databricks

Demand Forecasting

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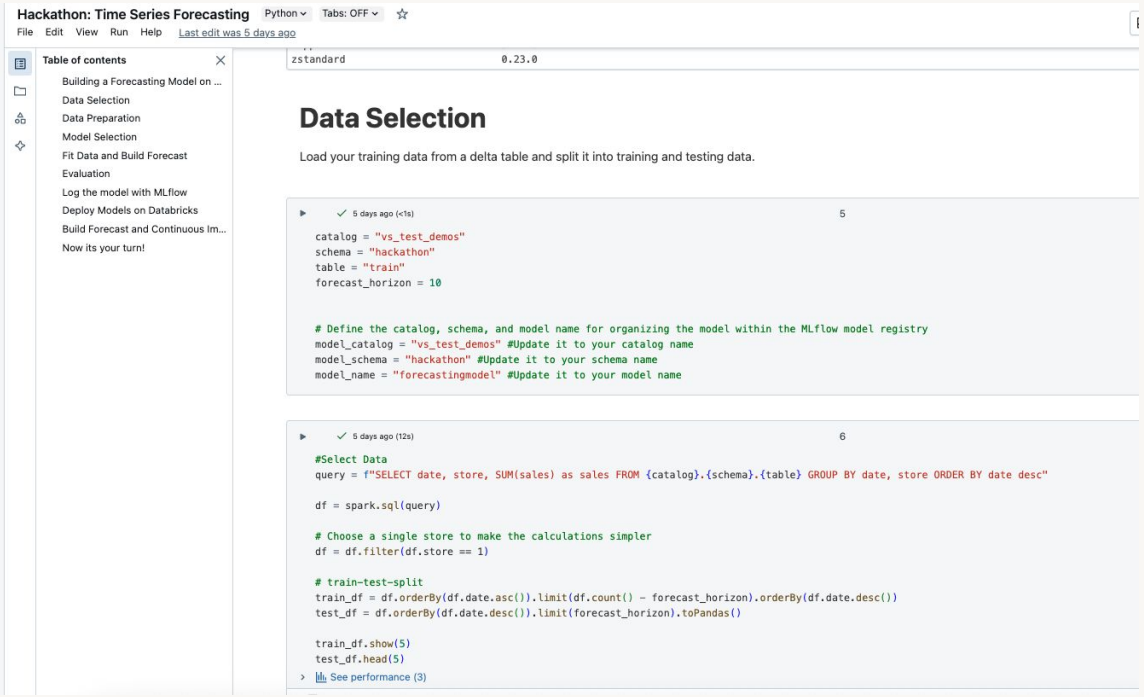
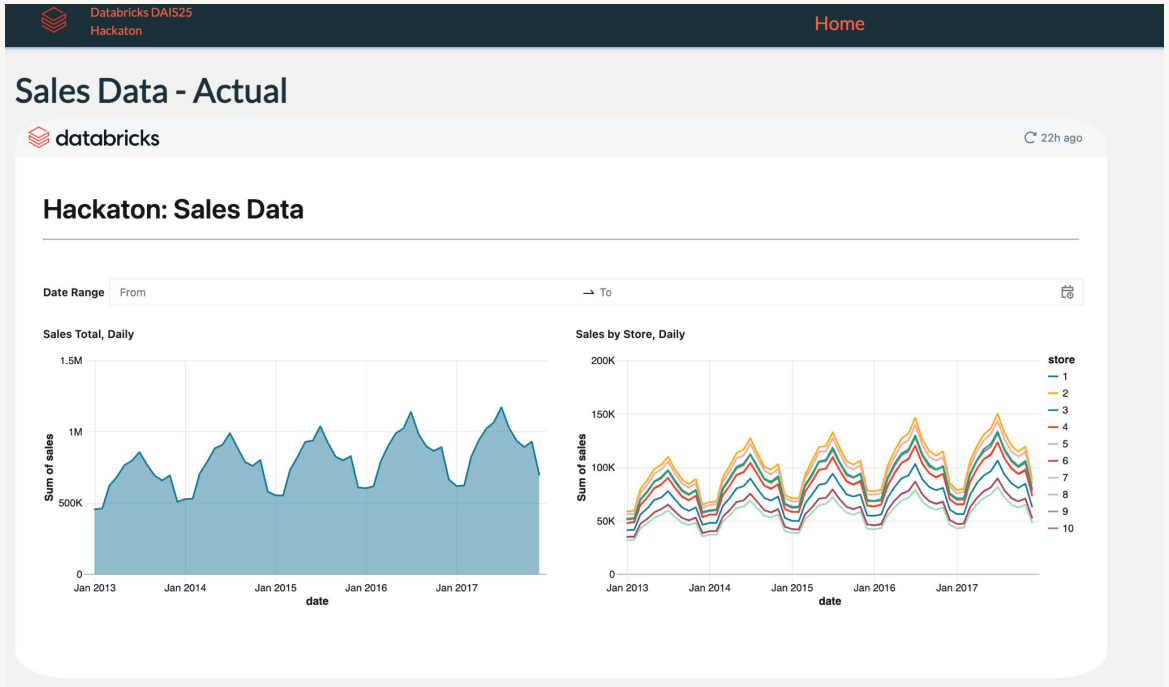
Why Demand Forecasting Matters

- Improves inventory management and reduces costs
- Enhances production planning and resource allocation
- Supports strategic business decisions and growth
- Optimizes pricing strategies for increased revenue

Creating an App + Dashboard for automated forecasting





What you will build

- Time Series Forecasting Notebook and Model Serving Endpoint
  - A Notebook is ready for you with the code and data to train a model, create forecasts and deploy a serving endpoint
  - You can add additional models and evaluation metrics
- AI/BI Dashboard
  - Based on the data and visualisations, you will build a dashboard to showcase the model performance and forecasts
- App
  - You will build a Databricks App, where you will implement a button that calls the serving endpoint to generate forecasts
  - You will embed the dashboard in the app

What we provide you and how to get started

- Sample data to train your model
- Example Notebook to get you started
- Access to a Databricks environment
- Instructions on how to embed a Dashboard in an App

Get Started

- Access the Workspace
  - Please use Compute with Databricks Runtime Version 15.4 LTS
- Clone the Git Repository, and start with the notebook in the folder demand_forecasting/hackathon_resources
  - Use the backup folder only if you get stuck, and speak with your SAs to help you
- Explore the data in the schema dev_hackathon.demand_forecasting
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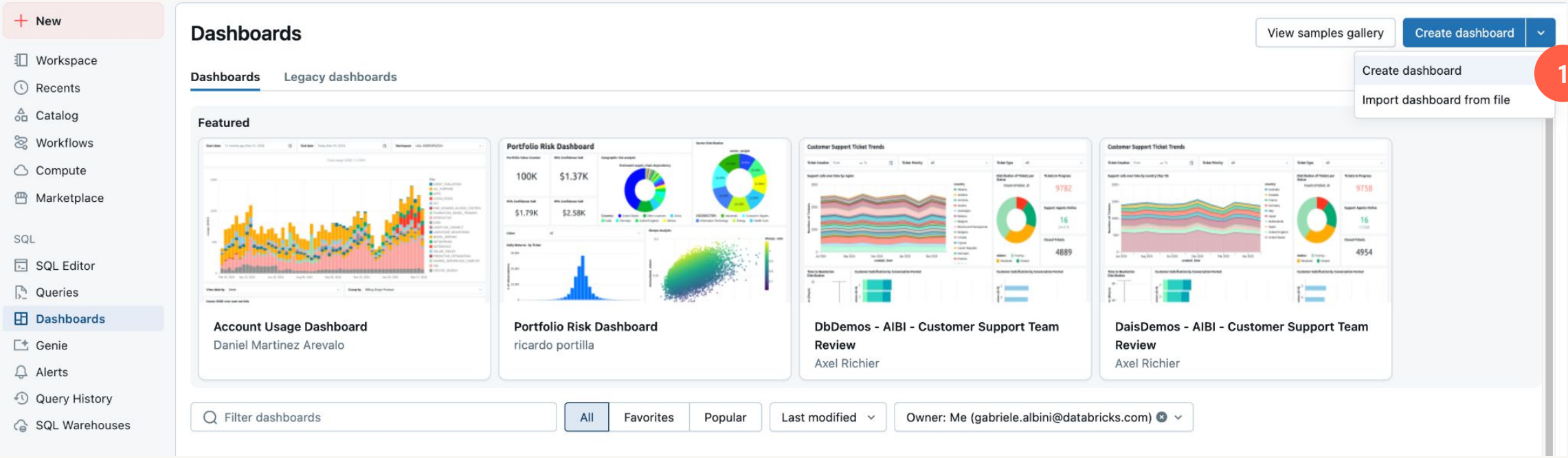
How to embed a Dashboard in an App

Part 1 - Creating a Dashboard

1 Create a new dashboard



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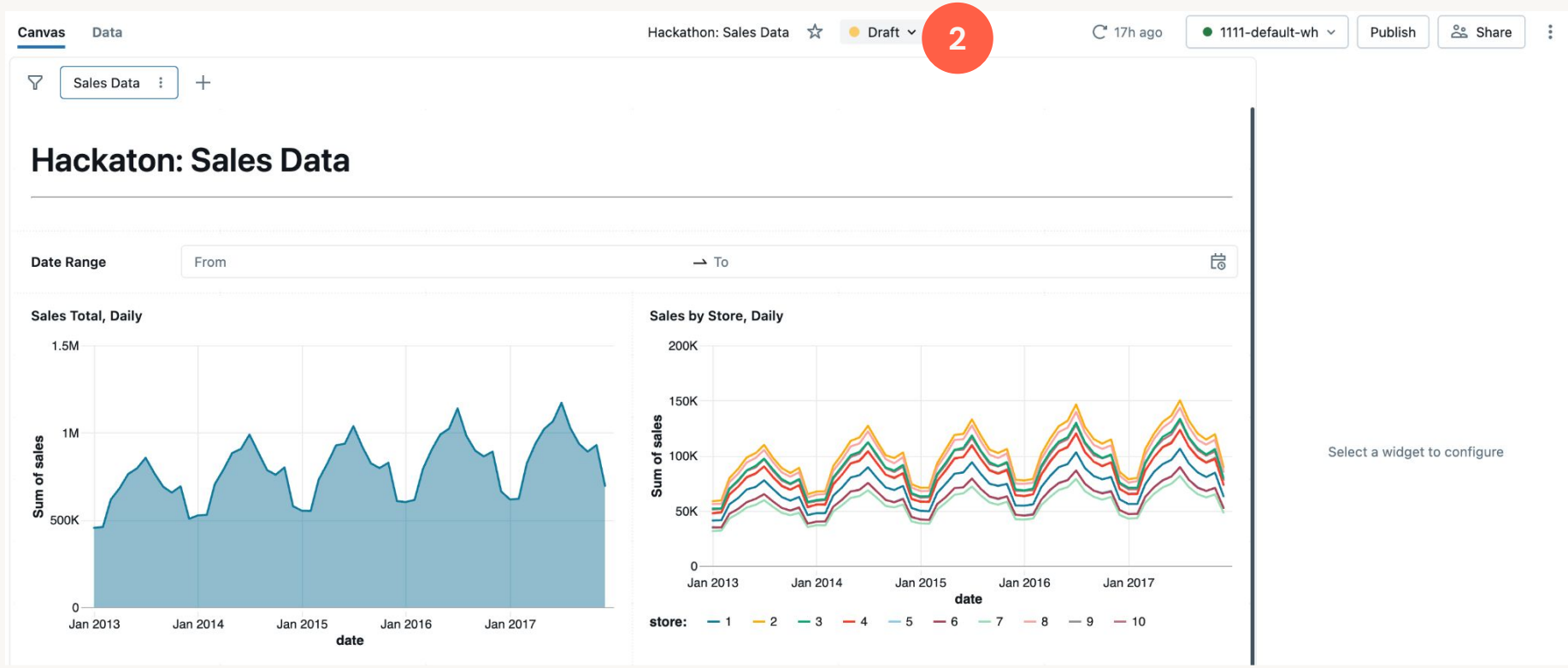
2 Edit datasets and canvas in Draft mode



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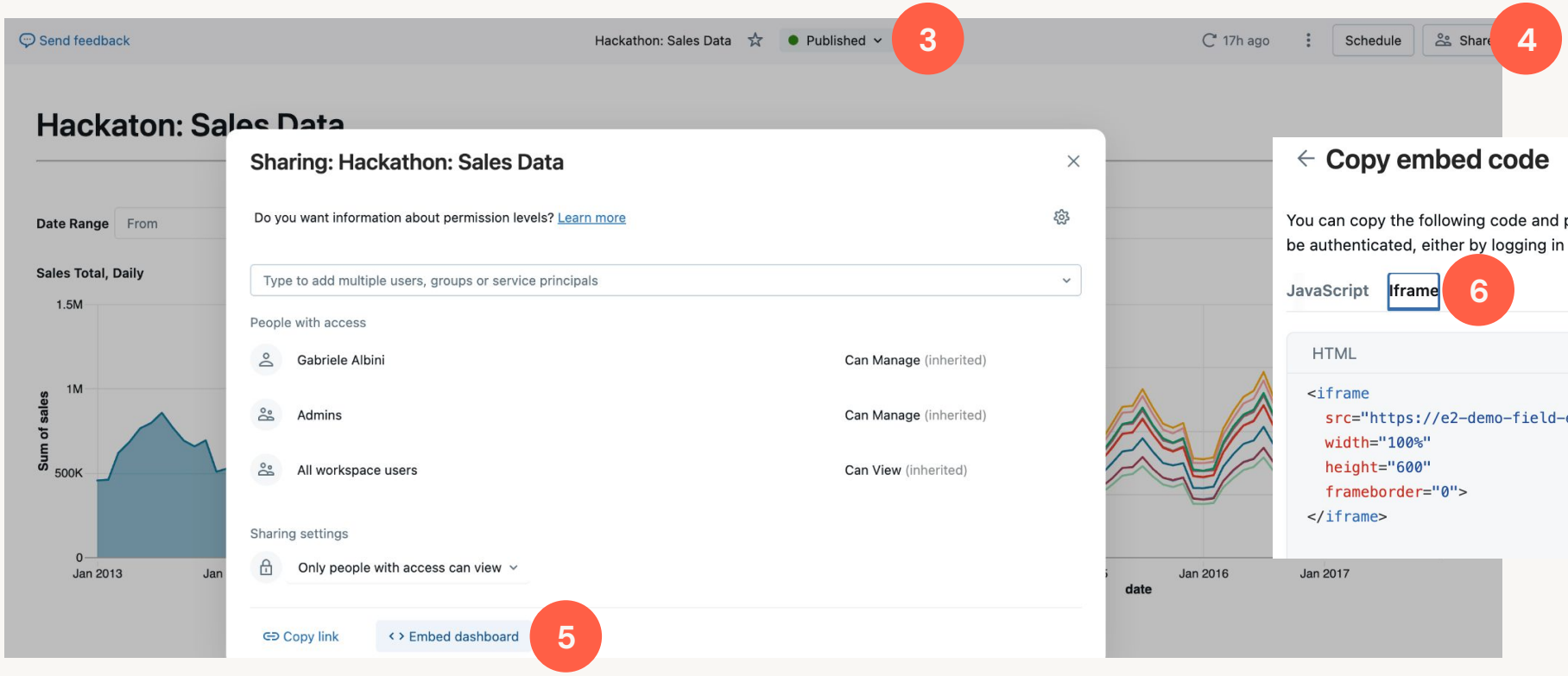
3 Switch to Published Mode

4 Click on Share

5 Open the Embed dashboard details and 6 copy Iframe code



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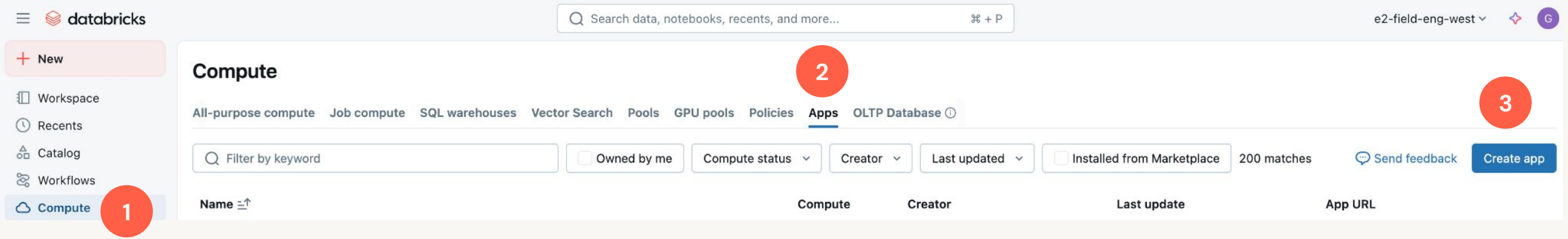
Part 2 - Create your App

1. Navigate to the Compute section
2. Click on Apps
3. Create a new app



How to embed a Dashboard in an App

4 Choose your support framework and 5 deploy a simple boilerplate app

Develop your app (e.g., using Notebooks), including the iFrame component 👩‍💻

6 Redeploy with the new source code path