

Project Development Phase

Delivery of Sprint - 1

Date	29 October 2022
Team ID	PNT2022TMID00906
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:

The screenshot shows the IBM Cognos Analytics with Watson web interface. At the top, there's a green success message: "mock_kaggle.csv was uploaded successfully." Below it, a welcome message reads: "Hello. Welcome to Cognos Analytics with Watson." A call-to-action button says "Take a product tour". On the right, there's a 3D isometric illustration of a data cube surrounded by various icons representing data storage and processing. At the bottom, there are four main navigation buttons: "Upload data" (with a "Upload or drag and drop" sub-instruction), "Prepare data" (with a "Use data modules to clean and" sub-instruction), "Exploration" (with a "Quickly find unbiased answers" sub-instruction), and "Present data" (with a "Create sophisticated," sub-instruction). The overall theme is dark with blue and white highlights.

Data Filtration:

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

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes 'IBM Cognos Analytics with Watson', 'New data module', a notification icon (303), a search bar, and user profile icons. The main workspace displays a 'Data module' panel on the left containing a tree view of data sources: 'New data module', 'Navigation paths', and a selected 'mock_kaggle.csv' source with children 'Month_Data', 'Revenue', 'Row Id', 'Year', 'sales', 'Stock', and 'Price'. To the right of the panel is a 'Grid' view showing a table with columns: Month_Data, Revenue, Row Id, Year, sales, and Stock. The data consists of 11 rows of sample data from the CSV file.

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 shows the 'Create calculation' dialog box in IBM Cognos Analytics with Watson. The 'Name' field contains 'Month_Data'. The 'Components' pane on the left lists 'mock_kaggle.csv' and its child components: '# RowId', 'data' (which is selected), 'venda', 'estoque', and 'preco'. The 'Expression' pane on the right shows the expression '1 month(data_)'. Below the expression, the 'Information' section defines the function as 'month(date_expression)' and provides a usage example: 'month(2005-11-01); Result: Returns 11.'

Create calculation

Name Month_Data

Components

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.

IBM Cognos Analytics with Watson New data module 303 Search content 1

B Properties

Data module + ①

Search

New data module

Navigation paths +

mock_kaggle.csv

① Month_Data

Revenue

Row Id

① Year

sales

Stock

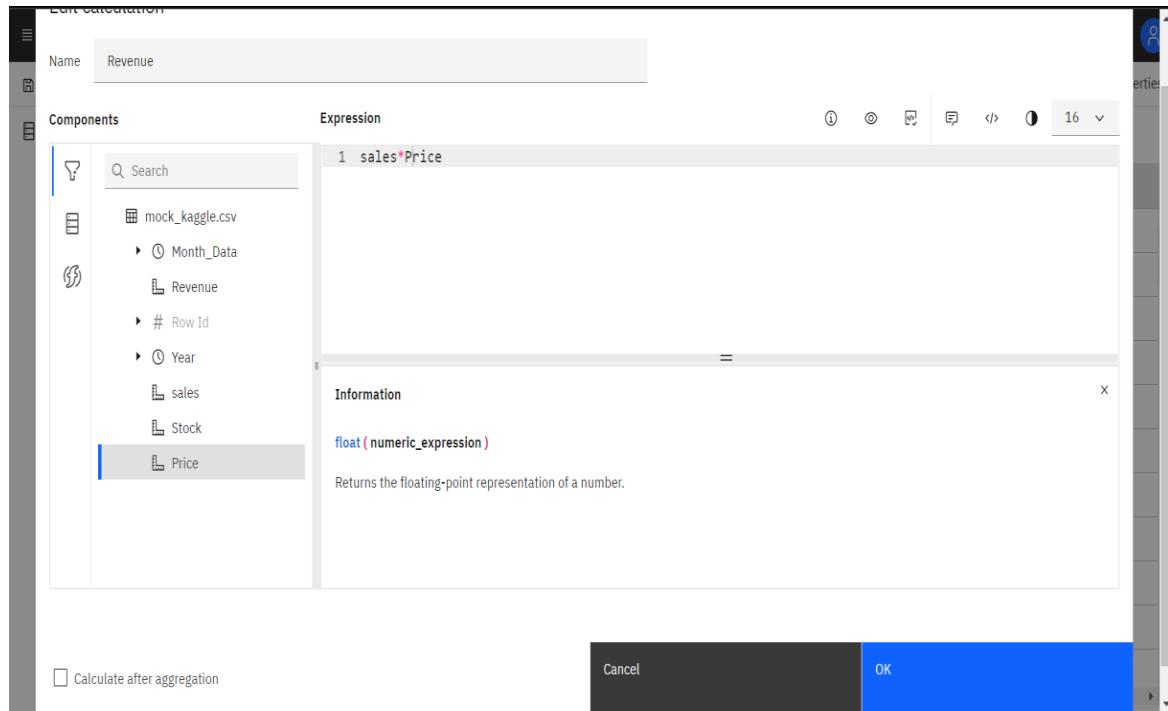
Price

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.



IBM Cognos Analytics with Watson

* New data module

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Properties

Data module

Grid Relationships Custom tables

Month_Data Revenue Row Id Year sales Stock

	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	414.0900000000003	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	204.9200000000002	11	1/11/14	188	5239	

Year Data:

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes 'IBM Cognos Analytics with Watson', 'New data module', a user icon, and a search bar. The main area is a data module editor for a 'Data module'. On the left, a sidebar lists data sources: 'New data module', 'mock_k...le.csv', 'Month_Data', 'Revenue', '# Row Id', 'Year' (which is selected), 'sales', 'Stock', and 'Price'. The central grid displays data with columns: Row Id, Year, sales, and Stock. The 'Year' column contains dates from 1/1/14 to 1/11/14. The 'sales' and 'Stock' columns show numerical values. The right side of the screen shows the 'Properties' panel for the 'Year' data source, with tabs for 'General' (selected) and 'Navigation paths'. Under 'General', the 'Label' is set to 'Year', 'Hide from users' is off, 'Expression' is 'View or edit >', 'Usage' is 'Attribute', 'Aggregate' is 'Count Distinct', 'Data type' is 'Date', and 'Represents' is 'Time'. The 'Time' dropdown shows 'Year'. The 'Lookup reference' section is empty.

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

Sales Data:

IBM Cognos Analytics with Watson

New data module

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Properties

Data module

Grid Relationships Custom tables

Row Id Year sales Stock

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:

View or edit: >

Usage: Measure

Aggregate: Total

Data type: Integer

Represents

Default

Lookup reference: None

Description

?

1

User icon

Search icon

Grid icon

Relationships icon

Custom tables icon

Properties icon

Close icon

Save icon

Cancel icon

Print icon

Copy icon

Delete icon

Help icon

Notification icon

User icon

Stock Data:

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes 'IBM Cognos Analytics with Watson', 'New data module', a user icon, and a search bar. The main workspace displays a data grid titled 'Stock' with columns: Id, Year, sales, and Stock. The 'Stock' column is selected. The right side of the screen shows the 'Properties' panel for the 'Stock' column, specifically the 'General' tab. The properties listed are:

- Label: Stock
- Hide from users: Off
- Expression: View or edit >
- Usage: Measure
- Aggregate: Total
- Data type: Integer
- Represents: None
- Default: None
- Lookup reference: None
- Description: None

The data grid contains the following data:

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

Price Data:

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes 'IBM Cognos Analytics with Watson', 'New data module', a user icon with a red notification badge (1), and search and properties buttons.

The main area features a data grid titled 'Grid' with columns: 'sales', 'Stock', and 'Price'. The 'Price' column is currently selected. The data grid displays the following rows:

	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

To the right of the grid is a 'Properties' panel with the 'General' tab selected. The properties listed are:

- Label:** Price
- Hide from users:**
- Expression:** View or edit >
- Usage:** Measure
- Aggregate:** Total
- Data type:** Decimal
- Represents:**
- Default:**
- Lookup reference:** None
- Description:**

Month-Format Data:

The screenshot shows the 'Data format' dialog box in the IBM Cognos Analytics with Watson interface. The dialog is centered over a data module named 'mock_k...le.csv' which contains a table named 'Month_Data'.

Column: Month_Data

Format type: Date

Date separator: /

Date style: Short

Date ordering: Default

Missing value characters: <empty>

Advanced options and **Reset properties** buttons are at the bottom.

Cancel and **OK** buttons are at the bottom right.

Properties and **Navigation paths** panes are visible on the right side of the interface.

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Data module

Month_Data

Grid Relationships Custom tables

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	414.0900000000003	8	1/8/14
1	136.25	9	1/9/14
1	95.92	10	1/10/14
1	204.9200000000002	11	1/11/14
1	131.8900000000001	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

Properties

Year-Format Data:

The screenshot shows the IBM Cognos Analytics interface with a 'Data format' dialog open over a data module view.

Data format Dialog Content:

- Column:** Year
- Format type:** Date
- Date separator:** /
- Date style:** Short
- Date ordering:** Default
- Missing value characters:** <empty>

Dialog Buttons:

- Advanced options
- Reset properties
- Cancel
- OK

Navigation Paths (Right Panel):

- Year
- View or edit
- Attribute
- Count Distinct
- Date

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Data module

Grid Relationships Custom tables

nth_Data Revenue Row Id Year

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

Properties

Sales-Format Data:

The screenshot shows the IBM Cognos Analytics with Watson interface. A modal dialog titled "Data format" is open, centered over the main workspace. The dialog is for the column "sales".

Column: sales

Format type: Number

① Number of decimal places	0
① Negative sign symbol	Default
① Use thousands separator	No
① Negative sign position	Default
① Missing value characters	<empty>

Advanced options | **Reset properties**

Cancel | **OK**

The background workspace shows a "Data module" tree on the left with nodes like "New data module", "mock_k...le.csv", "Month_Data", "Revenue", "Row Id", "Year", "sales", "Stock", and "Price". On the right, there's a "Properties" panel for the "sales" measure, showing "Measure" set to "Total" and "Type" set to "Integer".

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

Grid Relationships Custom tables

venue Row Id Year sales

venue	Row Id	Year	sales
	1	1/1/14	0
3	2	1/2/14	70
11	3	1/3/14	59
.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
1.09000000000003	8	1/8/14	321
.25	9	1/9/14	125
92	10	1/10/14	88
1.92000000000002	11	1/11/14	188
.89000000000001	12	1/12/14	121

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 shows the IBM Cognos Analytics interface with the 'Data format' dialog open. The left sidebar displays a 'Data module' tree with nodes like 'New data module', 'mock_k...le.csv', 'Month_Data', 'Revenue', 'Row Id', 'Year', 'sales', 'Stock' (which is selected), and 'Price'. The main 'Data format' dialog has 'Column: Stock' set. The 'Format type:' dropdown is set to 'Number'. The configuration pane contains the following settings:

Setting	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 are 'Advanced options' and 'Reset properties' buttons.

On the right side of the interface, there is a 'Properties' panel showing the following details for the 'Stock' column:

- Stock**: A switch is turned off.
- View or edit >**: A link to edit the column.
- Measure**: Set to 'Total'.
- Integer**: A switch is turned on.

IBM Cognos Analytics with Watson

Data format

Column: Stock

Data module

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

Properties

Stock

View or edit >

Measure

Total

Integer

ence

This screenshot shows the 'Data format' dialog in IBM Cognos Analytics. The 'Column' dropdown is set to 'Stock'. The 'Format type' is selected as 'Number'. The 'Number of decimal places' is set to 0. The 'Negative sign symbol' is set to 'Default'. The 'Use thousands separator' is set to 'No'. The 'Negative sign position' is set to 'Default'. The 'Missing value characters' field contains '<empty>'. At the bottom left is a 'Advanced options' button, and at the bottom right is a 'Reset properties' button. To the right of the dialog is a vertical panel titled 'Properties' containing settings for 'Stock': 'View or edit >', 'Measure' (set to 'Total'), and 'Integer'. The overall interface has a dark theme with some light-colored cards.

Price-Format Data:

The screenshot shows the 'Data format' dialog box in IBM Cognos Analytics. The 'Column' dropdown is set to 'Price'. The 'Format type' is selected as 'Number'. The configuration includes:

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

Buttons at the bottom include 'Advanced options', 'Reset properties', 'Cancel', and 'OK'. To the right of the dialog, the 'Properties' panel shows the 'Price' column is a measure, set to 'Total' with 'Decimal' precision.

IBM Cognos Analytics with Watson

New data module

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Search content

Properties

Data module

Grid Relationships Custom tables

General

Label: Price

Hide from users:

Expression: View or edit >

Usage: Measure

Aggregate: Total

Data type: Decimal

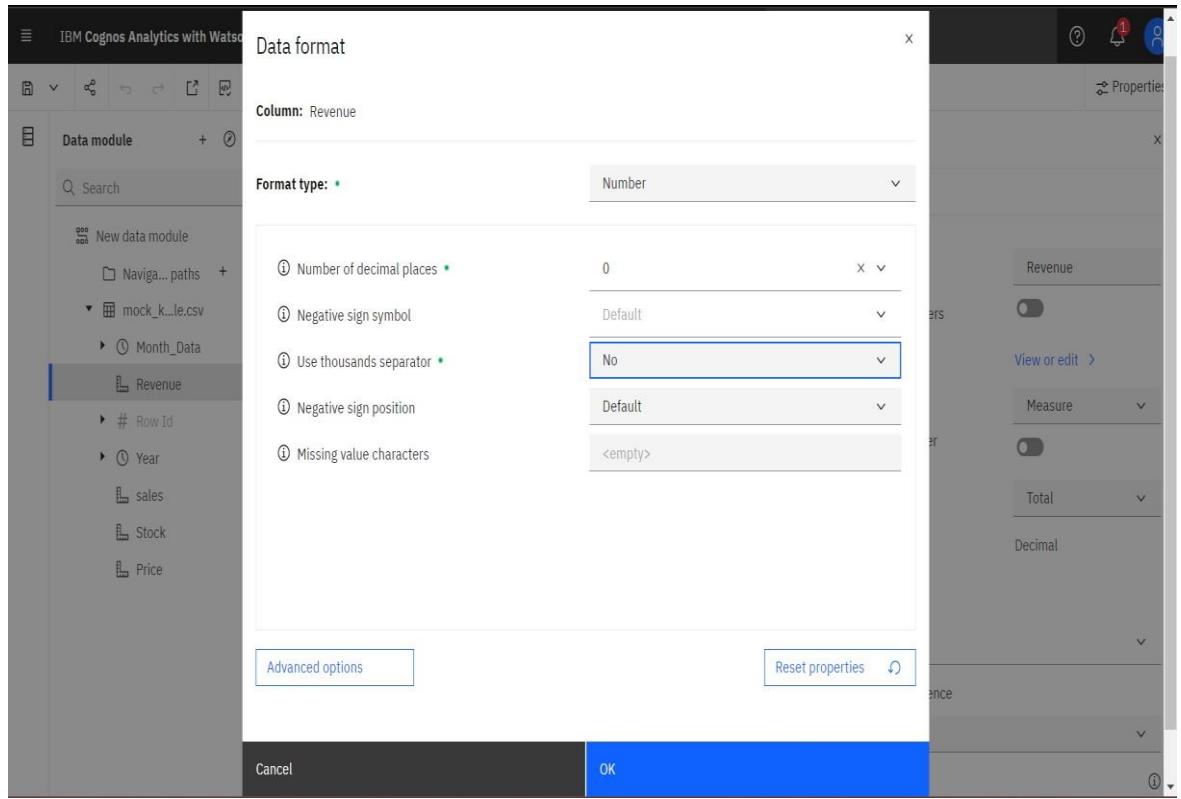
Represents: Default

Lookup reference: None

Description:

	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

Revenue-Format Data:



IBM Cognos Analytics with Watson

* New data module

30%

Search content

Properties

Data module

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

Label Revenue

Hide from users

Expression View or edit >

Usage Measure

Calculate after aggregation

Aggregate Total

Data type Decimal

Represents

Default

Lookup reference None

Description

Revenue

Row Id

Year

sales

Stock

Price

Prepared Data Link(Using Cognos Analytics):

https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.public_folders%2FSprint%2B1%2FNew%2Bdata%2Bmodule