



IBM Developer  
SKILLS NETWORK

# Hands-on Lab : Getting Started with Cognos Dashboard Embedded

**Estimated time needed:** 20 minutes

IBM Cognos Dashboard Embedded (CDE) is an AI-fueled business intelligence service that supports the entire data analytics cycle, from discovery to operationalization. It provides users with data discovery capabilities to visually explore and interact with their data to identify the key insights for improving data driven decisions. Users can perform data discovery and then quickly assemble that information into interactive, visually appealing dashboards; all without the need of formal training.

In this lab, first you will learn how to login to IBM Cloud Pak for Data platform through IBM Cloud and create a project there. Next, you will learn how to add a Cognos Dashboard Embedded (CDE) service and upload external data files to your project(supports CSV file only). Finally, you will learn general navigation around the CDE user interface (UI), and how to start a new dashboard with a template in CDE, populate it with a data visualization as well as save the dashboard.

## Software Used in this Lab

Since for the assignment of this module you will be using IBM Cognos Dashboard Embedded (CDE), so in this lab you will get started with IBM Cognos Dashboard Embedded (CDE) Lite plan service through IBM Cloud as this is available **at no charge for 50 sessions/month**. A session is a **60 minutes period** where users can perform unlimited interactions with an embedded dashboard. Lite plan services are deleted after **30 days of inactivity**.

## Dataset Used in this Lab

The dataset used in this lab comes from the following source: <https://www.kaggle.com/kyanyoga/sample-sales-data> under a [CC0: Public Domain license](#).

## Objectives

After completing this lab, you will be able to:

- Login to IBM Cloud Pak for Data platform through IBM Cloud
- Create a project in IBM Cloud Pak for Data
- Add a Cognos Dashboard Embedded (CDE) service to your created project
- Navigate around the Cognos Dashboard Embedded (CDE) user interface
- Upload external data files to your created project (Supports .CSV files only)
- Start a new dashboard with a dashboard template and populate it with a data visualization

## Exercise 1 : Login to IBM Cloud Pak for Data and Create a Project

In this exercise, you will how to login to IBM Cloud Pak for Data platform through IBM Cloud and create a project there.

## Task A : (optional) Create an Instance of Watson Studio / Cloud Pak for Data

- If you already have an instance of Watson Studio / Cloud Pak for Data , skip Task A.

1. Go to [cloud.ibm.com/login](https://cloud.ibm.com/login).

2. Enter your **IBMid** (the email ID you used to sign up for IBM Cloud) and click **Continue**.

The screenshot shows the IBM Cloud login interface. At the top, there's a navigation bar with icons for back, forward, search, and the URL 'cloud.ibm.com/login'. Below it is the 'IBM Cloud' logo. The main area has a dark background with a white cloud icon. The text 'Log in to IBM Cloud' is centered. Below it is a link 'Don't have an account? [Create an account](#)'. A form field labeled 'Enter your IBMID' contains a placeholder 'IBMid' and a redacted input field. To the right of the input field is a blue 'Continue' button with a white right-pointing arrow. Below the input field is a checked checkbox labeled 'Remember ID'. At the bottom left is a link 'Log in with SoftLayer ID'.

3. Enter your **password** and click **Log in**.

This screenshot shows the same IBM Cloud login page after the user has entered their password. The 'IBMid' input field is now empty. The 'Password' input field is filled with a redacted password and includes a visibility toggle icon (eye symbol). The 'Continue' button from the previous step has been replaced by a blue 'Log in' button at the bottom of the form. The rest of the page elements remain the same.

4. Click **Navigation Menu Icon** on the top left side.

The screenshot shows the IBM Cloud dashboard at [cloud.ibm.com](https://cloud.ibm.com). A red box highlights the first item in the navigation menu sidebar, which is a icon representing a list or menu.

**Navigation Menu**

**Dashboard** ▾

- ☰
- Resource summary
- Welcome!
- Get started with IBM Cloud by creating [Create a resource →](#)
- vm
- cf
- SS
- ✉
- ⟳
- ↻
- + Try spinning up an app using [starter kits](#)

5. From the navigation Menu sidebar, click **Watson**.

The screenshot shows the IBM Cloud dashboard interface. The top bar includes standard browser controls (back, forward, search) and the URL 'cloud.ibm.com'. The main header is 'IBM Cloud'. The left sidebar contains a navigation menu with the following items:

- Dashboard
- Resource List
- Classic Infrastructure
  - Cloud Foundry
  - Functions
  - Kubernetes
  - OpenShift
  - VMware
  - VPC Infrastructure
- Security and Compliance
- Code Engine
- API Management
- App Development
- DevOps
- Interconnectivity
- Observability
- Schematics
- Apple
- Blockchain
- Integrate
- Managed Solutions
- Watson** (highlighted with a red box)

At the bottom of the sidebar, there are three buttons: 'Watson' (highlighted with a red box), 'Watson', and 'Watson'.

6. Now from the section **Explore our other offerings**, click IBM Watson Studio **Try for free**. You will be redirected to IBM Cloud Pak ([dataplatform.cloud.ibm.com](https://dataplatform.cloud.ibm.com)) for Data platform.

The screenshot shows the 'Explore our other offerings' section of the website. It features several cards:

- Consult with IBM**: Get the most out of your IBM Cloud account by working with our consultants. Learn how to develop for the cloud, leverage Watson APIs, rearchitect an existing application, or experience the design thinking process in action.  
Engage us now! [button](#)
- IBM Watson Studio**: Collaborate to find insights fast. Visualize and manipulate data with code, graphical tools, or APIs. Develop models and neural networks with powerful algorithms and popular frameworks.  
Watch a Demo [button](#)  
Try for free [button](#)

7. **Select a region** matching the region of your IBM Cloud account. Then click **Log in with your IBMid**

## Try IBM Cloud Pak for Data

A starter set of Cloud Pak for Data services, fully managed on IBM Cloud. Provision the integrated Lite versions of Watson Studio, Watson Machine Learning, and Watson Knowledge Catalog as part of Cloud Pak for Data as a Service. Add more services as you need them.

### Pick your region for services and data

Select the region closest to you, or where you plan on hosting your data and services.

Dallas

London

Frankfurt

Tokyo

### Create a new IBM Cloud account to activate

#### Create an IBM Cloud Account

Email

 I accept the [IBM Cloud Pak for Data terms](#).

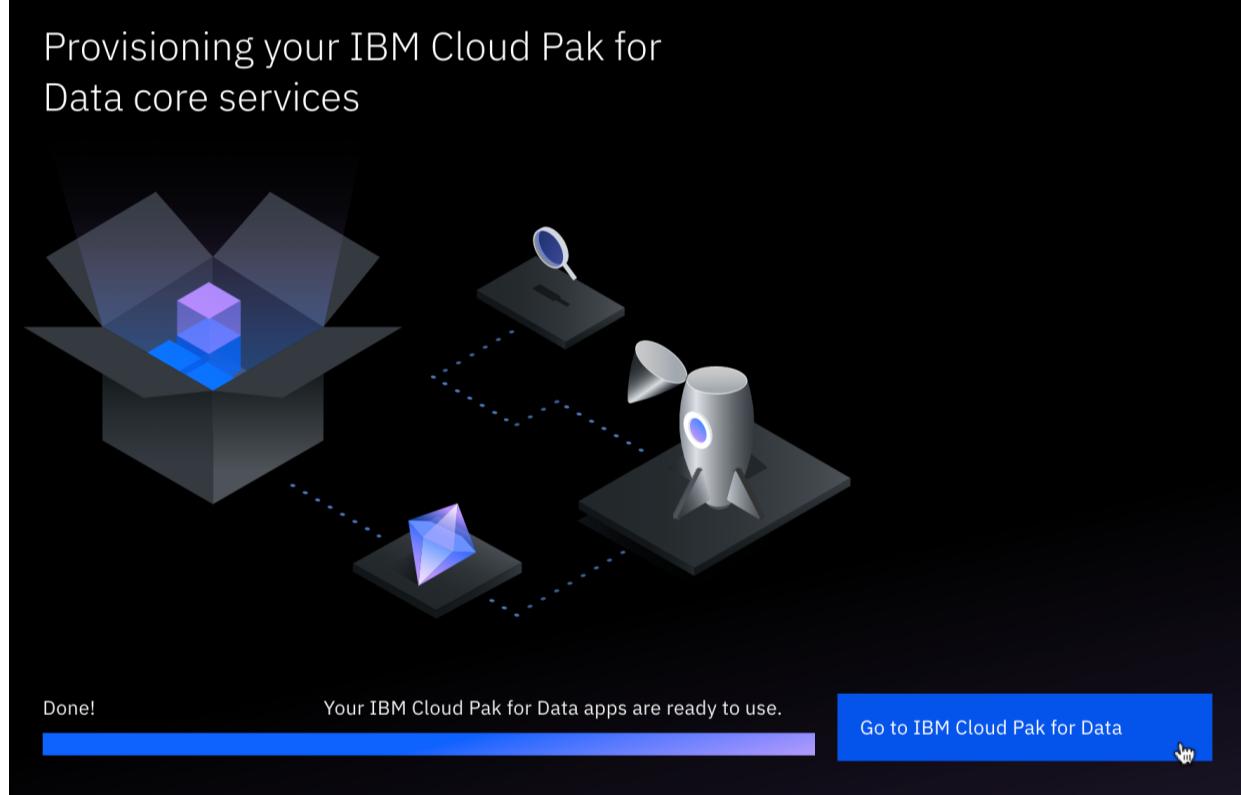
Next →

### Activate your IBM Cloud account

By logging in, you agree to our [terms](#) and that you have read our [Data Use Policy](#), including our [Cookie Use](#).

[Log in with your IBMid](#)

### 8. Click **Go to IBM Cloud Pak for Data**.



### 9. You have successfully logged in to the IBM Cloud Pak for Data platform.

The screenshot shows the IBM Cloud Pak for Data dashboard. At the top, there are three main sections: 'Learn by example', 'Work with data', and 'Extend your capabilities'. Below these are 'Quick navigation' links for Projects, Deployment spaces, Support, Documentation, FAQ, What's new, Give feedback, Stack overflow, and Manage Tickets. The 'Overview' section contains three cards: 'Notifications' (No notifications), 'Deployment spaces' (No deployment spaces), and 'Your services' (No Watson services to show). A sidebar on the left provides navigation links for various features like Learn by example, Work with data, Extend your capabilities, and more.

## Task B : Login to IBM Cloud Pak for Data

- **If you just completed Task A, you will already be logged in, so skip Task B.**

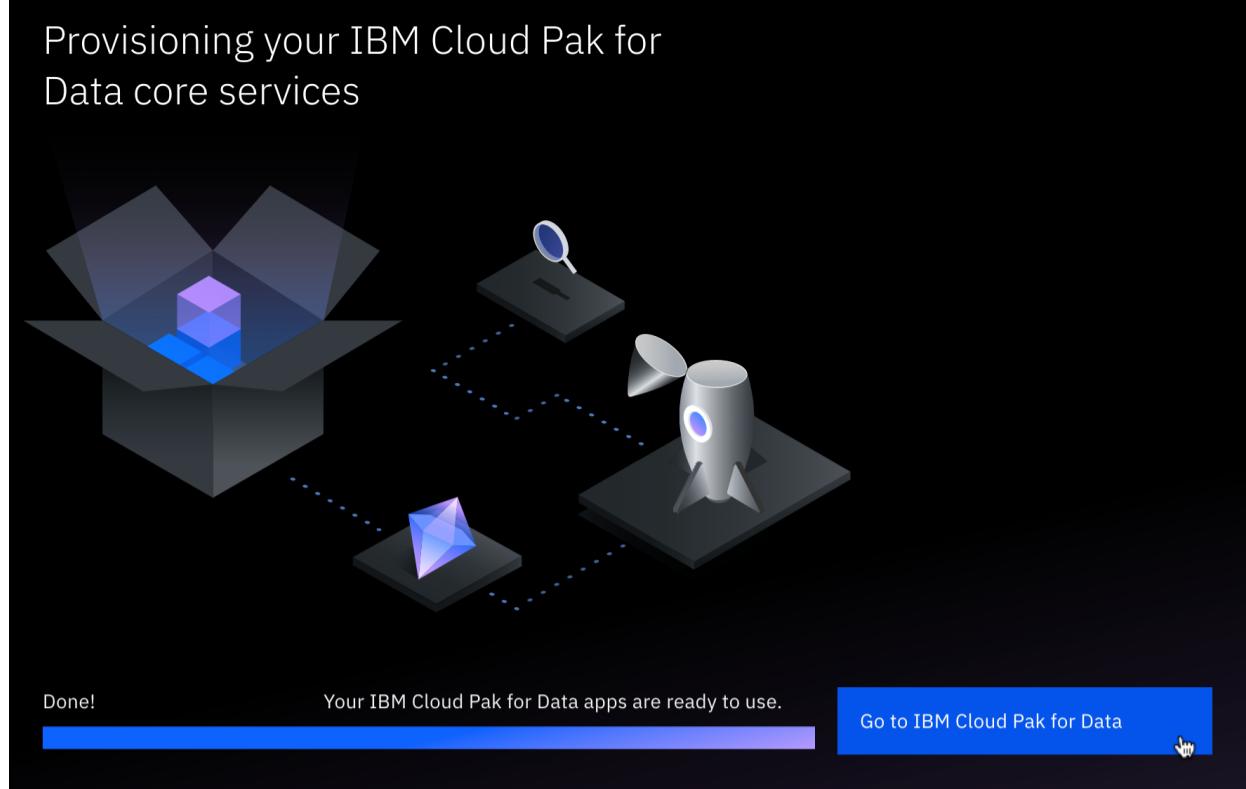
1. Go to [dataplatform.cloud.ibm.com](https://dataplatform.cloud.ibm.com).

2. Enter your **IBMid** (the email ID you used to sign up for IBM Cloud), **password** and select a **region**, same one you used for IBM Cloud account and IBM Cloud Pak for Data(if you have completed Task A).

The screenshot shows the login page for IBM Cloud Pak for Data. It features a dark-themed header with the text 'IBM Cloud Pak for Data'. Below the header is a 'Log in to IBM Cloud Pak for Data' section with a 'Starter edition' link. A 'Need an account? Sign up and try for free' button is also present. The main form includes fields for 'Username' and 'Password', both of which are filled with placeholder text. A 'Forgot ID?' and 'Forgot password?' link are located next to their respective fields. A 'Log in' button with a right-pointing arrow is centered below the password field. To the left of the log-in button is a checked checkbox labeled 'Remember ID'. At the bottom of the page is a dropdown menu titled 'You will log into Dallas' with options: Dallas, London, Frankfurt, and Tokyo. The 'Dallas' option is highlighted with a red border.

3. Click **Go to IBM Cloud Pak for Data**.

## Provisioning your IBM Cloud Pak for Data core services



4. You have successfully logged in to the IBM Cloud Pak for Data platform.

## Task C : Create a New Project

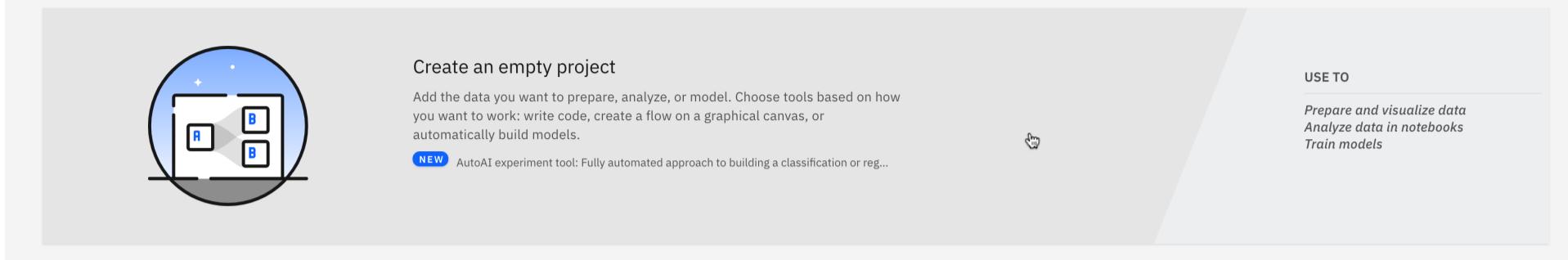
1. On the IBM Cloud Pak for Data welcome page, click **Create a project**.

2. Click **Create an empty project**.

[← Back](#)

## Create a project

Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.



3. Write **Capstone Project** as name of the project and click **Add** on Select storage service if no storage service appears. If a storage appears, proceed to step 6 directly.

The screenshot shows the 'New project' configuration page. On the left, under 'Define project details', the 'Name' field contains 'Capstone Project'. Below it, the 'Description' field has 'Project description' and a large text area. On the right, under 'Define storage', there's a section titled '(1) Select storage service' with an 'Add' button highlighted with a red box. Below it, instructions say 'Add an object storage instance, and then return to this page and click Refresh.' To the right of that is a '(2) Refresh' button.

4. You will be redirected to a new page. On the **Create** tab, select **Lite** plan. Then click **Create**.

The screenshot shows the 'Cloud Object Storage' creation page. At the top, there's a 'Create' button highlighted with a red box. In the center, there's a 'Pricing plan' table with two rows: 'Lite' and 'Standard'. The 'Lite' row is selected, showing its features and pricing (Free). A note says 'The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built in security.' Below this, a note states 'Lite plan services are deleted after 30 days of inactivity.' The 'Standard' row shows 'There is no minimum fee, so you pay only for what you use.' and a 'See pricing details' link. On the right, there's a 'Summary' panel with basic information: Region: Global, Plan: Lite, Service name: Cloud Object Storage-iu, Resource group: Default. At the bottom, there's a 'Create' button highlighted with a red box and a 'View terms' link.

5. Now you will be redirected to the previous new project page. Click **Refresh**.

## New project

**Define storage**

① Select storage service  
Add

Add an object storage instance, and then return to this page and click Refresh.

② Refresh

6. Once you see a storage service, click **Create**.

**Storage**

Cloud Object Storage-iu

**Create**

7. You have successfully created a project. Click **IBM Cloud Pak for Data** at the top left to go back to homepage.

Projects / Capstone Project

Overview Assets Jobs Manage

Find assets

0 asset

All assets

Asset types

Start adding assets

To get started with project assets, click **New asset** to create them, or **Add asset** to add existing ones.

## Exercise 2 : Add a CDE service and Upload External Data

In this exercise, you will learn how to add a Cognos Dashboard Embedded (CDE) service and upload external data files to your project.

# Task A : Add a CDE service

- From IBM Cloud Pak for Data homepage, click **Projects** under Quick navigation.

The screenshot shows the IBM Cloud Pak for Data homepage. At the top, there's a navigation bar with the text "IBM Cloud Pak for Data". Below it, a "Welcome" message says "Welcome, Sandip saha!". There are three main sections: "Learn by example", "Work with data", and "Extend your capabilities". Under "Work with data", there are links to "Create a project" and "Create a service". On the left side, there's a "Quick navigation" sidebar with "Projects" highlighted and a hand cursor icon, and "Deployment spaces". The main area is titled "Overview" and includes a "Notifications" section.

- Select **Capstone Project** you created earlier.

The screenshot shows the "Projects" page. At the top, there's a search bar with the placeholder "Which project are you looking for?". Below it, a table lists projects. The first row shows "Name" and "Capstone Project" with a hand cursor icon. The "Capstone Project" row is highlighted with a red border.

- Click on **Manage** tab , from the \*\*Services and integrations \*\* section click **Associate service**

The screenshot shows the "Manage" tab selected in the top navigation bar. On the left, there's a sidebar with "Project" and several tabs: "General", "Access control", "Environments", "Resource usage", and "Services & integrations" (which is highlighted with a red border and has a red circle with the number 2). In the main area, there's a section titled "Associate IBM Cloud services with this project to add tools, compute environments, or other capabilities. [Learn more](#)". It includes a search bar "Find services", a table with columns "Name" and "Service type", and a blue button "Associate service" with a plus sign, which is highlighted with a red border and has a red circle with the number 3. Below this, there's a message "No services" with a small icon and a note: "Click [Associate service](#) or ask a project Admin to associate one".

4. Click **New service**.

Associate service  
Choose an existing or add a new service to associate with your project.

Filter by: Resource Groups ▾ 2 × Locations ▾ None ▾

Name	Type	Plan	Location	Status	Group

New service +

5. Click **IBM Cognos Dashboard Embedded**.

Find services

## Analytics

Category

Analytics

**IBM Cognos Dashboard Embedded**  
Analytics

Bring data to life directly from your application with this powerful and easy-to-use visualization service.

Lite • Free

6. On the **Create** tab, select a close **region** and **Lite** plan. Then click **Create**.

Services catalog /

### IBM Cognos Dashboard Embedded

Author: IBM • Date of last update: Aug 17, 2020 • Docs

**Create** **About**

Select a region

Select a region

Dallas

Pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: United States

Plan	Features	Pricing
Lite	50 sessions/month  A session is a 60 minute period where end-users can perform unlimited interactions with an embedded dashboard.  Lite plan services are deleted after 30 days of inactivity.	Free <input checked="" type="checkbox"/>
Pay as you go	After 50 sessions Live connection to underlying data Embed dashboards where users are without losing interactivity Smart Creation of Visualizations Interactive exploration of data through filtering and navigation paths	\$0.05 USD/Session

**Summary**

**IBM Cognos Dashboard Embedded**

Region: Dallas  
Plan: Lite  
Service name: IBM Cognos Dashboard Embedded-lh  
Resource group: Default

**Create**

7. Select **IBM Cognos Dashboard Embedded** service and click **Associate service** to add the service to **Capstone Project**.

Associate service  
Choose an existing or add a new service to associate with your project.

Filter by: Resource Groups ▾ 2 × Locations ▾ 1 × sandipsahajoy@ibm.com ▾

Name	Type	Plan	Location	Status	Group
<input checked="" type="checkbox"/> IBM Cognos Dashboard Embedded-pe	IBM Cognos Dashboard Embedded	Lite	Dallas	Not associated	Default

Associate service Cancel

8. Once the service association status appears green, **close** the associate service page.

The screenshot shows the 'Associate service' page. At the top, it says 'Associate service' and 'Choose an existing or add a new service to associate with your project.' Below this is a search bar and filter options for 'Resource Groups', 'Locations', and 'Email'. A table lists one service entry:

Name	Type	Plan	Location	Status	Group
IBM Cognos Dashboard Embedded-pe	IBM Cognos Dashboard Embedded	Lite	Dallas	Associated	Default

## Task B : Upload External Data Files(Supports .CSV Files Only)

1. Download the file [car\\_sales\\_data\\_sample.csv](#).

2. On the **Assets** page, click **Find and add data** icon. Click **Drop data files here or browse for files to upload**.

The screenshot shows the 'Assets' page for the 'IBM\_Project' project. The 'Assets' tab is selected, indicated by a red circle with the number 1. A red box highlights the 'Assets' tab. On the right, there is a red box around the 'Click here to add a Data set' button, which is circled with the number 2. The page displays a summary of assets and a section for adding new assets.

3. Browse to the file download location, select the downloaded **CSV** file, and click **Open**.

4. Once upload completes, **car\_sales\_data\_sample.csv** will appear under **Data assets** section.

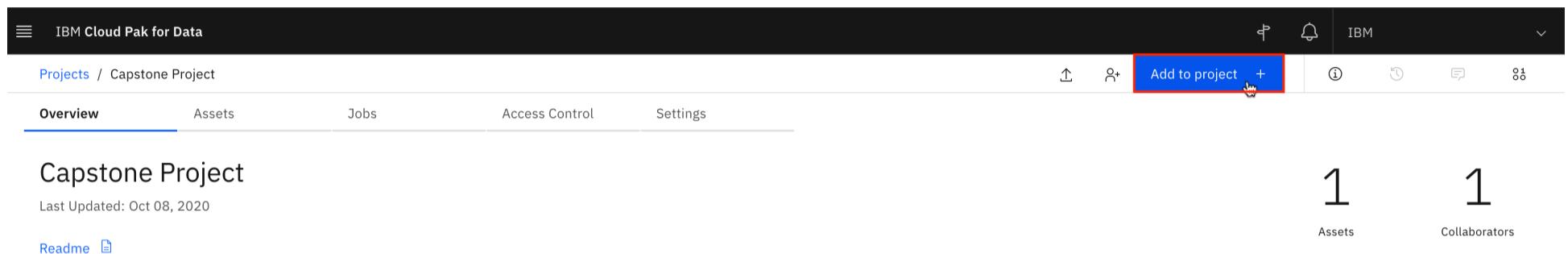
The screenshot shows the 'Data assets' section. It displays a table with one row:

<input type="checkbox"/>	Name	Type
<input type="checkbox"/>	CSV car_sales_data_sample.csv	Data Asset

# Exercise 3 : Navigate around CDE UI and Start a New Dashboard with a Template

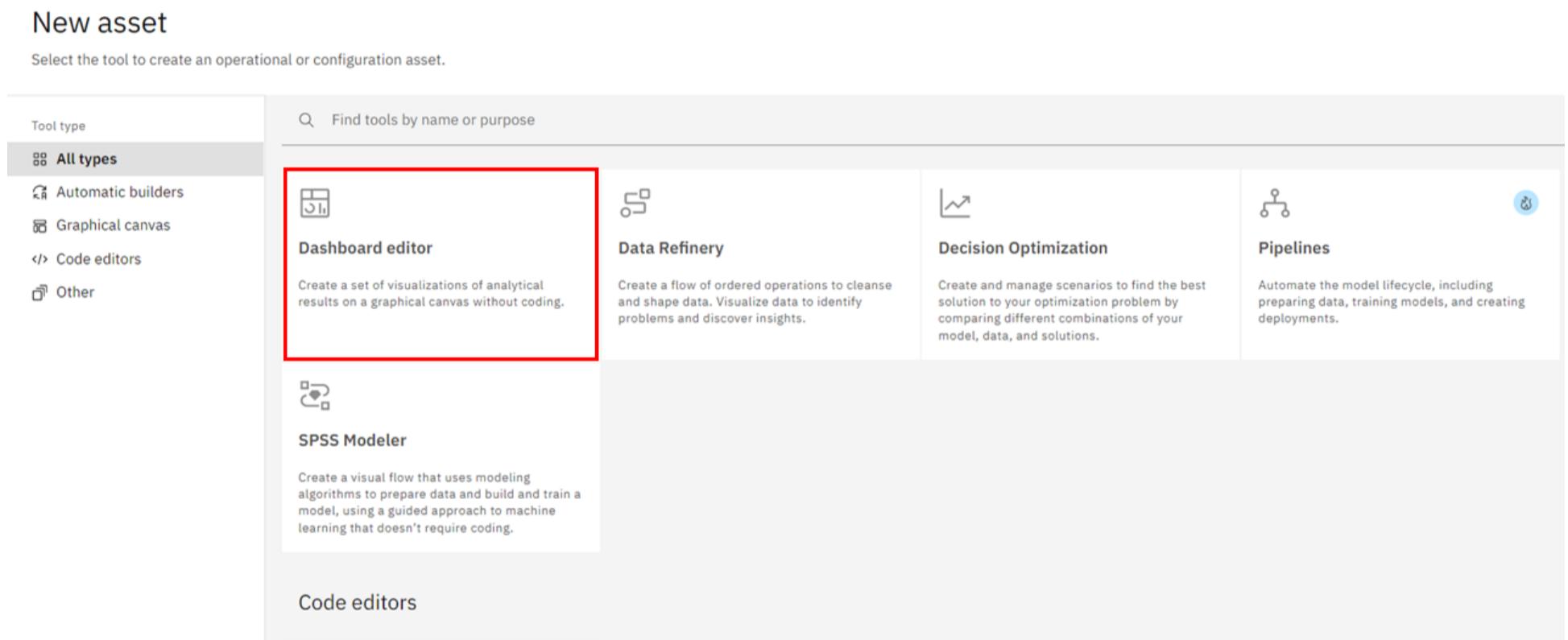
In this exercise, you will learn general navigation around the CDE user interface (UI), and how to start a new dashboard with a template in CDE, populate it with a data visualization as well as save the dashboard.

1. On the **Overview** page of Capstone Project project, click **New asset**.



The screenshot shows the 'Overview' tab selected in the top navigation bar. The main content area displays the 'Capstone Project' details, including a 'Readme' link. Below the project summary, there are two large numbers: '1' under 'Assets' and '1' under 'Collaborators'. At the top right, there is a prominent blue button labeled 'Add to project' with a '+' icon, which is also highlighted with a red box.

2. Scroll down and select **Dashboard Editor**.



The screenshot shows the 'New asset' creation interface. On the left, a sidebar lists 'Tool type' categories: 'All types' (selected), 'Automatic builders', 'Graphical canvas', 'Code editors', and 'Other'. The main area contains a search bar 'Find tools by name or purpose'. Below it, five tool cards are displayed in a grid:

- Dashboard editor**: Selected and highlighted with a red box. Description: 'Create a set of visualizations of analytical results on a graphical canvas without coding.'
- Data Refinery**: Description: 'Create a flow of ordered operations to cleanse and shape data. Visualize data to identify problems and discover insights.'
- Decision Optimization**: Description: 'Create and manage scenarios to find the best solution to your optimization problem by comparing different combinations of your model, data, and solutions.'
- Pipelines**: Description: 'Automate the model lifecycle, including preparing data, training models, and creating deployments.'
- SPSS Modeler**: Description: 'Create a visual flow that uses modeling algorithms to prepare data and build and train a model, using a guided approach to machine learning that doesn't require coding.'

3. Name the dashboard as **Simple Dashboard**. Then select a **Cognos Dashboard Embedded service** from the list and click **Create**.

## New dashboard

Blank      From file

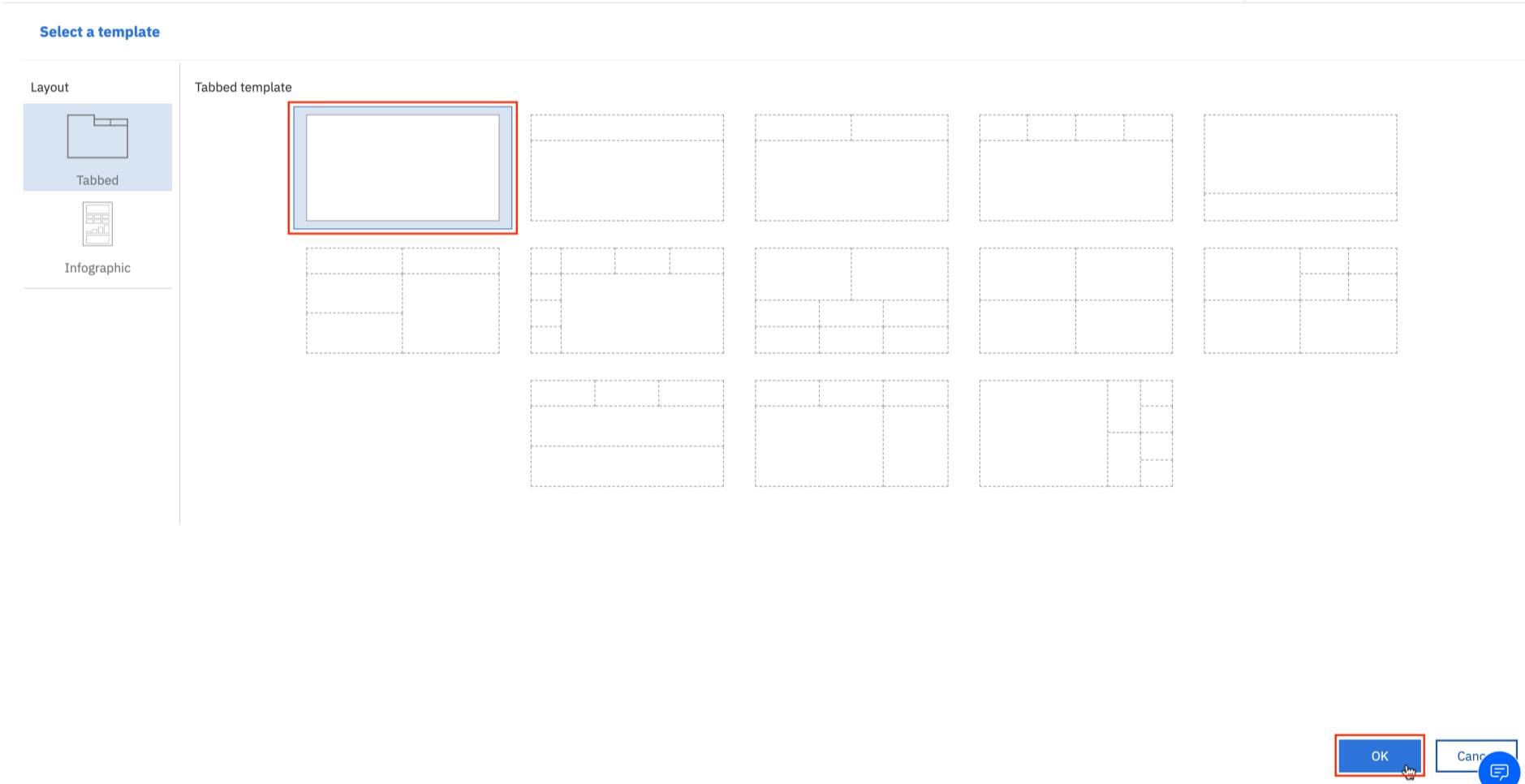
Name  
Simple Dashboard

Description (Optional)  
Dashboard description

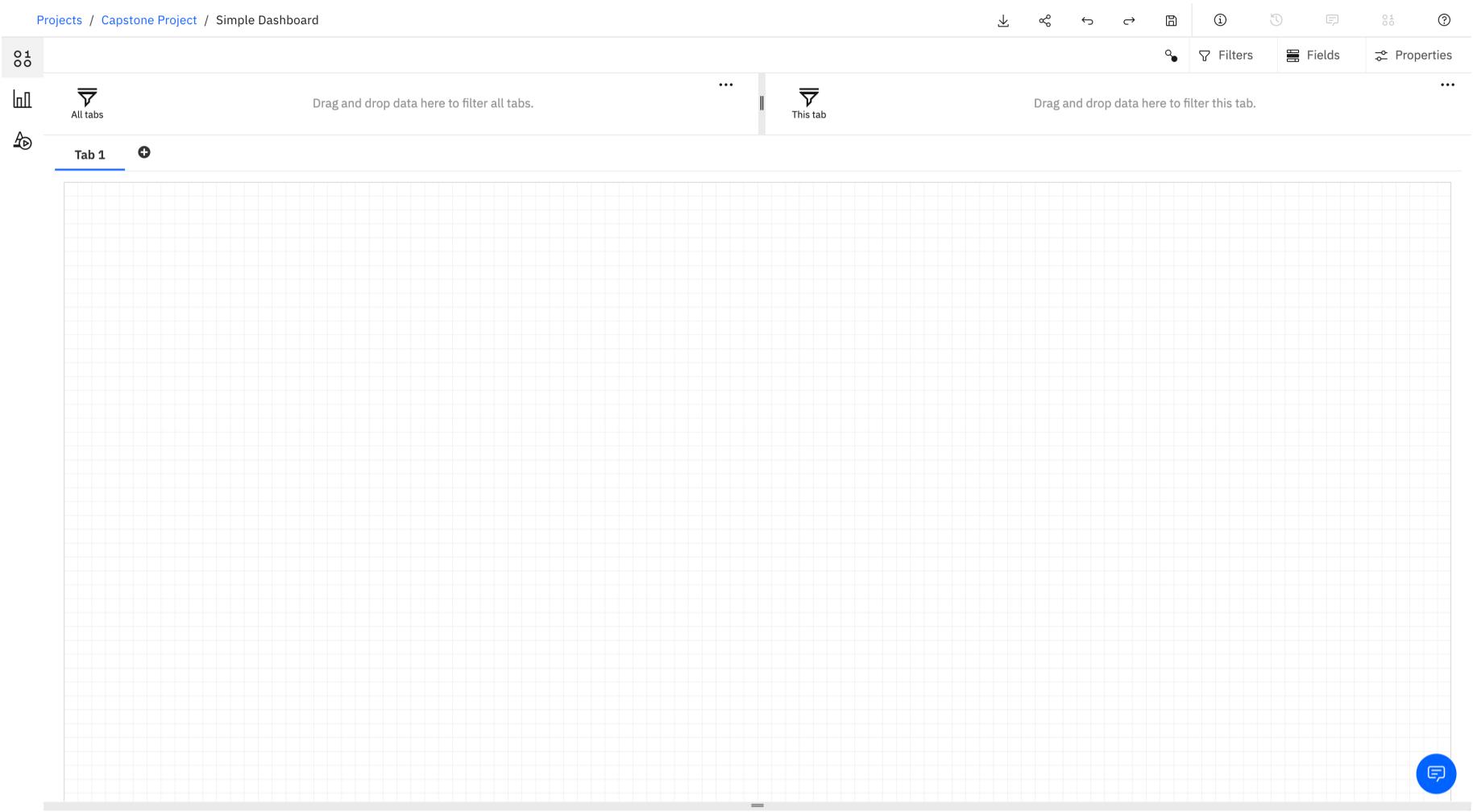
IBM Cognos Dashboard Embedded service  
Select Cognos Dashboard Embedded service from the list  
IBM Cognos Dashboard Embedded-pe

Cancel      Create

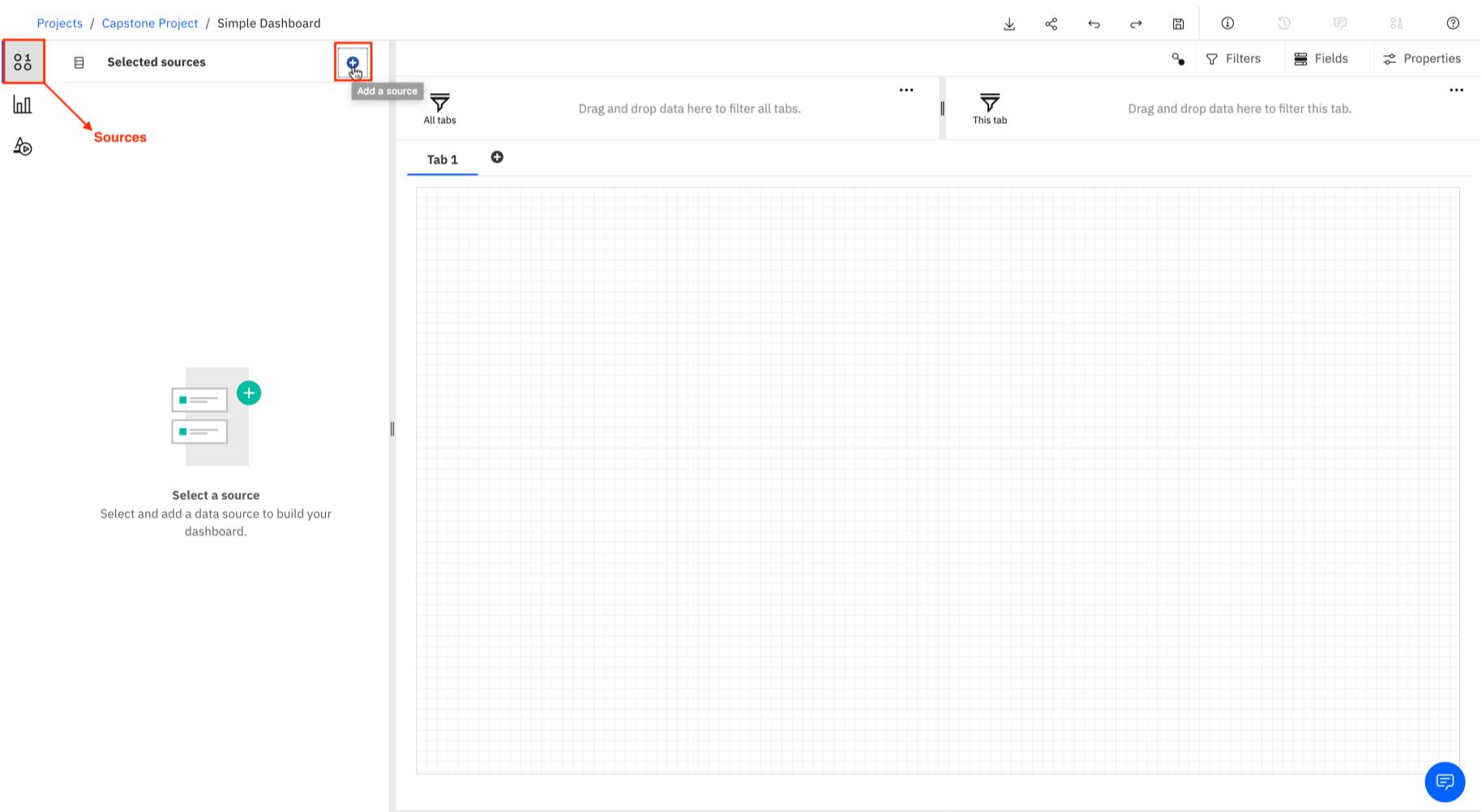
4. Select the **tabbed dashboard style**. This will allow you to have multiple pages for your dashboards. Select the **one-panel template**. Click **OK**.



5. Now you have created a new dashboard using the dashboard template.



6. Click **Sources** icon from the **Navigation** panel to open the data source panel. Then click **Add a source** icon.

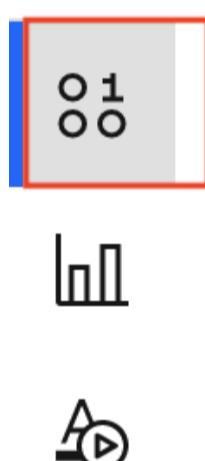


7. Select **Data assets**. Select **car\_sales\_data\_sample.csv** and click **Select**.

## Select connection source

The screenshot shows a 'Select connection source' dialog box. On the left, there's a tree view under 'Capstone Project' with 'Assets (2)' and 'Connections'. Under 'Data assets', 'car\_sales\_data\_sample.csv' is selected and highlighted with a red border. At the bottom right, there are 'Cancel' and 'Select' buttons, with 'Select' being highlighted by a blue border.

8. From the **Navigation** panel, select **Sources** to open the data source panel, if it is not already open. The **Data Source** panel displays the file **car\_sales\_data\_sample.csv**. Click on **car\_sales\_data\_sample.csv**.



9. From the **Data Source** panel, select **SALES**. Drag it to the **Panel** and release.

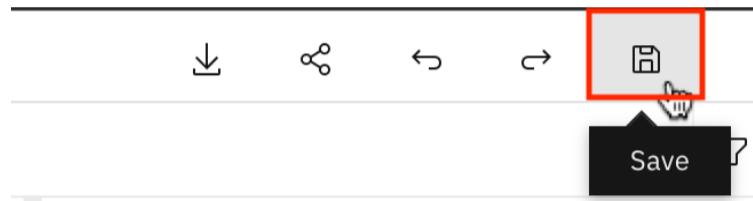
The screenshot shows the 'Data Source' panel for 'car\_sales\_data\_sample.csv'. On the left, a tree view shows fields like ORDERNUMBER, QUANTITYORDERED, PRICEEACH, ORDERLINENUMBER, and SALES. The 'SALES' node is highlighted with a red border and has a red arrow pointing to the right. On the right, a 'Panel' area titled 'Tab 1' contains a grid with a blue border around the 'SALES' field, which is also highlighted with a blue border.

10. Now you have successfully started to populate your dashboard with data visualizations too!

# 10M

## SALES

11. To save the newly created dashboard, click **Save** icon.



Congratulations! You have completed the Lab.

## Author(s)

- [Sandip Saha Joy](#)

## Other Contributor(s)

## Changelog

Date	Version	Changed by	Change Description
2022-05-04	1.1	Malika	Updated screenshot
2020-10-07	1.0	Sandip Saha Joy	Initial version created

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