

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

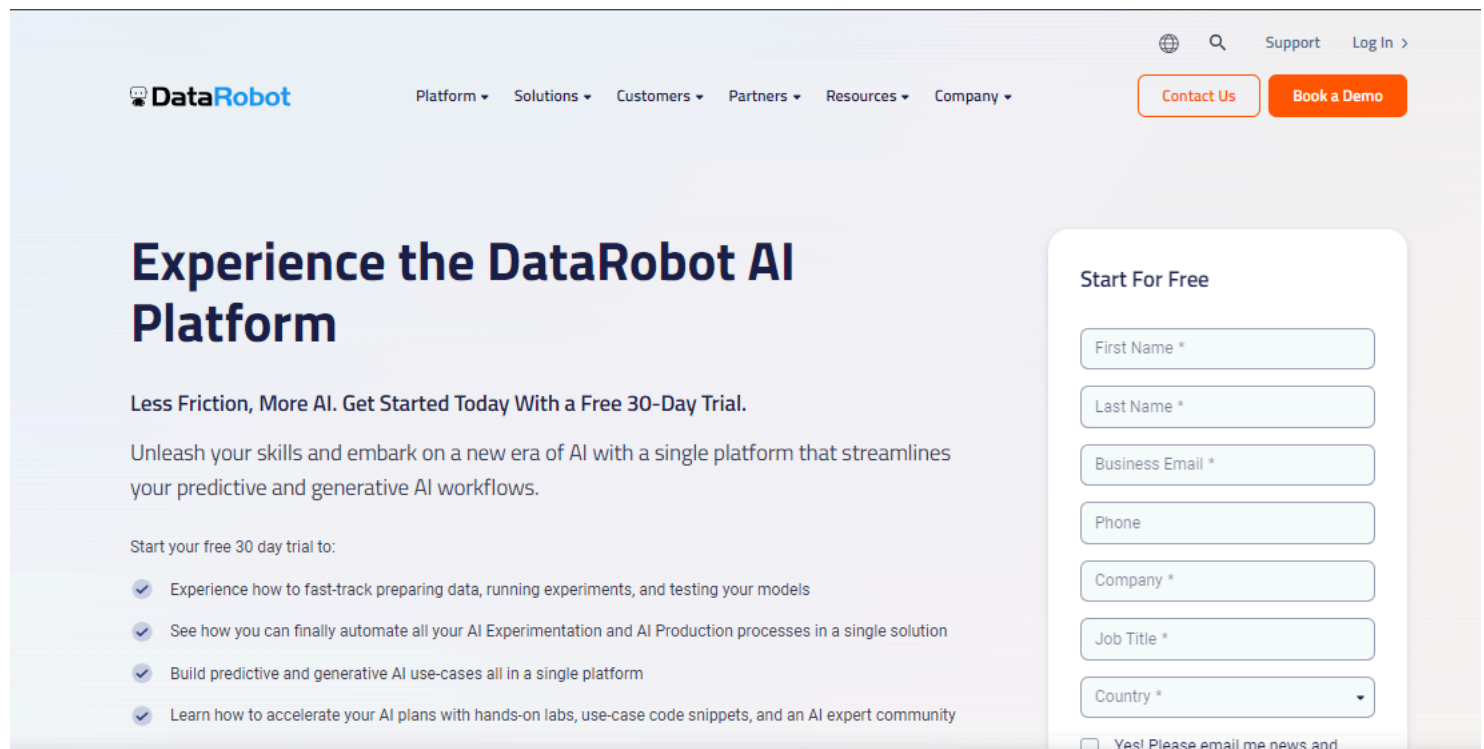
After completing this lab, you will be able to:

- Sign up 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: Fill in the required information under the "Start for free" section and create an account.



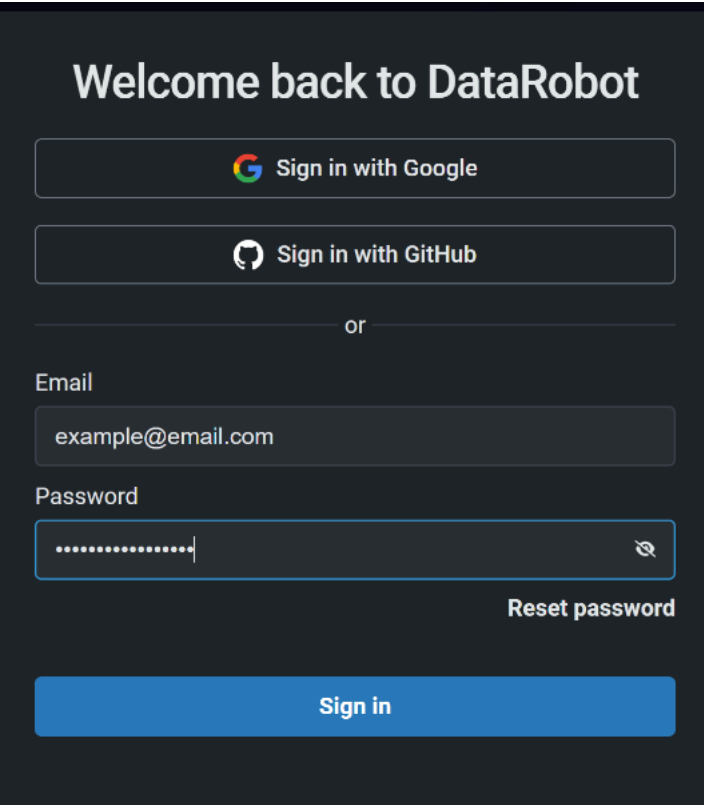
The screenshot shows the DataRobot website's homepage. The header includes the DataRobot logo, navigation links (Platform, Solutions, Customers, Partners, Resources, Company), and utility links (Support, Log In, Contact Us, Book a Demo). The main content area features a large heading 'Experience the DataRobot AI Platform' and a subheading 'Less Friction, More AI. Get Started Today With a Free 30-Day Trial.' Below this, a paragraph states: 'Unleash your skills and embark on a new era of AI with a single platform that streamlines your predictive and generative AI workflows.' A section titled 'Start your free 30 day trial to:' lists four benefits with checkmarks. On the right, a 'Start For Free' form is visible, containing input fields for First Name, Last Name, Business Email, Phone, Company, Job Title, and Country, followed by a checkbox for 'Yes! Please email me news and'.

Note: To access the DataRobot platform, you must sign up using a work email address. If you do not have a relevant work email, an alternative is to create a GitHub account using your Gmail address. Once registered, you can log in to DataRobot using your GitHub credentials.

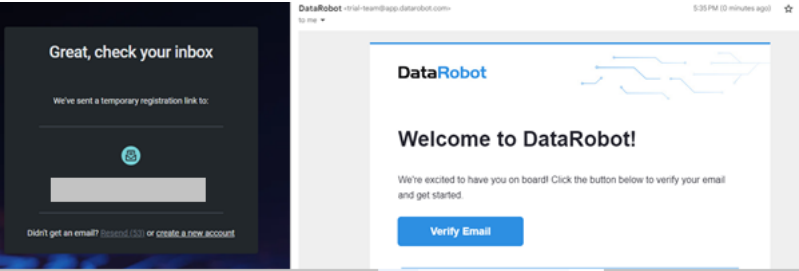
For step-by-step guidance on creating a GitHub account, please refer to the following link:

[GitHub Account Setup Guide](#)

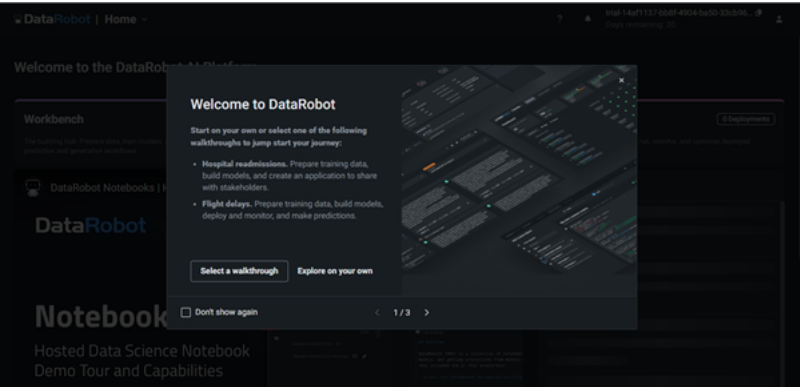
Step 4: A new window will open; select the relevant option for signing up.



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

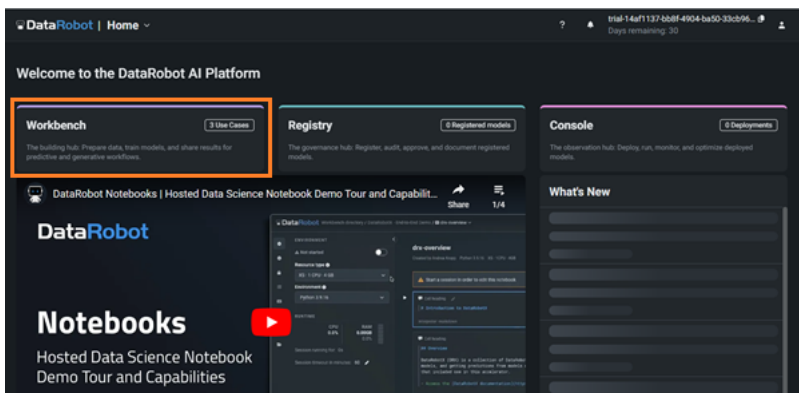


Step 6: Sign up and start your first experience of using the Generative AI tool.
The dashboard will look like the image below. You may like to familiarize yourself with the application by clicking **Select a walkthrough**.

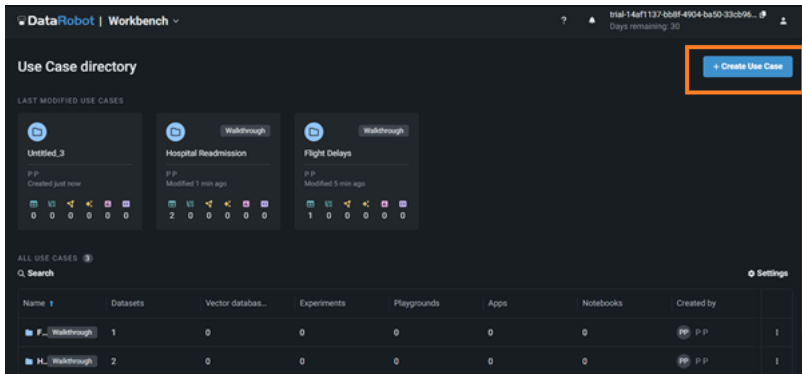


Task 2: Add a data set

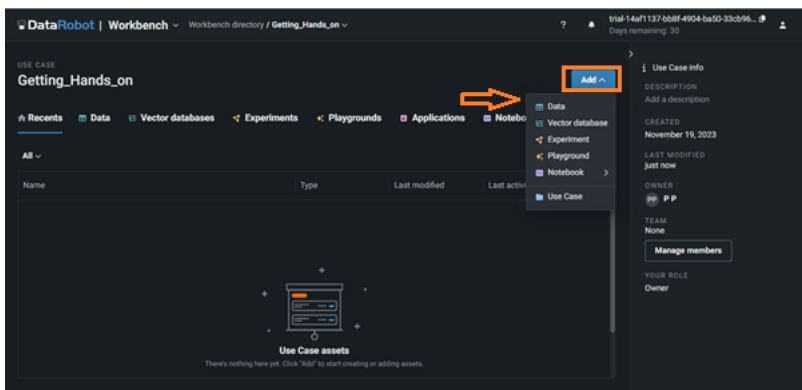
Step 7: The dashboard will appear shortly, and your screen will look as shown below. Click **Workbench**.



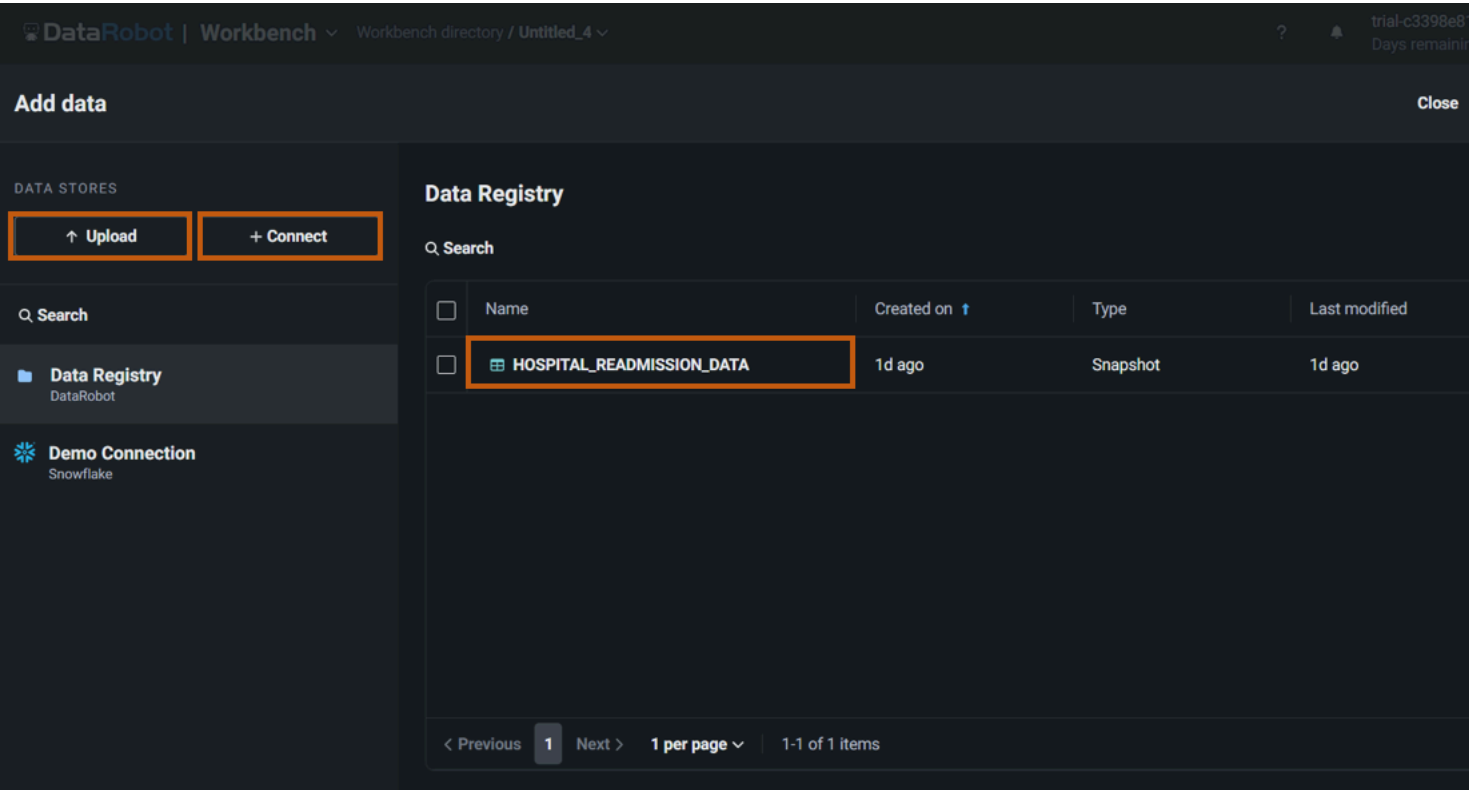
Step 8: Click **Create Use Case**.



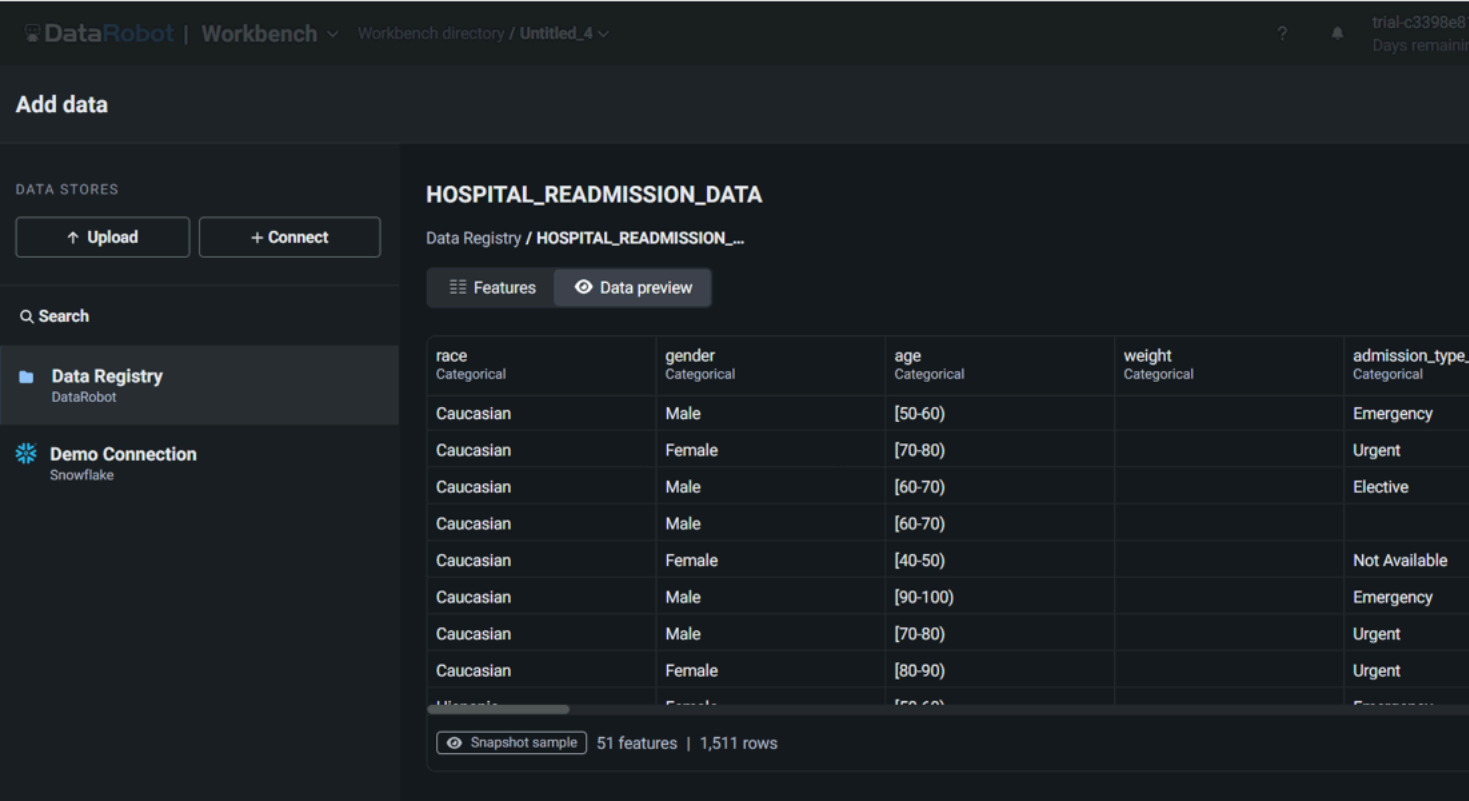
Step 9: Click **Add** and **Data** to include the data set in your use case.



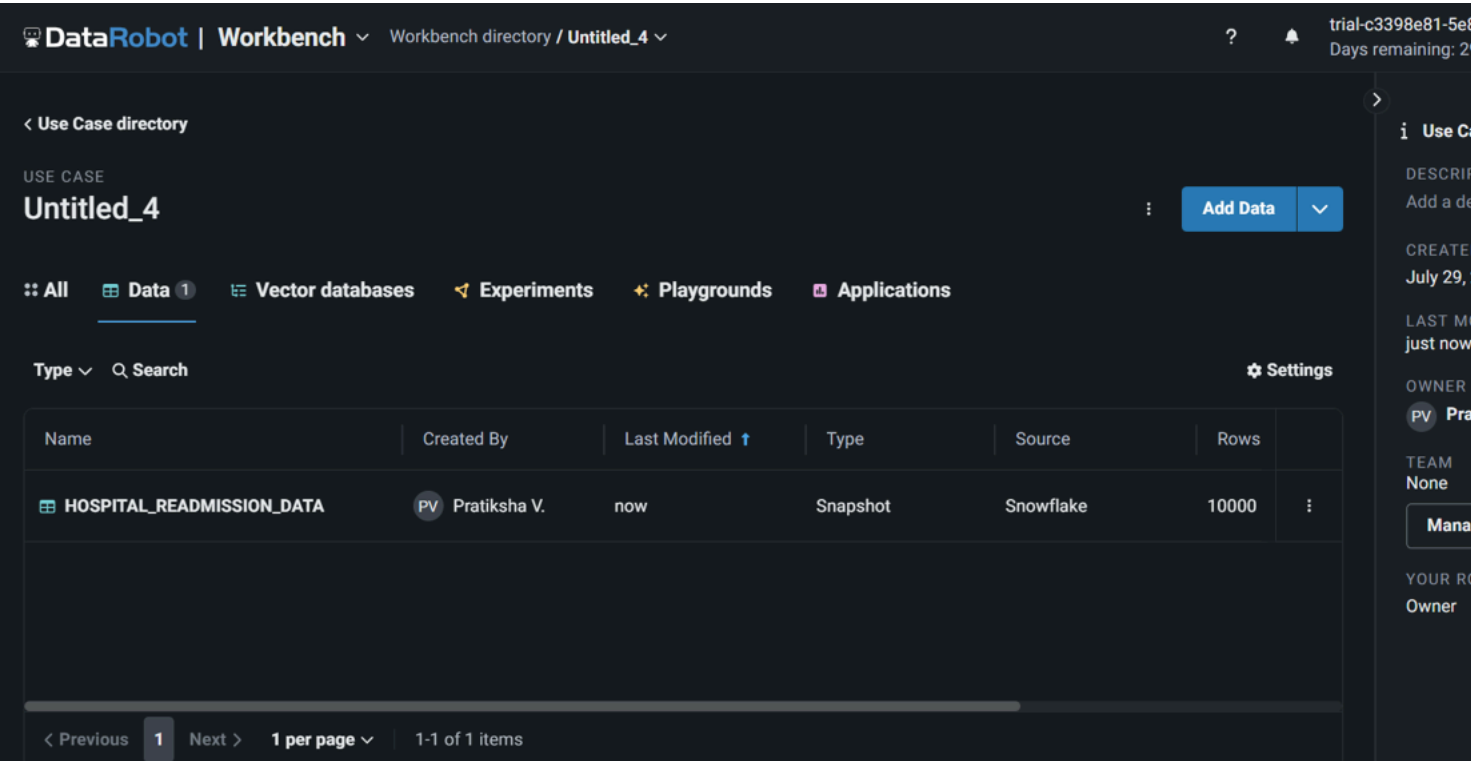
Step 10: **Upload** your data set or **Connect** to the data source; however, for this lab, you can select an in-built sample data set *HOSPITAL_READMISSION_DATA*.



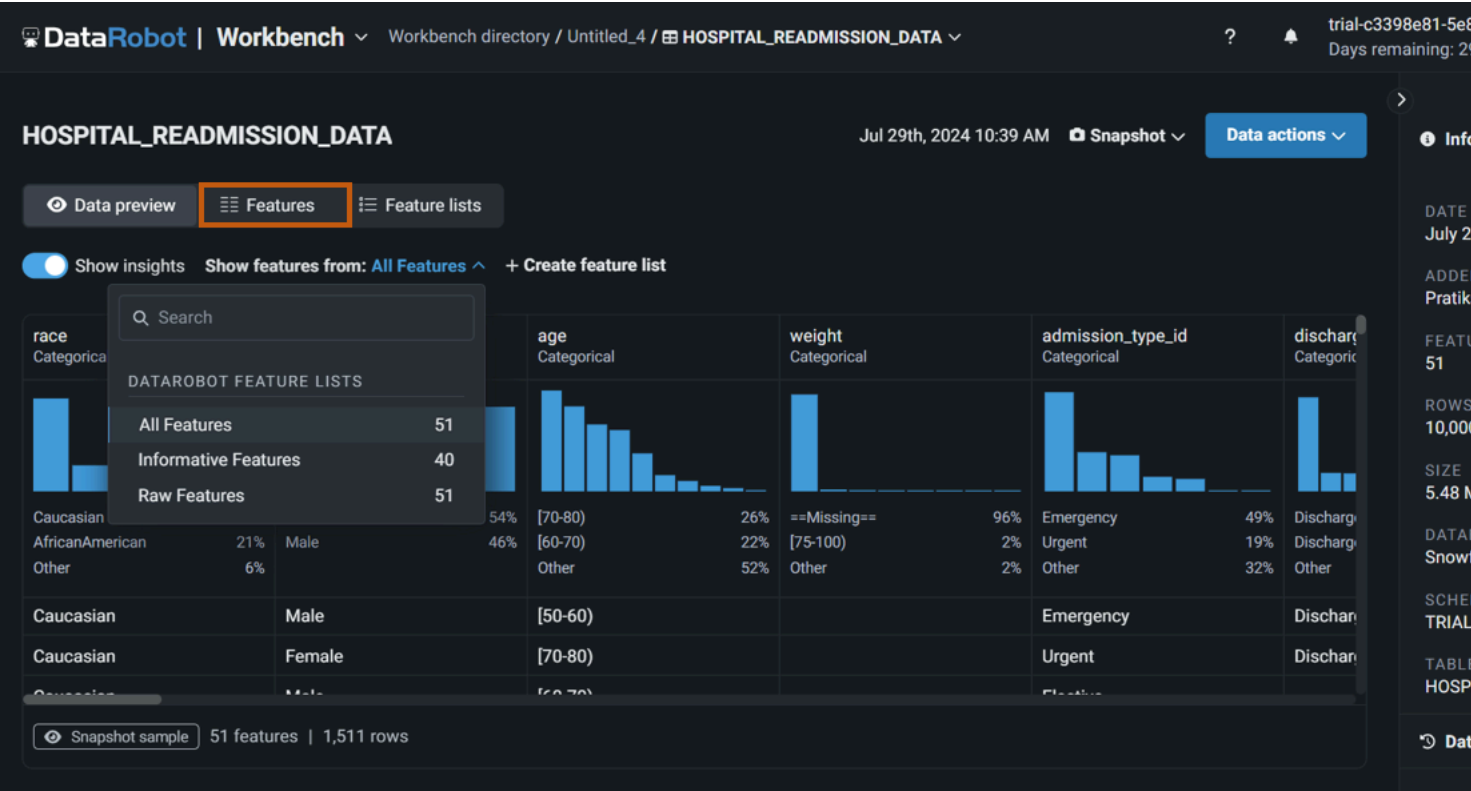
Step 11: Once you select the data set, you can see a preview of it. You can also view the data set's features, as shown below. Click **Add to Use Case**.



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**. 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.

DataRobot | Workbench

Workbench directory / Untitled_4 / **HOSPITAL_READMISSION_DATA**

?

trial-c3398e81-5e81-4b31-b00c-000000000000
 Days remaining: 29

HOSPITAL_READMISSION_DATA

Jul 29th, 2024 10:39 AM
 Snapshot

Data actions

- Start wrangling
- Start modeling**
- Start feature discovery
- Download dataset
- Remove dataset

Data preview
 Features
 Feature lists

☒ Show insights
 Show features from: All Features
 + Create feature list

race	gender	age	weight	admission	discharge
Categorical	Categorical	Categorical	Categorical	Categorical	Categorical
Caucasian 74%	Female 54%	[70-80] 26%	==Missing== 96%	Emergency 49%	Discharge 49%
AfricanAmerican 21%	Male 46%	[60-70] 22%	[75-100] 2%	Urgent 19%	Discharge 19%
Other 6%		Other 52%	Other 2%	Other 32%	Other 32%
Caucasian	Male	[50-60]		Emergency	Discharge
Caucasian	Female	[70-80]		Urgent	Discharge
Caucasian	Male	[60-70]		Emergency	Discharge

Snapshot sample
 51 features | 1,511 rows

Step 15: Once done, you need to select the **Target feature**. Select **readmitted** as your target feature.

target

target feature

Select the feature to make predictions on.

payer_code

ploglitazone

race

readmitted

repaglinide

trogilitazone

tolbutamide

tolazamide

time_in_hospital

Dataset

Target

Additional settings

	Uniq...	Missi...	Mean	Std Dev		
readmitted	7	9592	-	-		
trogilitazone	35	Categorical	1	0	-	-
tolbutamide	30	Categorical	2	0	-	-
tolazamide	36	Categorical	2	0	-	-
time_in_hospital	7	Numeric	14	0	4.43	3.021

Experiment summary

HOSPITAL_READ
07-30 11:23:57

Dataset

Name

Rows

Features

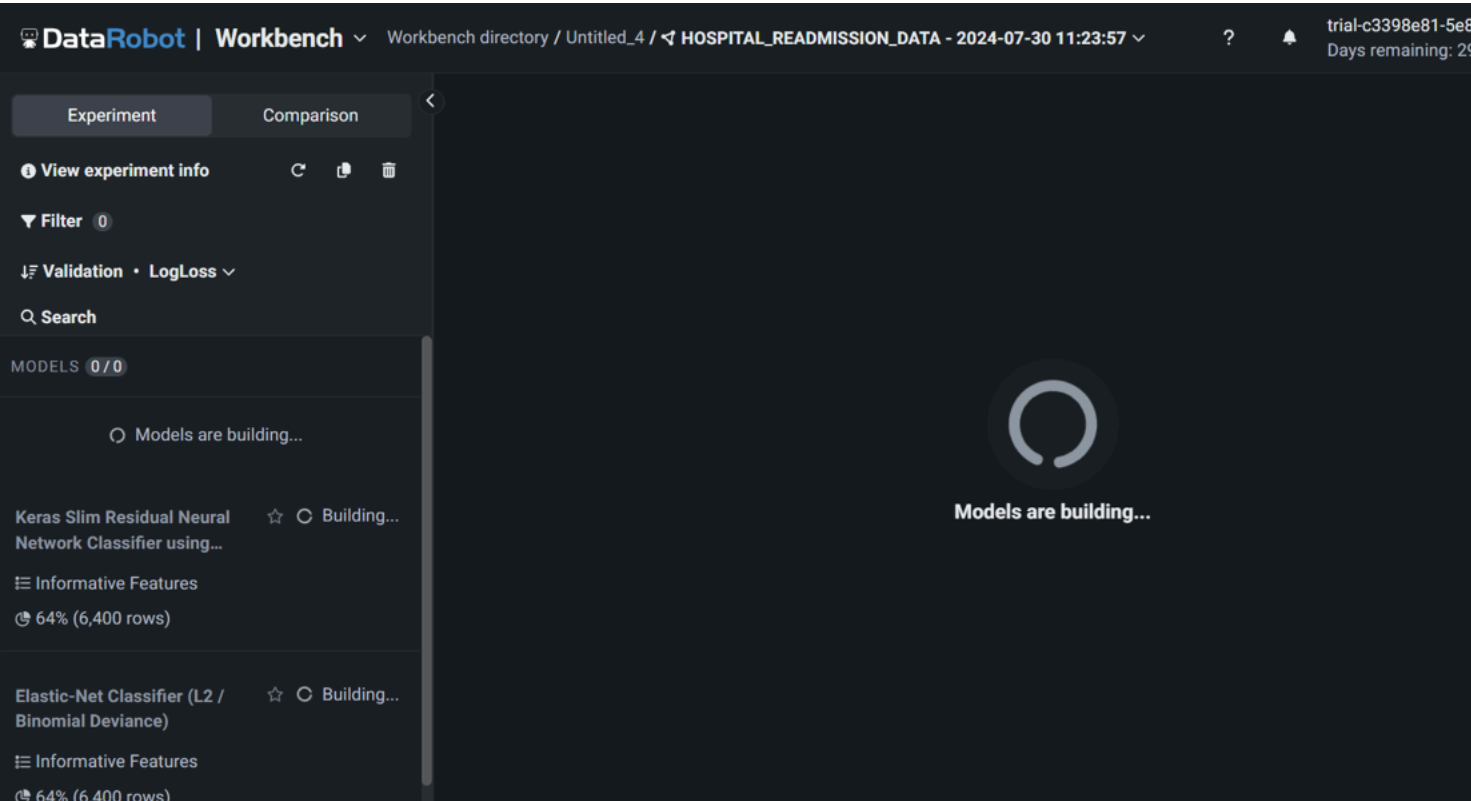
Target

No target selected

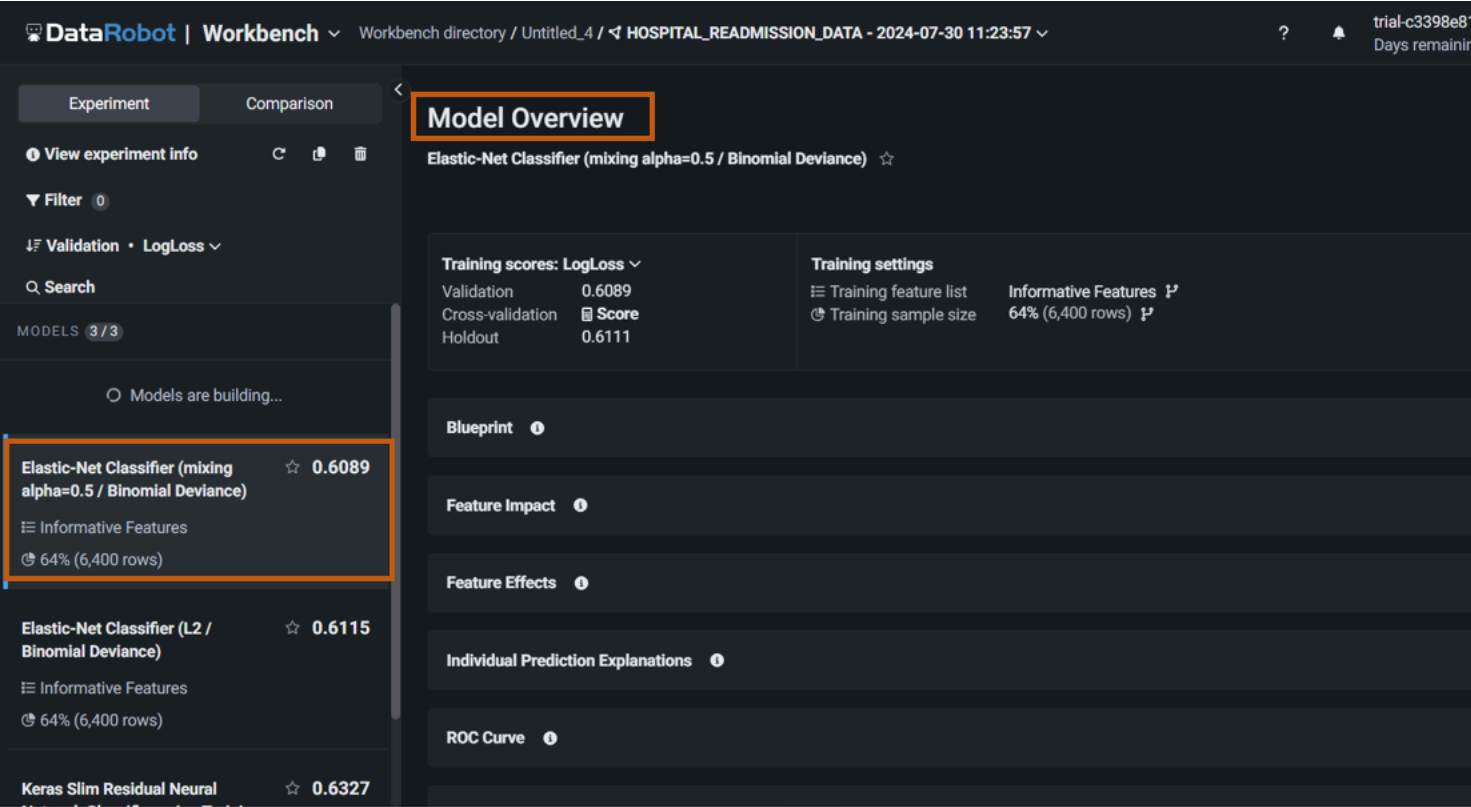
Step 16: The workbench screen will be displayed as shown below. Click **Next**.

Step 17: You can modify the model setting in **Additional Settings**; once done, click **Next** and then click **Start modelling**.

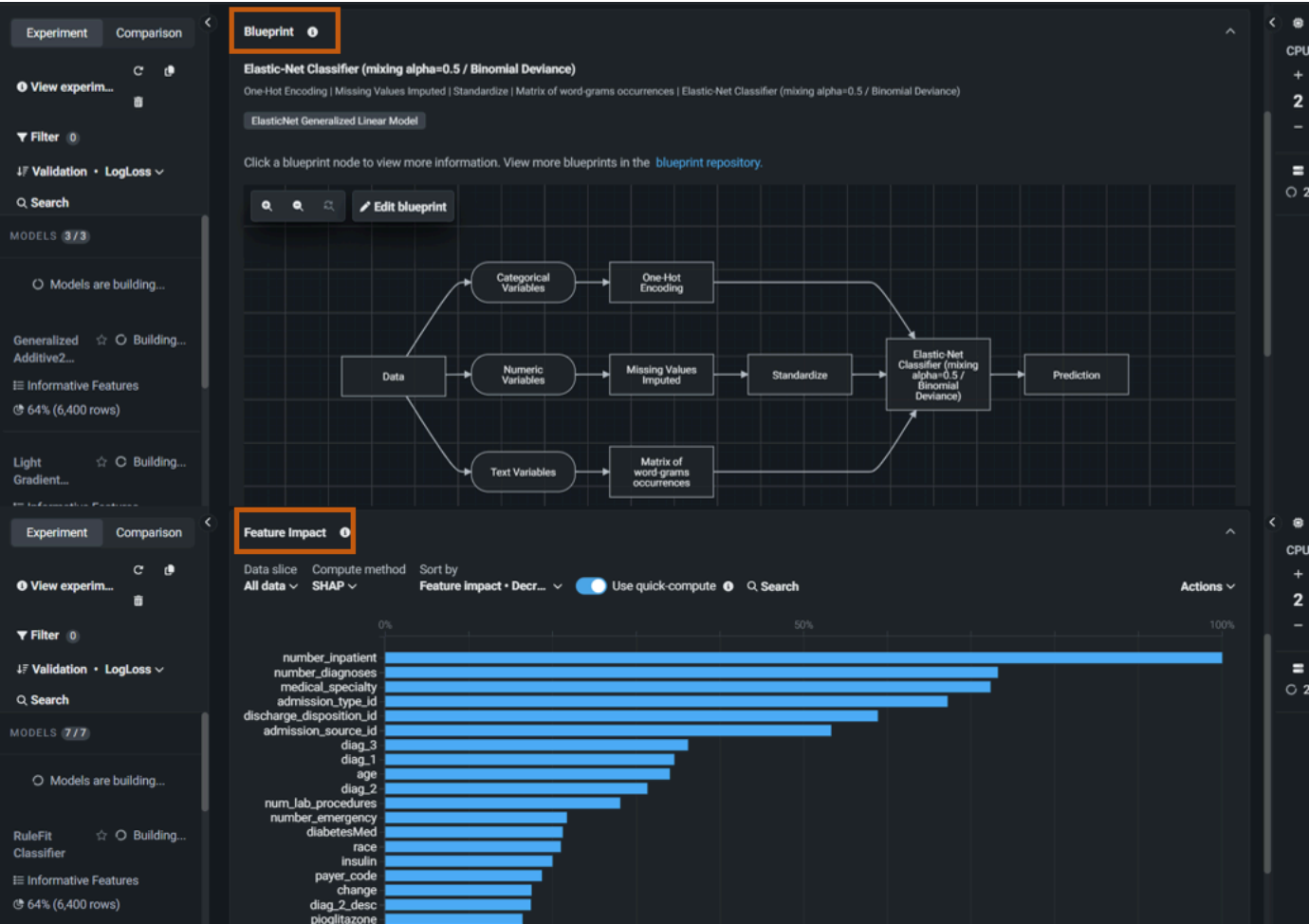
Step 18: Building models will take a while.



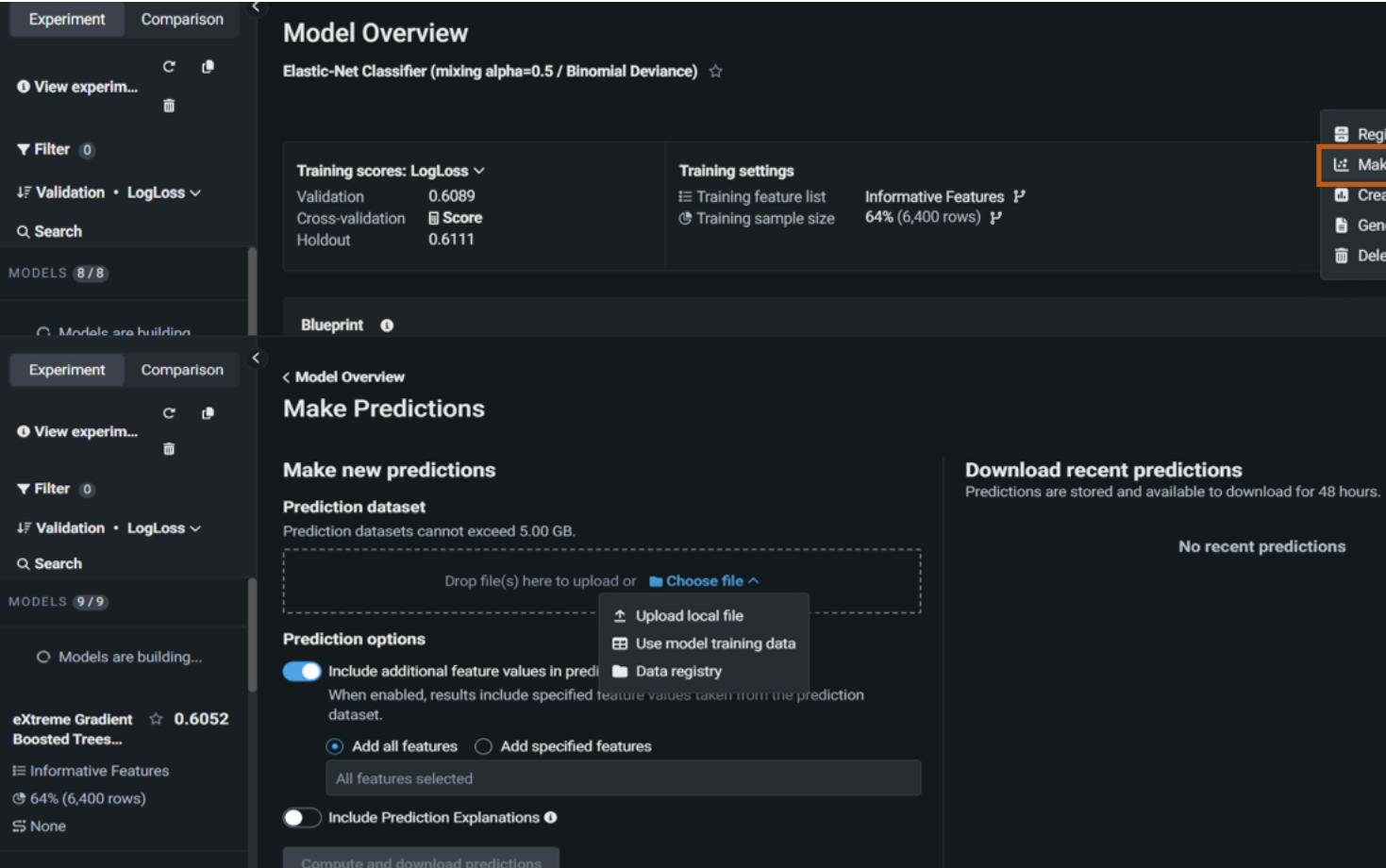
Step 19: once the modelling is complete, you can pick a model of your choice, and the DataRobot will show the **Model Overview**.



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** and **download compliance report** for your use case.

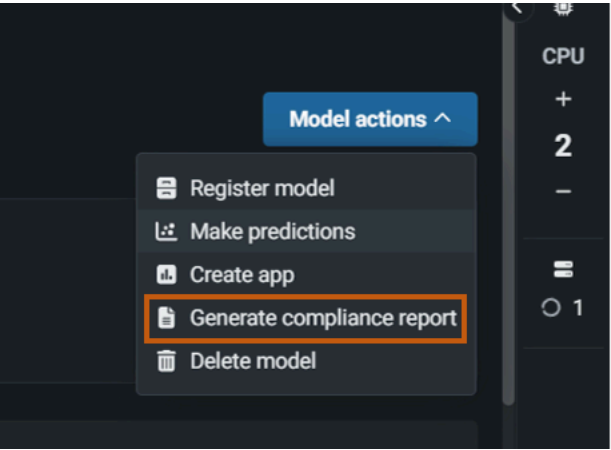


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Conclusion

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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