

## Project Development Phase

### Delivery of Sprint - 1

Date	29 October 2022
Team ID	PNT2022TMID00800
Project Name	Retail Store Stock Inventory Analytics

### Project Development Phase:

#### Sprint 1:

- Data Collection
- Data Filtration

#### Sprint 2:

- Data Visualization

#### Sprint 3:

- Dashboard Creation

#### Sprint 4:

- Report Creation
- Story Creation

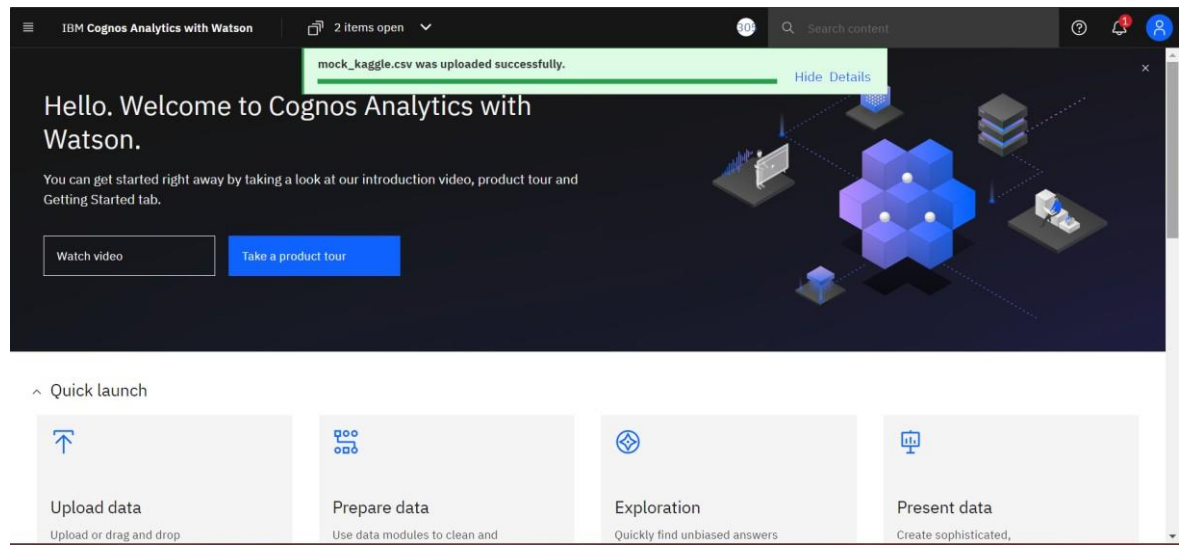
## Sprint -1:

### Data Collection:

#### Downloading the Dataset:

<https://drive.google.com/drive/folders/1kiL-5CHJmQvbk9VyFsuUs-myAupBZGNy>

#### *Loading the Dataset using IBM COGNOS ANALYTICS:*



# Data Filtration:

*Filtering the dataset and preparing by using data modules to clean and connect data from multiple modules.*

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Search

New data module

Navigation paths

mock\_kaggle.csv

Month\_Data

Revenue

Row Id

Year

sales

Stock

Price

Grid

Relationships

Custom tables

Month_Data	Revenue	Row Id	Year	sales	Stock
1	0	1	1/1/14	0	4972
1	90	2	1/2/14	70	4902
1	76	3	1/3/14	59	4843
1	120	4	1/4/14	93	4750
1	124	5	1/5/14	96	4654
1	187	6	1/6/14	145	4509
1	231	7	1/7/14	179	4329
1	414	8	1/8/14	321	4104
1	136	9	1/9/14	125	4459
1	96	10	1/10/14	88	5043
1	205	11	1/11/14	188	5239

## Month Data:

- *Creating a new calculation to get the month data.*

The screenshot displays the IBM Cognos Analytics interface. At the top, a dark header bar contains the text "IBM Cognos Analytics with Watson" and a "Learn More" button. Below the header, a "Create calculation" dialog is open. The "Name" field is set to "Month\_Data". The "Components" panel on the left shows a search bar and a list of components: "mock\_kaggle.csv", "# Row Id", "data" (selected), "venda", "estoque", and "preco". The "Expression" field contains the formula "1 month(data\_)". Below the expression field, an "Information" panel provides details about the "month" function: "month ( date\_expression )", "Returns the month (an integer from 1-12) from 'date\_expression'.", and an example: "month ( 2005-11-01 ); Result: Returns 11."

IBM Cognos Analytics with Watson [Learn More](#) Search content

### Create calculation

Name: Month\_Data

Components

- mock\_kaggle.csv
  - # Row Id
- data
- venda
- estoque
- preco

Expression

1 month(data\_)







Information

month ( date\_expression )



Returns the month (an integer from 1-12) from "date\_expression".

month ( 2005-11-01 );


Result: Returns 11.


     


Properties








 Data module + 

Search

 New data module

 Navigation paths +

 mock\_kaggle.csv

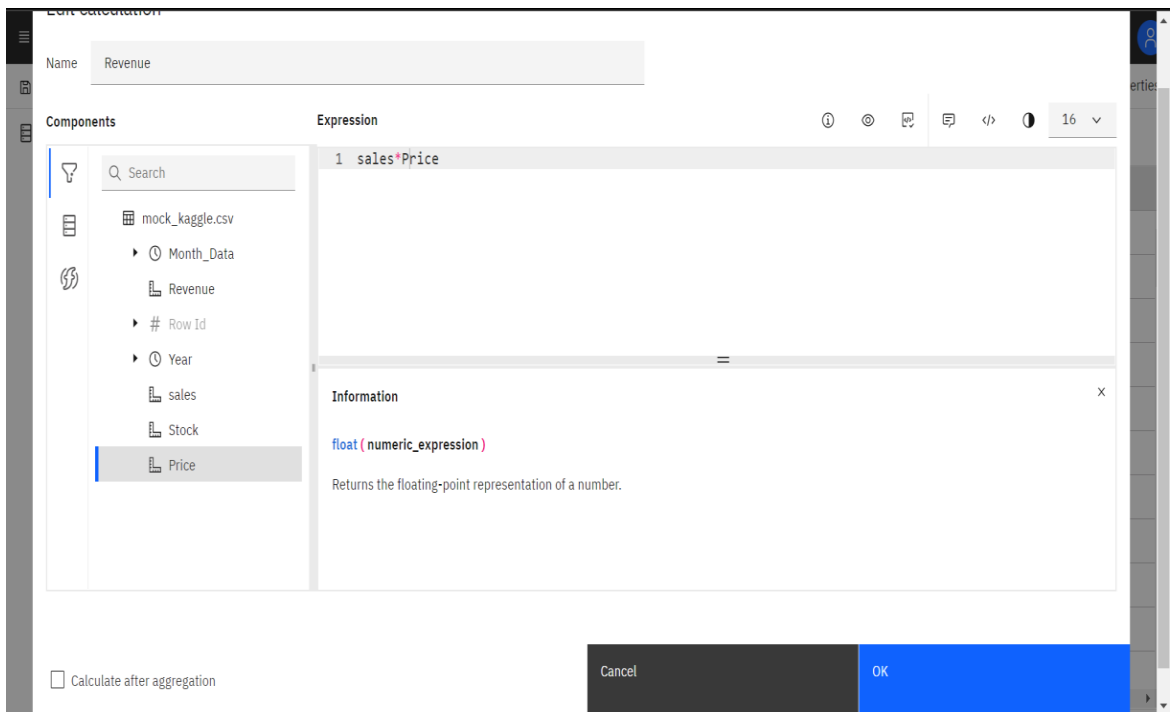
-  Month\_Data
-  Revenue
-  # Row Id
-  Year
-  sales
-  Stock
-  Price

Grid Relationships Custom tables

	Month_Data	Revenue	Row Id	Year	sales	Stock
1		0	1	1/1/14	0	4972
1		90	2	1/2/14	70	4902
1		76	3	1/3/14	59	4843
1		120	4	1/4/14	93	4750
1		124	5	1/5/14	96	4654
1		187	6	1/6/14	145	4509
1		231	7	1/7/14	179	4329
1		414	8	1/8/14	321	4104
1		136	9	1/9/14	125	4459
1		96	10	1/10/14	88	5043
1		205	11	1/11/14	188	5239

## Revenue Data:

- *Creating a new calculation to get the revenue data.*



Data module

Search

New data module

Navigation paths

mock\_kaggle.csv

Month\_Data

Revenue

# Row Id

Year

sales

Stock

Price

Month_Data	Revenue	Row Id	Year	sales	Stock
1	0	1	1/1/14	0	4972
1	90.3	2	1/2/14	70	4902
1	76.11	3	1/3/14	59	4843
1	119.97	4	1/4/14	93	4750
1	123.84	5	1/5/14	96	4654
1	187.05	6	1/6/14	145	4509
1	230.91	7	1/7/14	179	4329
1	414.09000000000003	8	1/8/14	321	4104
1	136.25	9	1/9/14	125	4459
1	95.92	10	1/10/14	88	5043
1	204.92000000000002	11	1/11/14	188	5239

## Year Data:

IBM Cognos Analytics with Watson

New data module

90%

Search content

Grid

Relationships

Custom tables

Search

New data module

Navigation paths

mock\_k...le.csv

Month\_Data

Revenue

Row Id

**Year**

sales

Stock

Price

Row Id	Year	sales	Stock
1	1/1/14	0	4972
2	1/2/14	70	4902
3	1/3/14	59	4843
4	1/4/14	93	4750
5	1/5/14	96	4654
6	1/6/14	145	4509
7	1/7/14	179	4329
8	1/8/14	321	4104
9	1/9/14	125	4459
10	1/10/14	88	5043
11	1/11/14	188	5239

Properties

General

Navigation paths

Label

Year

Hide from users

Expression

View or edit

Usage

Attribute

Aggregate

Count Distinct

Data type

Date

Represents

Time

Year

Lookup reference



## Sales Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

New data module

Naviga... paths

mock\_k...le.csv

Month\_Data

Revenue

# Row Id

Year

sales

Stock

Price

Row Id	Year	sales	Stock
1	1/1/14	0	4972
2	1/2/14	70	4902
3	1/3/14	59	4843
4	1/4/14	93	4750
5	1/5/14	96	4654
6	1/6/14	145	4509
7	1/7/14	179	4329
8	1/8/14	321	4104
9	1/9/14	125	4459
10	1/10/14	88	5043
11	1/11/14	188	5239

Properties

General

Label sales

Hide from users

Expression View or edit

Usage Measure

Aggregate Total

Data type Integer

Represents

Default

Lookup reference None

Description

## Stock Data:

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

New data module

Naviga... paths

mock\_k...le.csv

Month\_Data

Revenue

Row Id

Year

sales

Stock

Price

Id	Year	sales	Stock
	1/1/14	0	4972
	1/2/14	70	4902
	1/3/14	59	4843
	1/4/14	93	4750
	1/5/14	96	4654
	1/6/14	145	4509
	1/7/14	179	4329
	1/8/14	321	4104
	1/9/14	125	4459
	1/10/14	88	5043
	1/11/14	188	5239

Properties

General

Label Stock

Hide from users

Expression View or edit

Usage Measure

Aggregate Total

Data type Integer

Represents

Default

Lookup reference None

Description

Price Data:

IBM Cognos Analytics with Watson

New data module

90%

Search content

?

1

Grid

Relationships

Custom tables

Properties

Search

New data module

Navigation paths

mock\_k...le.csv

Month\_Data

Revenue

Row Id

Year

sales

Stock

Price

ir	sales	Stock	Price
/14	0	4972	1
/14	70	4902	1
/14	59	4843	1
/14	93	4750	1
/14	96	4654	1
/14	145	4509	1
/14	179	4329	1
/14	321	4104	1
/14	125	4459	1
0/14	88	5043	1
1/14	188	5239	1

General

LabelPrice

Hide from users

ExpressionView or edit

UsageMeasure

AggregateTotal

Data typeDecimal

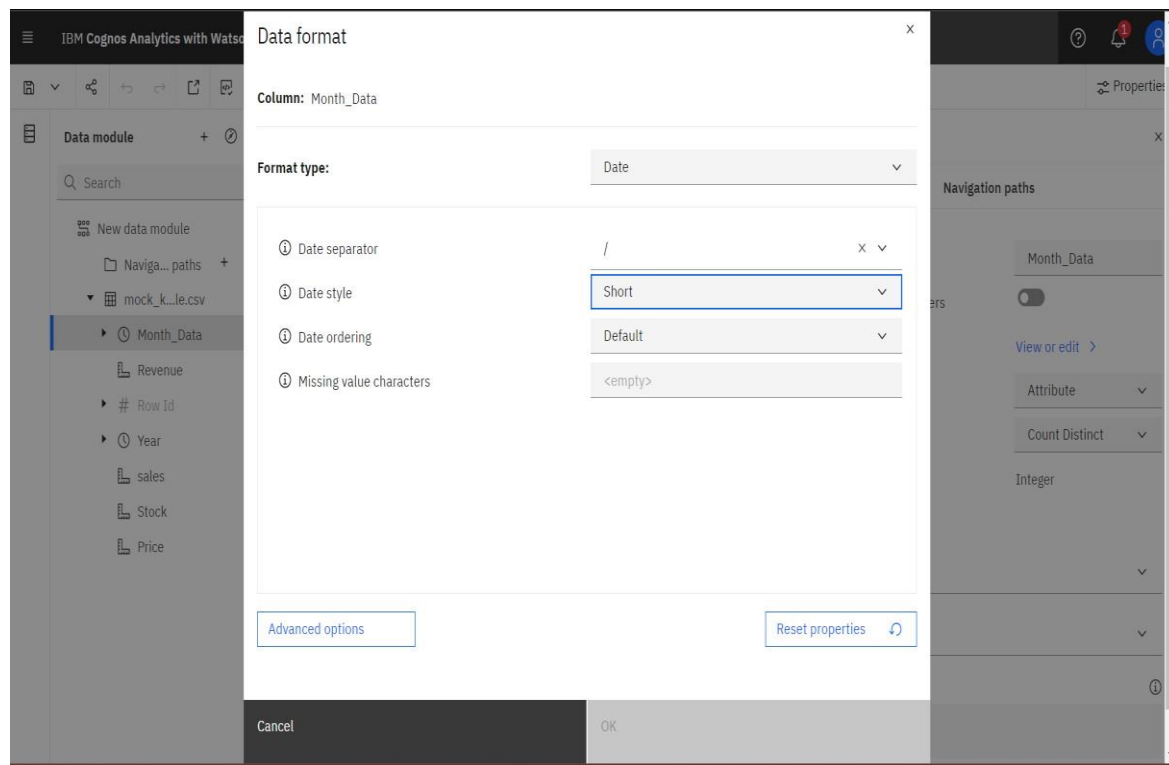
Represents

Default

Lookup referenceNone

Description

## Month-Format Data:



Grid

Relationships

Custom tables

Search

New data module

Navigation paths

mock\_k...le.csv

Month\_Data

Revenue

Row Id

Year

sales

Stock

Price

Month_Data	Revenue	Row Id	Year
1	0	1	1/1/14
1	90.3	2	1/2/14
1	76.11	3	1/3/14
1	119.97	4	1/4/14
1	123.84	5	1/5/14
1	187.05	6	1/6/14
1	230.91	7	1/7/14
1	414.09000000000003	8	1/8/14
1	136.25	9	1/9/14
1	95.92	10	1/10/14
1	204.92000000000002	11	1/11/14
1	131.89000000000001	12	1/12/14

Properties

General

Navigation paths

Label

Month\_Data

Hide from users

Expression

View or edit

Usage

Attribute

Aggregate

Count Distinct

Data type

Integer

Represents

Time

Month

Description

## Year-Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The dialog is titled 'Data format' and has a close button (X) in the top right corner. It is currently set to format the 'Year' column.

**Column:** Year

**Format type:** Date (dropdown menu)

**Properties:**

- Date separator:** / (dropdown menu with a clear button 'X' and a dropdown arrow 'v')
- Date style:** Short (dropdown menu with a dropdown arrow 'v')
- Date ordering:** Default (dropdown menu with a dropdown arrow 'v')
- Missing value characters:** <empty> (text input)

**Buttons:**

- Advanced options (button)
- Reset properties (button with a circular arrow icon)
- Cancel (button)
- OK (button)

The background shows the IBM Cognos Analytics interface with a sidebar containing 'Data module' and 'Navigation paths' sections. The 'Year' column is selected in the 'Navigation paths' section.

Grid

Relationships

Custom tables

Search

New data module

Naviga... paths

mock\_k...le.csv

Month\_Data

Revenue

# Row Id

Year

sales

Stock

Price

Month_Data	Revenue	Row Id	Year
0		1	1/1/14
90.3		2	1/2/14
76.11		3	1/3/14
119.97		4	1/4/14
123.84		5	1/5/14
187.05		6	1/6/14
230.91		7	1/7/14
414.09000000000003		8	1/8/14
136.25		9	1/9/14
95.92		10	1/10/14
204.92000000000002		11	1/11/14
131.89000000000001		12	1/12/14

Properties

General

Navigation paths

Label

Year

Hide from users

Expression

View or edit

Usage

Attribute

Aggregate

Count Distinct

Data type

Date

Represents

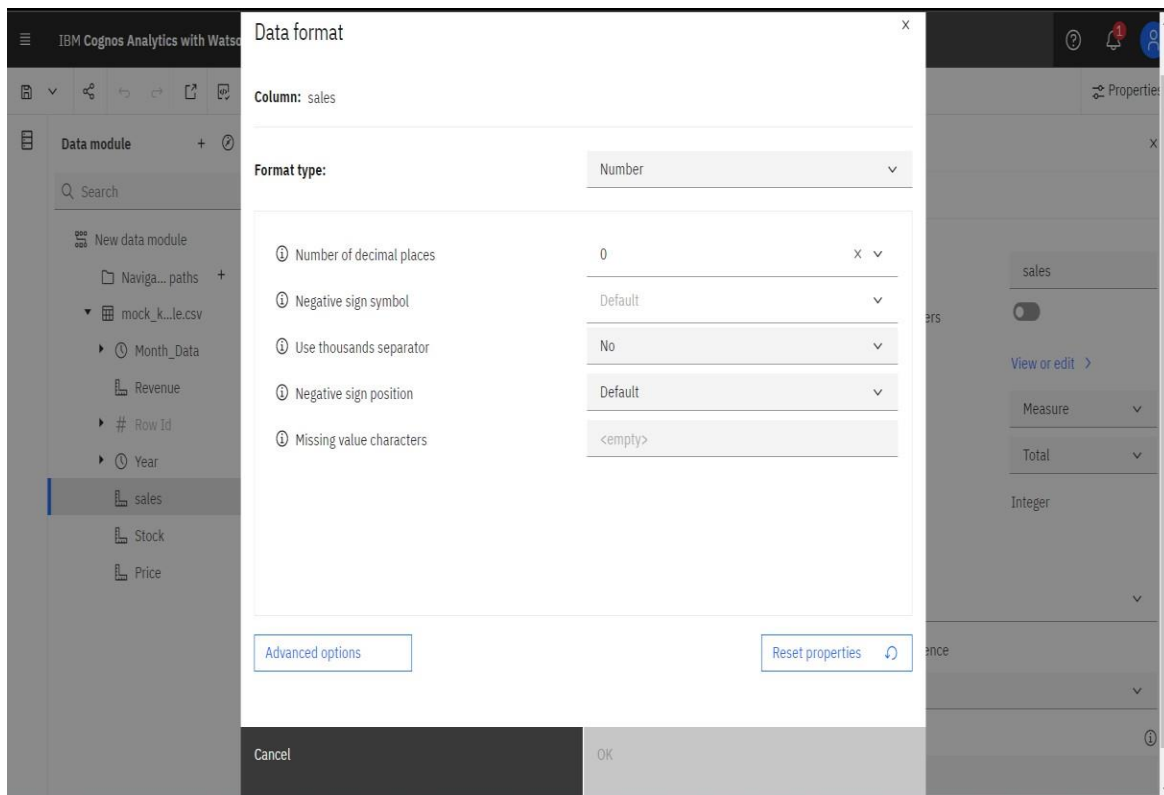
Time

Year



Lookup reference

None

## Sales-Format Data:





 Data module + 

Q Search

New data module

Naviga... paths +

mock\_k...le.csv

- Month\_Data
- Revenue
- # Row Id
- Year
- sales**
- Stock
- Price

Grid Relationships Custom tables

revenue	Row Id	Year	sales	S
	1	1/1/14	0	
3	2	1/2/14	70	
11	3	1/3/14	59	
1.97	4	1/4/14	93	
1.84	5	1/5/14	96	
1.05	6	1/6/14	145	
1.91	7	1/7/14	179	
1.0900000000000003	8	1/8/14	321	
1.25	9	1/9/14	125	
92	10	1/10/14	88	
1.9200000000000002	11	1/11/14	188	
1.8900000000000001	12	1/12/14	121	

Properties x

General

Label

sales

Hide from users

☐

Expression

[View or edit >](#)

Usage

Measure

Aggregate

Total

Data type

Integer

Represents

Default

Lookup reference

None

Description

## Stock-Format Data:

The screenshot displays the IBM Cognos Analytics interface with a 'Data format' dialog box open. The dialog is titled 'Data format' and shows the 'Column: Stock' configuration. The 'Format type' is set to 'Number'. Below this, several formatting options are listed with their current values:

Property	Value
Number of decimal places	0
Negative sign symbol	Default
Use thousands separator	No
Negative sign position	Default
Missing value characters	<empty>

At the bottom of the dialog, there are two buttons: 'Advanced options' and 'Reset properties'.

The background interface shows a 'Data module' on the left with a search bar and a list of data sources including 'mock\_k...le.csv', 'Month\_Data', 'Revenue', 'Row Id', 'Year', 'sales', 'Stock', and 'Price'. The 'Stock' item is currently selected. On the right, a 'Properties' panel is partially visible, showing settings for 'Stock' such as 'Measure' and 'Total'.

IBM Cognos Analytics with Watson

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↷

📄

🔍

Data module

+

🔗

🔍 Search

New data module

📁 Naviga...paths

📁 mock\_k...le.csv

🕒 Month\_Data

📊 Revenue

📊 # Row Id

🕒 Year

📊 sales

📊 Stock

📊 Price

Data format

✕

Column: Stock

Format type: Number

① Number of decimal places

0

x

① Negative sign symbol

Default

① Use thousands separator

No

① Negative sign position

Default

① Missing value characters

<empty>

Advanced options

Reset properties

?

🔔

👤

Properties

✕

Stock

View or edit

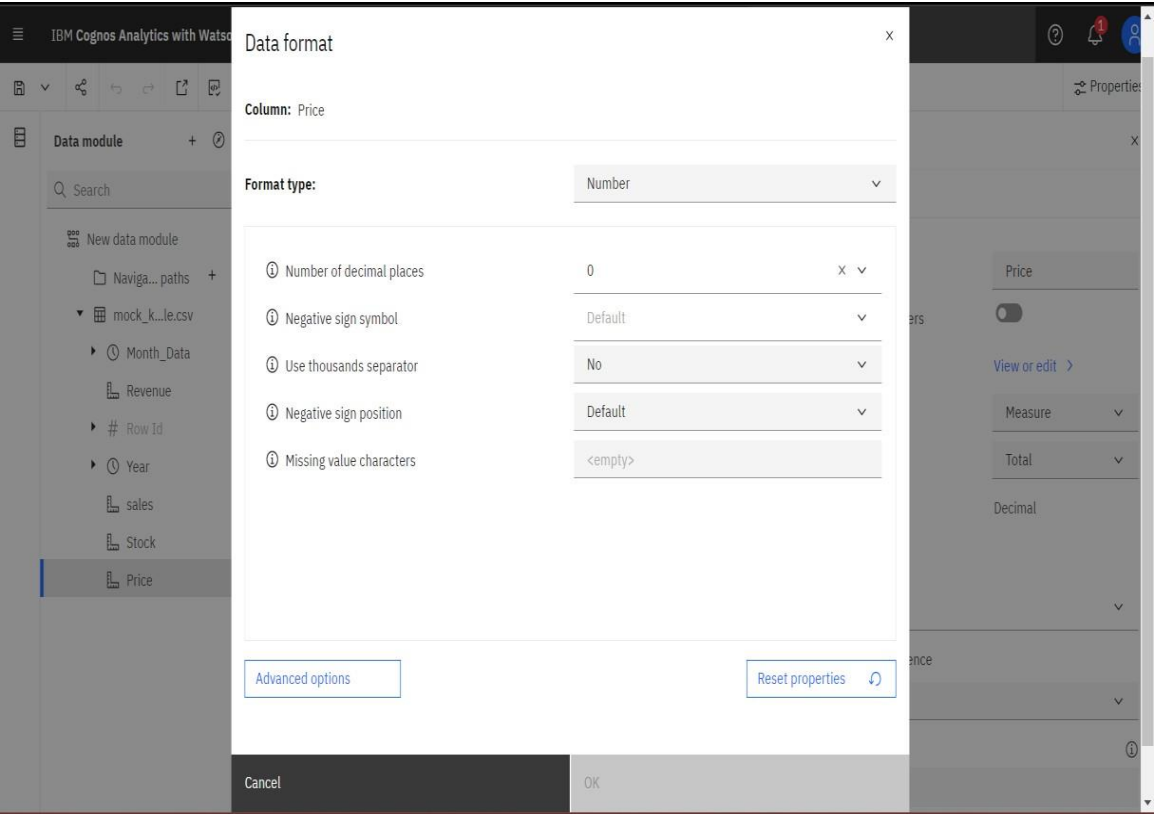
Measure






Total

Integer

ence

Price-Format Data:





Data module

Search

New data module

Naviga... paths

mock\_k...le.csv

Month\_Data

Revenue

# Row Id

Year

sales

Stock

Price

Grid

Relationships

Custom tables

↑ ↓	ir	sales	Stock	Price
/14	0	4972	1	
/14	70	4902	1	
/14	59	4843	1	
/14	93	4750	1	
/14	96	4654	1	
/14	145	4509	1	
/14	179	4329	1	
/14	321	4104	1	
/14	125	4459	1	
0/14	88	5043	1	
1/14	188	5239	1	
2/14	121	5118	1	

Properties

General

LabelPrice

Hide from users☐

Expression[View or edit](#)

UsageMeasure

AggregateTotal

Data typeDecimal

Represents

Default

Lookup referenceNone

Description

## Revenue-Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The 'Column' is set to 'Revenue'. The 'Format type' is 'Number'. The 'Number of decimal places' is set to 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is set to 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. There are buttons for 'Advanced options', 'Reset properties', 'Cancel', and 'OK'.

IBM Cognos Analytics with Watson

Data module

Search

New data module

Naviga... paths

mock\_k...le.csv

Month\_Data

Revenue

Row Id

Year

sales

Stock

Price

Data format

Column: Revenue

Format type: Number

Number of decimal places: 0

Negative sign symbol: Default

Use thousands separator: No

Negative sign position: Default



Missing value characters: <empty>

Advanced options

Reset properties

Cancel

OK

 Data module + 

Search

New data module

Navigation paths +

mock\_k...le.csv

- Month\_Data
- Revenue**
- # Row Id
- Year
- sales
- Stock
- Price

Grid Relationships Custom tables

Revenue	Row Id	Year	sales
0	1	1/1/14	0
90	2	1/2/14	70
76	3	1/3/14	59
120	4	1/4/14	93
124	5	1/5/14	96
187	6	1/6/14	145
231	7	1/7/14	179
414	8	1/8/14	321
136	9	1/9/14	125
96	10	1/10/14	88
205	11	1/11/14	188
132	12	1/12/14	121

Properties

General

LabelRevenue

Hide from users☐

Expression[View or edit >](#)

UsageMeasure

Calculate after aggregation☐

AggregateTotal

Data typeDecimal

Represents

Default

Lookup referenceNone

Description

*Prepared Data Link(Using Cognos Analytics):*

[https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my\\_folders%2FNew%2Bdata%2Bmodule](https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2FNew%2Bdata%2Bmodule)