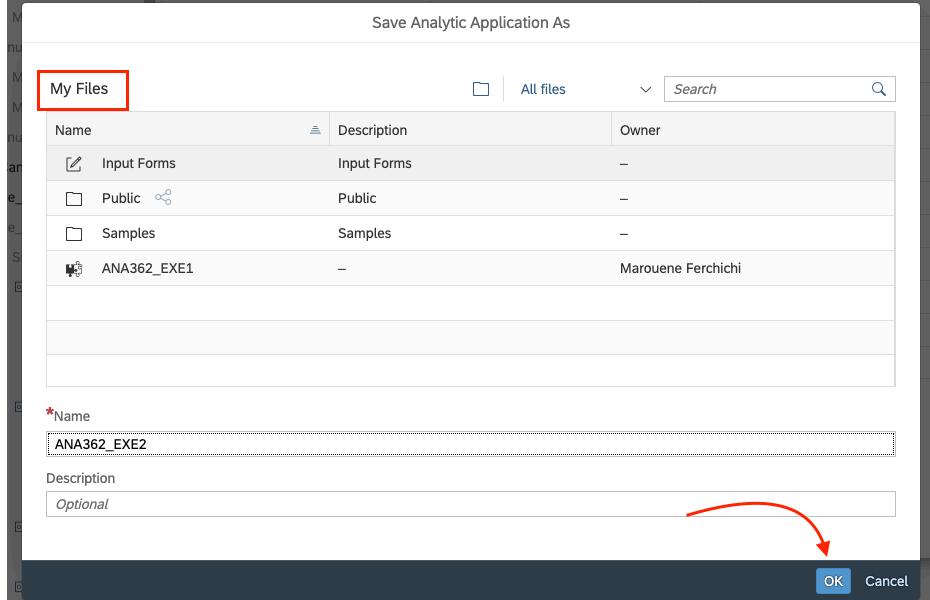
You are going to execute the following steps within this exercise

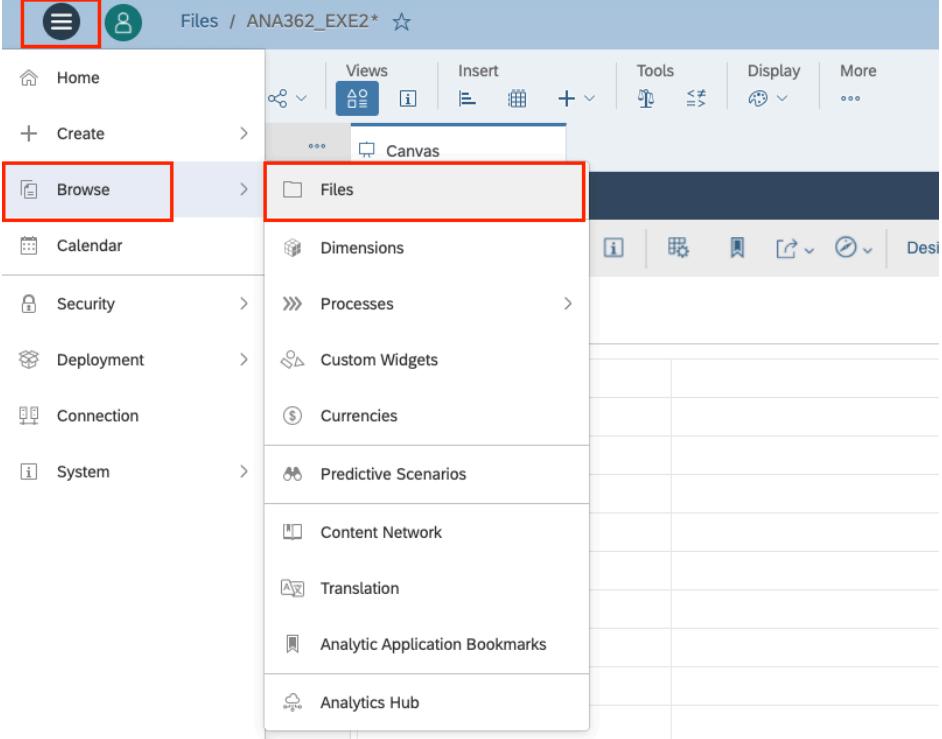
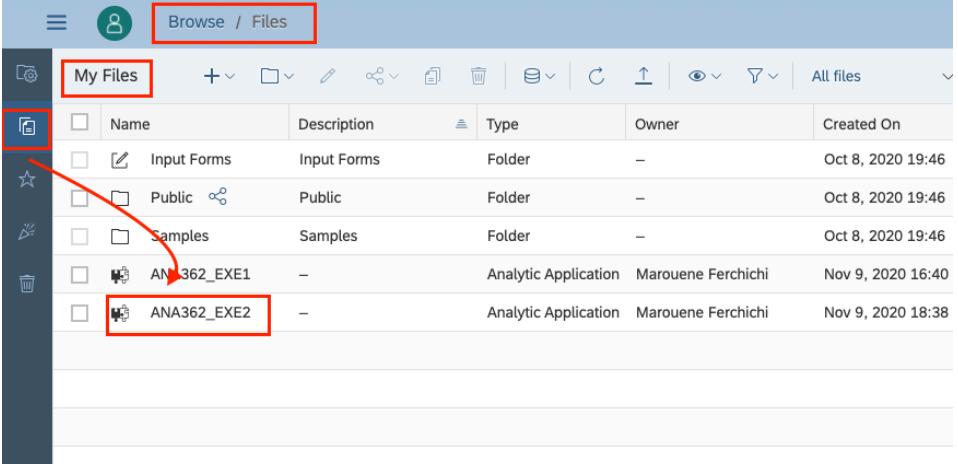
- Assign model to table and run the application
- Set the Data Model via URL Parameter when you run the application
- Use the SelectDataModelDialog to select a Model at start time

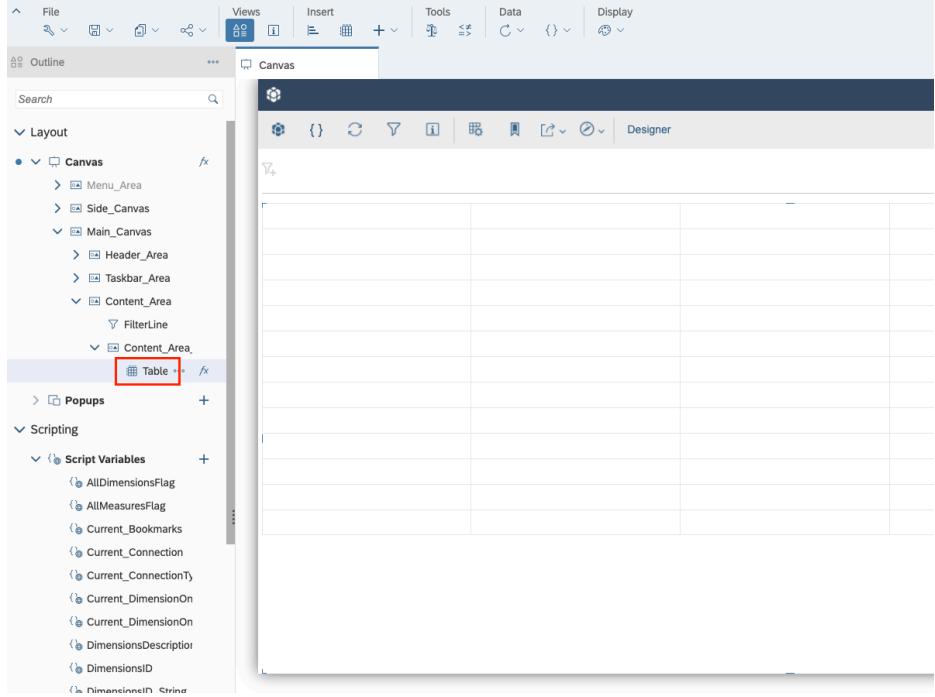
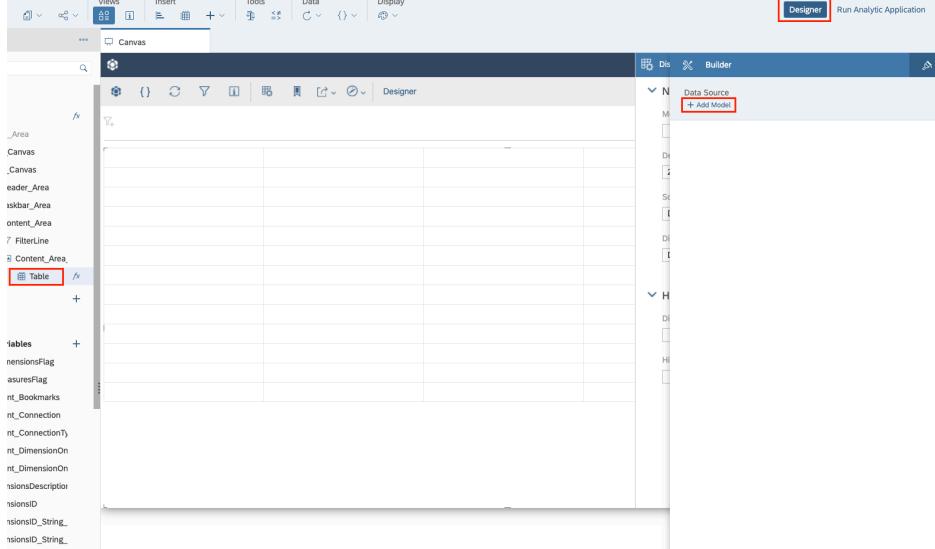
Part 1: Assign model to table and run the application & explore the different functionalities of the Generic Template.

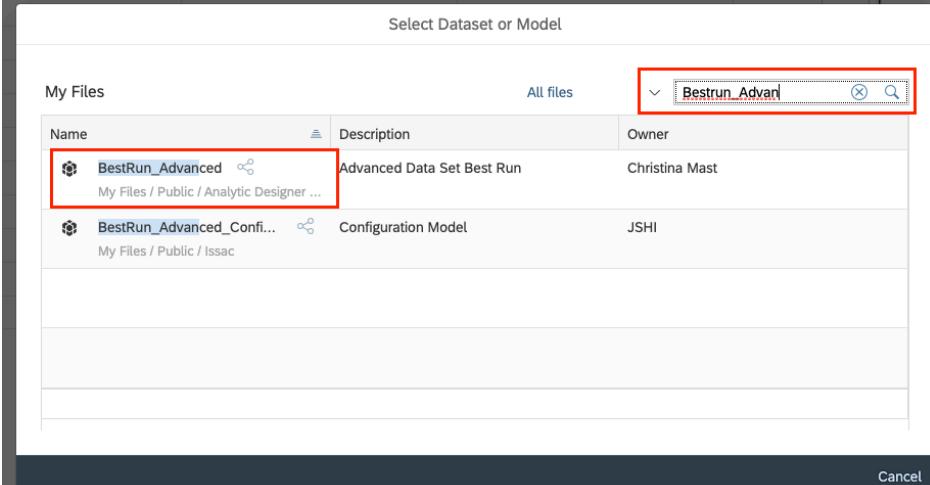
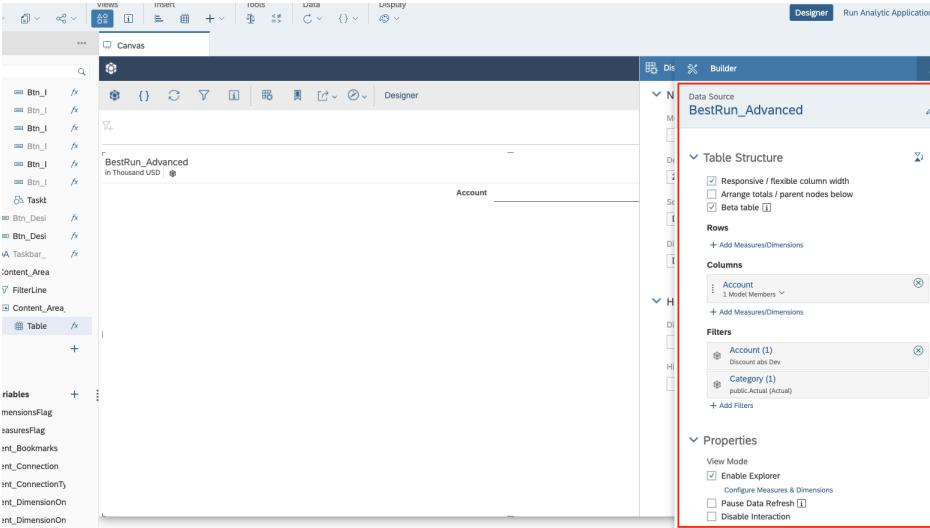
Explanation	Screenshot
1. Click on the Main Menu icon	
2. Select Browse and then Files to be able to select your analytical applications.	

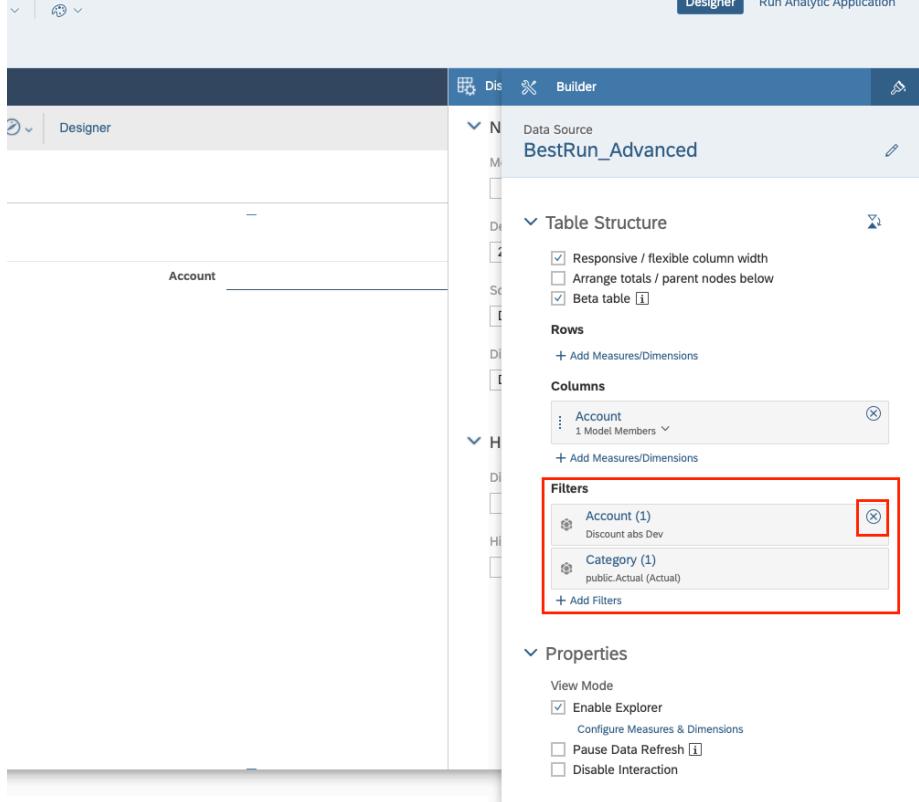
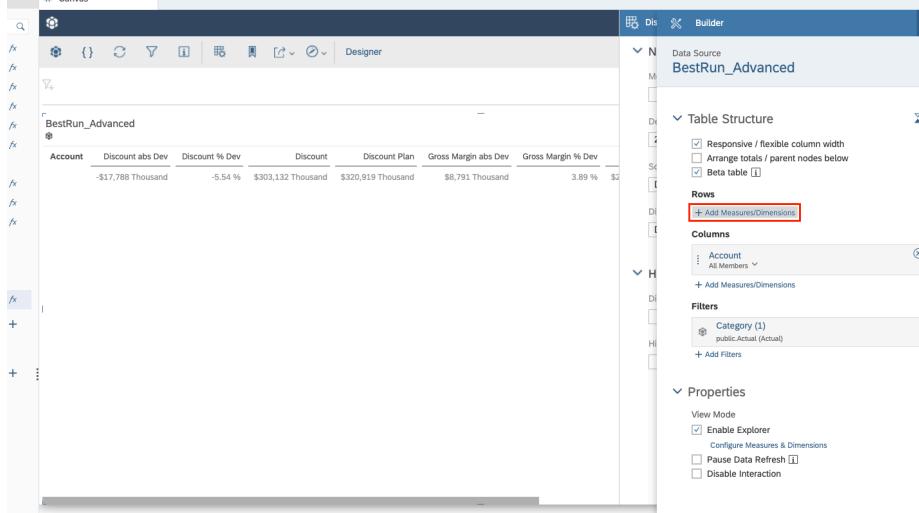
Explanation	Screenshot																								
<p>3. Select the icon System, and then open the folder Public.</p>	 <p>The screenshot shows the SAP Fiori Launchpad interface. On the left, there's a sidebar with icons for Home, System, Data, Analytics, and Fiori Launchpad. The 'System' icon is highlighted with a red box and has a red arrow pointing to the 'Public' folder in the main content area. The main content area displays a table with columns: Name, Description, Type, and Owner. The 'Public' folder is listed under the 'Input Forms' category.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> <th>Owner</th> </tr> </thead> <tbody> <tr> <td>Input Forms</td> <td>Input Forms</td> <td>Folder</td> <td>-</td> </tr> <tr> <td>Public</td> <td>Public</td> <td>Folder</td> <td>-</td> </tr> <tr> <td>SAC Content</td> <td>-</td> <td>Folder</td> <td>SY</td> </tr> <tr> <td>Samples</td> <td>Samples</td> <td>Folder</td> <td>-</td> </tr> <tr> <td>Users</td> <td>Users</td> <td>Folder</td> <td>-</td> </tr> </tbody> </table>	Name	Description	Type	Owner	Input Forms	Input Forms	Folder	-	Public	Public	Folder	-	SAC Content	-	Folder	SY	Samples	Samples	Folder	-	Users	Users	Folder	-
Name	Description	Type	Owner																						
Input Forms	Input Forms	Folder	-																						
Public	Public	Folder	-																						
SAC Content	-	Folder	SY																						
Samples	Samples	Folder	-																						
Users	Users	Folder	-																						
<p>4. Navigate to the folder ANA362</p>	 <p>The screenshot shows the 'System / Public' folder expanded. The 'ANA362' folder is highlighted with a red box. The table lists several sub-folders under 'Public': Analytic Designer - Dev, Collaborative Enterprise, Derek, and Models.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362</td> <td>-</td> <td>Folder</td> </tr> <tr> <td>Analytic Designer - Dev</td> <td>SAP Analytic Cloud, Analytic Design...</td> <td>Folder</td> </tr> <tr> <td>Collaborative Enterpr...</td> <td>-</td> <td>Folder</td> </tr> <tr> <td>Derek</td> <td>-</td> <td>Folder</td> </tr> <tr> <td>Models</td> <td>-</td> <td>Folder</td> </tr> </tbody> </table>	Name	Description	Type	ANA362	-	Folder	Analytic Designer - Dev	SAP Analytic Cloud, Analytic Design...	Folder	Collaborative Enterpr...	-	Folder	Derek	-	Folder	Models	-	Folder						
Name	Description	Type																							
ANA362	-	Folder																							
Analytic Designer - Dev	SAP Analytic Cloud, Analytic Design...	Folder																							
Collaborative Enterpr...	-	Folder																							
Derek	-	Folder																							
Models	-	Folder																							
<p>5. Click on the exercise ANA362_EXE2 to open it and then you will save it with My Files folder.</p>	 <p>The screenshot shows the 'My Files / Public / ANA362' folder expanded. The 'ANA362_EXE2' file is highlighted with a red box. The table lists files and folders within the 'ANA362' folder: ANA362BlackTheme, ANA362_EXE1, ANA362_EXE1.txt, ANA362_EXE1 SOLUTION, ANA362_EXE2, ANA362_EXE2 SOLUTION, and Explorer.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362BlackTheme</td> <td>-</td> <td>Theme</td> </tr> <tr> <td>ANA362_EXE1</td> <td>-</td> <td>Analy</td> </tr> <tr> <td>ANA362_EXE1.txt</td> <td>-</td> <td>File</td> </tr> <tr> <td>ANA362_EXE1 SOLUTION</td> <td>-</td> <td>Analy</td> </tr> <tr> <td>ANA362_EXE2</td> <td>-</td> <td>Analy</td> </tr> <tr> <td>ANA362_EXE2 SOLUTION</td> <td>-</td> <td>Analy</td> </tr> <tr> <td>Explorer</td> <td>-</td> <td>Analy</td> </tr> </tbody> </table>	Name	Description	Type	ANA362BlackTheme	-	Theme	ANA362_EXE1	-	Analy	ANA362_EXE1.txt	-	File	ANA362_EXE1 SOLUTION	-	Analy	ANA362_EXE2	-	Analy	ANA362_EXE2 SOLUTION	-	Analy	Explorer	-	Analy
Name	Description	Type																							
ANA362BlackTheme	-	Theme																							
ANA362_EXE1	-	Analy																							
ANA362_EXE1.txt	-	File																							
ANA362_EXE1 SOLUTION	-	Analy																							
ANA362_EXE2	-	Analy																							
ANA362_EXE2 SOLUTION	-	Analy																							
Explorer	-	Analy																							

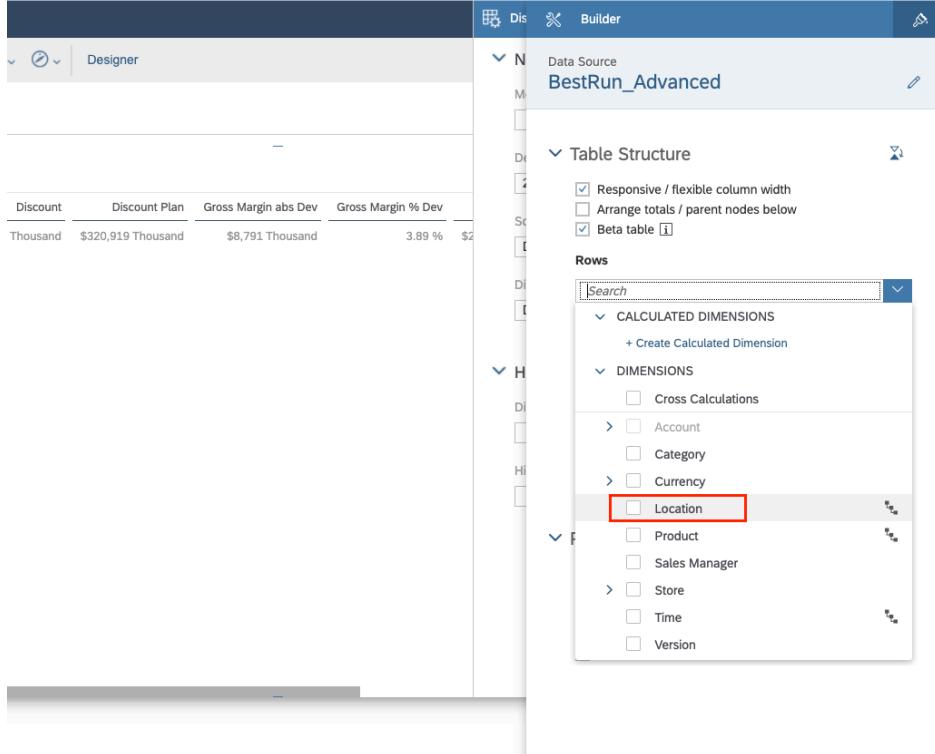
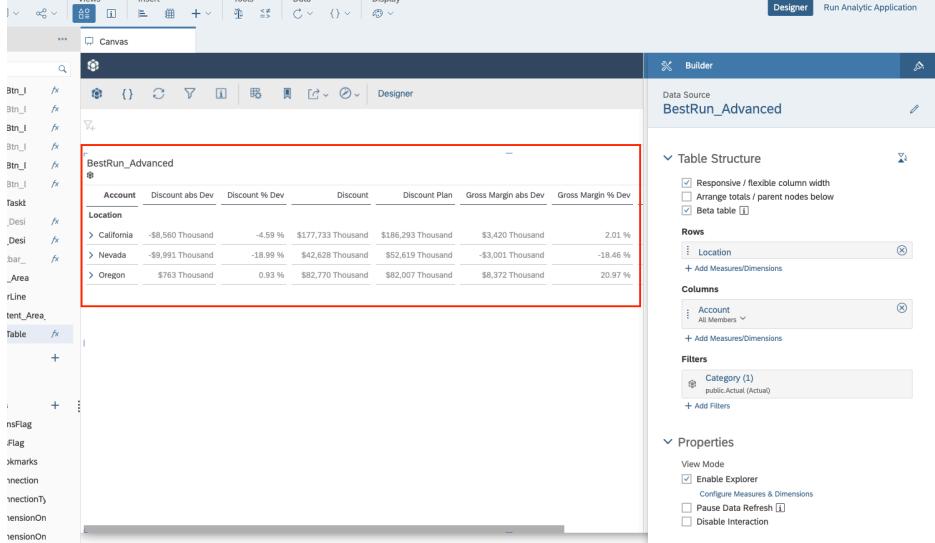
Explanation	Screenshot
<p>6. Before you start the different steps of the exercise, first of all YOU SHOULD save the application under My Files and rename it so you can work on your own application.</p> <p>Click on the Save icon → Save As</p>	
<p>7. Be sure that you are under the folder My Files.</p> <p>Press OK and the application will be saved under your private folder My Files</p>	

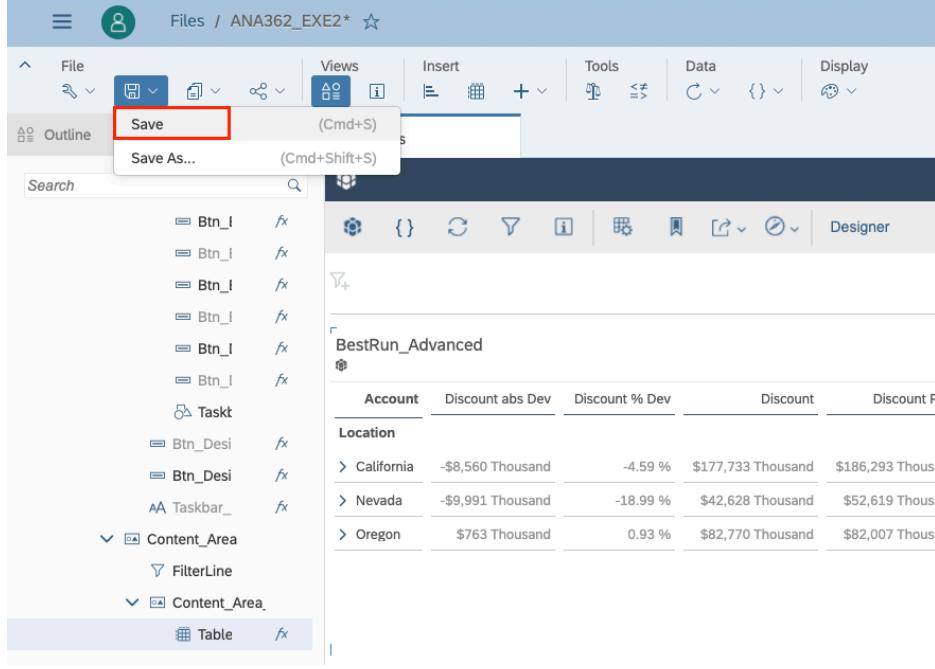
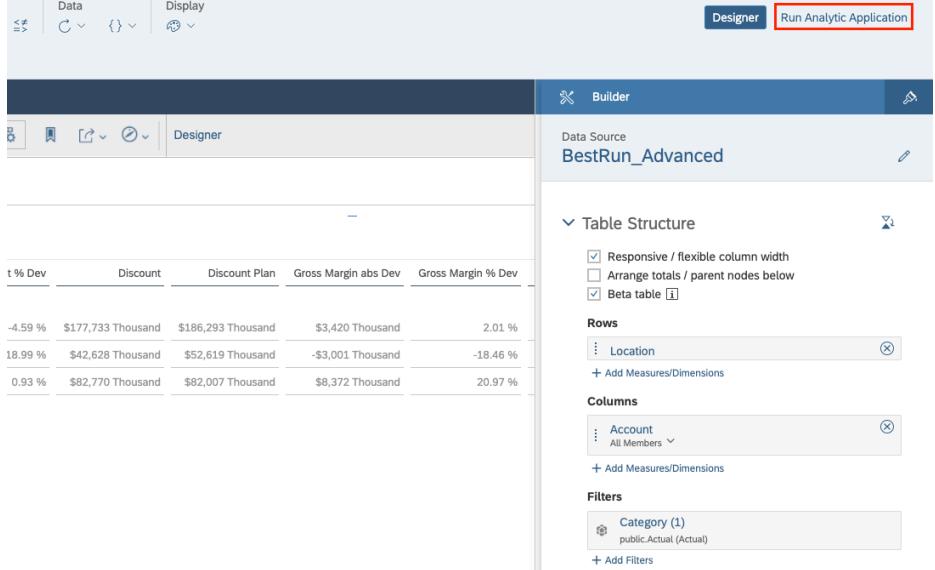
Explanation	Screenshot
<p>8. Now you can navigate back to My Files again in order to see your application.</p>	 <p>The screenshot shows the SAP Fiori Launchpad interface. The top navigation bar includes icons for Home, Views, Insert, Tools, Display, and More. Below the navigation bar, there is a breadcrumb trail: Home > Views > Canvas > Files. The 'Files' option is highlighted with a red box. The main content area displays various system-related tiles such as Dimensions, Processes, Custom Widgets, Currencies, Predictive Scenarios, Content Network, Translation, Analytic Application Bookmarks, and Analytics Hub.</p>
<p>9. Click on the exercise ANA362_EXE2 to open it within My Files folder.</p>	 <p>The screenshot shows the 'My Files' list view. The top navigation bar includes icons for Home, Views, Insert, Tools, Display, and More. The breadcrumb trail shows 'Browse / Files'. The main content area displays a table of files and folders. The columns are Name, Description, Type, Owner, and Created On. The table includes entries for Input Forms (Folder), Public (Folder), Samples (Folder), ANA362_EXE1 (Analytic Application), and ANA362_EXE2 (Analytic Application). The 'ANA362_EXE2' entry is highlighted with a red box and has a red arrow pointing to it from the previous screenshot's 'Files' list.</p>

Explanation	Screenshot
<p>10. As next, under Canvas → Main_Canvas → Content_Area, select the Table.</p>	
<p>11. Toggle the Designer panel to the Builder panel and click Add Model</p>	

Explanation	Screenshot
<p>12. Now you need to select a data source. Please use BestRun_Advanced as data source.</p> <p>Please use the search bar in order to find the data source faster; Write BestRun_Advan...</p>	
<p>13. Select BestRun_Advanced</p>	
<p>14. As you can see the data source was added to the Table and we can now configure the table structure.</p>	

Explanation	Screenshot
<p>15. Let's remove the Filter for Account. Click the icon x to delete the filter.</p>	
<p>16. As next we will add a dimension to the rows. Click +Add Measures/Dimensions</p>	

Explanation	Screenshot
<p>17. Select Location as a dimension.</p>	 <p>The screenshot shows the Tableau Data Builder interface. In the top right, the 'Builder' tab is selected. Below it, the 'Data Source' is set to 'BestRun_Advanced'. The main area is titled 'Table Structure'. Under the 'Dimensions' section, the 'Location' checkbox is checked and highlighted with a red box. Other dimensions listed include Account, Category, Currency, Product, Sales Manager, Store, Time, and Version.</p>
<p>18. As shown, we added the Location to our table. As next we save the application.</p>	 <p>The screenshot shows the Tableau Designer interface. A table named 'BestRun_Advanced' is displayed. The columns are: Account, Discount abs Dev, Discount % Dev, Discount, Discount Plan, Gross Margin abs Dev, and Gross Margin % Dev. The 'Location' column is highlighted with a red box. The 'Rows' section of the sidebar shows 'Location' is selected. The 'Properties' panel on the right shows 'View Mode' is set to 'Enable Explorer'.</p>

Explanation	Screenshot
<p>19. Click on the Floppy Disc icon and select Save.</p>	 <p>The screenshot shows the SAP Analytics Cloud interface with the file menu open. The 'Save' option is highlighted with a red box. Below it, 'Save As...' is also visible.</p>
<p>20. Click Run Analytic Application to see how our Generic Template look like, and let's explore the different functionalities available.</p>	 <p>The screenshot shows the SAP Analytics Cloud interface with the 'Run Analytic Application' button highlighted with a red box in the top right corner. The interface displays a table with data and various configuration options on the right side.</p>

Explanation**Screenshot**

21. Congratulations! You were able to assign a Model to the table and achieved the first part of the Exercise 2. Let's explore together to the different functionalities available in tool bar:

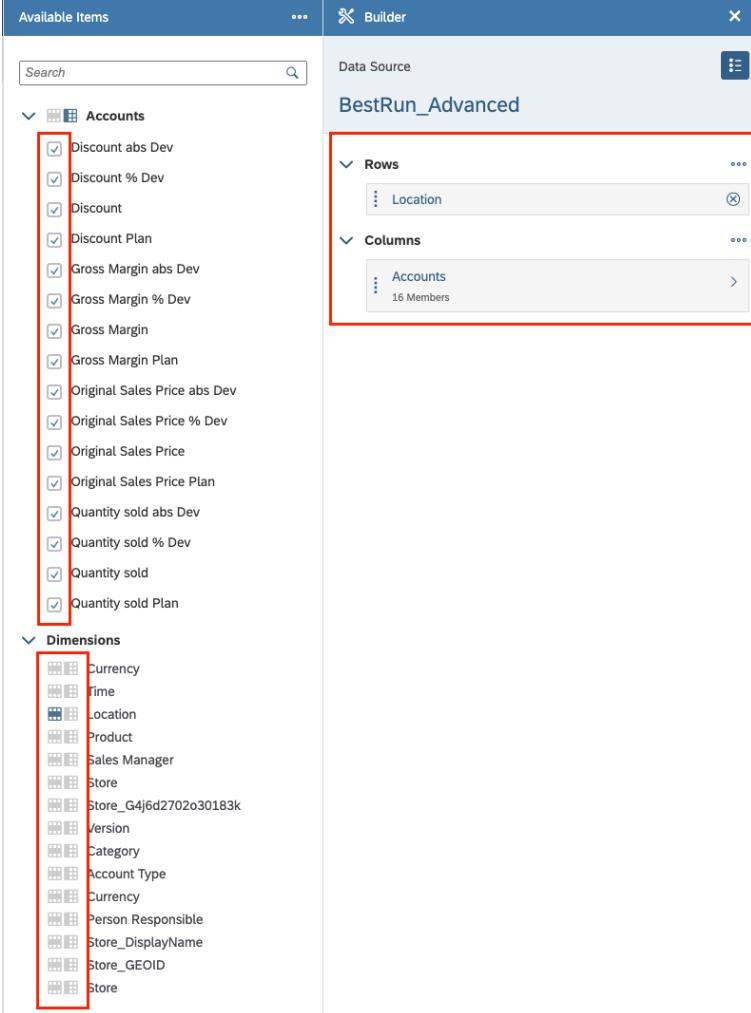
Location	Account	Discount abs Dev	Discount % Dev	Discount	Discount Plan	Gross Margin abs Dev	Gross Margin % Dev	Gross Margin	Gross Margin Plan	Original Sales Price abs Dev	Original Sales Price % Dev	Original Sales Price	Original Sales Price Plan	Quantity sold abs Dev	Quantity so
> California	-\$8,560 Thousand	-4.59 %	\$177,733 Thousand	\$186,293 Thousand	\$3,420 Thousand	2.01 %	\$173,482 Thousand	\$170,062 Thousand	-\$51,201 Thousand	0 k	\$723,452 Thousand	\$774,653 Thousand	-\$5,341.37 Thousand		
> Nevada	-\$9,991 Thousand	-18.99 %	\$42,628 Thousand	\$52,619 Thousand	-\$3,001 Thousand	-18.46 %	\$13,254 Thousand	\$16,255 Thousand	\$13,678 Thousand	0 k	\$114,506 Thousand	\$100,828 Thousand	-\$772.65 Thousand		
> Oregon	\$763 Thousand	0.93 %	\$82,770 Thousand	\$82,007 Thousand	\$8,372 Thousand	20.97 %	\$48,302 Thousand	\$39,690 Thousand	\$24,700 Thousand	0 k	\$291,152 Thousand	\$266,452 Thousand	-\$2,411.33 Thousand		

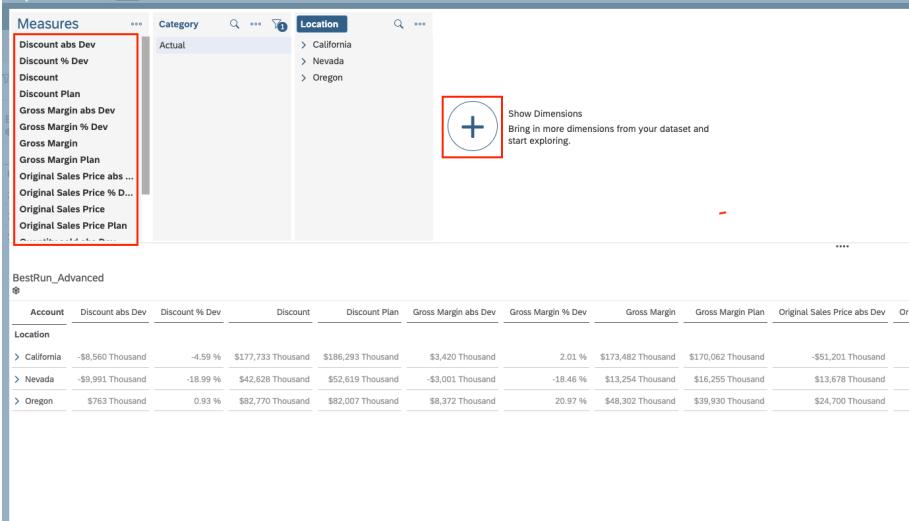
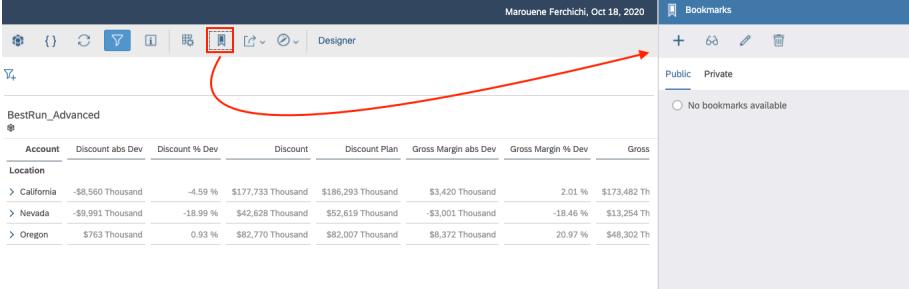
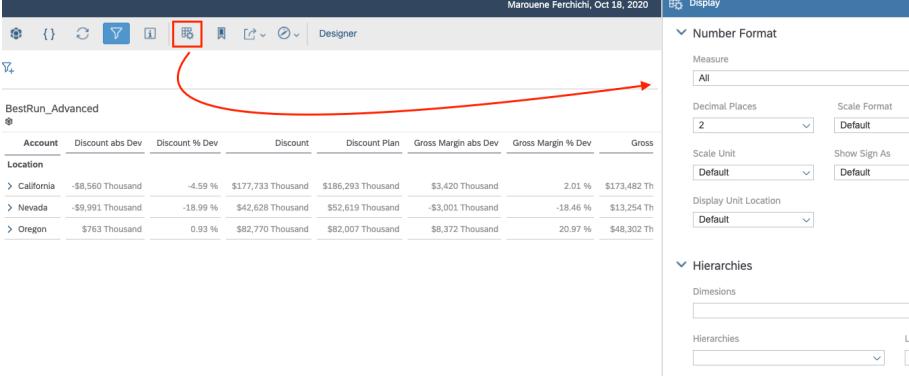
22. Click the button **Designer** and see what will happen.



23. As shown, by clicking the **Designer** button, a new panel will be opened.

In this **Designer Panel** we can see all the **Available Items (Accounts & Dimensions)** of our **Data source**.

Explanation	Screenshot
<p>24. You are able to select/deselect Measures. You can as well your dimension vertically or horizontally.</p> <p>You can drag and drop between rows and columns</p> <p>Feel free to explore it!</p>	 <p>The screenshot shows the Tableau Data Builder window. On the left, the 'Available Items' pane lists various measures and dimensions. A red box highlights the 'Accounts' section under 'Measures'. Another red box highlights the 'Dimensions' section. On the right, the 'Builder' pane shows the 'Data Source' as 'BestRun_Advanced'. Under 'Rows', there is one item: 'Location'. Under 'Columns', there is one item: 'Accounts' (16 Members). A red box highlights the 'Rows' section.</p>
<p>25. Click on Open Explorer icon</p>	 <p>The screenshot shows the Tableau ribbon. The 'Open Explorer' icon (a magnifying glass with a plus sign) is highlighted with a red box. Other icons include 'Home', 'New', 'Save', 'Refresh', 'Find', 'Info', 'Zoom In', 'Zoom Out', 'Designer', and 'Advanced Settings'. Below the ribbon, the text 'BestRun_Advanced' is visible.</p>

Explanation	Screenshot
26. You can also select/deselect Measures and Add dimensions.	 <p>The screenshot shows the Power BI interface with the 'Measures' pane open on the left. A red box highlights the list of measures: 'Discount abs Dev', 'Discount % Dev', 'Discount', 'Discount Plan', 'Gross Margin abs Dev', 'Gross Margin % Dev', 'Gross Margin', 'Gross Margin Plan', 'Original Sales Price abs ...', 'Original Sales Price % D...', 'Original Sales Price', and 'Original Sales Price Plan'. To the right of the pane is a 'Location' section with a tree view of locations: California, Nevada, and Oregon. Below the pane is a large plus icon with a circle inside, labeled 'Show Dimensions' with the sub-instruction 'Bring in more dimensions from your dataset and start exploring.'</p>
27. You can export your table to PDF by clicking the Export icon.	 <p>The screenshot shows the Power BI ribbon with various icons. A red box highlights the 'Export to PDF' icon, which is represented by a document with a printer symbol. Below the ribbon, there is a preview of a table titled 'BestRun_Advanced' with data for California, Nevada, and Oregon.</p>
28. By clicking the bookmark icon, a new panel will be opened, and you can either add/modify a public or a private bookmark.	 <p>The screenshot shows the Power BI ribbon with the 'Bookmark' icon highlighted by a red box. A red callout arrow points to a 'Bookmarks' panel on the right side of the screen. The panel has sections for 'Public' and 'Private' bookmarks, both of which are currently empty. The table 'BestRun_Advanced' is visible below the ribbon.</p>
29. You can change the Number Format of the available measures, by clicking the icon Display .	 <p>The screenshot shows the Power BI ribbon with the 'Display' icon highlighted by a red box. A red callout arrow points to a 'Number Format' panel on the right side of the screen. The panel includes settings for 'Measure' (set to 'All'), 'Decimal Places' (set to 2), 'Scale Format' (set to 'Default'), 'Scale Unit' (set to 'Default'), 'Show Sign As' (set to 'Default'), 'Display Unit Location' (set to 'Default'), and a 'Hierarchies' section. The table 'BestRun_Advanced' is visible below the ribbon.</p>

Part 2: Set the Data Model via URL Parameter, while running the application

- Let's go back to the application **ANA362_EXE2** and you will create a new Script variable.

Go to the outline panel and click

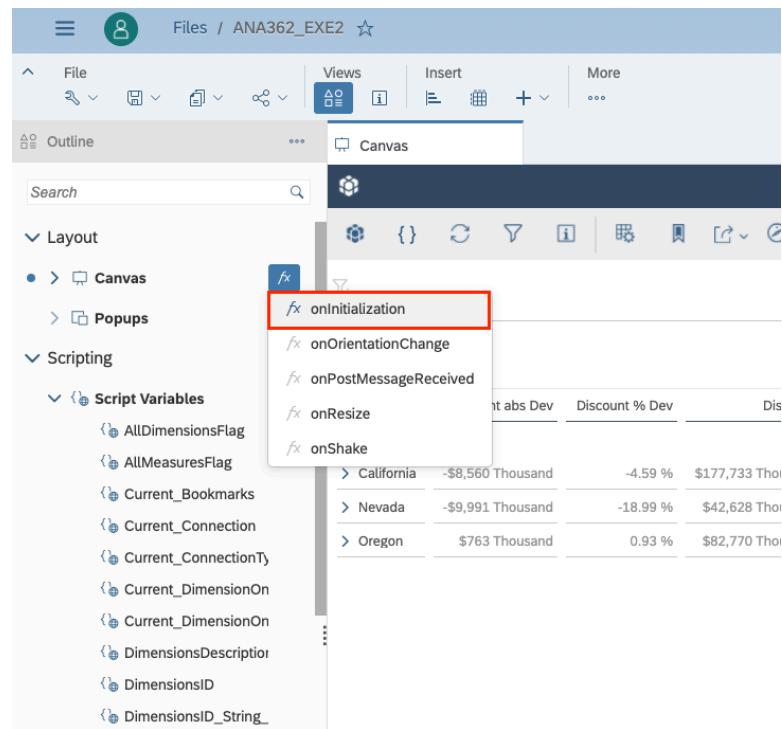
The screenshot shows the application interface with the title bar 'ANA362 / ANA362_EXE2'. The left sidebar has sections like 'File', 'Views', 'Insert', 'Tools', 'Data', and 'Display'. Under 'Scripting', there is a 'Script Variables' section with a '+' button highlighted by a red box. Below it is a list of variables: AllDimensionsFlag, AllMeasuresFlag, Current_Bookmarks, Current_Connection, Current_ConnectionT, Current_DimensionOn, Current_DimensionOff, DimensionsDescriptor, DimensionsID, DimensionsID_String, DimensionsID_String_0, and DimensionsInfo.

- Give to new variable **ModelId** as a name, **String** as type and **check the Expose variable via URL parameter** as shown in the screenshot.

The screenshot shows the 'Script Variable' dialog box. It has a 'Structure' section with a 'Name' input field containing 'ModelId', a 'Description' input field (empty), a 'Type' dropdown set to 'string', and a checked 'Expose variable via URL parameter' checkbox. At the bottom right, there is a 'Done' button with a red arrow pointing to it.

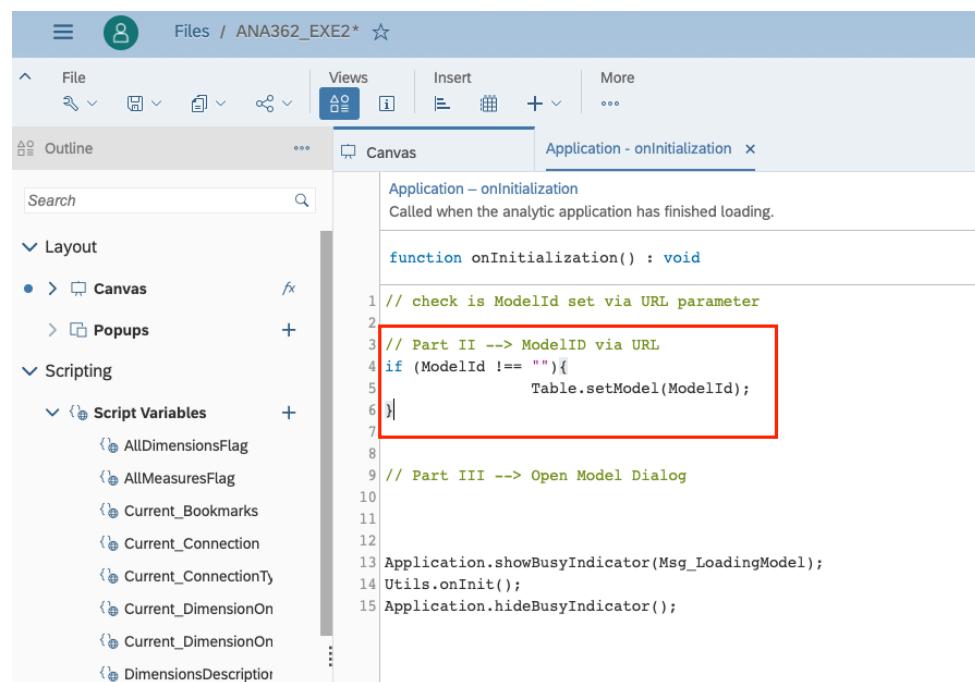
- Press Done to save.

4. Go to the **Canvas** in the Outline and click on **fx** and select **onInitialization** (event)

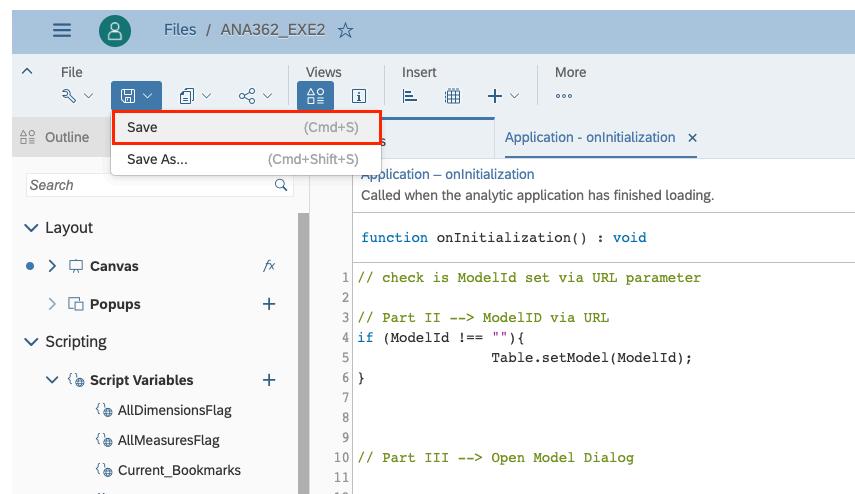


5. Add the script below under: // Part II --> ModelID via URL

```
if (ModelId !== ""){
    Table.setModel(ModelId);
}
```



6. Click on the **Floppy Disc** icon and select **Save**.



7. Click **Run Analytical Application**

The screenshot shows the SAP Analytics Cloud Designer view. At the top, there are tabs for 'Data' and 'Display'. On the right, there is a 'Builder' panel with the following configuration:

- Data Source:** BestRun_Advanced
- Table Structure:**
 - Responsive / flexible column width (checked)
 - Arrange totals / parent nodes below (unchecked)
 - Beta table (checked)
- Rows:** Location
- Columns:** Account
- Filters:** Category (1) public.Actual (Actual)

8. Go to the browser URL and add on the end of the URL **;p_ModelId=t.1.BestRun_Advanced:BestRun_Advanced**

Or

;p_ModelId=C123PY6L40Z0961QIUKIJ70F7K

The screenshot shows a web browser window with the following URL in the address bar:

http://app-design-pm.eu10.sapanalytics.cloud/app/pau/variants/107/app.html#mode=present;view_id=appBuilding;appId=f50c2af728eff89e6cb9f393e955ade

Below the address bar, the browser status bar shows the date: Marouene Ferchichi, Oct 18, 2020.

The main content area displays a table titled 'BestRun_Advanced' with the following data:

Location	Account	Discount abs Dev	Discount % Dev	Discount	Discount Plan	Gross Margin abs Dev	Gross Margin % Dev	Gross Margin	Gross Margin Plan	Original Sales Price abs Dev	Original Sales Price % Dev	Original Sales Price
California	\$8,560 Thousand	-4.59 %	\$177,733 Thousand	\$186,293 Thousand	\$3,420 Thousand	2.01 %	\$173,492 Thousand	\$170,062 Thousand	\$51,201 Thousand	0 k	\$723,452 Thousand	\$774,653 Thousand
Nevada	\$9,991 Thousand	-18.99 %	\$42,628 Thousand	\$52,619 Thousand	-\$3,001 Thousand	-18.46 %	\$13,254 Thousand	\$16,205 Thousand	\$13,678 Thousand	0 k	\$114,506 Thousand	\$100,828 Thousand
Oregon	\$763 Thousand	0.93 %	\$82,770 Thousand	\$82,007 Thousand	\$8,372 Thousand	20.97 %	\$48,302 Thousand	\$39,930 Thousand	\$24,700 Thousand	0 k	\$291,152 Thousand	\$266,452 Thousand

9. Reload the application to see the result
10. As you can see, we have now a new dataset which is **Planning_DataSet**, with different dimension and measures.

You can explore the new dataset by using the toolbar as shown in the first part of the exercise.

Account	Revenue
	805,582,874,986.00

11. You can explore the new dataset and build your own table based on the available items.

Available Items

- Accounts
- Revenue
- Quantity

Dimensions

- Country
- Product
- ProductGroup
- Version
- YearMonth
- Account Type

Builder

Data Source

Planning_DataSet

ROWS

- Accounts
- Country

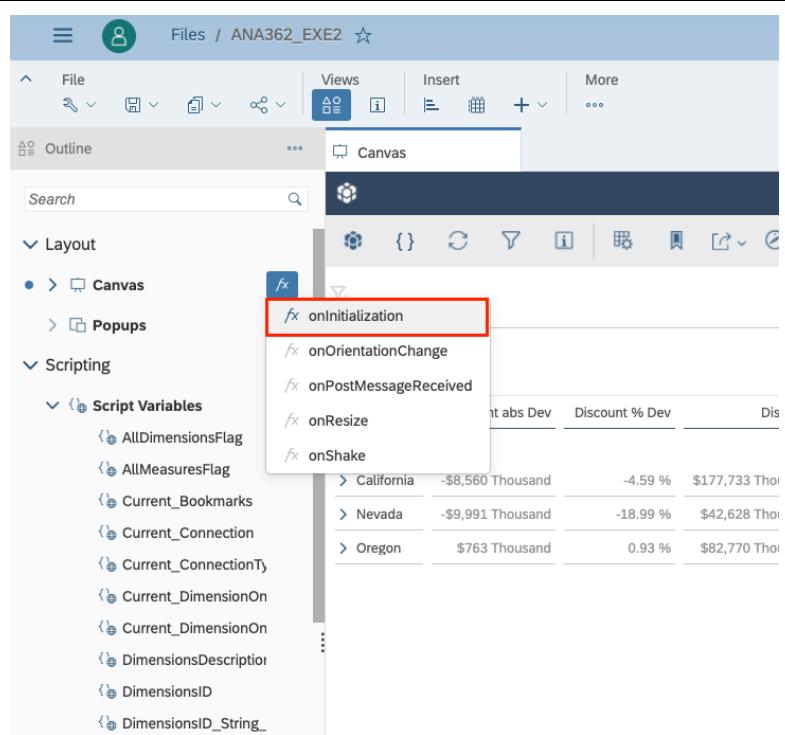
COLUMNS

- Version

Part 3: Use the SelectDataModelDialog to select a Model at Start time.

1. Let's go back to the application **ANA362_EXE2**.

2. Go to the outline panel and click **fx** of **Canvas** and select **onInitialization** (event)



3. Add the script below under the comment: **//Part III --> Open Model Dialog**

```
else {
    Table.openSelectModelDialog();
}
```

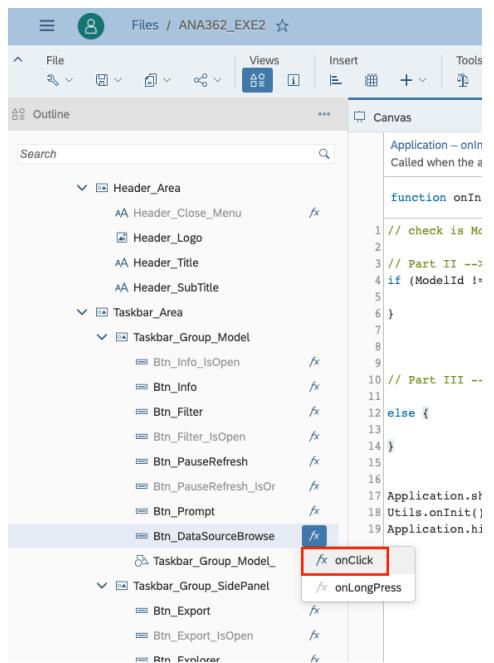
```
function onInitialization(): void
{
    // check is ModelID set via URL parameter
    if (ModelId != ""){
        Table.setModel(ModelId);
    }
}

// Part III --> Open Model Dialog
else {
    Table.openSelectModelDialog();
}

Application.showBusyIndicator(Msg_LoadingModel);
Utils.onInit();
Application.hideBusyIndicator();
```

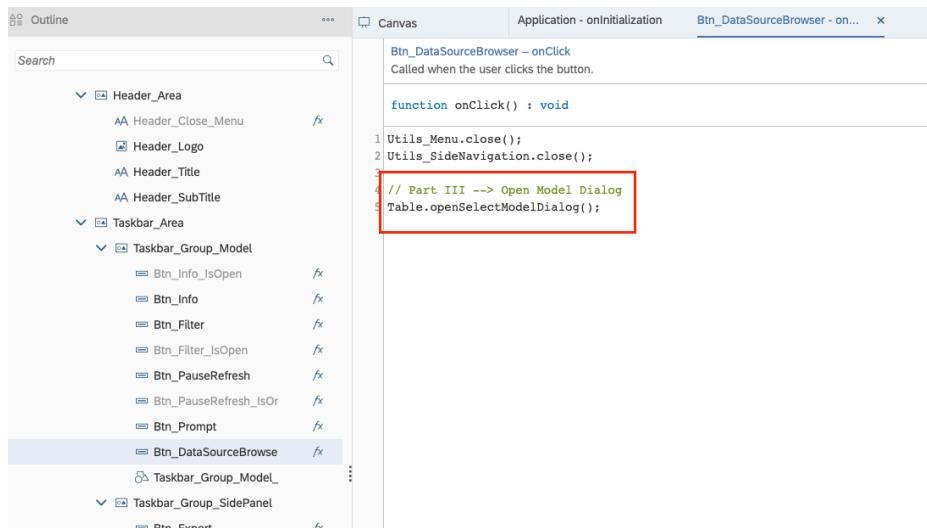
The screenshot shows the script editor for the 'onInitialization' event. The code is written in JavaScript. A red box highlights the line 'Table.openSelectModelDialog();' which is part of the 'else' block following the URL check. The code also includes comments for parts II and III, and handles busy indicator logic.

4. Go to the **Btn_DataSourceBrowser** in the outline and click **fx** and select **onClick** (event).

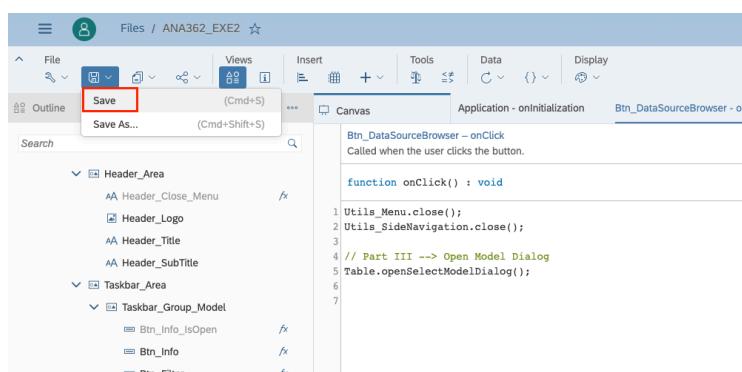


5. Add the script below under the comment **//Part III --> Open Model Dialog**

```
Table.openSelectModelDialog();
```



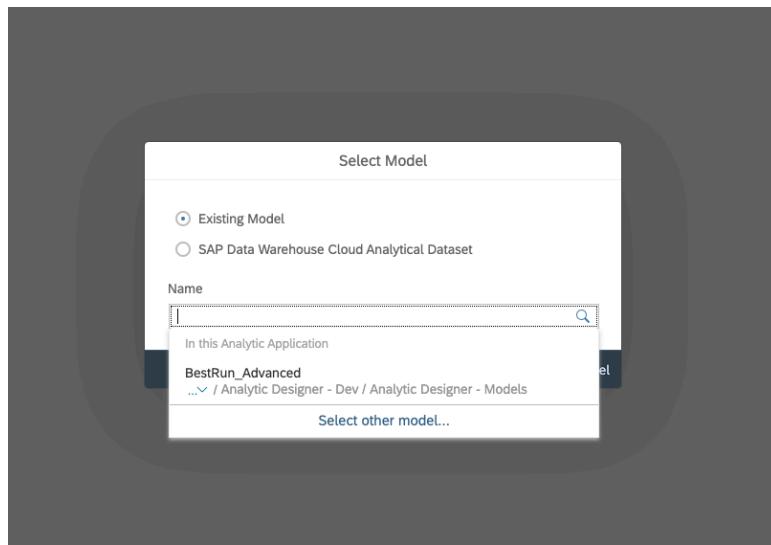
6. Click on the **Floppy Disc** icon and select **Save**.



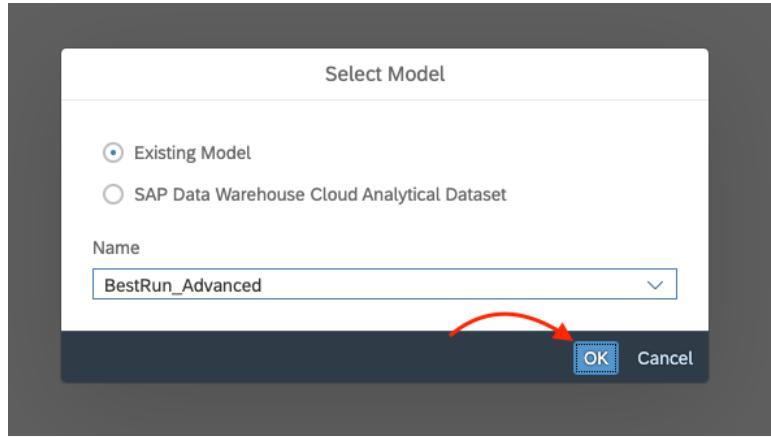
7. Click Run Analytical Application

The screenshot shows the SAP Analytics Cloud Designer interface. At the top, there are tabs for 'Data' and 'Display'. On the right, there are buttons for 'Designer' and 'Run Analytic Application', with the latter being highlighted with a red box. The main area is titled 'Builder' and shows a table structure for 'BestRun_Advanced'. The table has columns: t % Dev, Discount, Discount Plan, Gross Margin abs Dev, and Gross Margin % Dev. Below the table, there are sections for 'Table Structure' (with checkboxes for responsive width, totals, and beta table), 'Rows' (with 'Location' selected), 'Columns' (with 'Account' selected), and 'Filters' (with 'Category (1) public/Actual (Actual)' selected). A large red arrow points from the 'Run Analytic Application' button at the top to the 'Run Analytic Application' button at the bottom of the page.

8. Now you are able to select any Model available in Sap Analytics Cloud.



9. Click OK to confirm your selected Model.



10. You will be redirected to your **Generic Template** with the selected Model

The screenshot shows the SAP Analytics Cloud Designer interface. At the top, there are two tabs: 'SAP Analytics Cloud' and 'Designer'. The 'Designer' tab is active. Below the tabs, the title 'BestRun_Advanced' is displayed. The main area contains a table with data for three locations: California, Nevada, and Oregon. The columns include Account, Discount abs Dev, Discount % Dev, Discount, Discount Plan, Gross Margin abs Dev, and Gross Margin. The table data is as follows:

Location	Account	Discount abs Dev	Discount % Dev	Discount	Discount Plan	Gross Margin abs Dev	Gross Margin
California		-\$8,560 Thousand	-4.59 %	\$177,733 Thousand	\$186,293 Thousand	\$3,420 Thousand	
Nevada		-\$9,931 Thousand	-18.99 %	\$42,628 Thousand	\$52,619 Thousand	-\$3,001 Thousand	
Oregon		\$763 Thousand	0.93 %	\$82,770 Thousand	\$82,007 Thousand	\$8,372 Thousand	

To the right of the table is the 'Available Items' panel, which lists various data items under categories like Accounts, Dimensions, and Rows. Under 'Rows', 'Location' is selected. Under 'Columns', 'Accounts' is selected.

Congratulations! You Have completed the Exercise 2.

Summary

You Have Successfully Completed the Exercise!

You are now able to:

- Assign Model to Table and run the application
- Use and explore the Generic Template with all his available features
- Set the Data Model via URL Parameter
- Use the Select Data Model Dialog in order to select a Model at Start Time

ANA362 EXERCISE 3

Overview

Estimated time: [45] minutes

Objective

With this exercise we are going to create a simple feedback to ask users to enter the rating of a web page and then calculate the average score of this web page.

You are going to leverage the responsive capability of analytics designer and integration with SAC planning capability to implement this scenario.

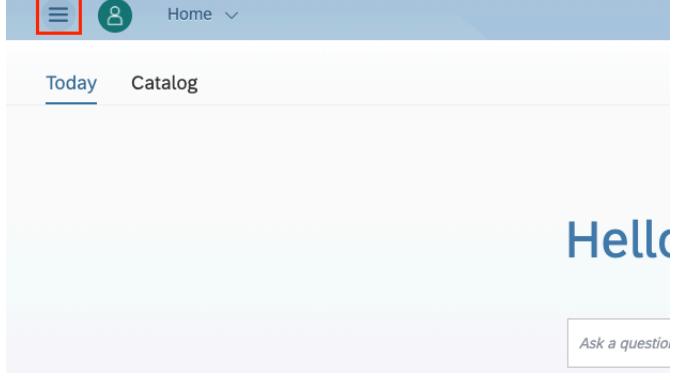
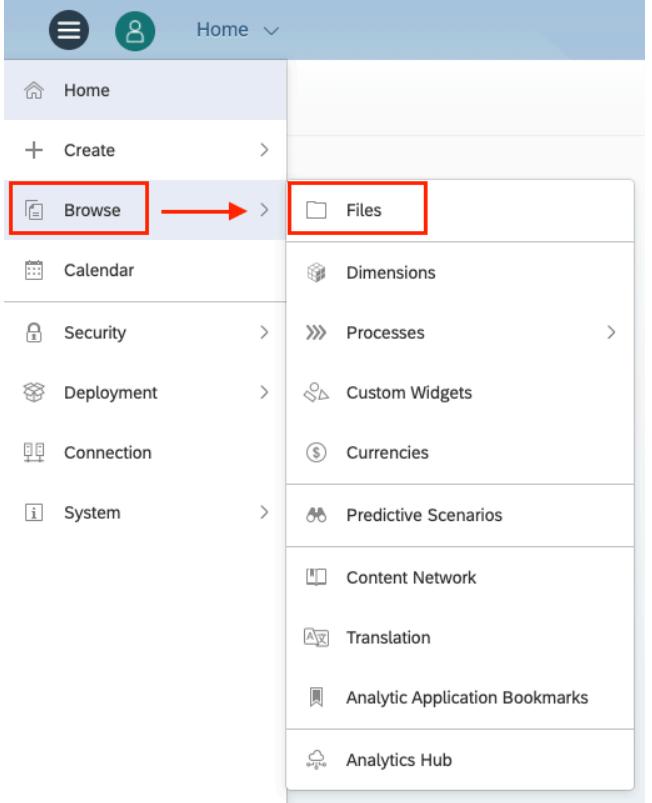
Exercise Description

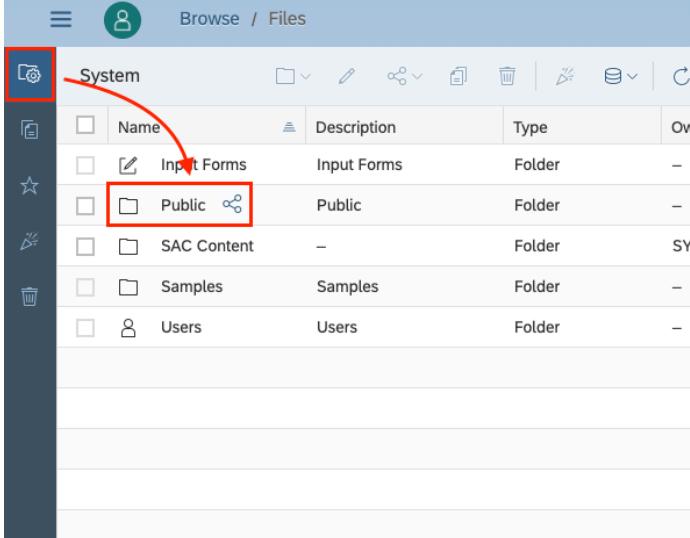
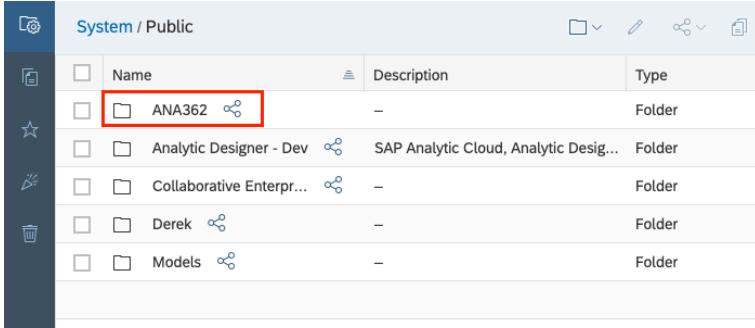
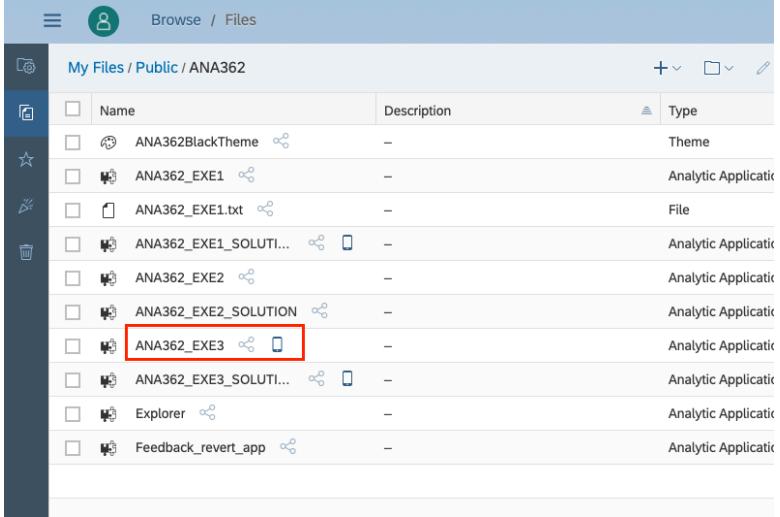
You are going to execute the following steps within this exercise

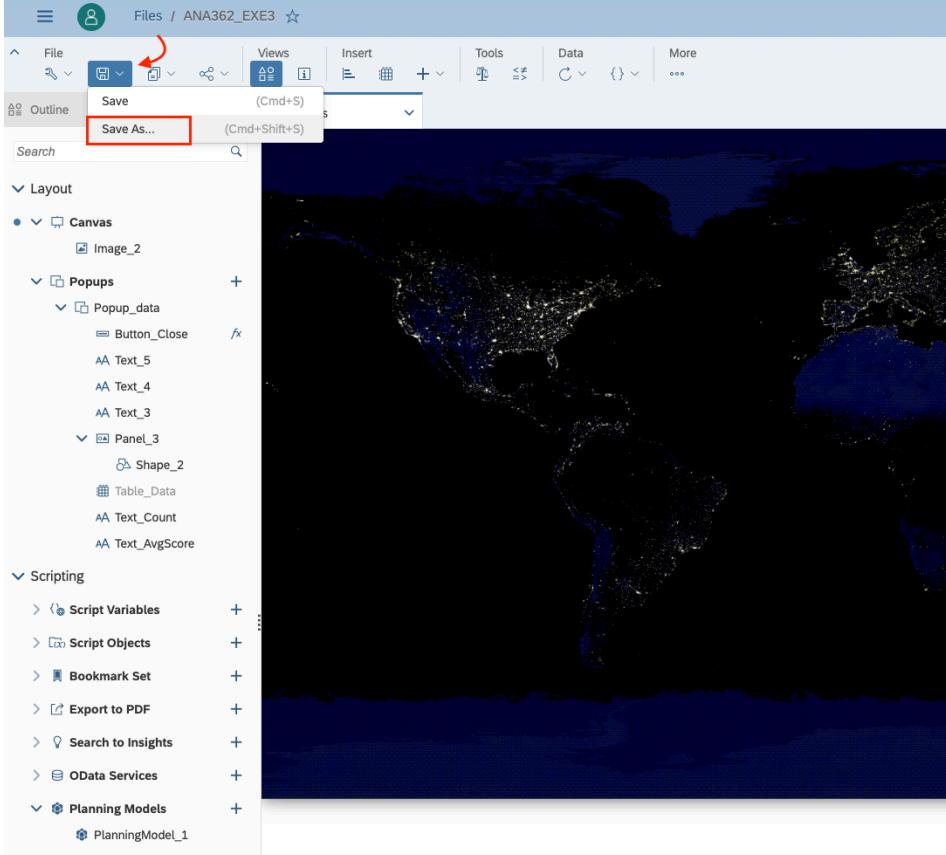
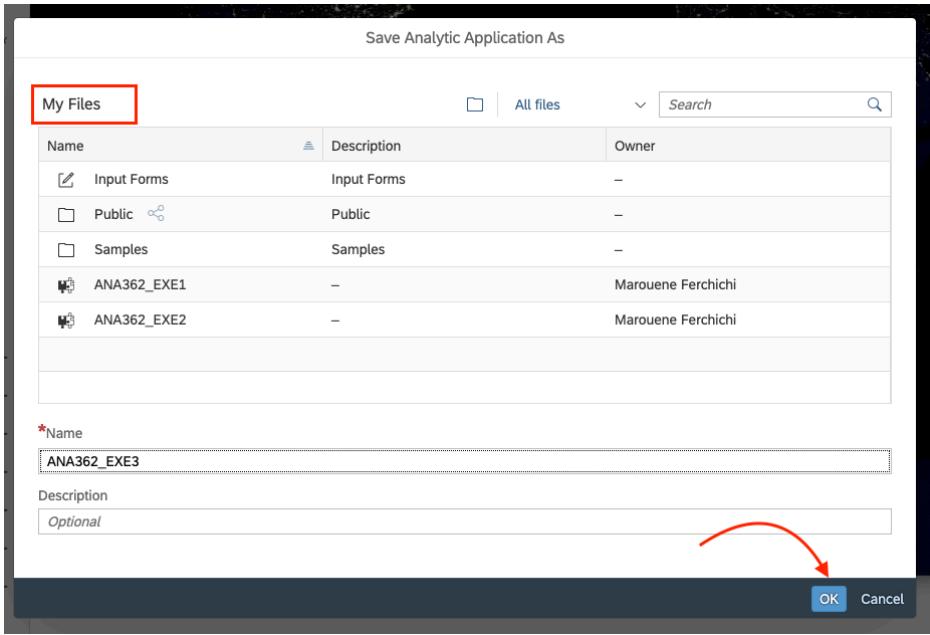
- Build a responsive application
- Create the Master data
- Enter Planning data

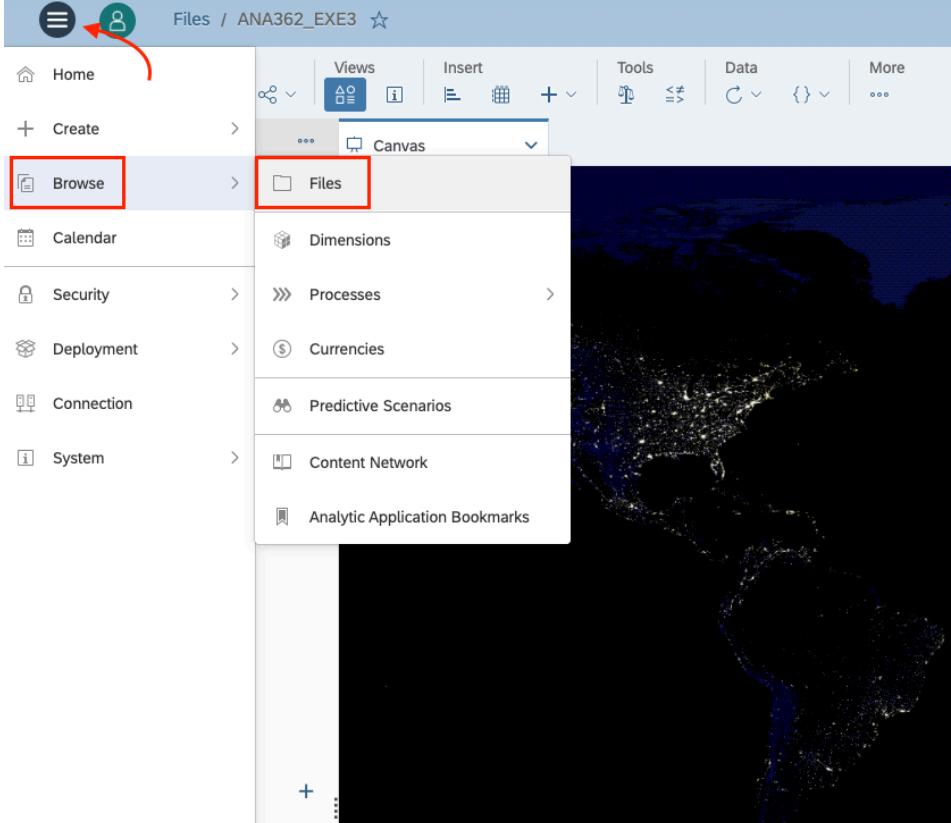
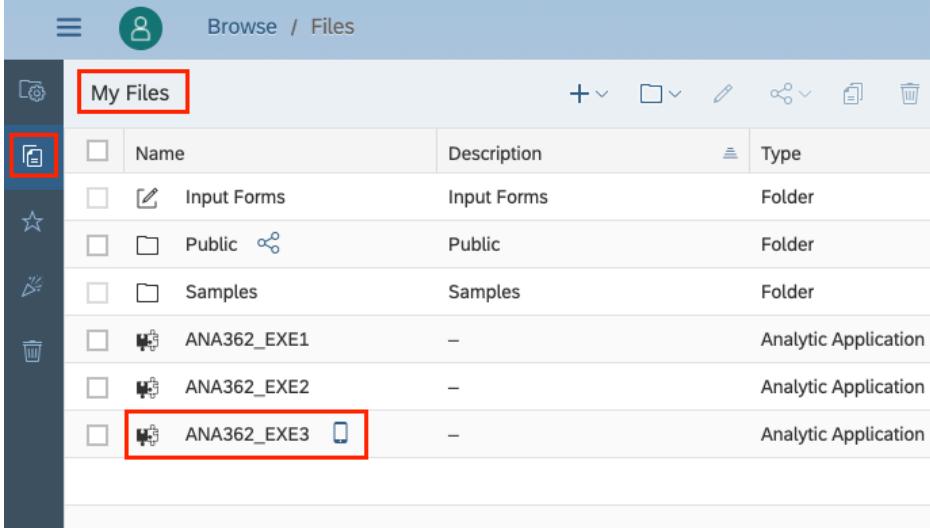
You will start with a pre-configured application. The popup, planning table part are already configured for you. You need to add the following parts into the application

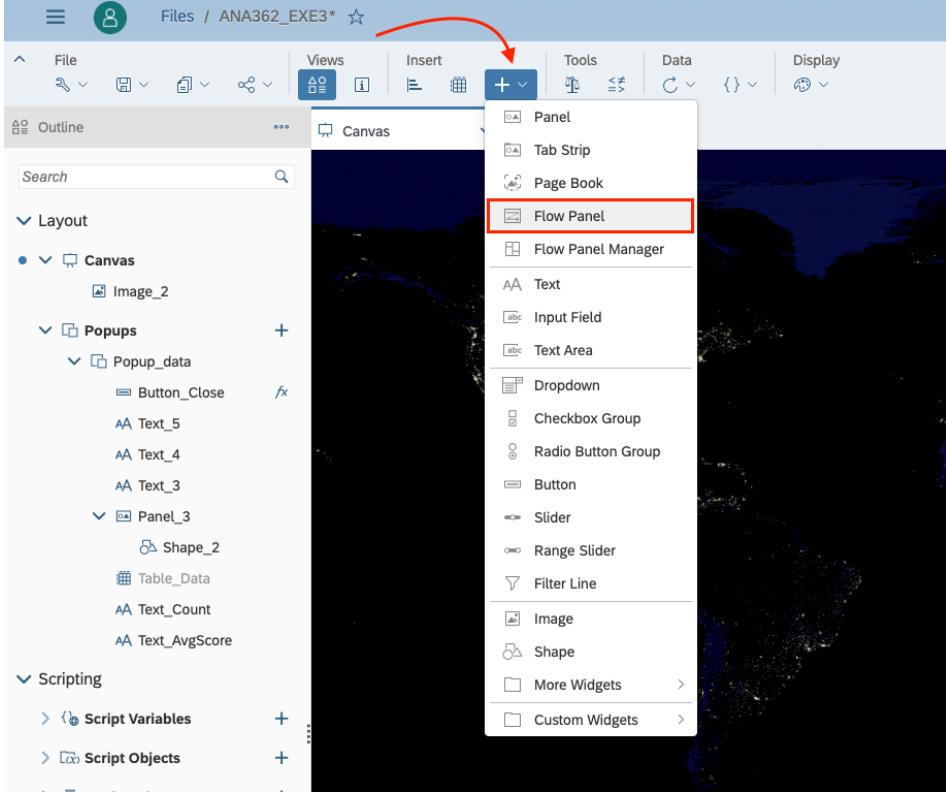
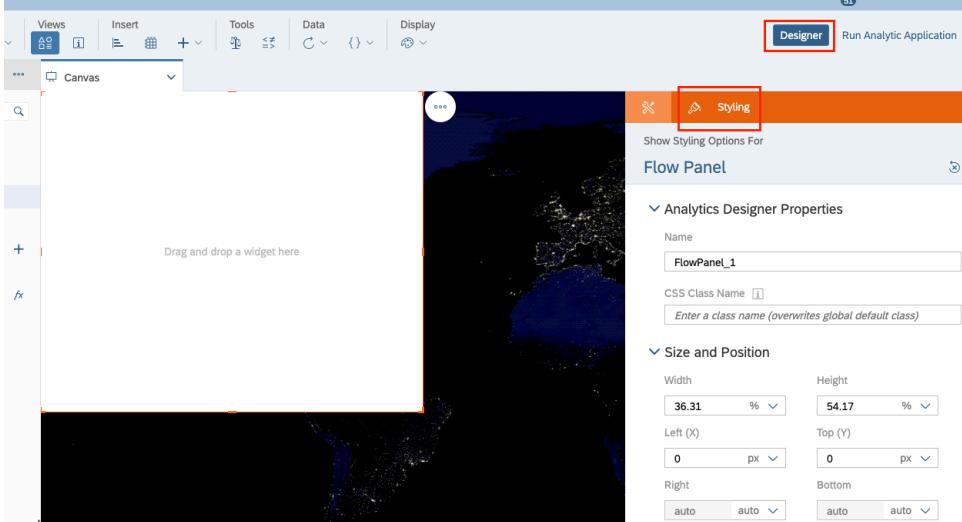
- Create flow panels (make the flow panel behaves like a feedback form):
 - adding name,
 - email,
 - telephone number,
 - rated score by using slider,
 - Comments
 - Send button
- Use the script APIs to add the logic of calculation of average score of this web page
 - Use create member API to create the master data (name, email etc.) in the planning table
 - Use setUserInput API to enter the key figure score into the planning table
 - Use script API to calculate the average score based on the count of master data and score

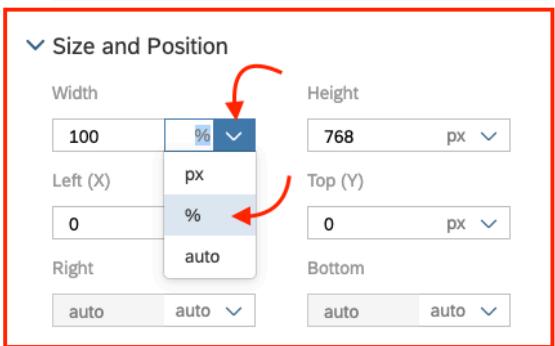
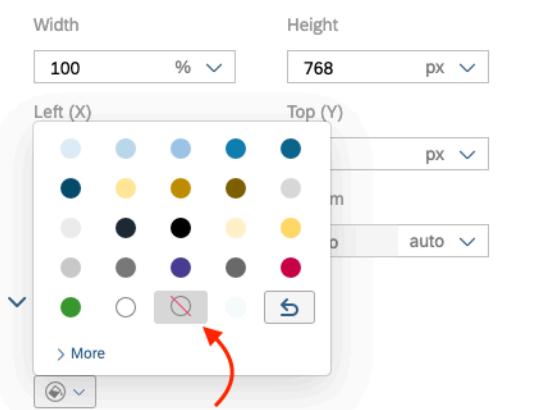
Explanation	Screenshot
<p>1. Click on the Main Menu icon</p>	
<p>2. Select Browse and then Files to be able to select your analytical applications.</p>	

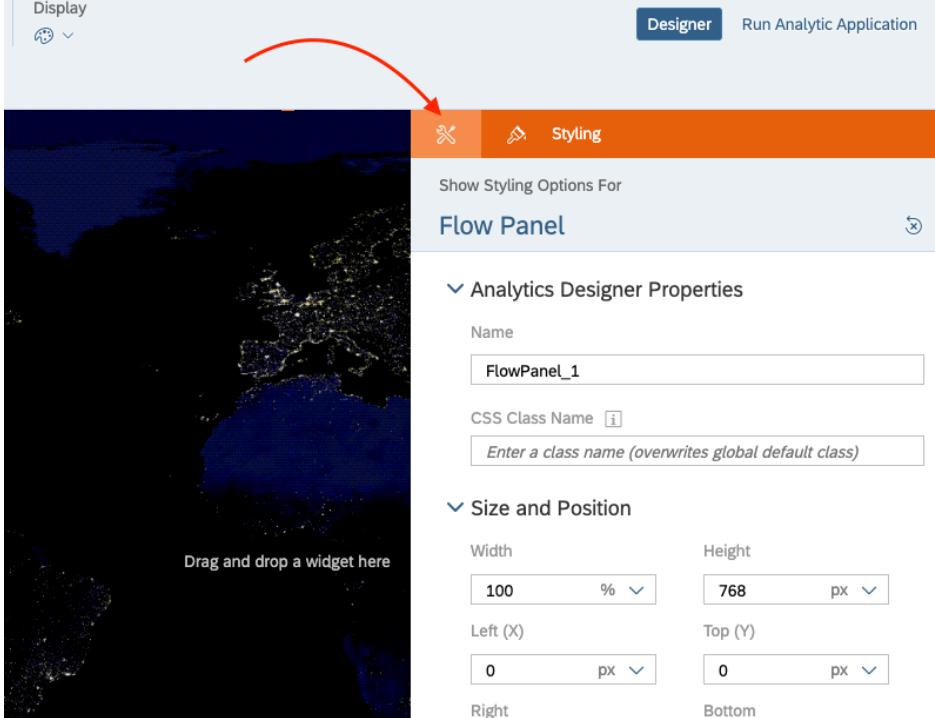
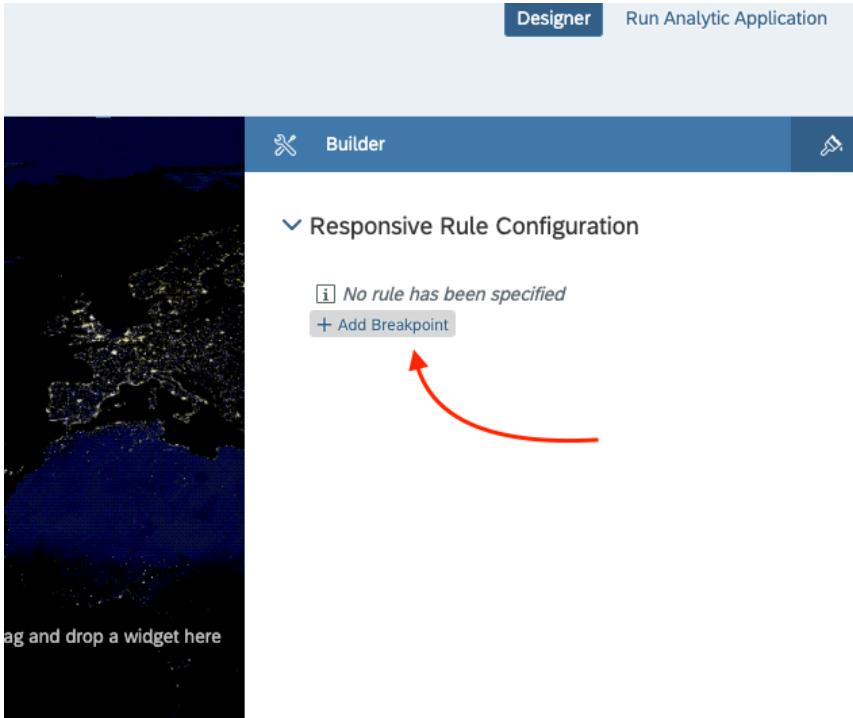
Explanation	Screenshot																						
<p>3. Select the icon System, and then open the folder Public.</p>	 <p>The screenshot shows the SAP Fiori Launchpad with the 'System' icon highlighted in red. The 'Public' folder under 'System' is also highlighted with a red box. The table lists various system folders like Input Forms, SAC Content, Samples, and Users.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>Input Forms</td> <td>Input Forms</td> <td>Folder</td> </tr> <tr> <td>Public</td> <td>Public</td> <td>Folder</td> </tr> <tr> <td>SAC Content</td> <td>-</td> <td>Folder</td> </tr> <tr> <td>Samples</td> <td>Samples</td> <td>Folder</td> </tr> <tr> <td>Users</td> <td>Users</td> <td>Folder</td> </tr> </tbody> </table>	Name	Description	Type	Input Forms	Input Forms	Folder	Public	Public	Folder	SAC Content	-	Folder	Samples	Samples	Folder	Users	Users	Folder				
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Users	Users	Folder																					
<p>4. Navigate to the folder ANA362</p>	 <p>The screenshot shows the 'System / Public' view. The 'ANA362' folder is highlighted with a red box. Other items in the list include Analytic Designer - Dev, Collaborative Enterpr..., Derek, and Models.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362</td> <td>Folder</td> </tr> <tr> <td>Analytic Designer - Dev</td> <td>Folder</td> </tr> <tr> <td>Collaborative Enterpr...</td> <td>Folder</td> </tr> <tr> <td>Derek</td> <td>Folder</td> </tr> <tr> <td>Models</td> <td>Folder</td> </tr> </tbody> </table>	Name	Type	ANA362	Folder	Analytic Designer - Dev	Folder	Collaborative Enterpr...	Folder	Derek	Folder	Models	Folder										
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Analytic Designer - Dev	Folder																						
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Derek	Folder																						
Models	Folder																						
<p>5. Click on the exercise ANA362_EXE3 to open it and then you will save it with My Files folder.</p>	 <p>The screenshot shows the 'My Files / Public / ANA362' view. The 'ANA362_EXE3' file is highlighted with a red box. Other files listed include ANA362BlackTheme, ANA362_EXE1, ANA362_EXE1.txt, ANA362_EXE1_SOLUTION, ANA362_EXE2, ANA362_EXE2 SOLUTION, ANA362_EXE3, ANA362_EXE3 SOLUTION, Explorer, and Feedback_revert_app.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>ANA362BlackTheme</td> <td>Theme</td> </tr> <tr> <td>ANA362_EXE1</td> <td>Analytic Application</td> </tr> <tr> <td>ANA362_EXE1.txt</td> <td>File</td> </tr> <tr> <td>ANA362_EXE1_SOLUTION</td> <td>Analytic Application</td> </tr> <tr> <td>ANA362_EXE2</td> <td>Analytic Application</td> </tr> <tr> <td>ANA362_EXE2 SOLUTION</td> <td>Analytic Application</td> </tr> <tr> <td>ANA362_EXE3</td> <td>Analytic Application</td> </tr> <tr> <td>ANA362_EXE3 SOLUTION</td> <td>Analytic Application</td> </tr> <tr> <td>Explorer</td> <td>Analytic Application</td> </tr> <tr> <td>Feedback_revert_app</td> <td>Analytic Application</td> </tr> </tbody> </table>	Name	Type	ANA362BlackTheme	Theme	ANA362_EXE1	Analytic Application	ANA362_EXE1.txt	File	ANA362_EXE1_SOLUTION	Analytic Application	ANA362_EXE2	Analytic Application	ANA362_EXE2 SOLUTION	Analytic Application	ANA362_EXE3	Analytic Application	ANA362_EXE3 SOLUTION	Analytic Application	Explorer	Analytic Application	Feedback_revert_app	Analytic Application
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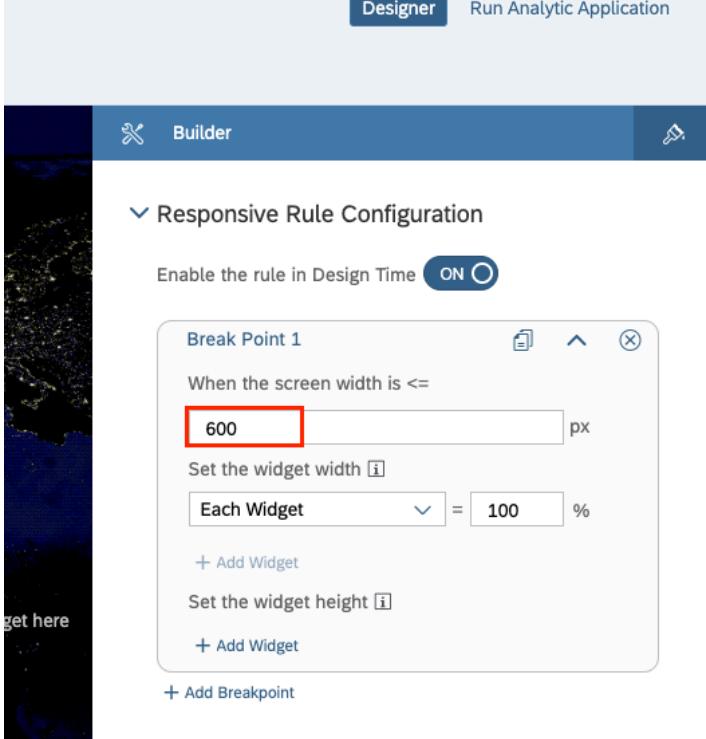
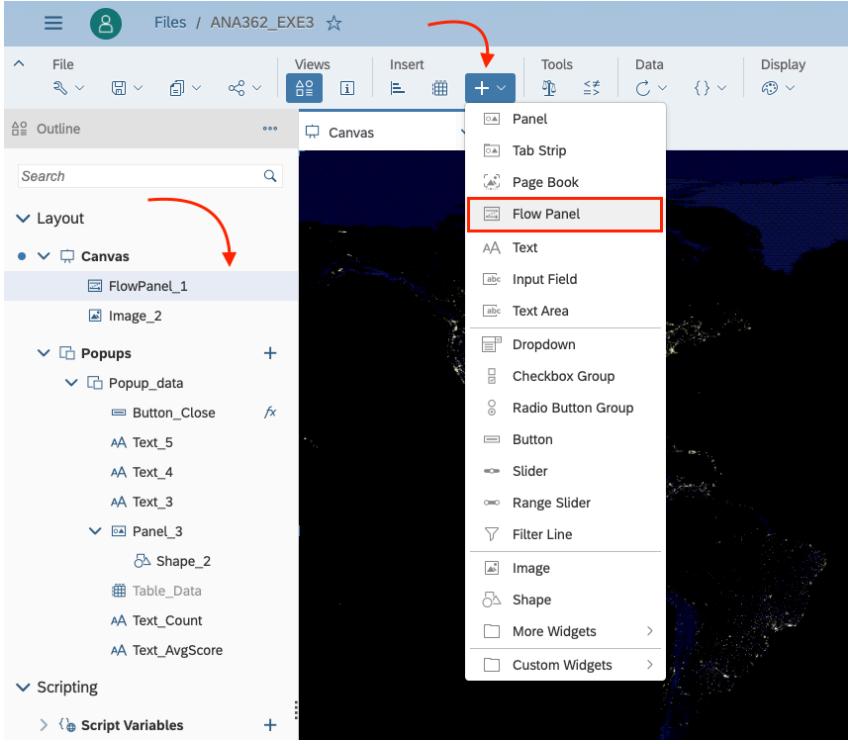
Explanation	Screenshot
<p>6. Before you start the different steps of the exercise, first of all YOU SHOULD save the application under My Files and rename it so you can work on your own application.</p> <p>Click on the Save icon → Save As</p>	
<p>7. Be sure that you are under the folder My Files.</p> <p>Press OK and the application will be saved under your private folder My Files</p>	

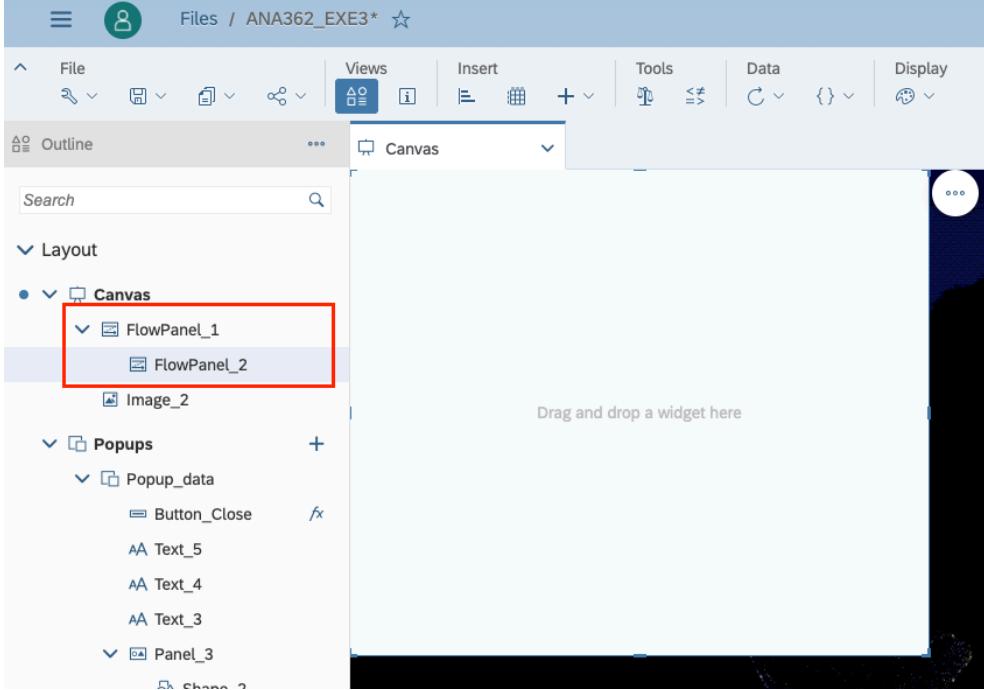
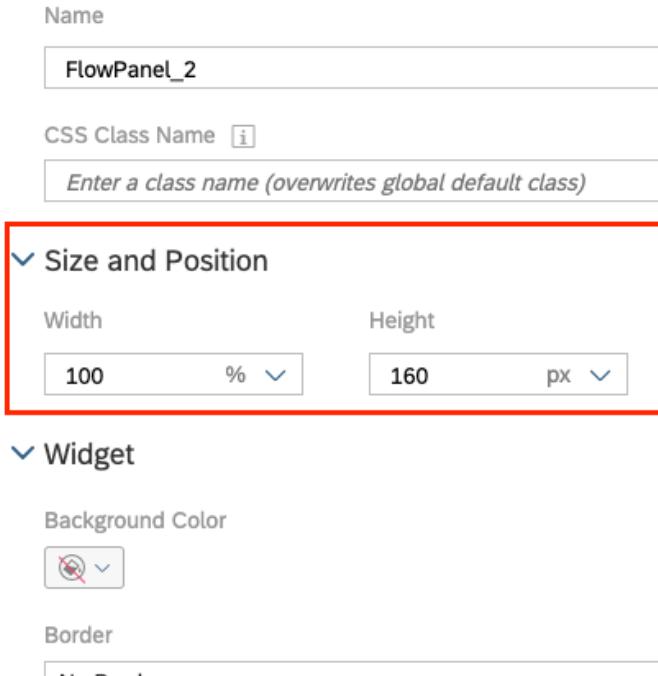
Explanation	Screenshot																					
<p>8. Now you can navigate back to My Files again in order to see your application.</p>																						
<p>9. Click on the exercise ANA362_EXE3 to open it within My Files folder.</p>	 <table border="1"> <thead> <tr> <th data-bbox="551 1332 649 1353">Name</th> <th data-bbox="915 1332 1013 1353">Description</th> <th data-bbox="1253 1332 1286 1353">Type</th> </tr> </thead> <tbody> <tr> <td data-bbox="551 1374 763 1396">Input Forms</td> <td data-bbox="915 1374 1013 1396">Input Forms</td> <td data-bbox="1253 1374 1286 1396">Folder</td> </tr> <tr> <td data-bbox="551 1417 763 1438">Public</td> <td data-bbox="915 1417 1013 1438">Public</td> <td data-bbox="1253 1417 1286 1438">Folder</td> </tr> <tr> <td data-bbox="551 1459 763 1480">Samples</td> <td data-bbox="915 1459 1013 1480">Samples</td> <td data-bbox="1253 1459 1286 1480">Folder</td> </tr> <tr> <td data-bbox="551 1501 763 1522">ANA362_EXE1</td> <td data-bbox="915 1501 1013 1522">-</td> <td data-bbox="1253 1501 1400 1522">Analytic Application</td> </tr> <tr> <td data-bbox="551 1543 763 1564">ANA362_EXE2</td> <td data-bbox="915 1543 1013 1564">-</td> <td data-bbox="1253 1543 1400 1564">Analytic Application</td> </tr> <tr> <td data-bbox="551 1586 763 1607">ANA362_EXE3</td> <td data-bbox="915 1586 1013 1607">-</td> <td data-bbox="1253 1586 1400 1607">Analytic Application</td> </tr> </tbody> </table>	Name	Description	Type	Input Forms	Input Forms	Folder	Public	Public	Folder	Samples	Samples	Folder	ANA362_EXE1	-	Analytic Application	ANA362_EXE2	-	Analytic Application	ANA362_EXE3	-	Analytic Application
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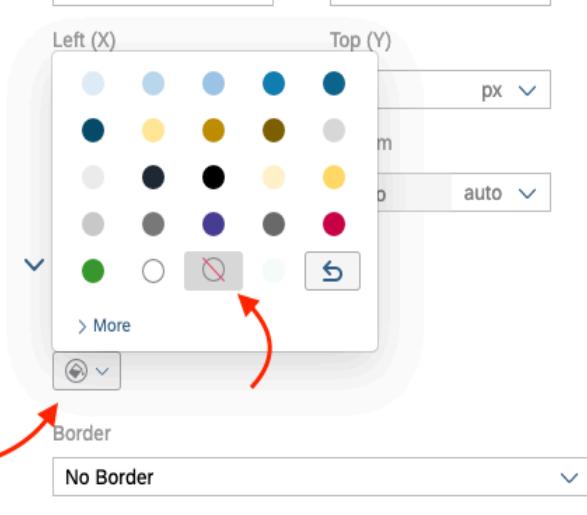
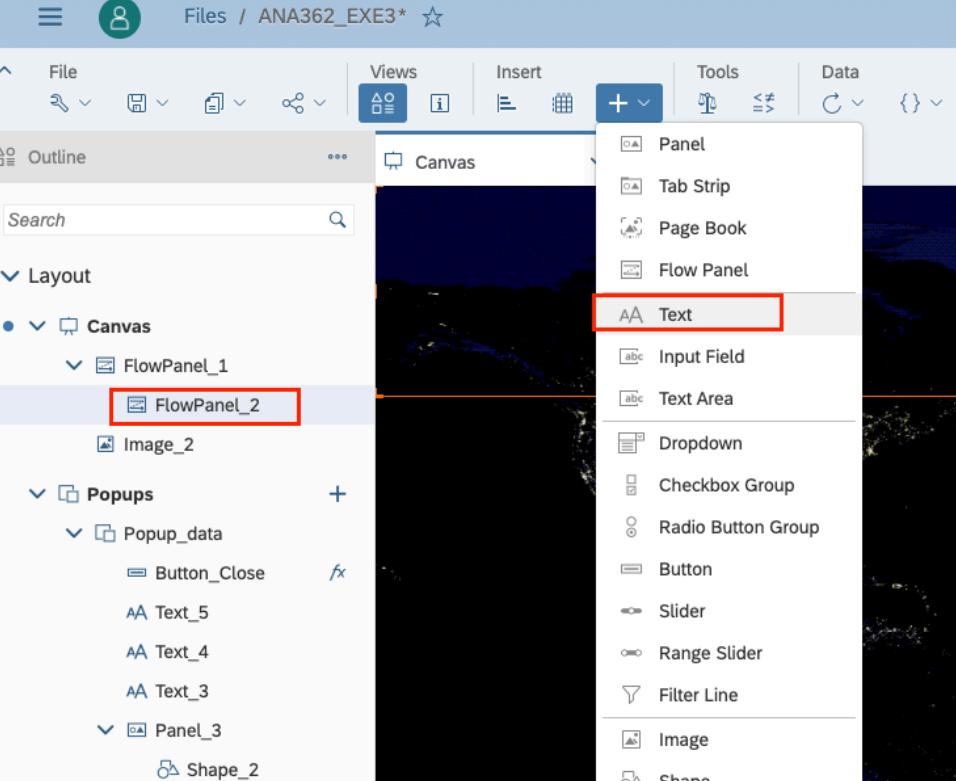
Explanation	Screenshot
<p>10. Let's start by adding the first Flow_Panel</p> <p>Under the Insert tool bar, press the + sign and select Flow Panel</p>	
<p>11. Let's configure the Style of the first Flow Panel.</p> <p>Select the Flow Panel and open the Designer Panel.</p>	

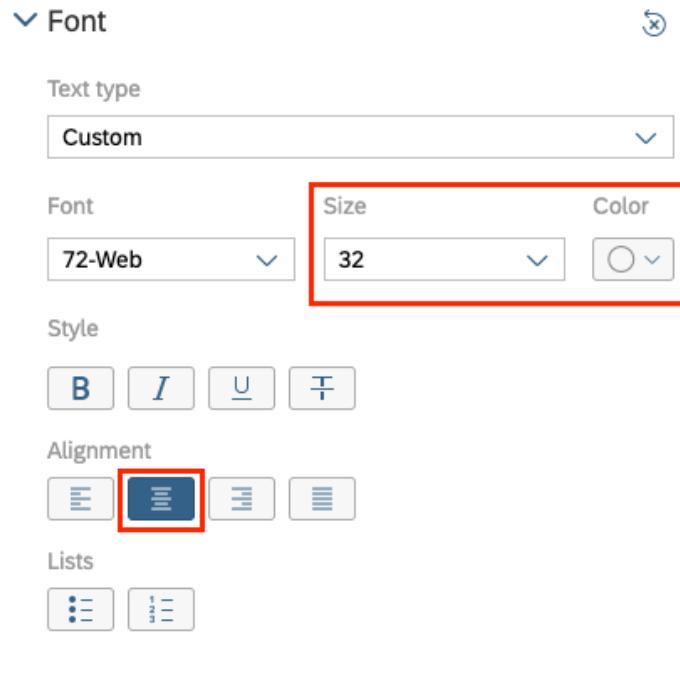
Explanation	Screenshot																												
<p>12. Change the Width and the Height as shown in the Screenshot.</p> <p>Width: 100% Height:768px</p>	 <p>Size and Position</p> <table border="1"> <tr> <td>Width</td> <td>100</td> <td>%</td> <td>px</td> <td>Height</td> <td>768</td> <td>px</td> </tr> <tr> <td>Left (X)</td> <td>px</td> <td colspan="2"></td> <td>Top (Y)</td> <td>0</td> <td>px</td> </tr> <tr> <td>0</td> <td>%</td> <td colspan="2"></td> <td>Bottom</td> <td>auto</td> <td>auto</td> </tr> <tr> <td>Right</td> <td>auto</td> <td colspan="2"></td> <td>auto</td> <td>auto</td> <td>auto</td> </tr> </table> <p>Widget</p> <p>Background Color</p> <p>Border</p> <p>No Border</p> <p>Actions</p> <p><input checked="" type="checkbox"/> Show this item at view time</p> <p><input type="checkbox"/> Always initialize on startup</p> <p>Order</p> <p>Up, Down, Move, Remove</p>	Width	100	%	px	Height	768	px	Left (X)	px			Top (Y)	0	px	0	%			Bottom	auto	auto	Right	auto			auto	auto	auto
Width	100	%	px	Height	768	px																							
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Right	auto			auto	auto	auto																							
<p>13. As next change the Background Color of the Flow Panel to Transparent</p>	 <p>Width</p> <p>100 %</p> <p>Height</p> <p>768 px</p> <p>Left (X)</p> <p>Top (Y)</p> <p>Border</p> <p>No Border</p> <p>Actions</p> <p><input checked="" type="checkbox"/> Show this item at view time</p> <p><input type="checkbox"/> Always initialize on startup</p>																												

Explanation	Screenshot
<p>14. Toggle the Builder Panel in order to set the responsive rule of the Flow Panel</p>	 <p>The screenshot shows the 'Designer' tab selected at the top right. Below it, the 'Display' tab is active. The main area shows a map of Europe with city lights. A placeholder text 'Drag and drop a widget here' is visible. On the right, the 'Builder' panel is open, showing 'Analytics Designer Properties' with a name 'FlowPanel_1' and a CSS class 'FlowPanel'. It also shows 'Size and Position' settings for width (100%), height (768px), left (0px), top (0px), right, and bottom.</p>
<p>15. As next let's add a Breakpoint by clicking + Add Breakpoint</p>	 <p>The screenshot shows the 'Builder' tab selected at the top right. The main area shows the same map and placeholder text as the previous screenshot. The 'Builder' panel now includes a 'Responsive Rule Configuration' section with a message 'No rule has been specified' and a button '+ Add Breakpoint'.</p>

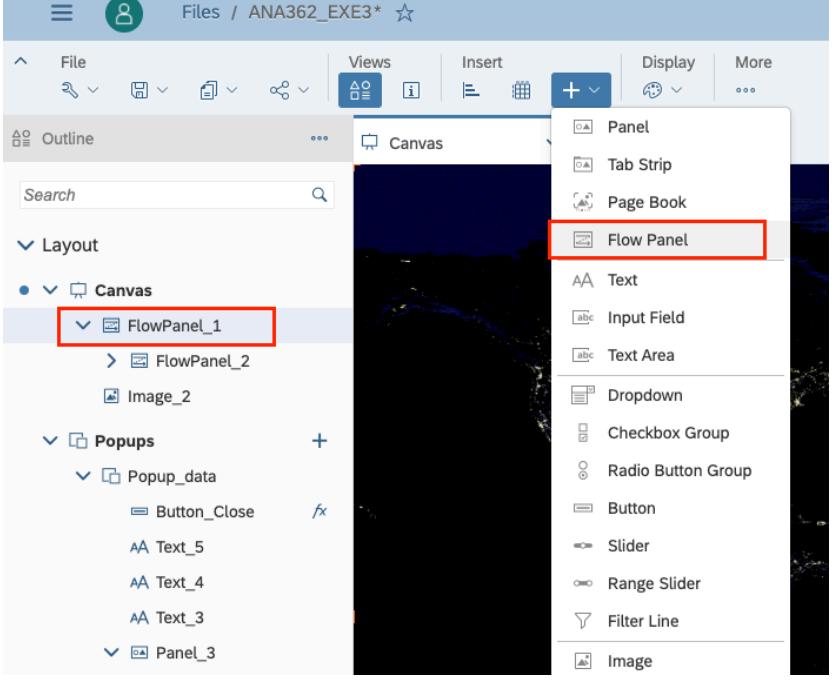
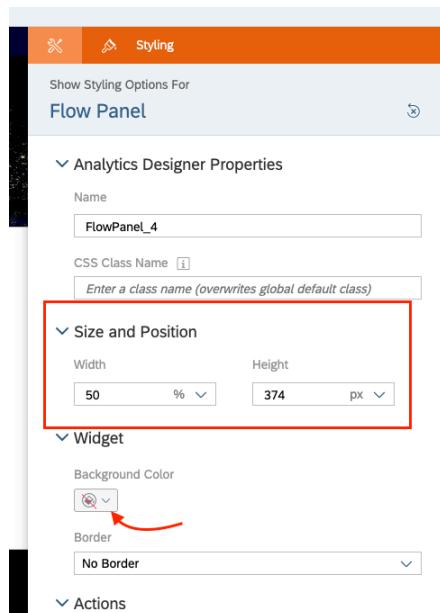
Explanation	Screenshot
<p>16. Set the Break Point 1 to 600 as shown in the screenshot.</p>	 <p>The screenshot shows the 'Responsive Rule Configuration' dialog in the Designer. It has a 'Break Point 1' section. The 'When the screen width is <=' field contains '600'. Below it, under 'Set the widget width', there is a dropdown 'Each Widget' followed by '= 100 %'. There are also '+ Add Widget' and '+ Add Breakpoint' buttons.</p>
<p>17. As next we will add a second Flow Panel under the first one.</p> <p>For that select the first Flow Panel and then Click the (+) and add the second flow panel.</p>	 <p>The screenshot shows the Builder interface. The 'Insert' menu is open, and the 'Flow Panel' option is highlighted with a red box and arrow. The 'Outline' panel on the left shows a tree structure with 'FlowPanel_1' and 'Image_2' under 'Canvas'.</p>

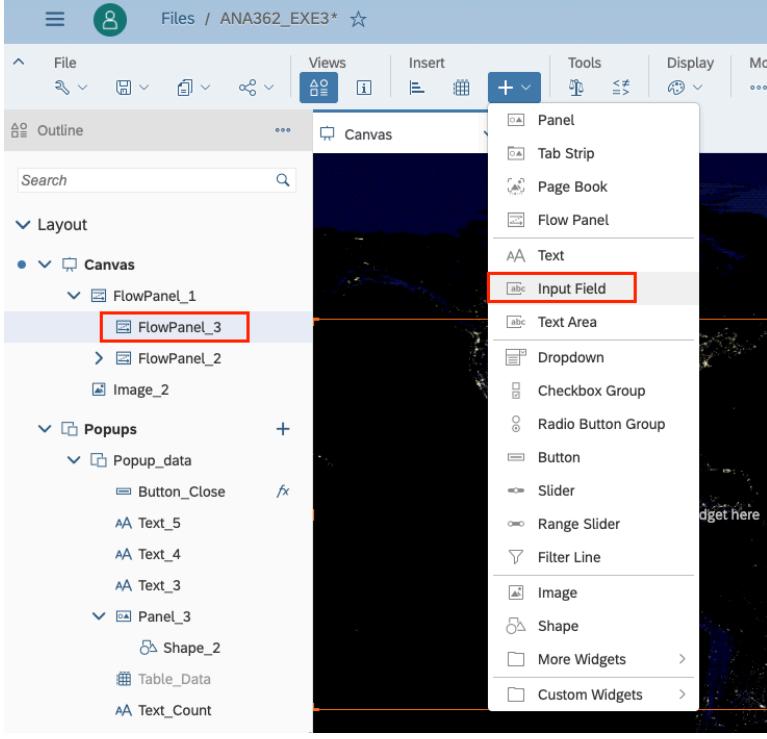
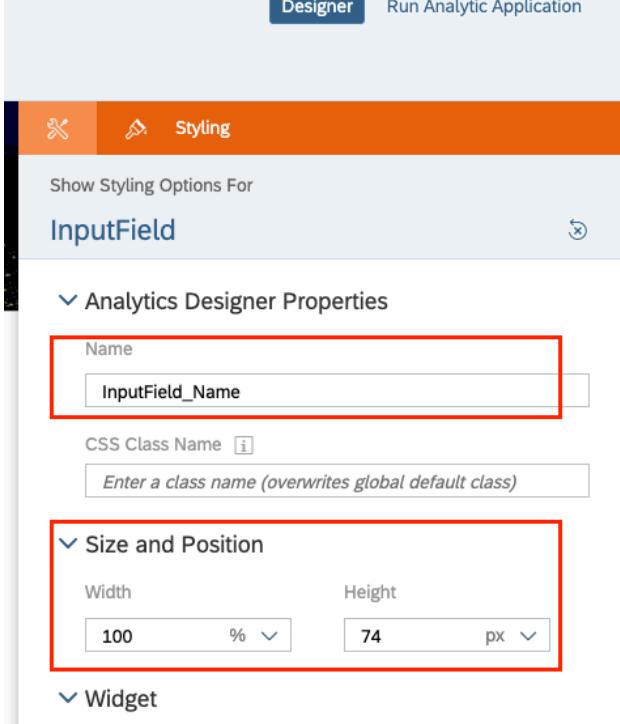
Explanation	Screenshot
<p>18. As shown the second flow panel was added under the first one.</p> <p>Let's now configure the layout, by opening the designer panel → Styling (Check Step 11)</p>	 <p>The screenshot shows the Designer panel interface. On the left is the Outline panel, which lists the components in the canvas. Under the 'Canvas' category, 'FlowPanel_1' is expanded, showing 'FlowPanel_2' as a child node. Both 'FlowPanel_1' and 'FlowPanel_2' are highlighted with a red box. To the right is the main workspace, labeled 'Canvas', with a message 'Drag and drop a widget here'. The top navigation bar includes File, Views, Insert, Tools, Data, and Display tabs.</p>
<p>19. Change the Width and the Height as shown in the Screenshot. Width: 100% Height:160px</p>	 <p>The screenshot shows the Styling panel for the selected component 'FlowPanel_2'. At the top, there are fields for 'Name' (set to 'FlowPanel_2') and 'CSS Class Name'. Below is a section titled 'Size and Position' with two input fields: 'Width' (set to '100%') and 'Height' (set to '160px'). This entire 'Size and Position' section is highlighted with a red box. Further down, there are sections for 'Widget', 'Background Color' (with a color picker), and 'Border' (with a border color picker).</p>

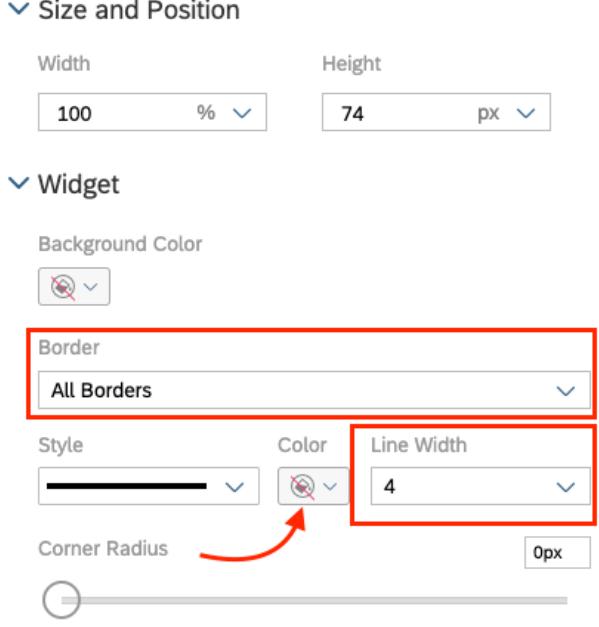
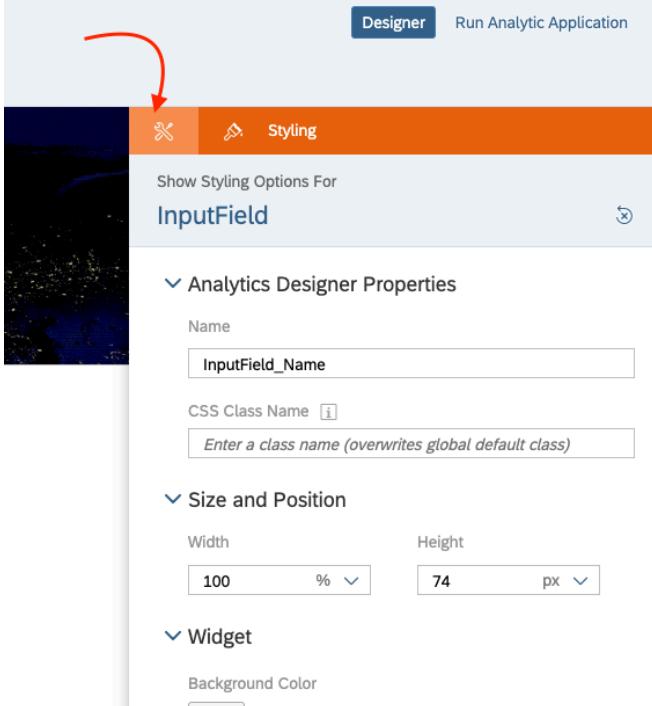
Explanation	Screenshot
20. As next change the Background Color of the Flow Panel to Transparent	 <p>The screenshot shows the 'Border' settings for a flow panel. A red arrow points to the 'No Border' dropdown menu, indicating the step to change the background color to transparent.</p>
21. Now we will add a Text Widget under the second Flow Panel	 <p>The screenshot shows the 'Insert' menu open, with the 'Text' option highlighted. A red box highlights the 'Text' item in the list. The left sidebar shows a tree view of the current UI structure, including 'FlowPanel_2' which is selected.</p>

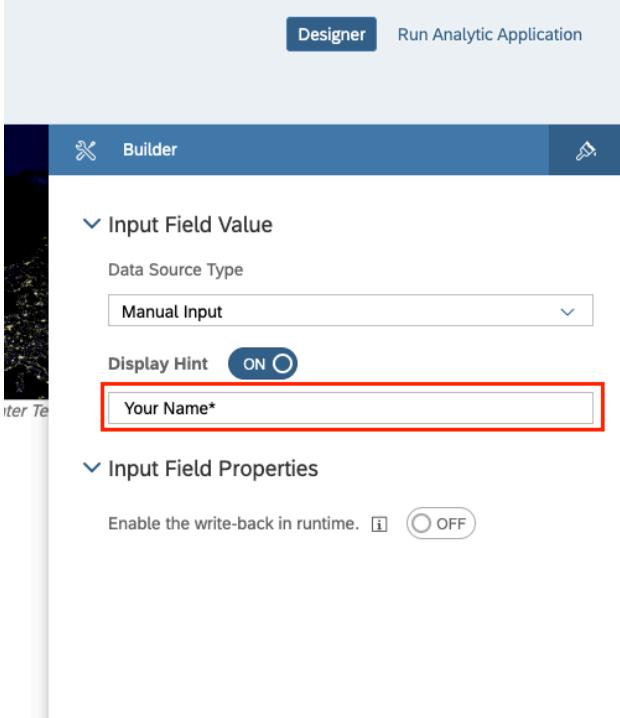
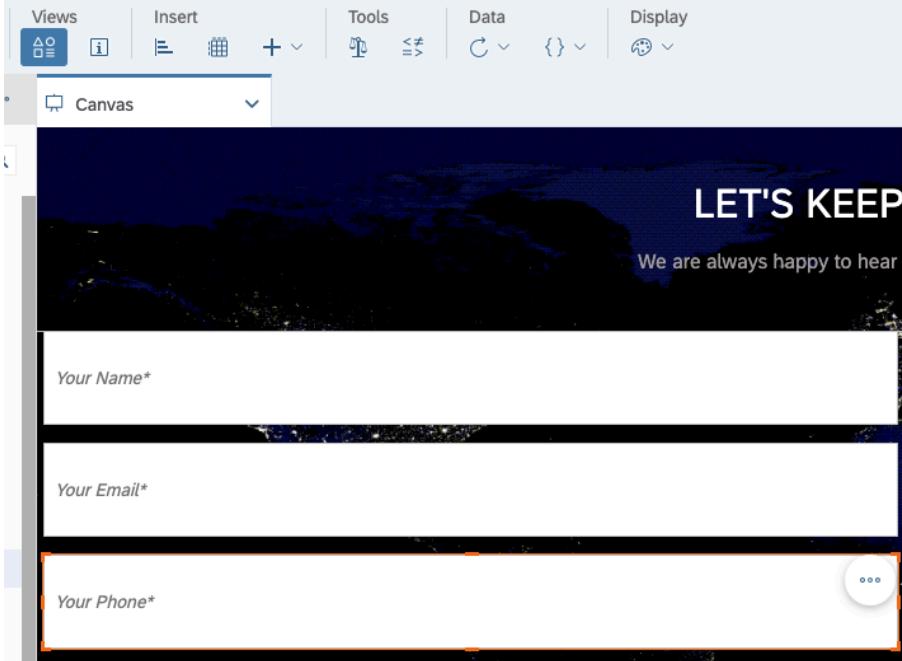
Explanation	Screenshot
<p>22. Let's now configure the layout, by opening the designer panel → Styling (Check Step 11)</p> <p>23. Change the Width and the Height as shown in the Screenshot.</p> <p>Width: 100% Height:160px</p>	 <p>Size and Position</p> <p>Width: 100% Height: 160px</p>
<p>24. DOUBLE CLICK inside the Text Widget in order to Style the Font.</p> <p>25. From the same styling panel, lets change the font size to 32 and the color to white and the alignment to the Middle. As shown in the screenshot.</p>	 <p>Font</p> <p>Text type: Custom</p> <p>Font: 72-Web</p> <p>Size: 32</p> <p>Color: (white)</p> <p>Style: B I U T</p> <p>Alignment: (Middle icon highlighted with a blue box)</p> <p>Lists:</p> <p>Dynamic Text</p>

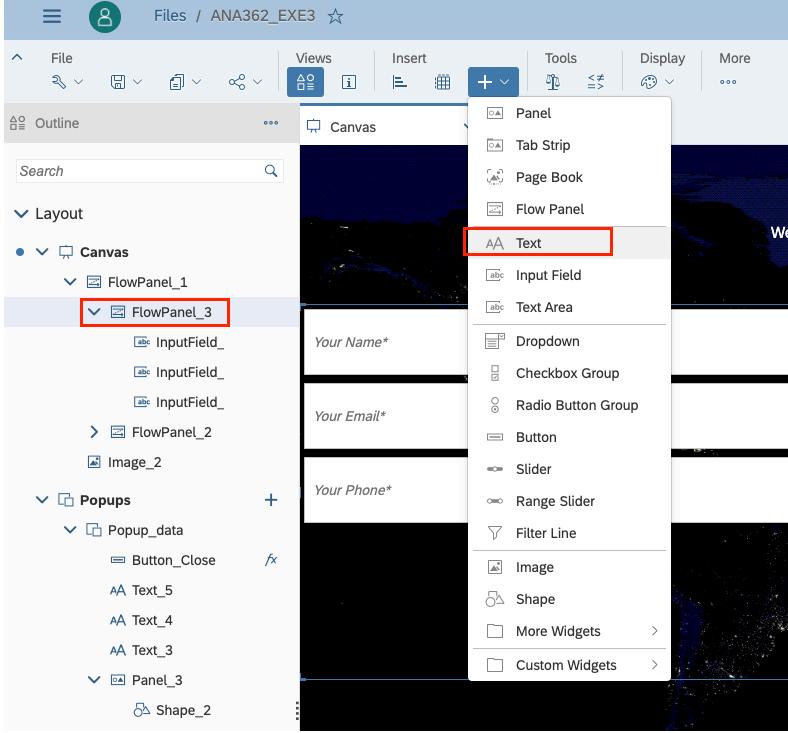
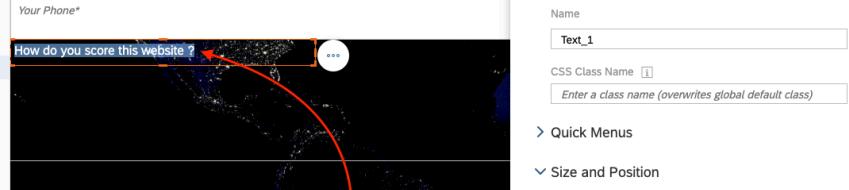
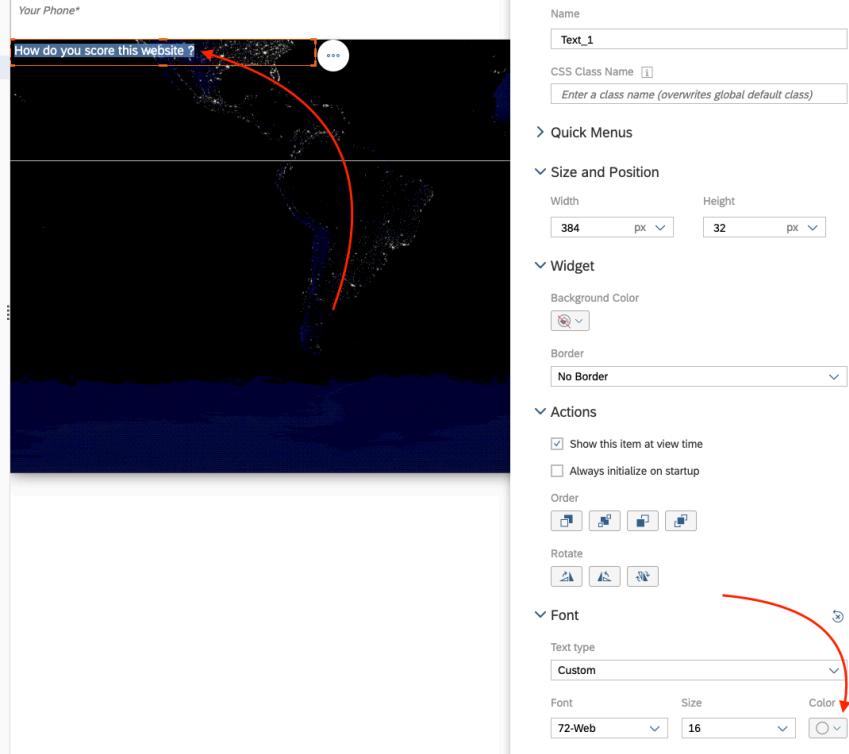
Explanation	Screenshot
<p>26. Write as a Title: LET'S KEEP IN TOUCH!</p> <p>And as a Subtitle:</p> <p>We are always happy to hear feedback and answer queries.</p>	<p>The screenshot shows a dark-themed dashboard with a world map in the background. In the top-left corner, there is a white rectangular callout box with a thin black border. Inside the box, the text 'LET'S KEEP IN TOUCH!' is displayed in a large, bold, black font at the top, followed by a smaller line of text 'We are always happy to hear feedback and answer queries.' Below the callout box is a detailed world map where city lights are represented as small white dots.</p>
<p>27. Let's change the font size of the Subtitle to 16</p>	<p>The screenshot shows the same dashboard setup as the previous one, but the subtitle 'We are always happy to hear feedback and answer queries.' now has a smaller font size. A red curved arrow originates from the bottom-right of the previous screenshot and points to the 'Size' dropdown menu in the styling panel of this screenshot, highlighting the change.</p>

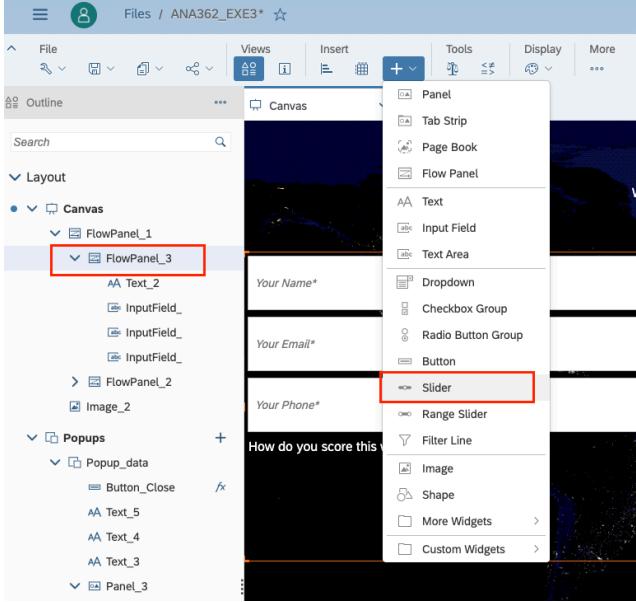
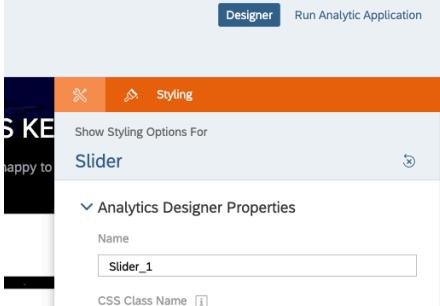
Explanation	Screenshot
<p>28. As next, select the first Flow Panel in order to add a third Flow Panel</p>	
<p>29. Let's now configure the layout, by opening the designer panel → Styling (Check Step 11)</p> <p>30. Change the Width and the Height as shown in the Screenshot. Width: 50% Height: 374px</p> <p>31. change the Background Color of the Panel to Transparent (Check Step 20)</p>	

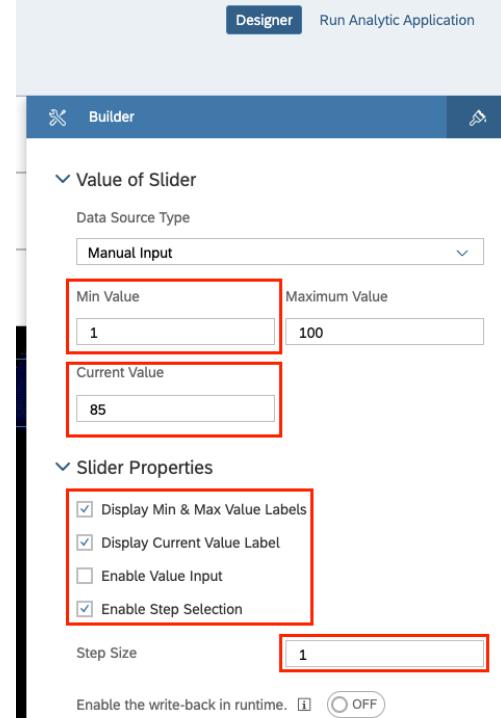
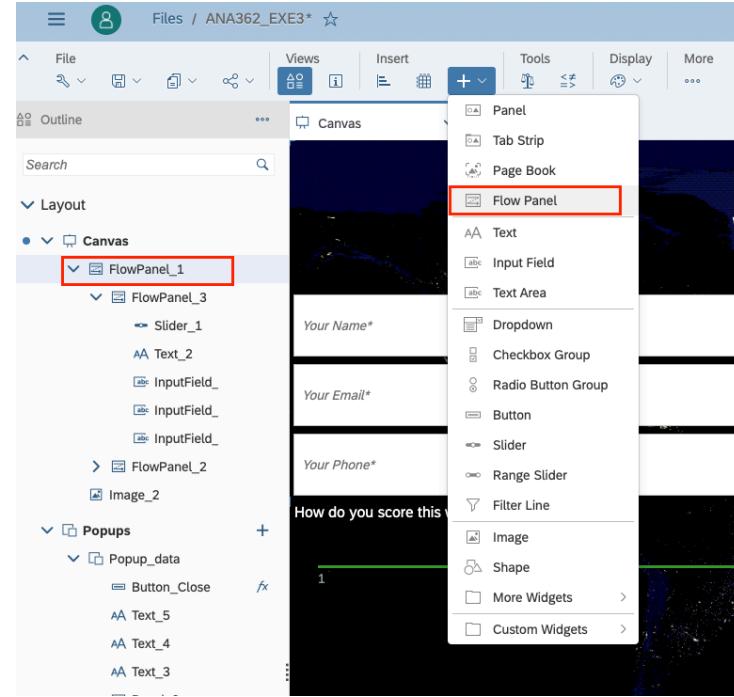
Explanation	Screenshot
<p>32. As next let's add 3 Input Filed (Name, Email, Phone) under the Third Flow Panel</p> <p>Select the Third Flow Panel and press the (+) sign.</p>	 <p>The screenshot shows the 'Insert' menu open, with 'Input Field' highlighted and surrounded by a red box. The 'Outline' panel on the left shows a tree structure with 'FlowPanel_3' selected, also highlighted with a red box. The 'Canvas' panel on the right shows a dark background with some UI elements.</p>
<p>33. Let's now configure the layout of the input field, by opening the designer panel → Styling (Check Step 11)</p> <p>34. Change the name to InputField_Name</p> <p>35. Change the Width and the Height as shown in the Screenshot. Width: 100% Height:74px</p>	 <p>The screenshot shows the 'Styling' panel open for an 'InputField' component. The 'Analytics Designer Properties' section is visible, with the 'Name' field set to 'InputField_Name' (highlighted with a red box). The 'Size and Position' section is also highlighted with a red box, showing 'Width' set to '100%' and 'Height' set to '74px'. Other settings like 'CSS Class Name' and 'Widget' are also visible.</p>

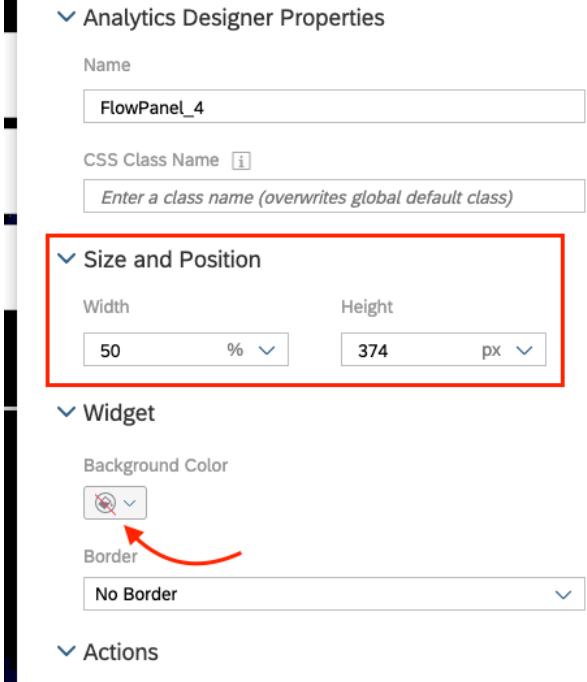
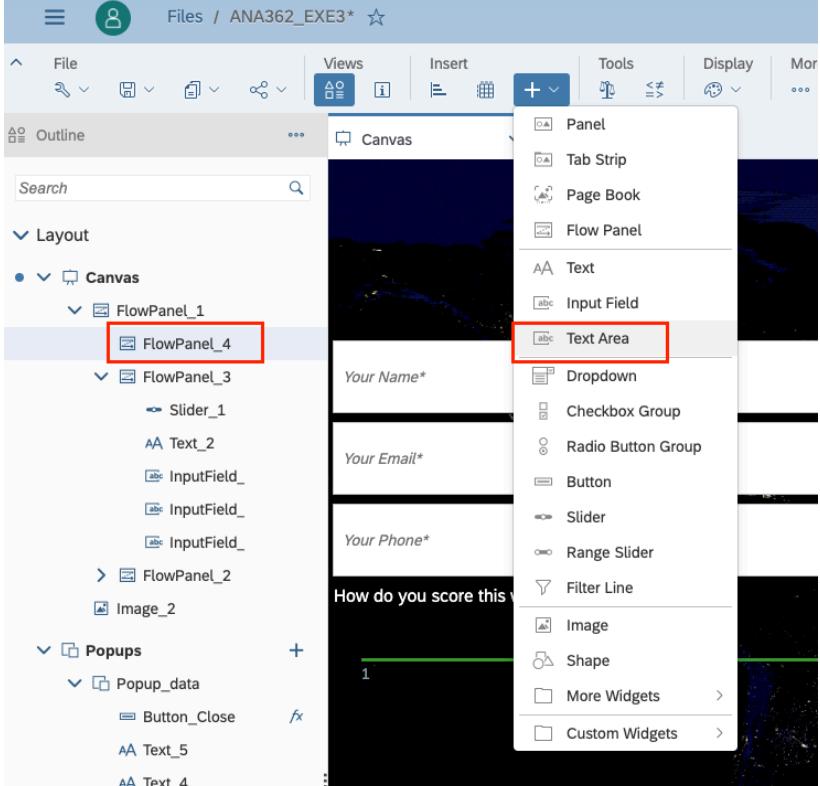
Explanation	Screenshot
<p>36. For better presentation of the Input Field, and in order to have some space between the widgets, select All Borders from the Border list box, a transparent color for the Borders, and a Line Width =4</p>	 <p>The screenshot shows the 'Widget' section of the styling panel. A red box highlights the 'Border' dropdown menu, which is set to 'All Borders'. Another red box highlights the 'Line Width' input field, which is set to '4'. A red arrow points from the 'Line Width' input field towards the 'Color' dropdown menu, indicating that the transparent color is being applied to the border.</p>
<p>37. Toggle the builder Panel in order to change the display name of the input field</p>	 <p>The screenshot shows the 'Styling' tab of the builder panel. A red arrow points from the 'Styling' tab towards the 'Name' input field, which contains the value 'InputField_Name'. Below the 'Name' field is a 'CSS Class Name' input field with the placeholder text 'Enter a class name (overwrites global default class)'.</p>

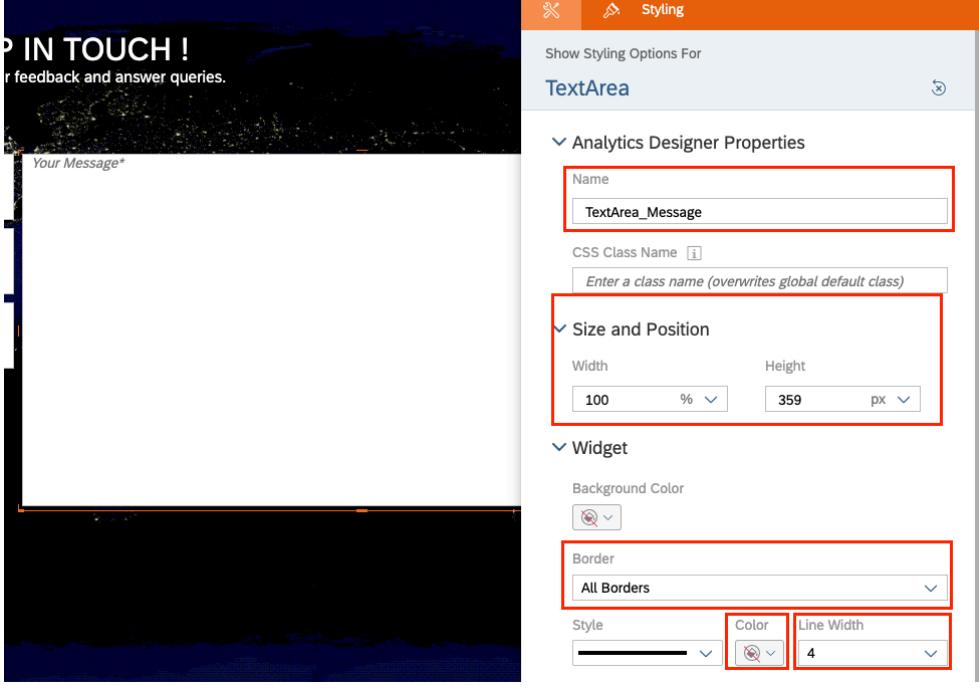
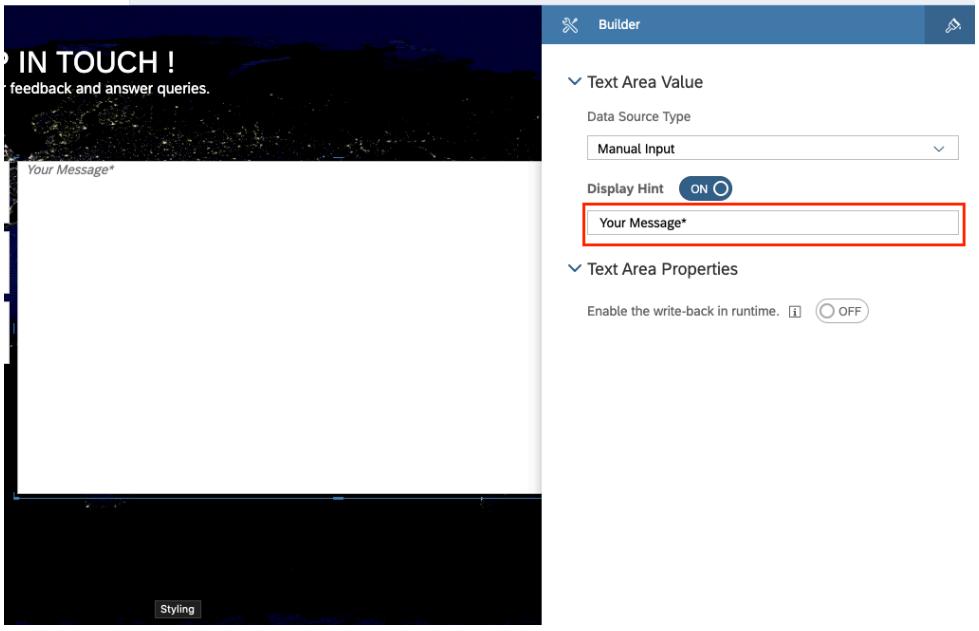
Explanation	Screenshot
<p>38. Replace the default display name to Your Name* as shown.</p>	 <p>The screenshot shows the Oracle Analytics Designer interface. In the top right, there are buttons for 'Designer' and 'Run Analytic Application'. Below that is a blue header bar with the word 'Builder'. The main area has a sidebar on the left with a tree view. The main content area is titled 'Input Field Value'. It includes sections for 'Data Source Type' (set to 'Manual Input'), 'Display Hint' (set to 'ON' with a red box around it), and 'Input Field Properties' (with a 'OFF' button). The 'Display Hint' field contains the text 'Your Name*'. The entire screenshot is framed by a thick black border.</p>
<p>39. Add 2 other Input_Filed (step 32) and style them like the previous steps (step 33,35,36,37), and change their names (Step 34) to: InputField_Email InputField_Phone</p> <p>Change the default display name (Step 38) of the 2 other input field names to: Your Email* Your Phone*</p>	 <p>The screenshot shows the Oracle Analytics Canvas interface. At the top, there's a toolbar with 'Views', 'Insert', 'Tools', 'Data', and 'Display' tabs. Below the toolbar is a canvas area with a dark background featuring a landscape image and text 'LET'S KEEP' and 'We are always happy to hear'. On the left side of the canvas, there's a sidebar with a 'Canvas' tab. Three input fields have been placed on the canvas: one at the top labeled 'Your Name*', and two below it labeled 'Your Email*' and 'Your Phone*'. The entire screenshot is framed by a thick black border.</p>

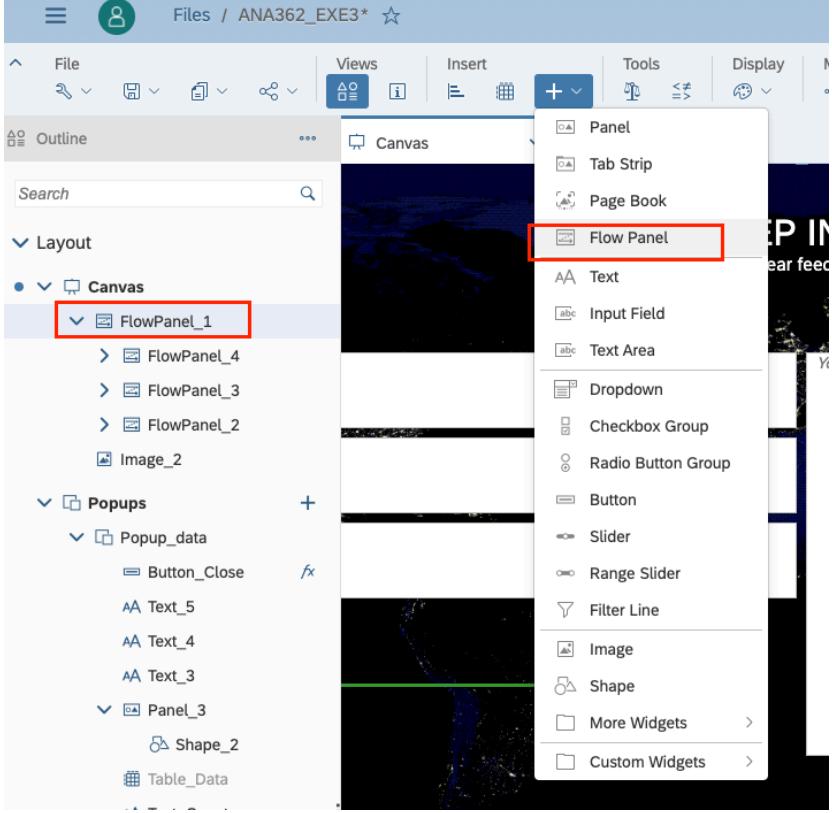
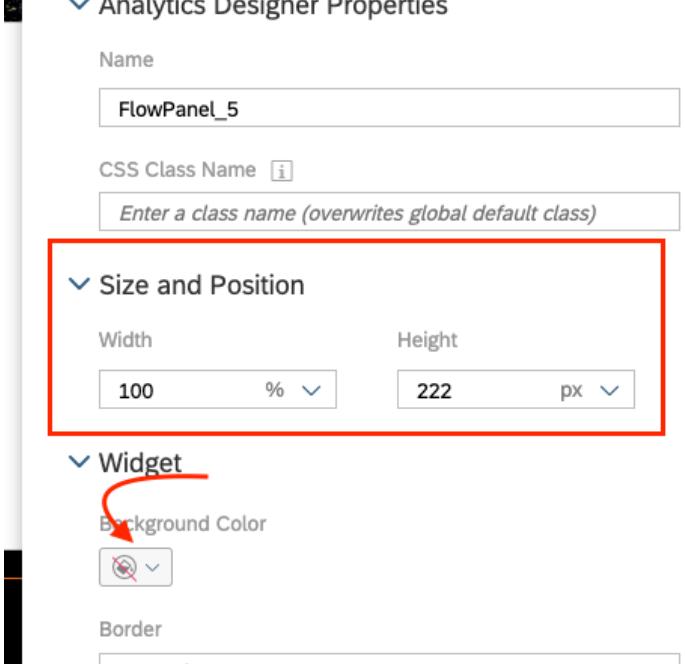
Explanation	Screenshot
<p>40. As next we will add 2 more widgets under the Third Flow Panel: A Text Widget and a Slider.</p> <p>41. Let's start by adding the Text by selecting the Third Flow Panel and press the (+) and add the Text</p>	
<p>42. Let's now configure the layout of the Text, by opening the designer panel → Styling (Check Step 11)</p>	
<p>43. Double Click the Default Text and change the color font to White</p> <p>44. After that replace the default text by:</p> <p>How do you score this Website?</p>	

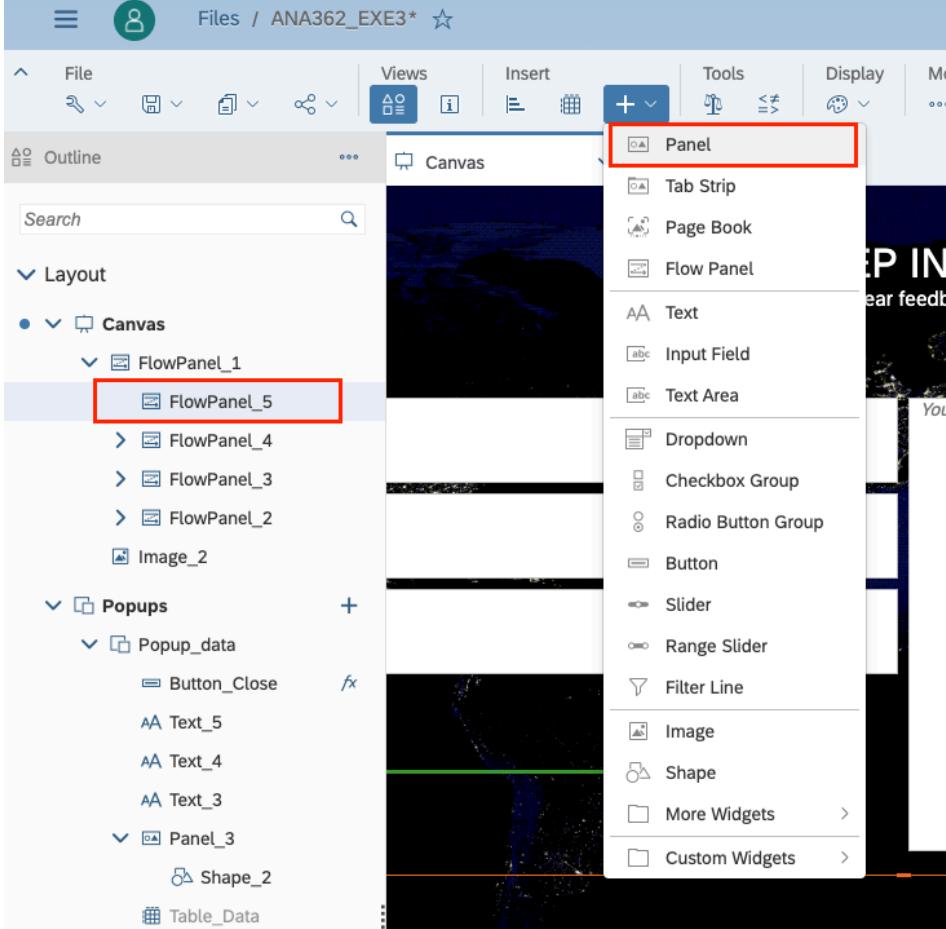
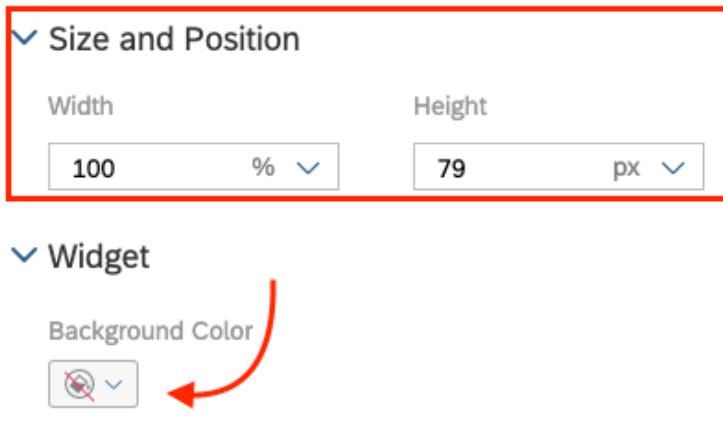
Explanation	Screenshot
45. As next let's add a Slider under the Third Flow Panel	
46. Let's now configure the layout of the Slider, by opening the designer panel → Styling (Check Step 11)	
47. Change the Width and the Height as shown in the Screenshot. Width: 100% Height: 64px	
48. Change the Progress Bar Color to Green	

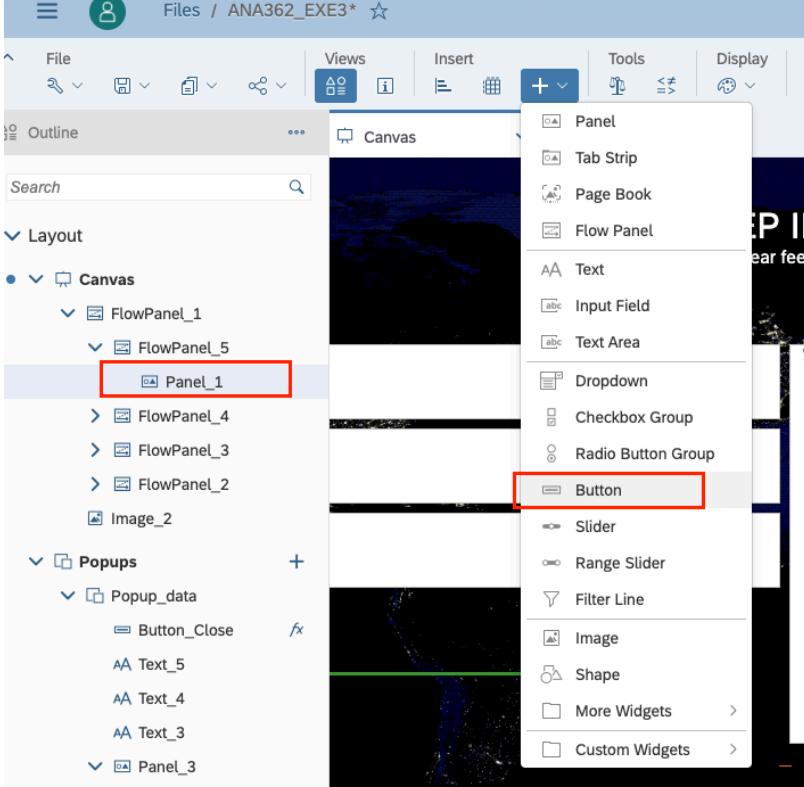
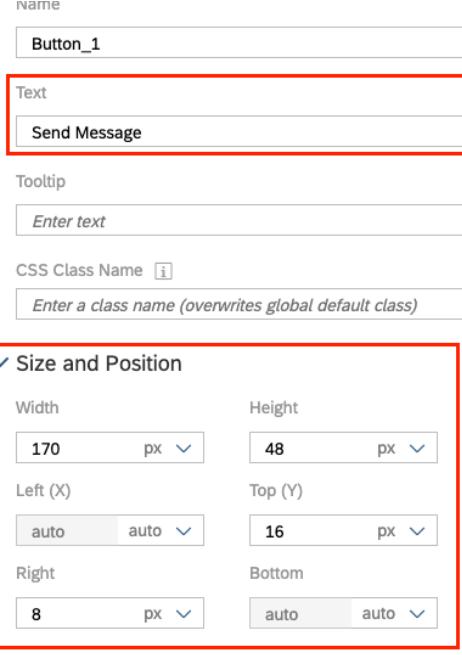
Explanation	Screenshot
<p>49. Toggle the Builder Panel (Check the step 48) and configure the Slider as shown:</p> <p>Min Value = 1 Current Value= 85</p> <p>Check the display Properties as shown in the screenshot</p> <p>Step Size= 1</p>	
<p>50. Let's add a fourth and last Flow Panel under the first Flow Panel.</p> <p>Press the sign (+) and add the Flow Panel</p>	

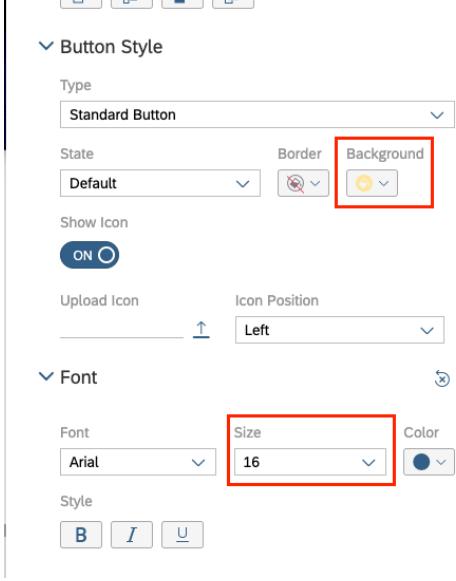
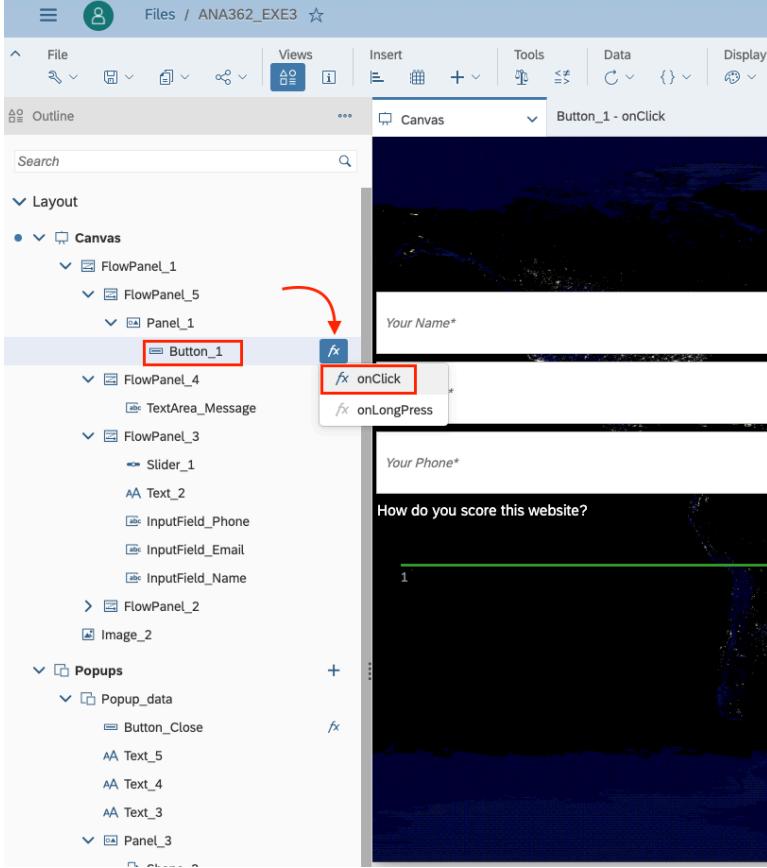
Explanation	Screenshot
<p>51. Let's change the layout of fourth Flow Panel from the Styling Panel as shown:</p> <p>Width: 50% Height: 374px</p> <p>Background Color: Transparent</p>	 <p>Analytics Designer Properties</p> <p>Name: FlowPanel_4</p> <p>CSS Class Name: Enter a class name (overwrites global default class)</p> <p>Size and Position</p> <p>Width: 50 % Height: 374 px</p> <p>Widget</p> <p>Background Color: No Border</p> <p>Actions</p>
<p>52. As next, we will add a Text Area under the Fourth Flow Panel.</p> <p>Select the Fourth Flow Panel and Press the (+) sign and select Text Area</p>	 <p>Files / ANA362_EXE3* ☆</p> <p>File Views Insert Tools Display More</p> <p>Outline Search</p> <p>Layout Canvas</p> <p>FlowPanel_1 FlowPanel_4 FlowPanel_3 FlowPanel_2 Image_2</p> <p>Popups Popup_data Button_Close Text_5 Text_4</p> <p>+</p> <ul style="list-style-type: none"> Panel Tab Strip Page Book Flow Panel Text Input Field Text Area Dropdown Checkbox Group Radio Button Group Button Slider Range Slider Filter Line Image Shape More Widgets > Custom Widgets >

Explanation	Screenshot
<p>53. Jump to the Styling Panel and resize the Text Area.</p> <p>Rename the TextArea: TextArea_Message</p> <p>Width: 100% Height: 359px</p> <p>Select All Borders from the Border list box, with a transparent border color and a line width equal to 4. (Check step 36)</p>	
<p>54. Toggle the Builder Panel and Change the default Display Hint to: Your Message*</p>	

Explanation	Screenshot
<p>55. Let's add now the last Flow Panel under the First Flow Panel.</p>	
<p>56. From the Styling Panel, change the size and position of the flow panel.</p> <p>Width: 100% Height: 222px</p> <p>Background Color: Transparent</p>	

Explanation	Screenshot
<p>57. We will now add a Panel under the last flow panel</p> <p>Select the last Flow Panel, then use the sign (+) and add the Panel.</p>	 <p>The screenshot shows the ANA362 application's interface. The top navigation bar includes 'File', 'Views', 'Insert', 'Tools', 'Display', and 'More'. A dropdown menu 'Insert' is open, showing various options like 'Panel', 'Tab Strip', 'Page Book', 'Flow Panel', 'Text', 'Input Field', 'Text Area', 'Dropdown', etc. On the left, there's an 'Outline' panel and a 'Canvas' panel. In the 'Canvas' panel, there's a tree view of components: 'FlowPanel_1' (selected), 'FlowPanel_5' (highlighted with a red box), 'FlowPanel_4', 'FlowPanel_3', 'FlowPanel_2', 'Image_2', 'Popups', 'Popup_data', 'Button_Close', 'Text_5', 'Text_4', 'Text_3', 'Panel_3', 'Shape_2', and 'Table_Data'. A search bar is also present in the canvas area.</p>
<p>58. From the Styling Panel, change the size and position of the panel.</p> <p>Width: 100% Height: 79px</p> <p>Background Color: Transparent</p>	 <p>The screenshot shows the styling panel with two main sections: 'Size and Position' and 'Widget'. In the 'Size and Position' section, 'Width' is set to '100%' and 'Height' is set to '79px'. In the 'Widget' section, there's a 'Background Color' field with a color swatch set to transparent. A red arrow points to this transparent color swatch.</p>

Explanation	Screenshot
<p>59. Under the Panel, we will add a Button:</p> <p>Select the Panel and add the Button as shown.</p>	 <p>The screenshot shows a software interface with a toolbar at the top and a central canvas area. On the left, there's a sidebar with sections like 'Outline' and 'Layout'. In the 'Layout' section, 'Canvas' is expanded, showing a tree structure with nodes like 'FlowPanel_1', 'FlowPanel_5', etc. A red box highlights 'Panel_1'. A context menu is open over the 'Panel_1' node, listing various UI components. The 'Button' option is highlighted with a red box.</p>
<p>60. Let's restyle our Button from the styling Panel.</p> <p>Text: Send Message</p> <p>Width: 170px Height: 48px Left: auto Top: 16px Right: 8px Bottom: auto</p>	 <p>The screenshot shows the styling panel for the 'Button_1' component. It includes fields for 'name' (set to 'Button_1'), 'Text' (set to 'Send Message'), 'Tooltip' (empty), and 'CSS Class Name' (empty). A large red box highlights the 'Size and Position' section, which contains fields for 'Width' (170 px), 'Height' (48 px), 'Left (X)' (auto), 'Top (Y)' (16 px), 'Right' (8 px), and 'Bottom' (auto).</p>

Explanation	Screenshot
61. Change the Background color of the Button to Yellow , and the font size to 16	
62. After Building the layout Part, let's add now some script in order to calculate the average score of the webpage. We will first add some Script under the button. 63. Click on the Button_1 and then select the function onClick	

Explanation	Screenshot
-------------	------------

64. Copy/paste the script below :

```

// define variables
var name = InputField_Name.getValue();
var email = InputField_Email.getValue();
var phone = InputField_Phone.getValue();
var message= TextArea_Message.getValue();
var score = Slider_1.getValue();

// create master data into the planning table

PlanningModel_1.createMembers("Name", {id: name});
PlanningModel_1.createMembers("Email", {id: email});
PlanningModel_1.createMembers("Phone", {id: phone});
PlanningModel_1.createMembers("Message", {id: message});

// Refresh table before we are adding the key figure into the planning table

Table_Data.getDataSource().refreshData();

// Planning key figure by using setUserInput API
var sel = {
    "@MeasureDimension": "[Account].[parentId].&[Score]",
    "Name": name,
};

Table_Data.getPlanning().setUserInput(sel, score.toString());
Table_Data.getPlanning().submitData();

//in real life we will need the publish step to publish the data, but for this exercise we will work within our own planning version//
/*Table_Data.getPlanning().getPublicVersion("Actual").publish();*/

//calculate the avg score

var rs = Table_Data.getDataSource().getResultSet({"@MeasureDimension": "[Account].[parentId].&[Score]"});
var totalCount = rs.length;
var totalScore = 0.0;

for (var i = 0; i < rs.length; i++) {
    totalScore = totalScore + ConvertUtils.stringToNumber(rs[i]["@MeasureDimension"].rawValue);
}

var avgScore = "0";
if (totalCount > 0) {
    avgScore = (totalScore/totalCount).toFixed (0);
}

// set text for the totalCount and avergae Score
Text_Count.applyText(totalCount.toString());
Text_AvgScore.applyText(avgScore);

// Open Popup to show the result
Popup_data.open();

```

Explanation

Screenshot

```

Button_1 - onClick
Called when the user clicks the button.

function onClick() : void
{
    // define variables
    var name = InputField_Name.getValue();
    var email = InputField_Email.getValue();
    var phone = InputField_Phone.getValue();
    var message= TextArea_Message.getValue();
    var score = Slider_1.getValue();

    // create master data into the planning table
    PlanningModel_1.createMembers("Name", {id: name});
    PlanningModel_1.createMembers("Email", {id: email});
    PlanningModel_1.createMembers("Phone", {id: phone});
    PlanningModel_1.createMembers("Message", {id: message});

    // Refresh table before we are adding the key figure into the planning table
    Table_Data.getDataSource().refreshData();

    // Planning key figure by using setUserInput API
    var sel = {
        "@MeasureDimension": "[Account].[parentId].&[Score]",
        "Name": name,
    };

    Table_Data.getPlanning().setUserInput(sel, score.toString());
    Table_Data.getPlanning().submitData();

    //in real life we will need the publish step to publish the data, but for this exercise we will work within our own
    //planning version/
    /*Table_Data.getPlanning().getPublicVersion("Actual").publish();*/

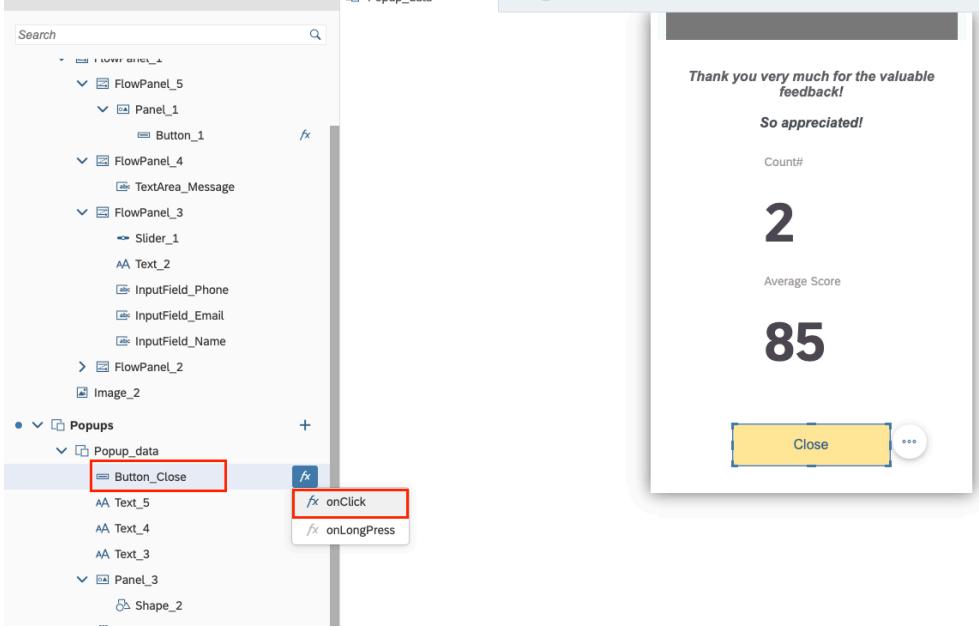
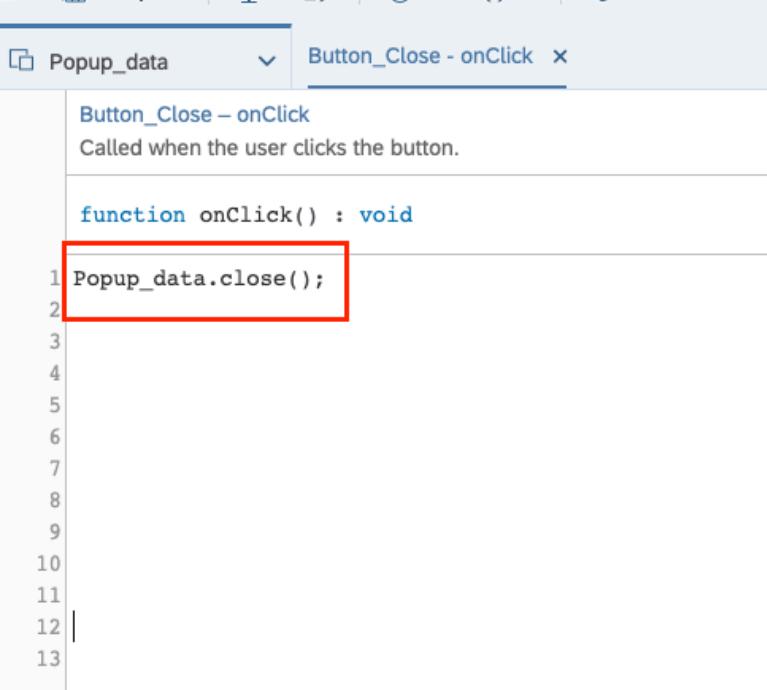
    //calculate the avg score
    var rs = Table_Data.getDataSource().getResultSet({"@MeasureDimension": "[Account].[parentId].&[Score]"});
    var totalCount = rs.length;
    var totalScore = 0.0;

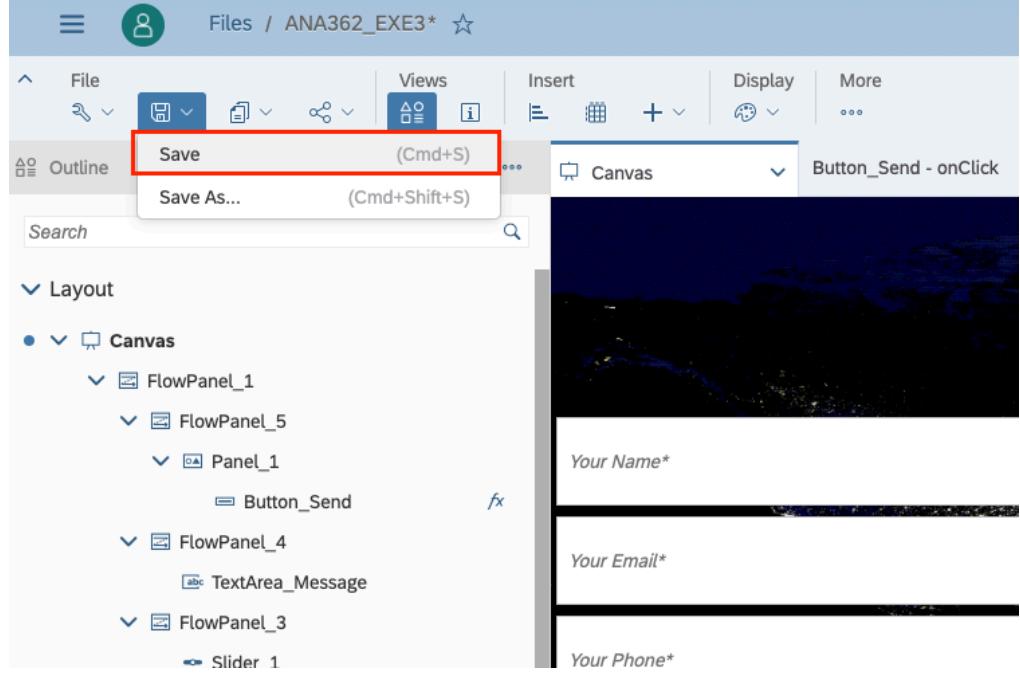
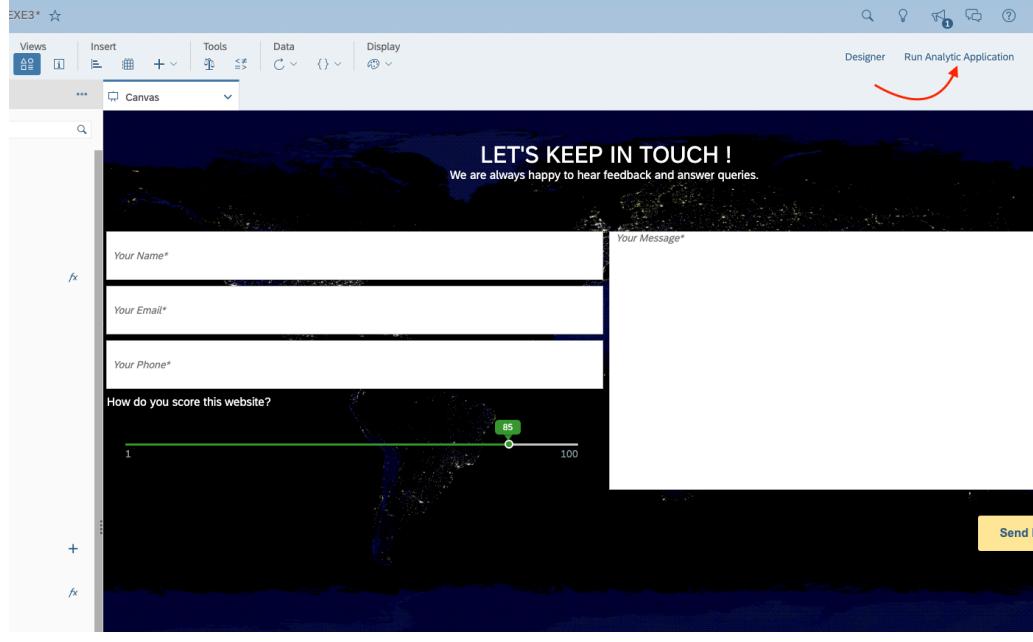
    for (var i = 0; i < rs.length; i++) {
        totalScore = totalScore + ConvertUtils.stringToNumber(rs[i]["@MeasureDimension"].rawValue);
    }

    var avgScore = "0";
    if (totalCount > 0) {
        avgScore = (totalScore/totalCount).toFixed (0);
    }

    // set text for the totalCount and average Score
    Text_Count.applyText(totalCount.toString());
    Text_AvgScore.applyText(avgScore);
}

```

Explanation	Screenshot
<p>65. As Next let's add some script for the Button_Close under the Popups</p>	
<p>66. Copy/Paste the line below:</p> <pre>Popup_data.close();</pre> <p>This line of code allows us to close the popup of the result.</p>	 <pre>Button_Close – onClick Called when the user clicks the button. function onClick(): void 1 Popup_data.close(); 2 3 4 5 6 7 8 9 10 11 12 13</pre>

Explanation	Screenshot
<p>67. Click on the Floppy Disc icon and select Save.</p>	 <p>The screenshot shows the application's interface with a toolbar at the top. The 'File' menu is open, and the 'Save' option is highlighted with a red box. Below the toolbar, there is a sidebar labeled 'Layout' containing a tree view of the application's structure. On the right side, there is a canvas area with three input fields: 'Your Name*', 'Your Email*', and 'Your Phone*'. The 'Your Name*' field has a placeholder 'Your Name*' and a red asterisk indicating it is required.</p>
<p>68. Click Run Analytic Application to see how our Application will behave.</p>	 <p>The screenshot shows the application's interface with a toolbar at the top. The 'Canvas' tab is selected. In the center, there is a form with fields for 'Your Name*', 'Your Email*', and 'Your Phone*'. Below these fields is a question 'How do you score this website?' followed by a slider scale from 1 to 100, with the value set to 85. To the right of the slider is a button labeled 'Send'. In the top right corner of the interface, there is a button labeled 'Run Analytic Application' with a red arrow pointing towards it. The background features a dark blue globe graphic.</p>

Explanation**Screenshot**

69. Here is the final result of your application, now you can use it in order to score a random Website

The screenshot shows a contact form titled "LET'S KEEP IN TOUCH!" with a sub-instruction "We are always happy to hear feedback and answer queries." The form includes fields for "Your Name*", "Your Email*", "Your Phone*", and "How do you score this website?". A slider is set at 85. The message area contains "Your Message*" and a "Send Message" button.

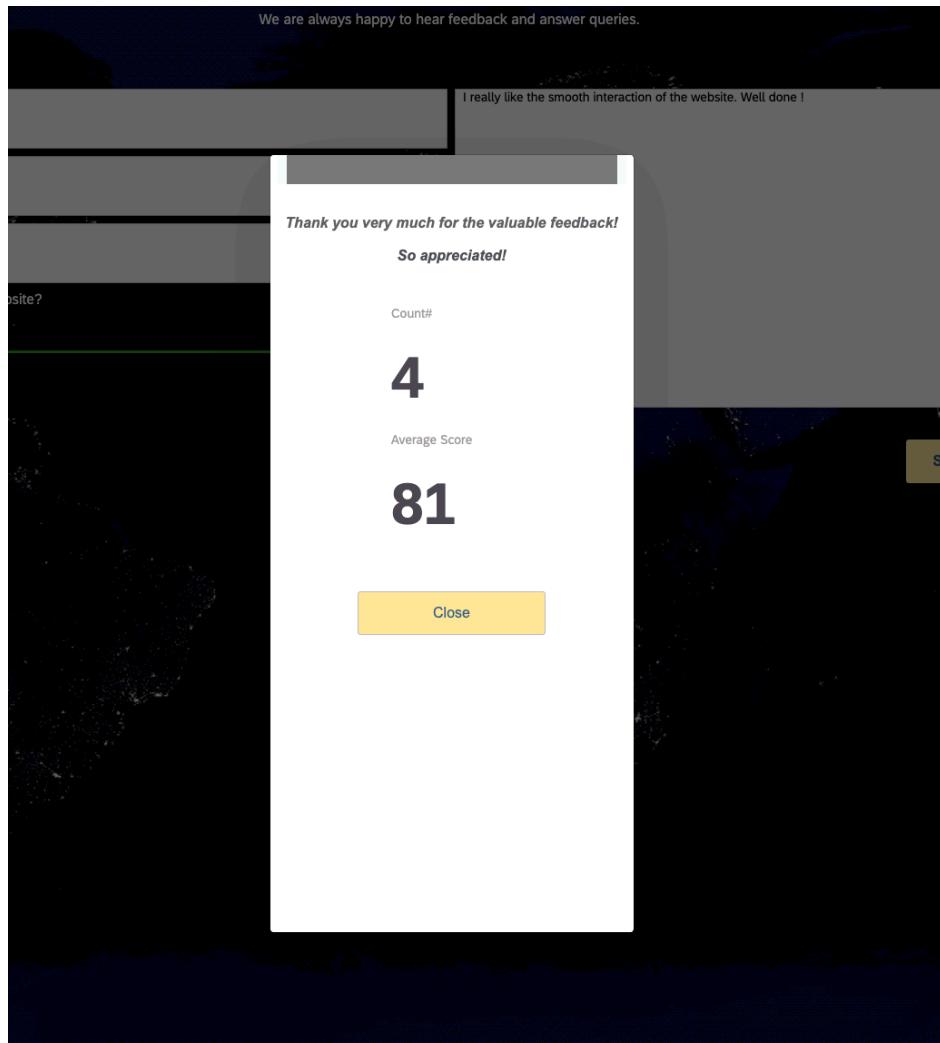
70. Insert your Name, Email, Phone, Score the Website using the Slider, Write your Message, and at last Click Send Message button:

The screenshot shows the same contact form after input. The "Name" field has "Marou", the "Email" field has "m.ferchichi@sap.com", and the "Phone" field has "0123456789". The slider is now at 93. The message area contains "I really like the smooth interaction of the website. Well done! |". An orange arrow points from the "Send Message" button to the right.

Explanation

Screenshot

71. As shown a Popup will appear showing us, how many users have had already participated, and the average score.



Congratulations! You Have completed the Exercise 2.

www.sap.com/contactsap

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