

## Sprint 2 Deliverables

Date	18 November 2022
Team ID	PNT2022TMID05467
Project Name	Project – Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	4 Marks

### Loading and Understanding the Dataset:

The screenshot shows a Jupyter Notebook in Google Colab with the following code cells:

```
[1] ! pip install -q kaggle
[3] ! mkdir ~/.kaggle
[4] ! cp kaggle.json ~/.kaggle/
[5] ! chmod 600 ~/.kaggle/kaggle.json
[6] ! kaggle datasets download rishidamarla/heart-disease-prediction

Downloading heart-disease-prediction.zip to /content
0% 0.00/3.41k [00:00<?, ?B/s]
100% 3.41k/3.41k [00:00<00:00, 3.11MB/s]

! unzip heart-disease-prediction.zip
Archive: heart-disease-prediction.zip
  inflating: Heart_Disease_Prediction.csv
```

The file browser on the left shows the downloaded files: sample\_data, heart-disease-prediction.zip, and kaggle.json.

### Activating Db2 Service credentials in IBM cloud:

The screenshot shows the IBM Db2 on Cloud console. The 'Tables' tab is selected, and the table 'HEARTDISEASE' is highlighted. The table definition is shown on the right:

Name	Data type	Nullable	Length	Scale
AGE	SMALLINT	Y		0
SEX	SMALLINT	Y		0
CHEST_PAIN_TYPE	SMALLINT	Y		0
BP	SMALLINT	Y		0
CHOLESTEROL	SMALLINT	Y		0
FBS_OVER_120	SMALLINT	Y		0

The console also shows the 'Schemas' tab with a list of schemas, including 'ZHY338...'.

The screenshot displays the IBM Cloud 'Resource list' interface. At the top, there's a navigation bar with the IBM Cloud logo and a search bar. Below this, the 'Resource list' title is prominent, accompanied by a 'Create resource' button. The main area features a table with columns for Name, Group, Location, Product, Status, and Tags. The table lists various resource categories, each with a dropdown arrow and a count in parentheses. The 'Databases' category is expanded, revealing a single resource named 'Db2-62' which is in an 'Active' state. The interface is clean and professional, typical of a cloud management console.

Name	Group	Location	Product	Status	Tags
Filter by name or IP address...	Filter by group or org...	Filter...	Filter...	Filter...	Filter...
Compute (0)					
Containers (0)					
Networking (0)					
Storage (0)					
AI / Machine Learning (0)					
Analytics (0)					
Blockchain (0)					
Databases (1)					
Db2-62	Default	London	Db2	Active	—
Developer tools (0)					
Logging and monitoring (0)					

## Resource list

[Create resource +](#)

Name	Group	Location	Product	Status	Tags
Q Filter by name or IP address...	Filter by group or org... ▾	Filter... ▾	Q Filter...	Q Filter...	Filter... ▾
▼ Compute (0)					
▼ Containers (0)					
▼ Networking (0)					
▼ Storage (0)					
▼ AI / Machine Learning (0)					
▼ Analytics (0)					
▼ Blockchain (0)					
▲ Databases (1)					
Db2-62	Default	London	Db2	Active	-
▼ Developer tools (0)					
▼ Logging and monitoring (0)					

Windows taskbar showing search bar, taskbar icons (File Explorer, Edge, Word, PowerPoint, Outlook, Teams, OneDrive, Chrome, PDF, Mail, Word, PowerPoint), system tray (26°C Mostly cloudy, 14-11-2022, ENG, 23:11).

The screenshot shows the IBM Cloud console interface. At the top, there's a navigation bar with the IBM logo and a search bar. Below it, the 'Service credentials' page for a Db2 instance is displayed. The page has a sidebar with options like 'Manage', 'Getting started', 'Service credentials' (selected), and 'Connections'. The main content area shows a table of service credentials. One credential is listed: 'Service credentials-1', created on '2022-11-10 7:35 PM'. The details of this credential are shown in a JSON format, including connection information, CLI arguments, and various certificates and keys.

Key name	Date created
Service credentials-1	2022-11-10 7:35 PM

```

{
  "connection": {
    "cli": {
      "arguments": [
        "-u",
        "zhy33870",
        "-p",
        "ej4xIg7ccRpmx35",
        "--ssl",
        "--sslCAfile",
        "1dd14d0c-1b52-4f63-a606-53ecba28771d",
        "--authenticationDatabase",
        "admin",
        "--host",
        "21fecfd8-47b7-4937-840d-d791d0218660.bs2io90108kqb1od81cg.databases.appdomain.cloud:31864"
      ]
    }
  }
}

```

Resource list /

Db2-62

Active

Add tags

Details

Actions...

Manage

Getting started

Service credentials

Connections

Service credentials

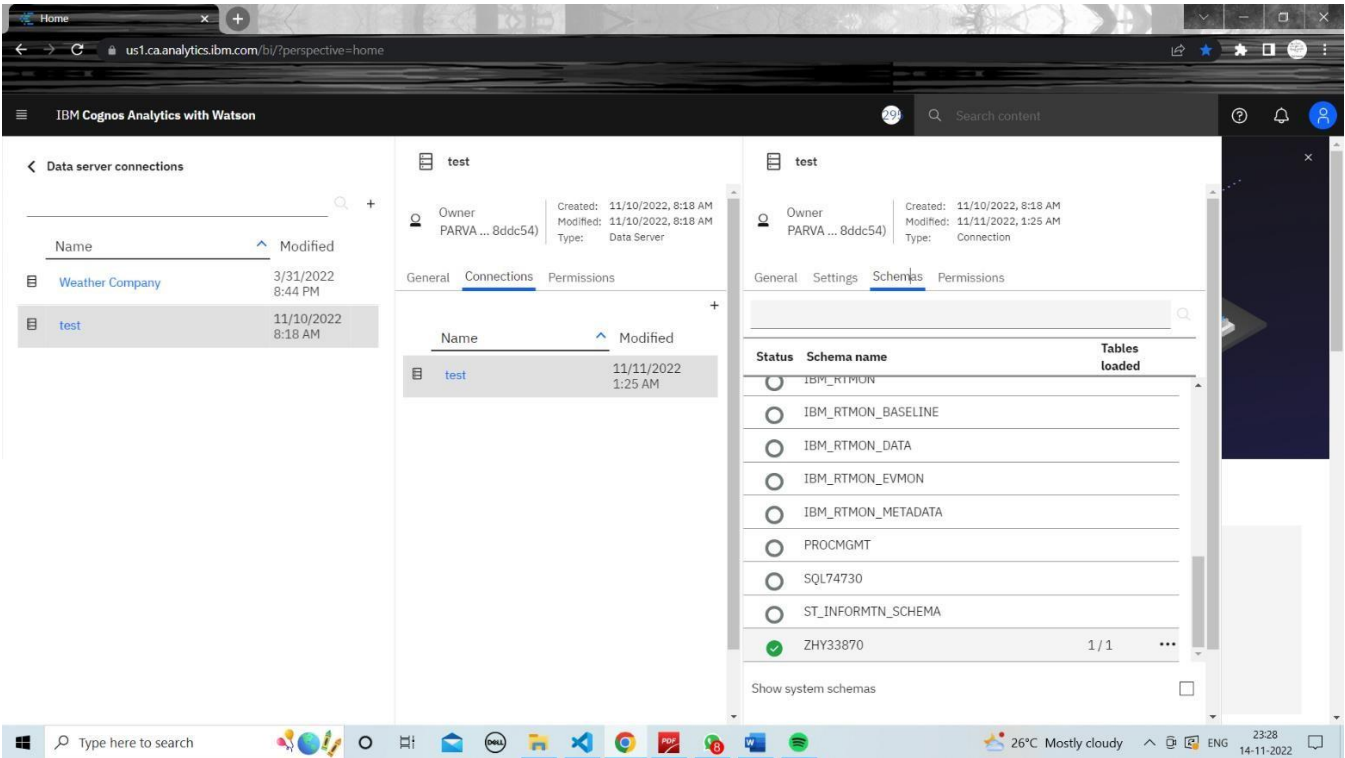
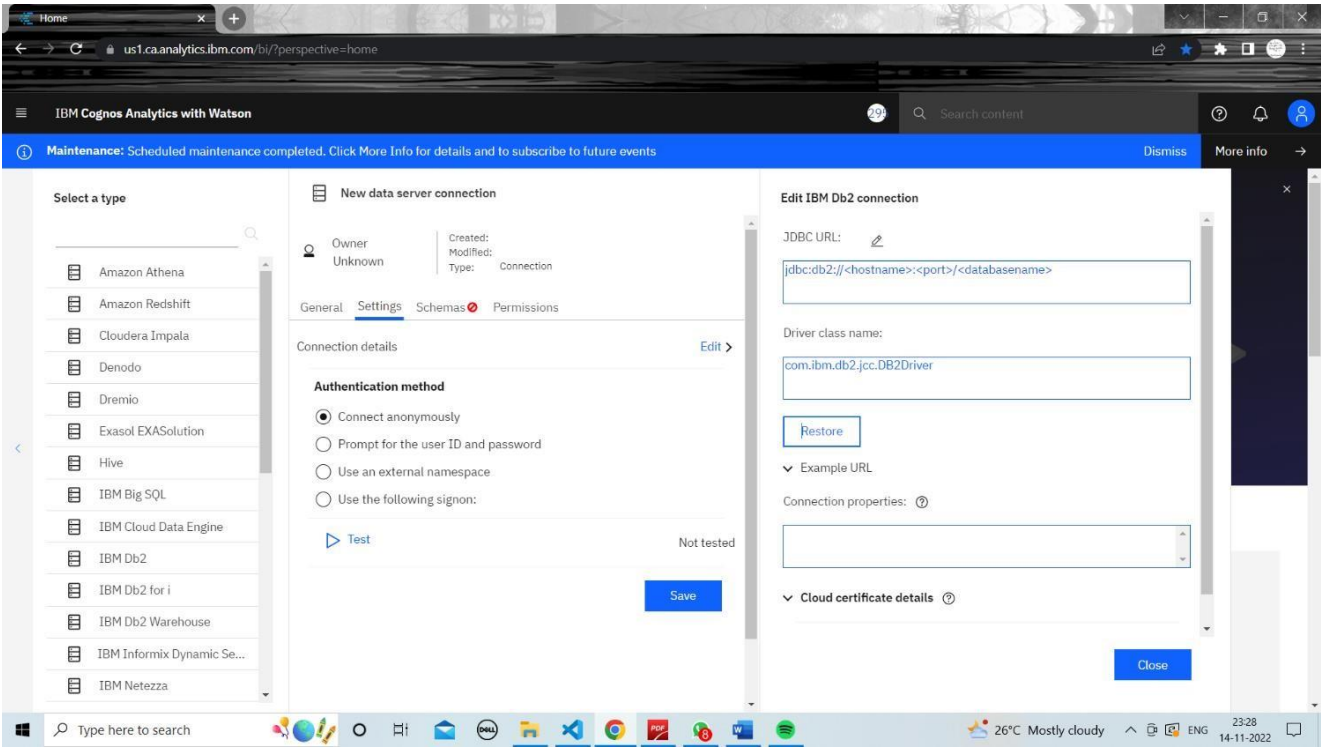
Search credentials...

New credential

Key name	Date created
<div>Service credentials-1</div> <div> <pre>{   "connection": {     "cli": {       "arguments": [         "-u",         "zhy33870",         "-p",         "ej4xrIg7ccRpmx35",         "--ssl",         "--sslCAFile",         "1dd14d0c-1b52-4f63-a606-53eba28771d",         "--authenticationDatabase",         "admin",         "--host",         "21fecfd8-47b7-4937-840d-d791d0218660.bs2io90108kqb1od81cg.databases.appdomain.cloud:31864"       ]     }   } }</pre> </div>	2022-11-10 7:35 PM

Windows taskbar showing search bar, icons for various applications (including Chrome, PDF, Word, and a calendar), and system status (26°C Mostly cloudy, 23:10, 14.11.2022).

## Connecting IBM Db2 Service to IBM Cognos Analytics Tool:



## Preparation of Data Module:

The screenshot shows the 'New data module' interface in IBM Cognos Analytics. On the left, a 'Data module' pane lists various data sources under 'Navigation paths', including 'Heartdisease' and its associated fields like Age, Sex, Chest Pain Type, Bp, Cholesterol, Fbs Over 120, EKG Results, Max Hr, Exercise Angina, St Depression, Slope Of St, Number O...ls Fluro, and Thallium. The main area displays a 'Preview data' icon and text: 'To preview data, select a table, a column in a table, or a folder that contains columns.' The bottom of the screen shows a Windows taskbar with various application icons and system information like '26°C Mostly cloudy' and '23:29 14-11-2022'.

## Exploration of Data Module:

