

Hands-on Lab: Explore a Simple Generative Tool

Estimated time needed: 30 minutes

Overview

Generative AI models have revolutionized how you interact with technology, enabling you to create new content, generate realistic images, and translate languages with remarkable accuracy.

In this lab, you will gain hands-on experience with a simple generative AI tool, DataRobot, exploring its capabilities and applications.

Learning Objectives

After completing this lab, you will be able to:

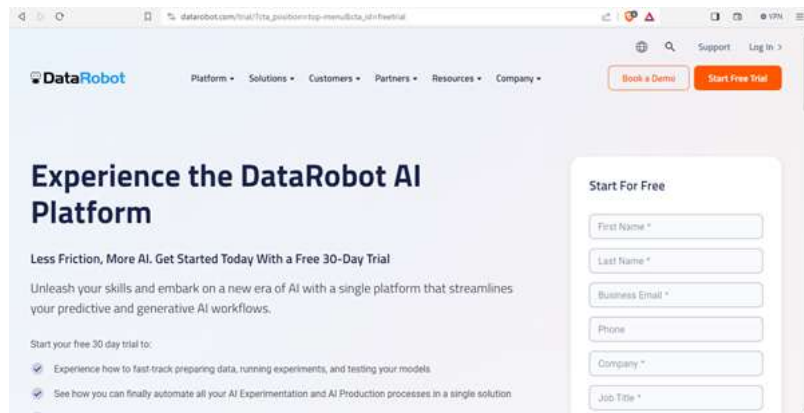
- Signup in DataRobot
- Add a data set to the use case
- Work on model building

Task 1: Sign-up in DataRobot

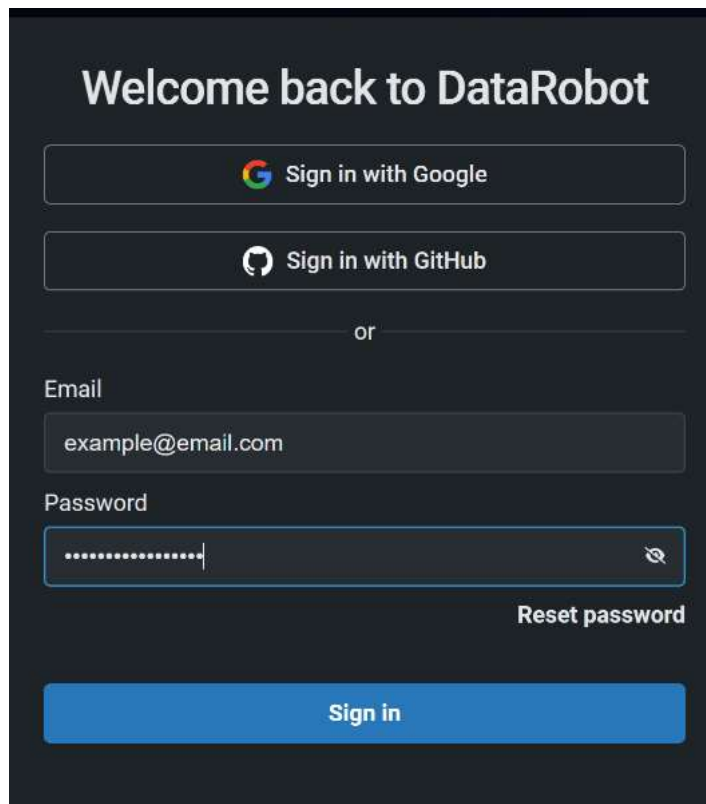
Step 1: Click www.datarobot.com

Step 2: Click Start Free Trial.

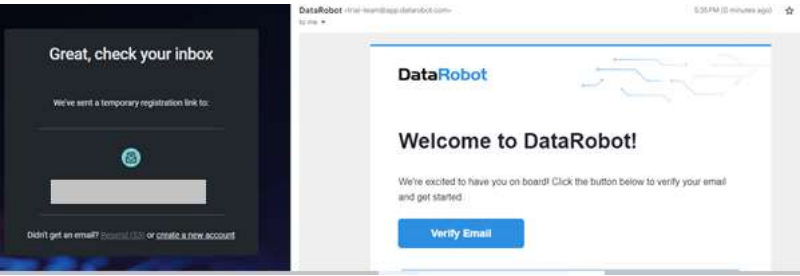
Step 3: Fill in the required information and create an account.

A screenshot of the DataRobot website's homepage. The header includes the DataRobot logo and navigation links for Platform, Solutions, Customers, Partners, Resources, and Company. There are buttons for 'Book a Demo' and 'Start Free Trial'. The main content area features the heading 'Experience the DataRobot AI Platform' and a subheading 'Less Friction, More AI. Get Started Today With a Free 30-Day Trial'. Below this is a paragraph about streamlining AI workflows and a list of trial benefits. On the right side, there is a 'Start For Free' form with input fields for First Name, Last Name, Business Email, Phone, Company, and Job Title.

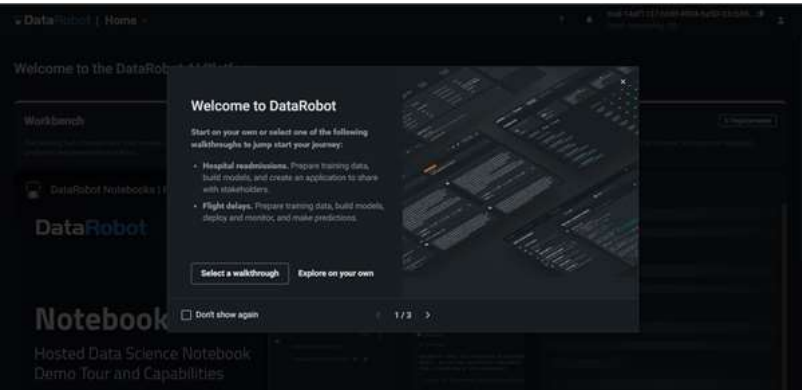
Step 4: A new window will open; select the relevant option for signing up.

A screenshot of the DataRobot sign-in page. The background is dark with white text. At the top, it says 'Welcome back to DataRobot'. Below this are two large buttons: 'Sign in with Google' and 'Sign in with GitHub'. In the center, there is a horizontal line with the word 'or' below it. Underneath, there are input fields for 'Email' (containing 'example@email.com') and 'Password' (with a toggle for visibility). To the right of the password field is a link that says 'Reset password'. At the bottom, there is a large blue button that says 'Sign in'.

Step 5: Confirm your email by clicking **Verify Email** in your inbox.

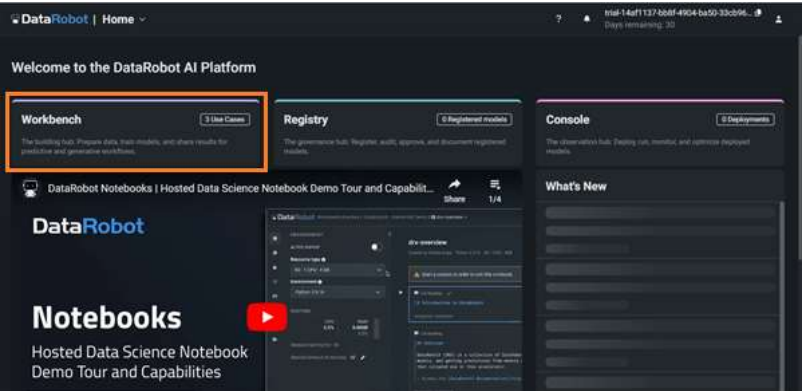


Step 6: Sign up and start your first experience of using the Generative AI tool. The dashboard will look like the image below. You may like to familiarize yourself with the application by clicking **Select a walkthrough**.

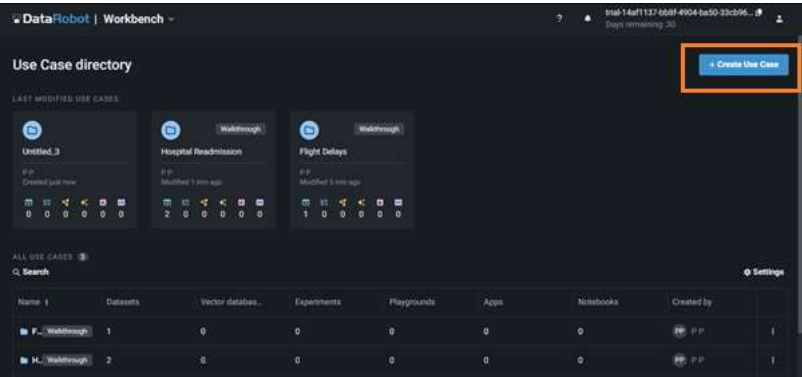


Task 2: Add a data set

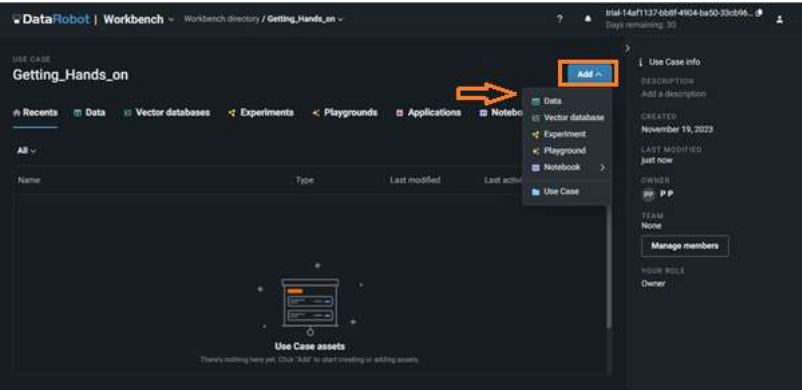
Step 7: The dashboard will appear shortly, and your screen will look as shown below. Click **Workbench**.



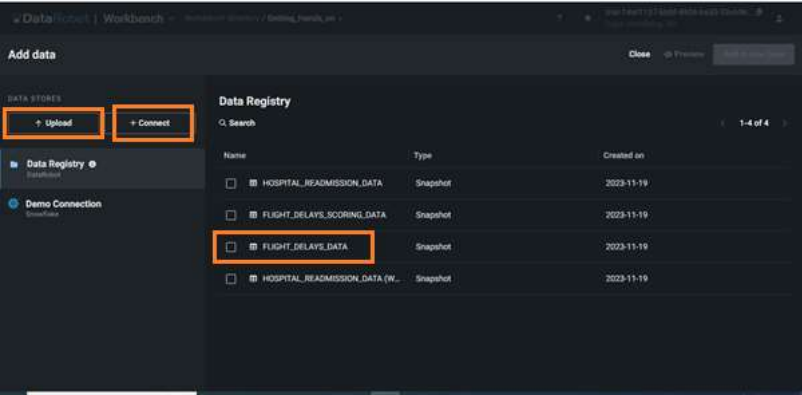
Step 8: Click **Create Use Case**.



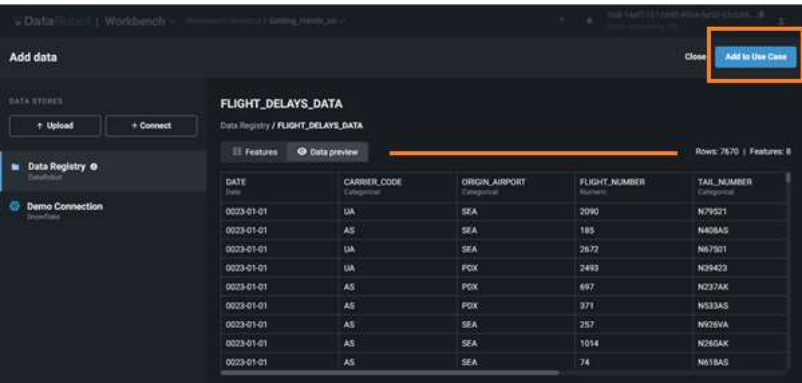
Step 9: Click **Add** and **Data** to include the data set in your use case.



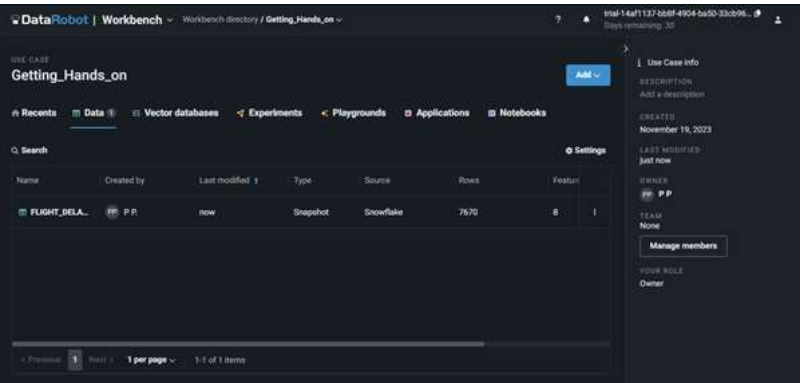
Step 10: **Upload** your data set or **Connect** to the data source; however, for this lab, you can select an in-built sample data set *FLIGHT_DELAYS_DATA*.



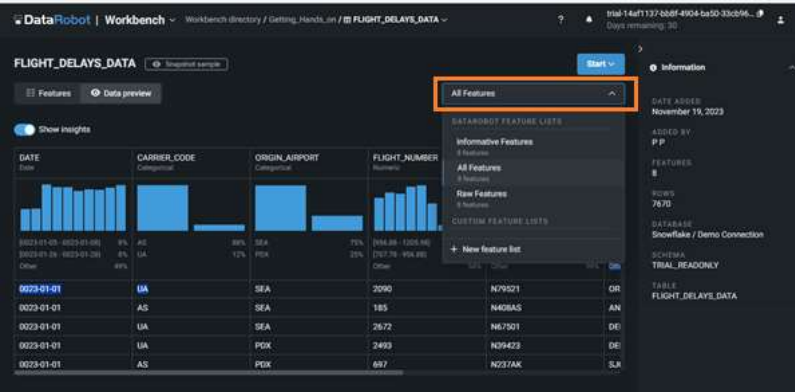
Step 11: Once you select the data set, you can see a preview of it. You can also view the data set's features, as shown below. Click **Add to Use Case**.



Step 12: After you add the data set to the use case, the workbench will appear as shown below. You can click the data set to see the feature insights.

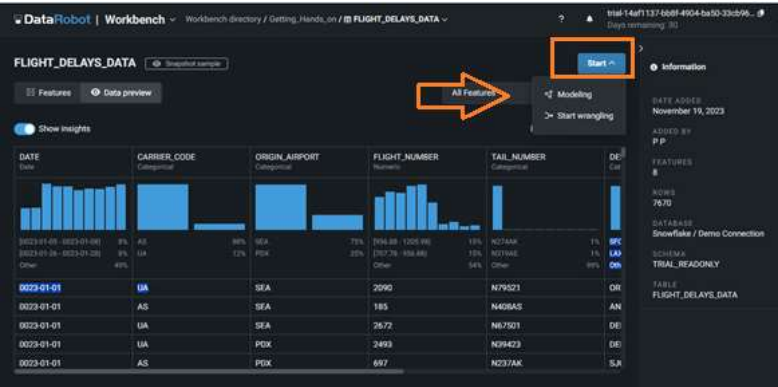


Step 13: Explore the **All Features** menu to display specific features.

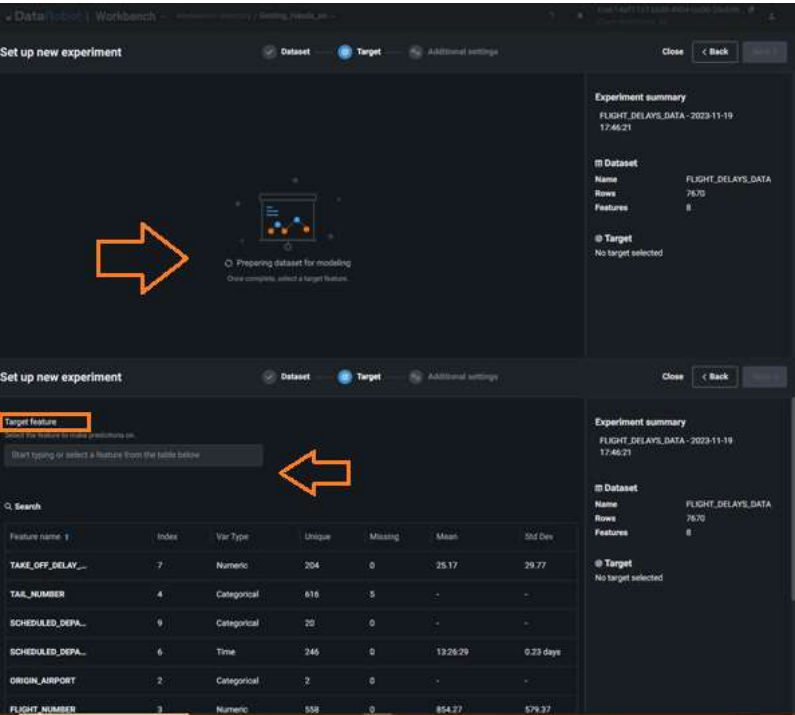


Task 3: Work on Data Modeling

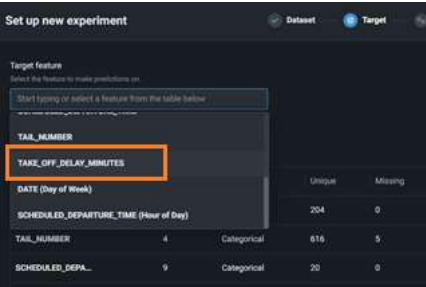
Step 14: Click **Start**. You will have options **Modelling** and **Start wrangling**.



Step 15: You can try data wrangling if you want to. For this lab, you will work on model building. Click **Start** and select **Modelling**. It will take a while to prepare a data set for modelling. Once done, you need to select the **Target** feature.



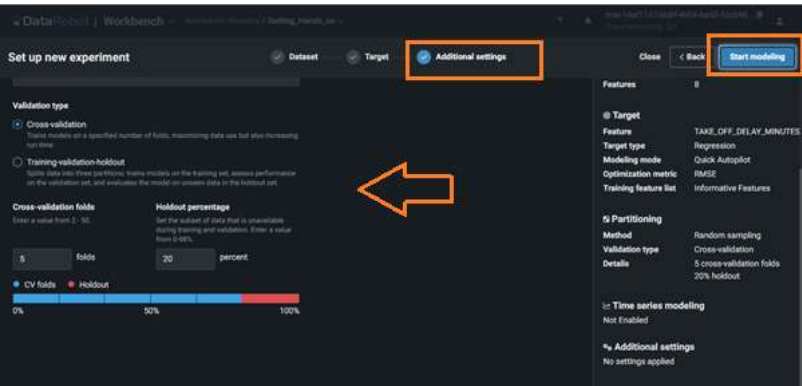
Step 16: Select **TAKE_OFF_DELAY_MINUTES** as your target feature.



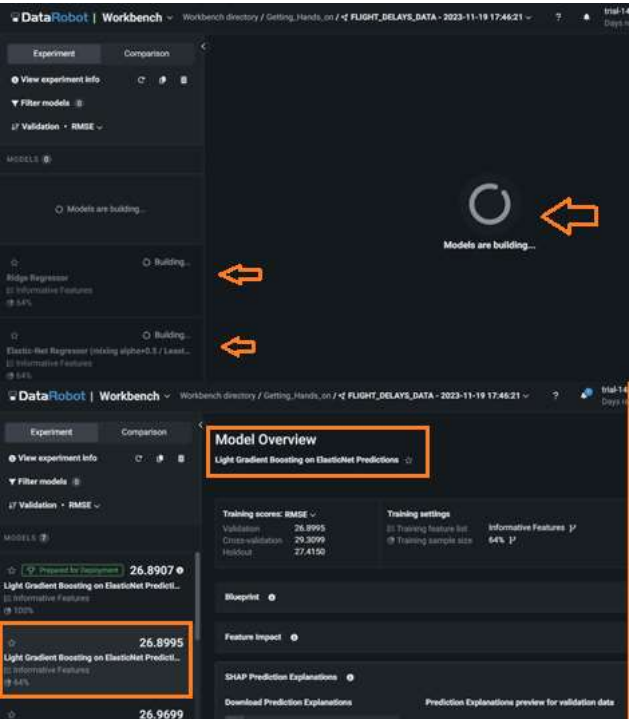
Step 17: The workbench screen will be displayed as shown below. Click **Next**.



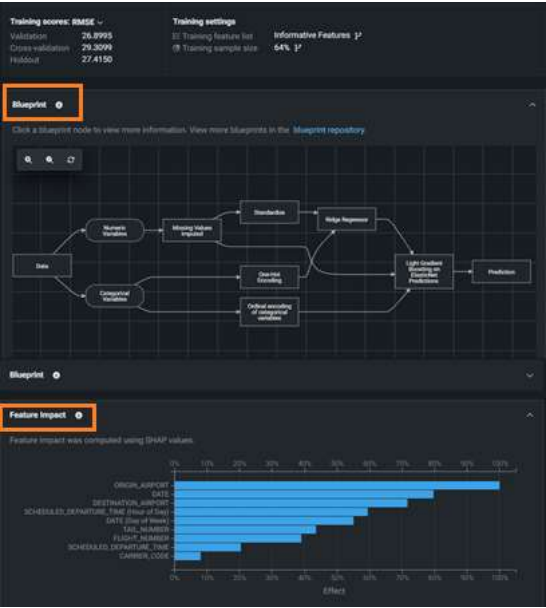
Step 18: You can modify the model setting in **Additional Settings**; once done, click **Next** and then click **Start modelling**.



Step 19: Building models will take a while; once the modelling is complete, you can pick a model of your choice, and the DataRobot will show the **Model Overview**.



Step 20: You can explore various model overview components like **Blueprint**, **Feature Impact**, and so on.



Step 21: If you have test or unseen data, you can also make predictions by clicking **Make Predictions** under **Model actions**.

Step 22: You can also click **Generate compliance report**.

The screenshot displays the model overview interface. At the top, there is a header with the model name and a trial ID. Below this, the 'Overview' section is visible. The 'Model actions' dropdown menu is open, showing options like 'Register model', 'Make predictions', 'Create app', 'Generate compliance report', and 'Delete model'.

Getting_Hands_on / FLIGHT_DELAYS_DATA - 2023-11-19 17:46:21

trial-14af1137-bb8f-4904-ba50-33cb96

Days remaining: 30

Overview

Boosting on ElasticNet Predictions

Model actions

- Register model
- Make predictions**
- Create app
- Generate compliance report
- Delete model

Training scores: RMSE

Validation	26.8995
Cross-validation	29.3099
Holdout	27.4150

Training settings

Training feature list	Informative Features
Training sample size	64%

Make new predictions

Prediction dataset

Prediction datasets cannot exceed 5.00 GB.

Drop file(s) here to upload or [Choose file ^](#)

Prediction options

☒ Include additional feature values

When enabled, results include specified feature values from the prediction dataset.

☒ Add all features ☐ Add specified features

All features selected

- Upload local file
- Use model training data
- Select from data registry

Step 23: Then you can click **Download compliance report** for your use case.

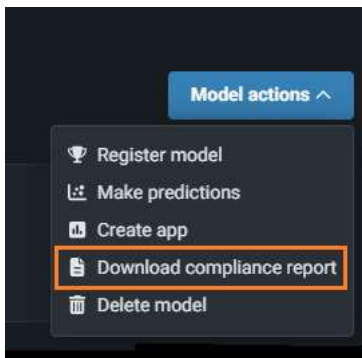


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 - 3.4 Overview of Model Results

Conclusion

In this lab, you have signed up in DataRobot, added a data set in a use case, and worked on data modelling.

Author(s)

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