

Project Development Phase

SPRINT 1

Team ID	PNT2022TMID49218
Project Name	Retail Store Stock Inventory Analytics

Sprint 1:

Data Collection

Data Preparation

Data collection:

Download the dataset

Dataset link –

<https://drive.google.com/file/d/1awFIKJ9LiIdnNHwGLcsqNDbbwshFHR- w/vie>

mock_kaggle - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Paste Clipboard Font Alignment Number Conditional Formatting Format as Table Cell Styles Insert Delete Format Cells AutoSum Fill Clear Sort & Filter Find & Select

POSSIBLE DATA LOSS Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve these features, save it in an Excel file format. Don't show again Save As...

A1 data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	data	venda	estoque	preco																	
2	1/1/2014	0	4972	1.29																	
3	1/2/2014	70	4902	1.29																	
4	1/3/2014	59	4843	1.29																	
5	1/4/2014	93	4750	1.29																	
6	1/5/2014	96	4654	1.29																	
7	1/6/2014	145	4509	1.29																	
8	1/7/2014	179	4329	1.29																	
9	1/8/2014	321	4104	1.29																	
10	1/9/2014	125	4459	1.09																	
11	#####	88	5043	1.09																	
12	#####	188	5239	1.09																	
13	#####	121	5118	1.09																	
14	#####	134	4984	1.09																	
15	#####	80	4904	1.09																	
16	#####	82	4822	1.09																	
17	#####	94	4728	1.19																	
18	#####	159	4464	1.19																	
19	#####	199	4265	1.19																	
20	#####	104	4161	1.19																	
21	#####	70	4091	1.19																	

mock_kaggle

Ready Accessibility: Unavailable

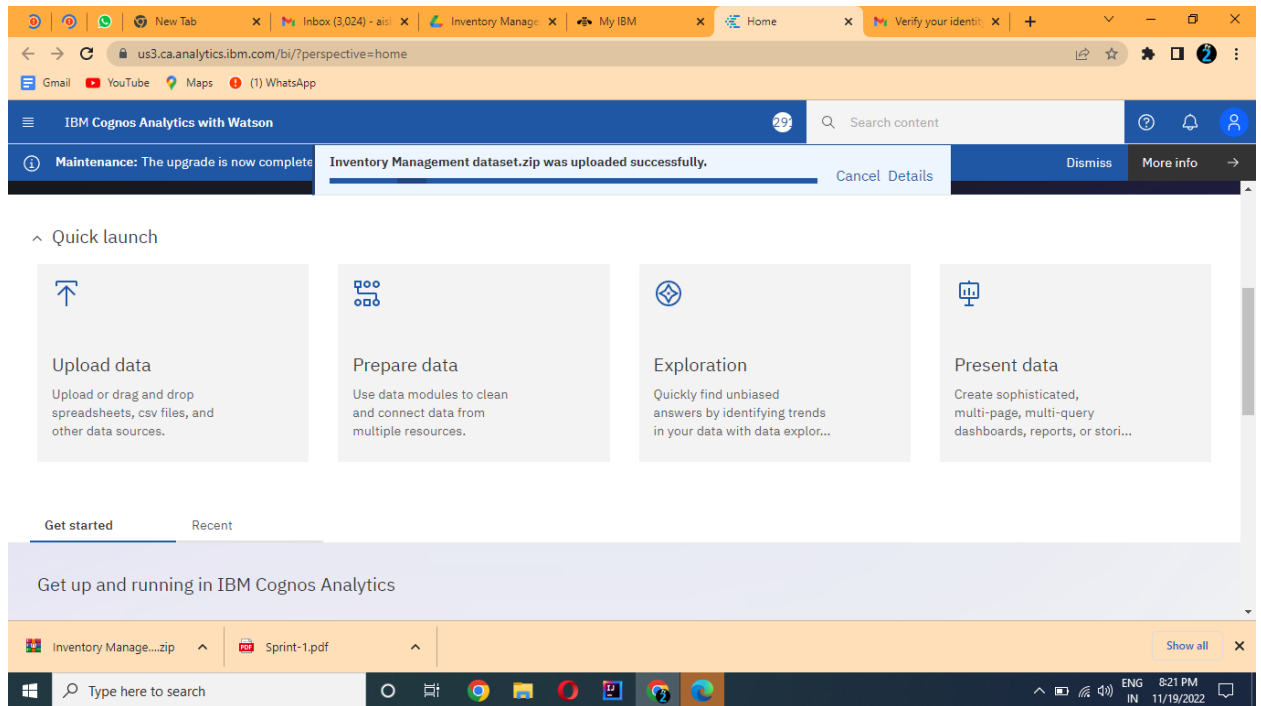
Type here to search

ENG 8:29 PM 11/19/2022

2. Loading the dataset :

Tool Used –

IBM Cognos Analytics



Data Preparation:

The screenshot displays the IBM Cognos Analytics 'Content' page. The browser's address bar shows the URL 'us3.ca.analytics.ibm.com/bi/?perspective=content'. The page header is blue and contains the text 'IBM Cognos Analytics with Watson' and a search bar. Below the header, the 'Content' page title is displayed. The 'My content' tab is selected, showing a list of content items. The list has columns for 'Name', 'Type', and 'Last Accessed'. The items are: 'archive (2).zip' (Uploaded file, 9/25/2022, 1:13 AM), 'archive.zip' (Uploaded file, 9/21/2022, 8:18 AM), 'Inventory Management dataset.zip' (Uploaded file, 11/19/2022, 9:53 AM), 'New exploration' (Exploration, 9/25/2022, 2:32 AM), and 'Pharma_Monthly_Sales.csv' (Uploaded file, 10/4/2022, 1:21 AM). The 'Pharma_Monthly_Sales.csv' item is highlighted with a blue bar and a 'CSV' label. The page also features a right-hand sidebar with icons for various actions.

Name	Type	Last Accessed
archive (2).zip	Uploaded file	9/25/2022, 1:13 AM
archive.zip	Uploaded file	9/21/2022, 8:18 AM
Inventory Management dataset.zip	Uploaded file	11/19/2022, 9:53 AM
New exploration	Exploration	9/25/2022, 2:32 AM
Pharma_Monthly_Sales.csv	Uploaded file	10/4/2022, 1:21 AM

Month Data:

The screenshot displays the 'Create calculation' interface in IBM Analytics. The browser address bar shows the URL: `us3.ca.analytics.ibm.com/bi/?perspective=dashboard&id=dashboard_f904e547-e93b-4d62-a4dd-bc923a2735b9&ui_appbar=true&options%5BdisableGlassPrefetc...`. The interface includes a sidebar with navigation icons and a main workspace. The 'Name' field is set to 'M_Data'. The 'Components' panel on the left shows a tree structure under 'Inventory M...ataset.zip' with sub-items: 'data', 'venda', 'estoque', and 'preco'. The 'Expression' field contains the formula: `1 month(mock_kaggle.data_)`. Below the expression field, a 'Validation Results' panel shows a green checkmark and the message: 'The expression is valid.' The Windows taskbar at the bottom shows the system clock as 8:36 PM on 11/19/2022, with the language set to ENG IN.

Create calculation

Name: M_Data

Components

- Inventory M...ataset.zip
 - data
 - venda
 - estoque
 - preco

Expression

```
1 month(mock_kaggle.data_)
```

Validation Results

✓ The expression is valid.

Inventory Manage...zip | Sprint-1.pdf

Type here to search

ENG IN 8:36 PM 11/19/2022

IBM Cognos Analytics with Watson

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory M...dataset.zip

M_Data

Row Id

data

venda

estoque

preco

Grid

Relationships

Custom tables

M_Data	Row Id	data	venda	estoque	preco
1	1	2014-01-01	0	4972	1.29
1	2	2014-01-02	70	4902	1.29
1	3	2014-01-03	59	4843	1.29
1	4	2014-01-04	93	4750	1.29
1	5	2014-01-05	96	4654	1.29
1	6	2014-01-06	145	4509	1.29
1	7	2014-01-07	179	4329	1.29
1	8	2014-01-08	321	4104	1.29
1	9	2014-01-09	125	4459	1.09
1	10	2014-01-10	88	5043	1.09
1	11	2014-01-11	100	5120	1.09

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Revenue Data:

IBM Cognos Analytics with Watson

Search content

Properties

Data module

Search

New data module

Navigation paths

Inventory M...dataset.zip

Revenue

M_Data

Row Id

data

venda

estoque

preco

Grid

Relationships

Custom tables

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	2014-01-01	0	4972
90.3	1	2	2014-01-02	70	4902
76.11	1	3	2014-01-03	59	4843
119.97	1	4	2014-01-04	93	4750
123.84	1	5	2014-01-05	96	4654
187.05	1	6	2014-01-06	145	4509
230.91	1	7	2014-01-07	179	4329
414.09000000000003	1	8	2014-01-08	321	4104
136.25	1	9	2014-01-09	125	4459
95.92	1	10	2014-01-10	88	5043
204.01000000000003	1	11	2014-01-11	100	5120

Type here to search

ENG IN 9:07 PM 11/19/2022

Year Data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane displays a tree structure with 'data' selected. The main grid view shows a table with columns: Row Id, data, venda, estoque, and preco. The data represents daily sales and inventory for the year 2014.

Row Id	data	venda	estoque	preco
1	1/1/14	0	4972	1
2	1/2/14	70	4902	1
3	1/3/14	59	4843	1
4	1/4/14	93	4750	1
5	1/5/14	96	4654	1
6	1/6/14	145	4509	1
7	1/7/14	179	4329	1
8	1/8/14	321	4104	1
9	1/9/14	125	4459	1
10	1/10/14	88	5043	1
11	1/11/14	100	5220	1

Sales Data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane displays a tree structure with 'venda' selected. The main grid view shows a table with columns: Revenue, M_Data, Row Id, data, venda, and estoque. The data represents daily sales and inventory for the year 2014, with an additional 'Revenue' column.

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	2014-01-01	0	4972
90.3	1	2	2014-01-02	70	4902
76.11	1	3	2014-01-03	59	4843
119.97	1	4	2014-01-04	93	4750
123.84	1	5	2014-01-05	96	4654
187.05	1	6	2014-01-06	145	4509
230.91	1	7	2014-01-07	179	4329
414.09000000000003	1	8	2014-01-08	321	4104
136.25	1	9	2014-01-09	125	4459
95.92	1	10	2014-01-10	88	5043
204.02000000000003	1	11	2014-01-11	100	5220

Stock Data:

The screenshot displays the IBM Cognos Analytics web application. The browser's address bar shows the URL: `us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&iid=2565150046_016cc44afd734a9d8bc468c4928bf671_sessionTemp&objRef=8&tid=2565150046_016cc44af...`. The interface includes a top navigation bar with the text "IBM Cognos Analytics with Watson" and a search bar. On the left, a "Data module" sidebar lists various data sources, with "preco" selected. The main area shows a table with the following columns: "Row Id", "data", "venda", "estoque", and "preco". The table contains 11 rows of data, representing stock transactions from January 1, 2014, to January 11, 2014.

Row Id	data	venda	estoque	preco
1	2014-01-01	0	4972	1.29
2	2014-01-02	70	4902	1.29
3	2014-01-03	59	4843	1.29
4	2014-01-04	93	4750	1.29
5	2014-01-05	96	4654	1.29
6	2014-01-06	145	4509	1.29
7	2014-01-07	179	4329	1.29
8	2014-01-08	321	4104	1.29
9	2014-01-09	125	4459	1.09
10	2014-01-10	88	5043	1.09
11	2014-01-11	100	5220	1.09

Month Format Data:

Column: M_Data

Format type: Date

① Date separator: /

① Date style: Short

① Date ordering: Default

① Missing value characters: <empty>

Advanced options

Reset properties

Cancel OK

estoque	preco
972	1.29
902	1.29
843	1.29
750	1.29
654	1.29
509	1.29
329	1.29
104	1.29
459	1.09
043	1.09
220	1.09

Grid Relationships Custom tables

Row Id	data	venda	estoque	preco
1	2014-01-01	0	4972	1.29
2	2014-01-02	70	4902	1.29
3	2014-01-03	59	4843	1.29
4	2014-01-04	93	4750	1.29
5	2014-01-05	96	4654	1.29
6	2014-01-06	145	4509	1.29
7	2014-01-07	179	4329	1.29
8	2014-01-08	321	4104	1.29
9	2014-01-09	125	4459	1.09
10	2014-01-10	88	5043	1.09

Revenue Format:

The screenshot shows the IBM Cognos Analytics interface with the 'Revenue' column selected. A dialog box titled 'Column: Revenue' is open, displaying the 'Format type' as 'Number'. The 'Advanced options' section is expanded, showing the following settings:

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

The dialog has 'Cancel', 'OK', 'Advanced options', and 'Reset properties' buttons. The background shows a data table with columns 'venda' and 'estoque'.

The screenshot shows the IBM Cognos Analytics interface with the 'Revenue' column selected. The data table is displayed in 'Grid' view, showing the following data:

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	2014-01-01	0	4972
90	1	2	2014-01-02	70	4902
76	1	3	2014-01-03	59	4843
120	1	4	2014-01-04	93	4750
124	1	5	2014-01-05	96	4654
187	1	6	2014-01-06	145	4509
231	1	7	2014-01-07	179	4329
414	1	8	2014-01-08	321	4104
136	1	9	2014-01-09	125	4459
96	1	10	2014-01-10	88	5043
205	1	11	2014-01-11	188	5120

Year Format Data:

The screenshot shows the IBM Cognos Analytics web interface. A modal dialog titled 'Format type' is open for the column 'data'. The 'Format type' is set to 'Date'. The 'Date separator' is set to '/'. The 'Date style' is set to 'Short'. The 'Date ordering' is set to 'Default'. The 'Missing value characters' are set to '<empty>'. The dialog has 'Advanced options', 'Reset properties', 'Cancel', and 'OK' buttons. In the background, a data table is visible with columns 'venda' and 'estoque'.

venda	estoque
4972	4972
4902	4902
4843	4843
4750	4750
4654	4654
4509	4509
4329	4329
4104	4104
4459	4459
5043	5043

This is a duplicate of the screenshot above, showing the same IBM Cognos Analytics interface with the 'Format type' dialog open for the 'data' column. The settings are identical: Format type is 'Date', Date separator is '/', Date style is 'Short', Date ordering is 'Default', and Missing value characters are '<empty>'. The background data table also remains the same.

venda	estoque
4972	4972
4902	4902
4843	4843
4750	4750
4654	4654
4509	4509
4329	4329
4104	4104
4459	4459
5043	5043

Sales Format Data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'venda' as the selected column. A 'Format type' dialog box is open, showing settings for the 'venda' column. The 'Format type' is set to 'Number'. The 'Number of decimal places' is 0. The 'Negative sign symbol' is 'Default'. The 'Use thousands separator' is 'No'. The 'Negative sign position' is 'Default'. The 'Missing value characters' are '<empty>'. The dialog has 'Advanced options', 'Reset properties', 'Cancel', and 'OK' buttons.

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

The screenshot shows the IBM Cognos Analytics interface with the 'Grid' view selected. The 'venda' column is highlighted in the 'Data module' pane. The table displays the following data:

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	1/1/14	0	4972
90	1	2	1/2/14	70	4902
76	1	3	1/3/14	59	4843
120	1	4	1/4/14	93	4750
124	1	5	1/5/14	96	4654
187	1	6	1/6/14	145	4509
231	1	7	1/7/14	179	4329
414	1	8	1/8/14	321	4104
136	1	9	1/9/14	125	4459
96	1	10	1/10/14	88	5043
205	1	11	1/11/14	100	5120

Stock Format Data:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists 'estoque' under the 'data' folder. The main area displays the 'Format type' dialog for the 'estoque' column. The dialog has a 'Format type' dropdown set to 'Number'. Below it, several options are listed: 'Number of decimal places' (0), 'Negative sign symbol' (Default), 'Use thousands separator' (No), 'Negative sign position' (Default), and 'Missing value characters' (<empty>). At the bottom, there are 'Advanced options' and 'Reset properties' buttons. The background shows a table with the 'estoque' column highlighted.

estoque
4972
4902
4843
4750
4654
4509
4329
4104
4459
5043

The screenshot shows the IBM Cognos Analytics interface with the 'Grid' view selected. The 'Data module' pane on the left shows the 'estoque' column selected. The main area displays a table with the following data:

M_Data	Row Id	data	venda	estoque
1	1	1/1/14	0	4972
1	2	1/2/14	70	4902
1	3	1/3/14	59	4843
1	4	1/4/14	93	4750
1	5	1/5/14	96	4654
1	6	1/6/14	145	4509
1	7	1/7/14	179	4329
1	8	1/8/14	321	4104
1	9	1/9/14	125	4459
1	10	1/10/14	88	5043

Price Format Data:

The screenshot shows the IBM Cognos Analytics interface with the 'Format type' dialog box open for the 'preco' column. The dialog has a 'Format type' dropdown set to 'Number'. Below it, several options are listed with their respective values:

- Number of decimal places: 0
- Negative sign symbol: Default
- Use thousands separator: No (highlighted with a blue border)
- Negative sign position: Default
- Missing value characters: <empty>

Buttons at the bottom include 'Advanced options', 'Reset properties', 'Cancel', and 'OK'. The background shows a data table with columns 'Row Id', 'data', 'venda', 'estoque', and 'preco'.

The screenshot shows the IBM Cognos Analytics interface with a data table displayed. The table has the following columns: 'Row Id', 'data', 'venda', 'estoque', and 'preco'. The data is as follows:

Row Id	data	venda	estoque	preco
1	1/1/14	0	4972	1
2	1/2/14	70	4902	1
3	1/3/14	59	4843	1
4	1/4/14	93	4750	1
5	1/5/14	96	4654	1
6	1/6/14	145	4509	1
7	1/7/14	179	4329	1
8	1/8/14	321	4104	1
9	1/9/14	125	4459	1
10	1/10/14	88	5043	1
11	1/11/14	100	5220	1

Month Data Properties:

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays the 'Data module' tree with 'M_Data' selected. The main grid shows the 'M_Data' table with columns: Row Id, data, venda, estoque, and preco. The data is as follows:

Row Id	data	venda	estoque	preco
1	1/1/14	0	4972	1
2	1/2/14	70	4902	1
3	1/3/14	59	4843	1
4	1/4/14	93	4750	1
5	1/5/14	96	4654	1
6	1/6/14	145	4509	1
7	1/7/14	179	4329	1
8	1/8/14	321	4104	1
9	1/9/14	125	4459	1
10	1/10/14	88	5043	1

Revenue Data Properties:

The screenshot shows the IBM Cognos Analytics interface. The left sidebar displays the 'Data module' tree with 'Revenue' selected. The main grid shows the 'Revenue' table with columns: M_Data, Row Id, data, venda, and estoque. The data is as follows:

M_Data	Row Id	data	venda	estoque
0	1	1/1/14	0	4972
90	2	1/2/14	70	4902
76	3	1/3/14	59	4843
120	4	1/4/14	93	4750
124	5	1/5/14	96	4654
187	6	1/6/14	145	4509
231	7	1/7/14	179	4329
414	8	1/8/14	321	4104
136	9	1/9/14	125	4459
96	10	1/10/14	88	5043

Year Data Format:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane is open, showing a tree structure with 'New data module' at the top, followed by 'Navigation paths', 'Inventory M...dataset.zip', 'Revenue', 'M_Data', '# Row Id', 'data' (selected), 'venda', 'estoque', and 'preco'. The main area displays a table with the following columns: Revenue, M_Data, Row Id, data, venda, and estoque. The table contains 10 rows of data, with the 'data' column highlighted in blue.

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	1/1/14	0	4972
90	1	2	1/2/14	70	4902
76	1	3	1/3/14	59	4843
120	1	4	1/4/14	93	4750
124	1	5	1/5/14	96	4654
187	1	6	1/6/14	145	4509
231	1	7	1/7/14	179	4329
414	1	8	1/8/14	321	4104
136	1	9	1/9/14	125	4459
96	1	10	1/10/14	88	5043

Sales Data Format:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane is open, showing a tree structure with 'New data module' at the top, followed by 'Navigation paths', 'Inventory M...dataset.zip', 'Revenue', 'M_Data', '# Row Id', 'data', 'venda' (selected), 'estoque', and 'preco'. The main area displays a table with the following columns: Revenue, M_Data, Row Id, data, venda, and estoque. The table contains 10 rows of data, with the 'venda' column highlighted in blue.

Revenue	M_Data	Row Id	data	venda	estoque
0	1	1	1/1/14	0	4972
90	1	2	1/2/14	70	4902
76	1	3	1/3/14	59	4843
120	1	4	1/4/14	93	4750
124	1	5	1/5/14	96	4654
187	1	6	1/6/14	145	4509
231	1	7	1/7/14	179	4329
414	1	8	1/8/14	321	4104
136	1	9	1/9/14	125	4459
96	1	10	1/10/14	88	5043

Stock Data Properties:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists the following items: New data module, Navigation paths, Inventory M...dataset.zip, Revenue, M_Data, # Row Id, data, venda, **estoque** (highlighted), and preco. The main grid displays the following data:

↑↓	M_Data	Row Id	data	venda	estoque
1	1	1	1/1/14	0	4972
1	1	2	1/2/14	70	4902
1	1	3	1/3/14	59	4843
1	1	4	1/4/14	93	4750
1	1	5	1/5/14	96	4654
1	1	6	1/6/14	145	4509
1	1	7	1/7/14	179	4329
1	1	8	1/8/14	321	4104
1	1	9	1/9/14	125	4459
1	1	10	1/10/14	88	5043

Price Data Properties:

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists the following items: New data module, Navigation paths, Inventory M...dataset.zip, Revenue, M_Data, # Row Id, data, venda, estoque, and **preco** (highlighted). The main grid displays the following data:

↑↓	Row Id	data	venda	estoque	preco
1	1	1/1/14	0	4972	1
2	2	1/2/14	70	4902	1
3	3	1/3/14	59	4843	1
4	4	1/4/14	93	4750	1
5	5	1/5/14	96	4654	1
6	6	1/6/14	145	4509	1
7	7	1/7/14	179	4329	1
8	8	1/8/14	321	4104	1
9	9	1/9/14	125	4459	1
10	10	1/10/14	88	5043	1