**ML project 1 : Iris species classification -**

Youtube link : <https://www.youtube.com/watch?v=9cKuP-P0EG0>

**ML Project 2 : CardioVascular disease Prediction -**

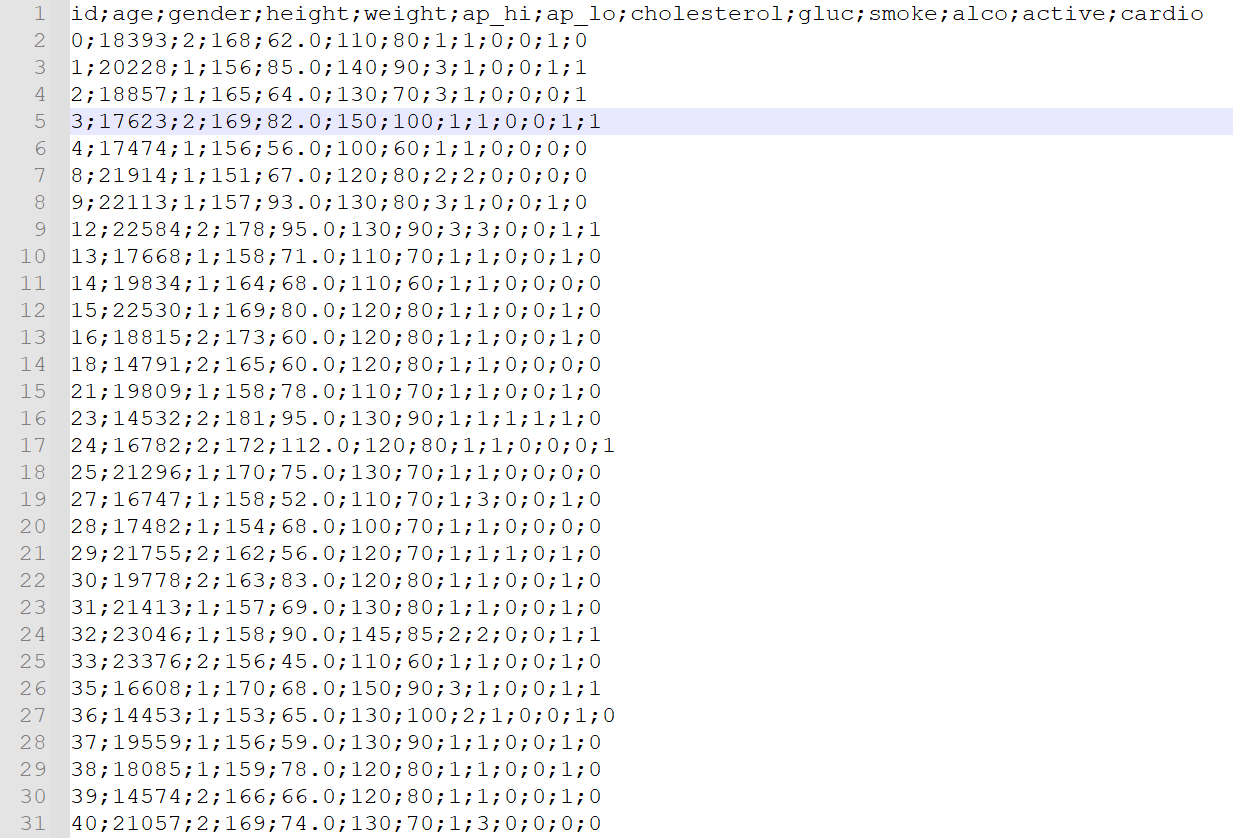
Steps and Screenshots Below **:**

**Training Dataset:**

**Step 1 :**

The dataset consists of patient information such as :

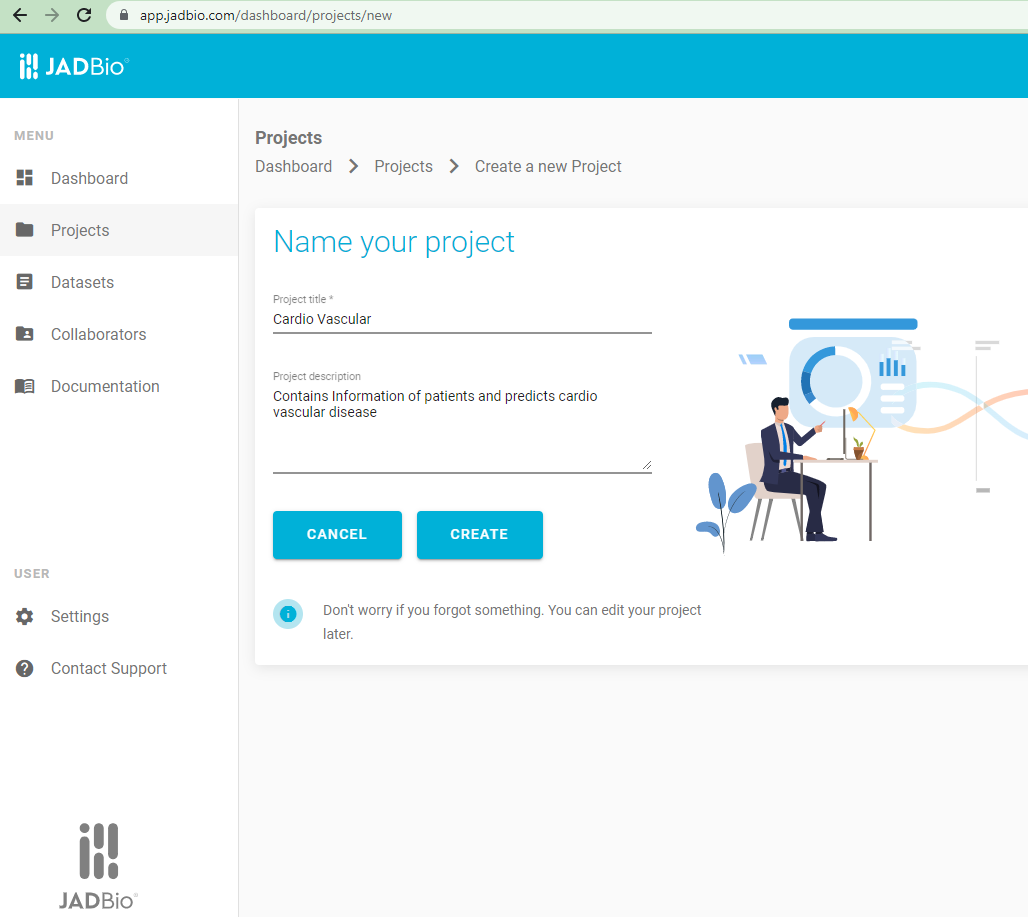
* Age : integer
* Height : integer
* Weight : float
* Gender : Code 1 or 2
* Systolic blood pressure : integer
* Diastolic blood pressure : integer
* Cholesterol : 1,2 of 3(normal, above normal and well above normal)
* Glucose : 1,2 of 3(normal, above normal and well above normal)
* Smoking : binary
* Alcohol intake : binary
* Physical activity : binary
* Cardiovascular disease : binary (presence)



**Jadbio :**

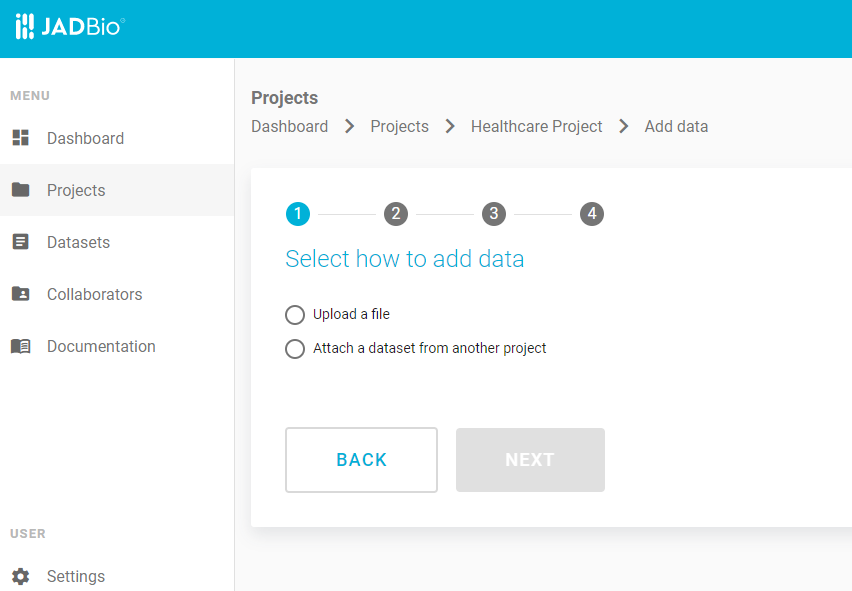
**Step 2 :**

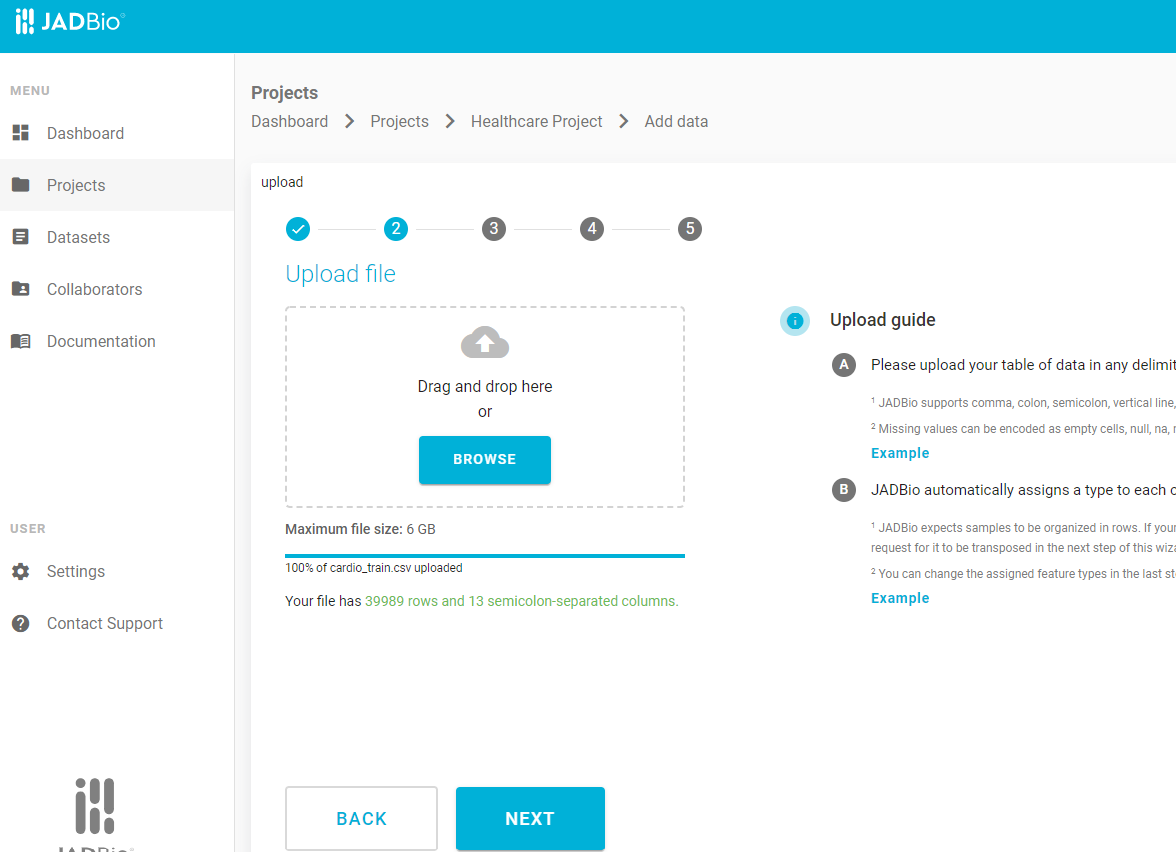
Create new project

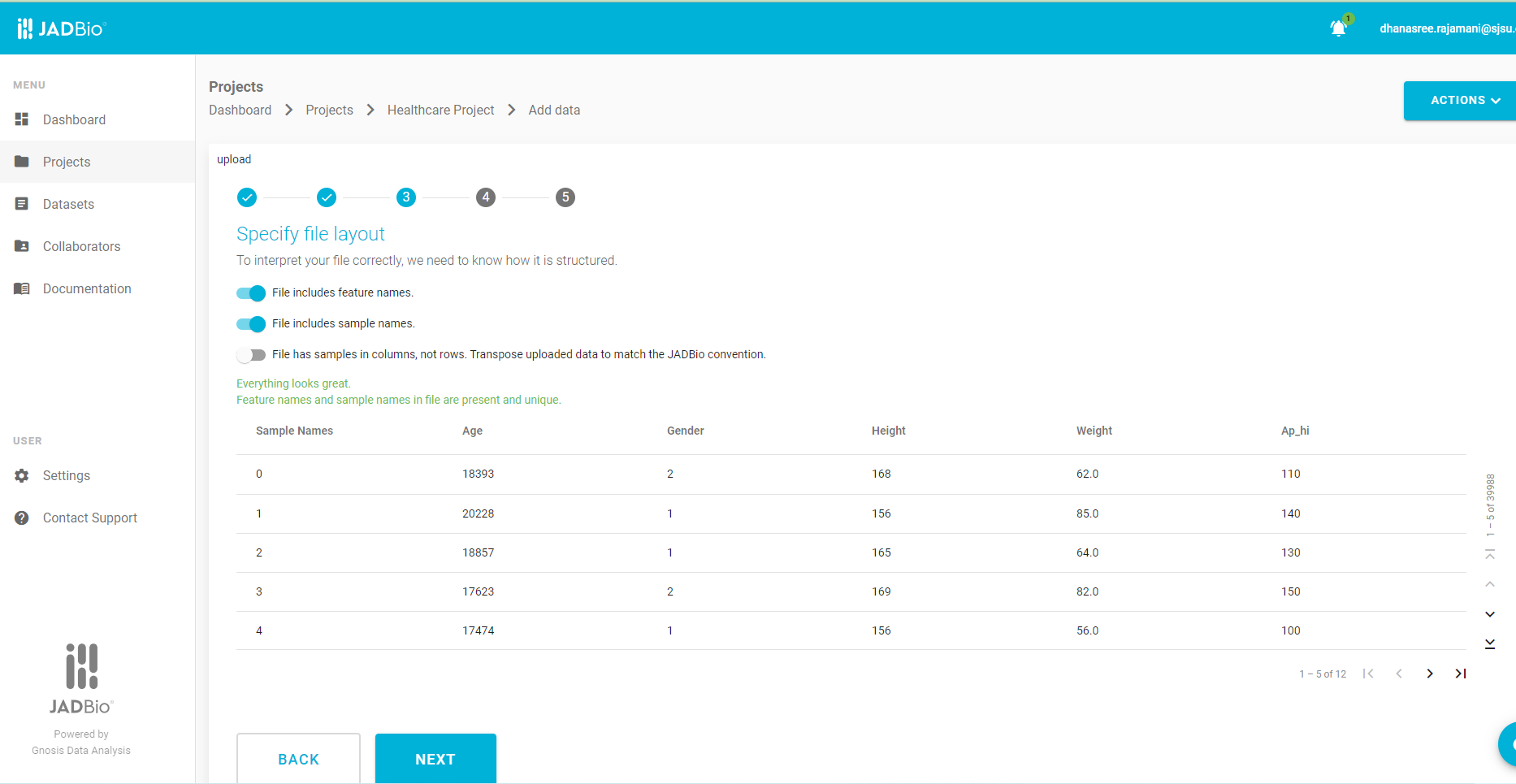


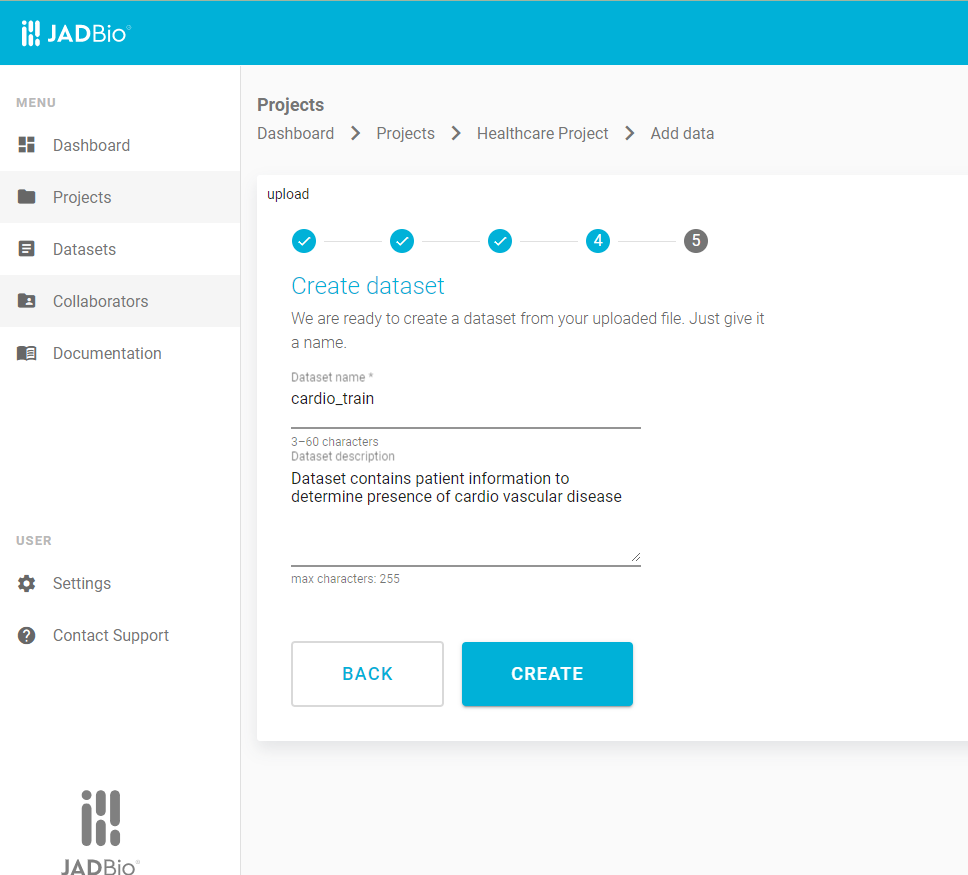
**Step 3:**

* Add training data set
* Specify file layout - if file contains the feature names, and if file has sample names





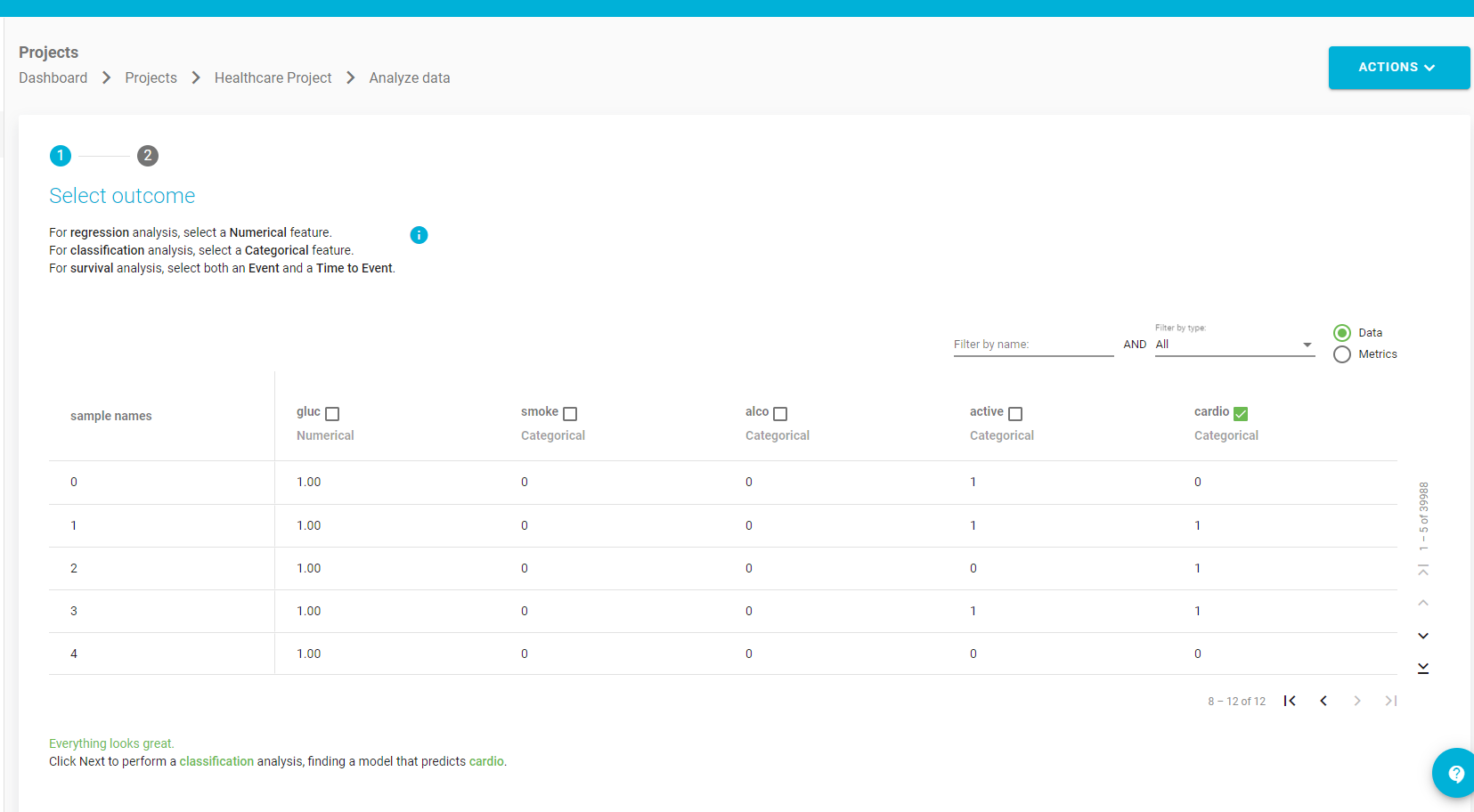




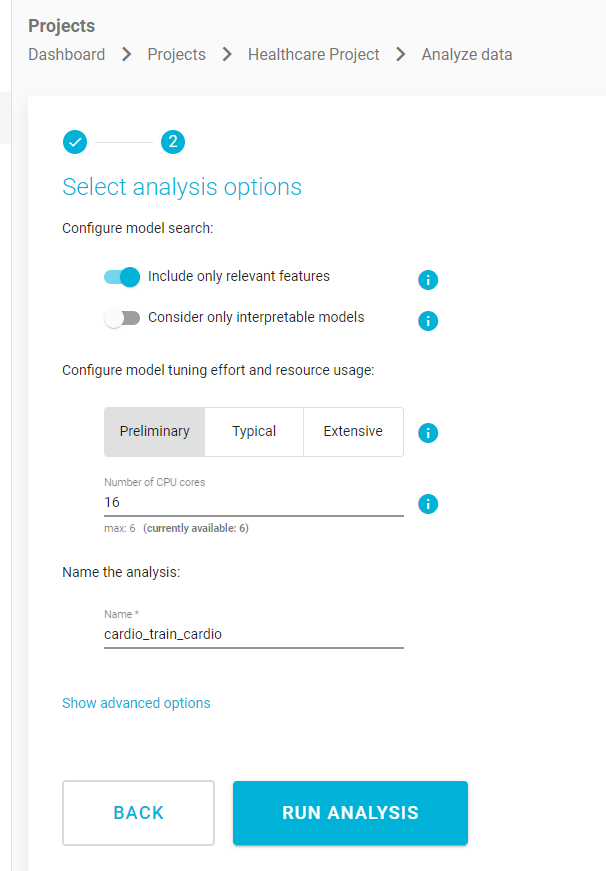


**Step 4:**

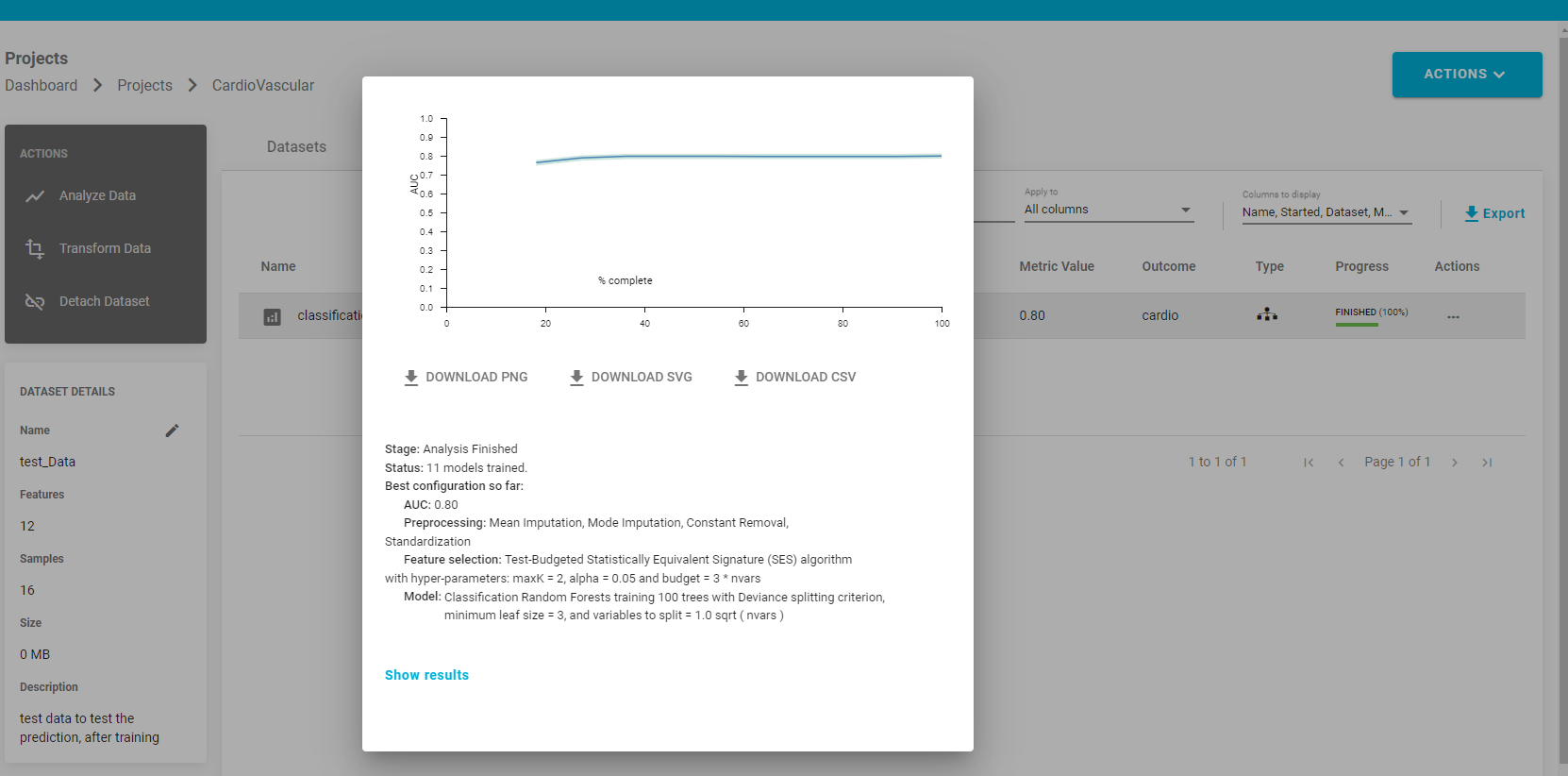
* Perform Analysis, choose the outcome which has to be predicted
* I have chosen Cardio to predict presence of absence of cardiovascular disease



Perform analysis - choose option to include only the relevant features

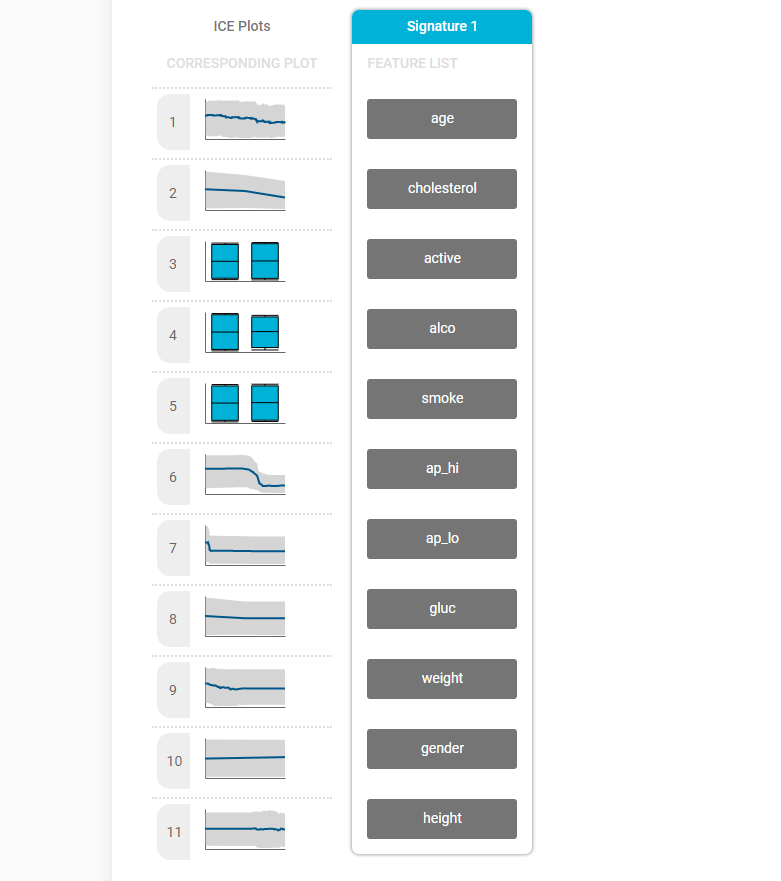


Analysis progress:

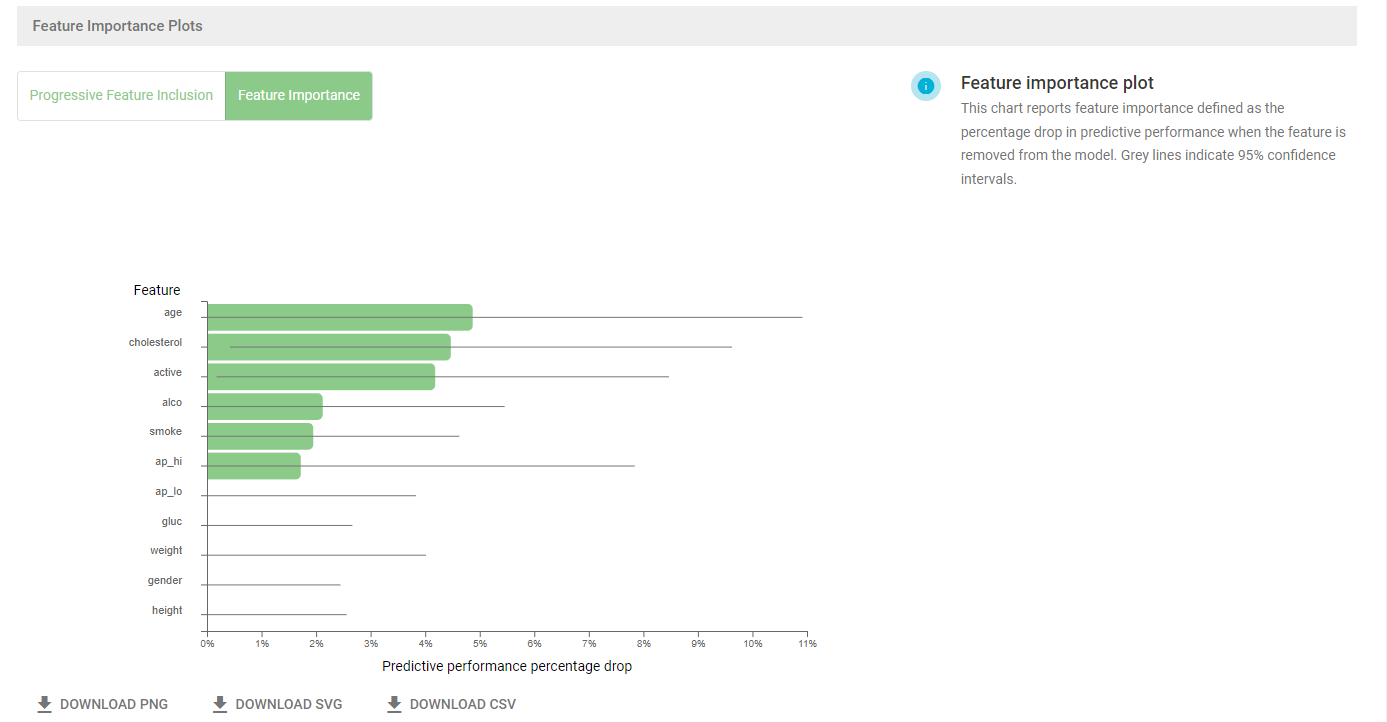


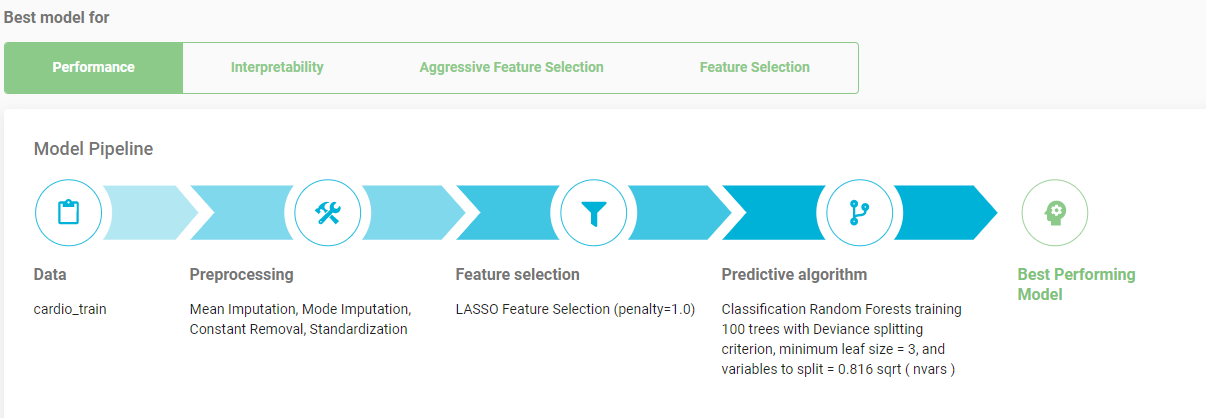
Feature selection:

* Denotes the features that have been selected to predict the outcome

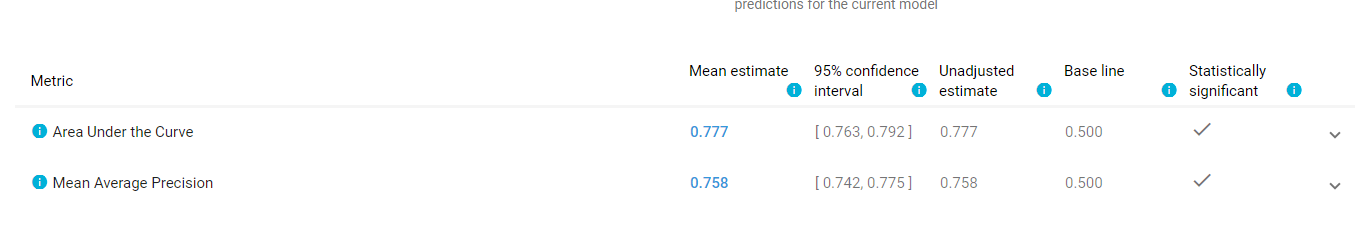


Feature Importance:





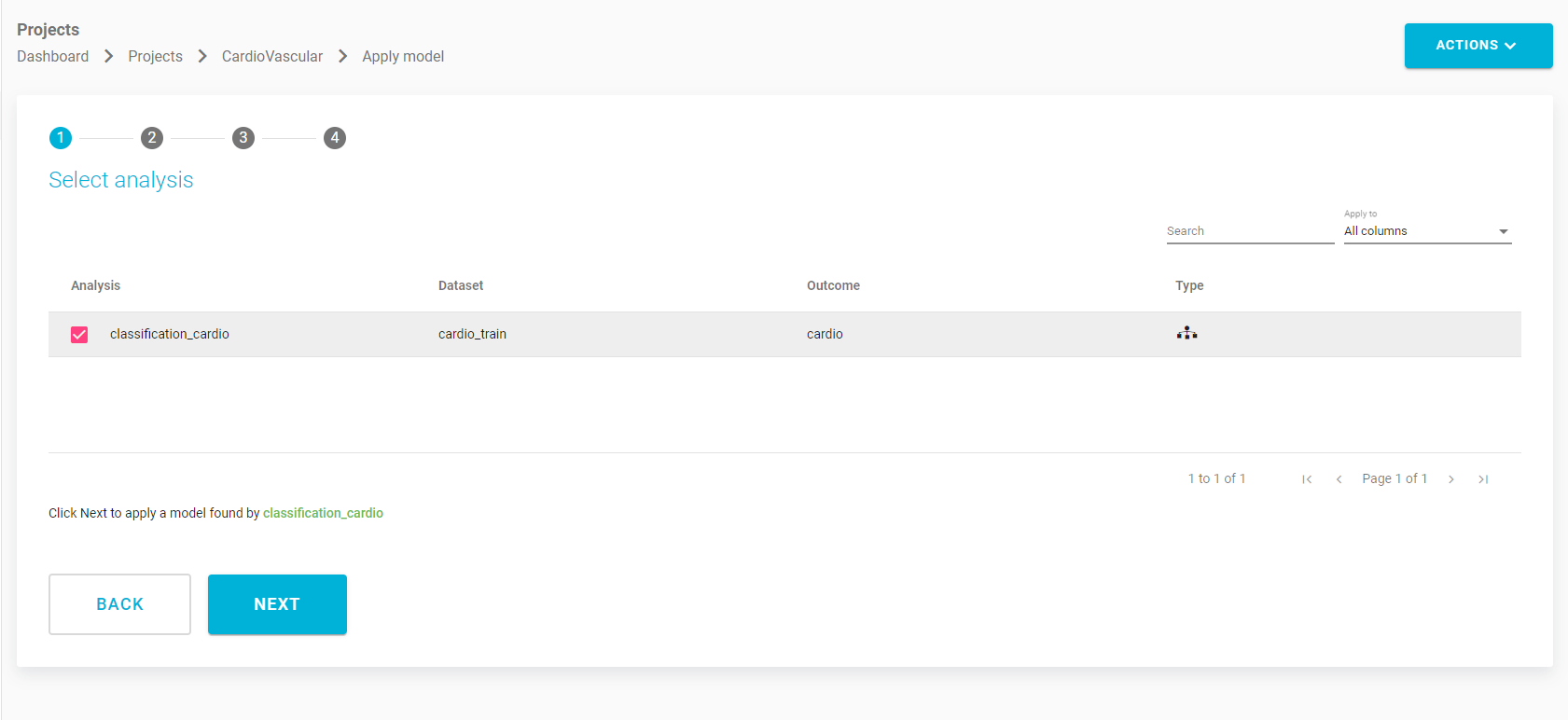
Accuracy of prediction:

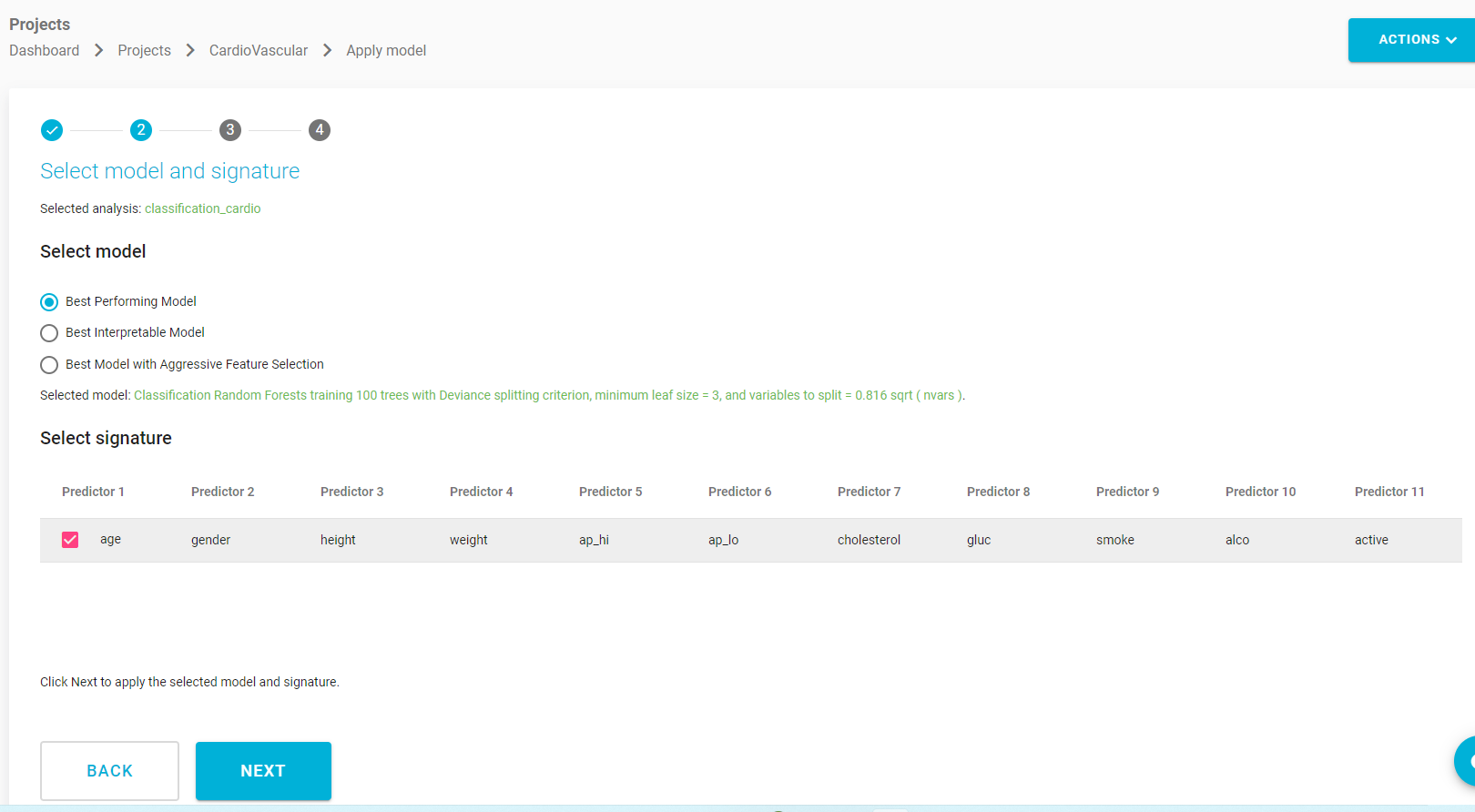


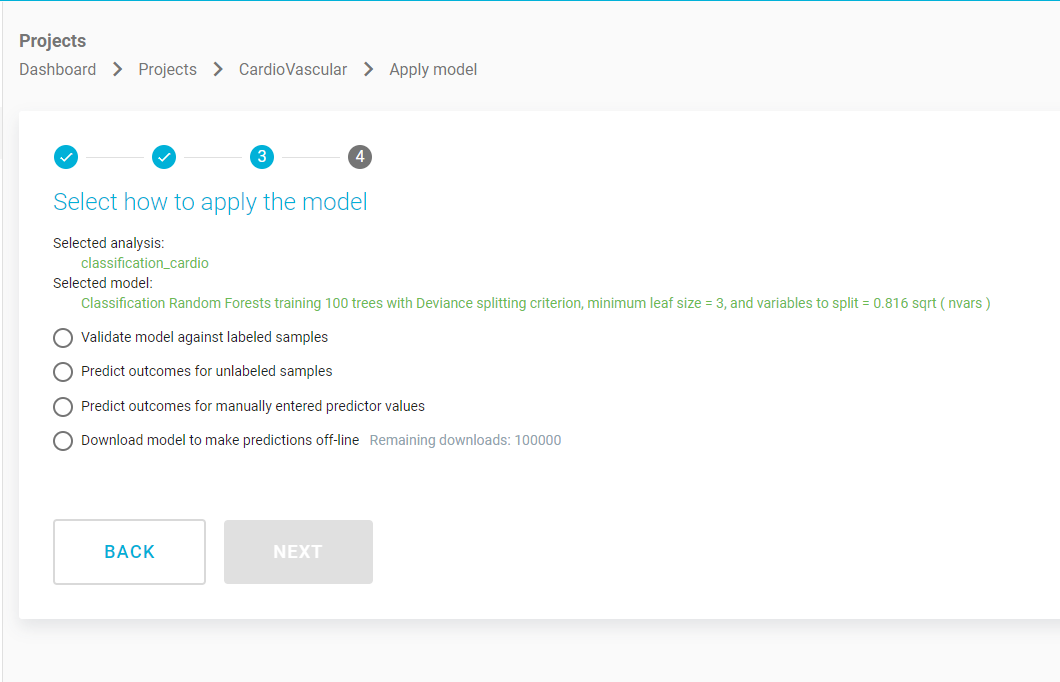
**Step 5:**

Apply model

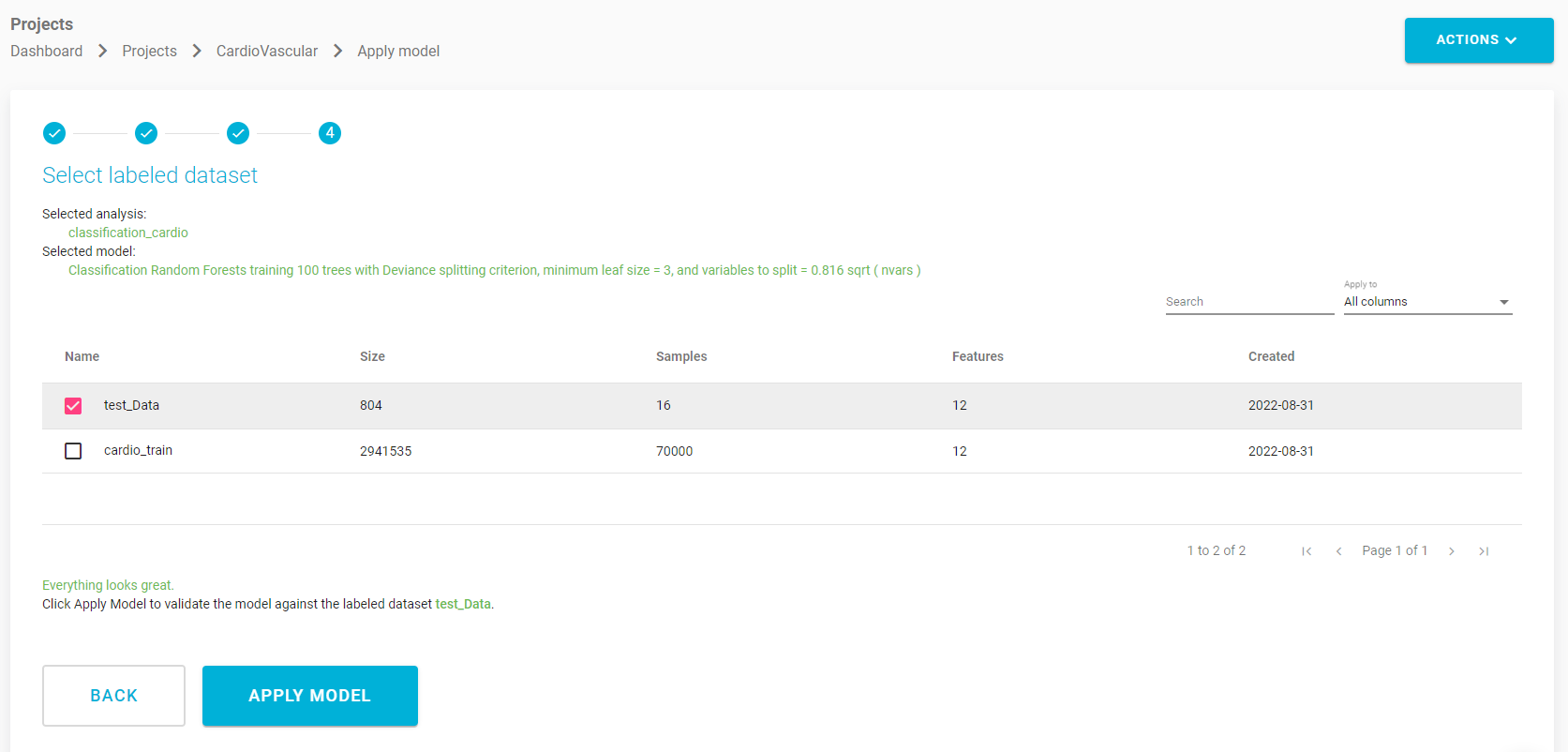
* Once the model is trained, we have given a test patient dataset for the model to predict outcome - presence or absence of cardiovascular disease



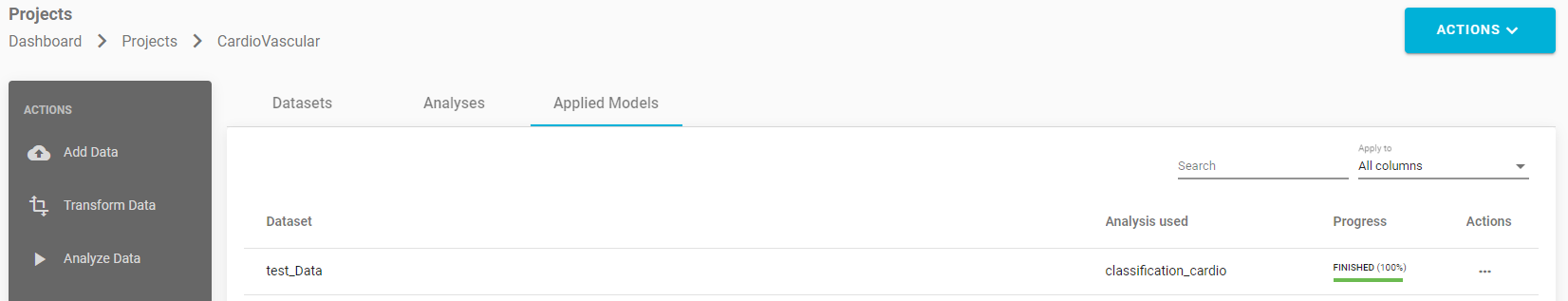




We use validate model against labeled samples

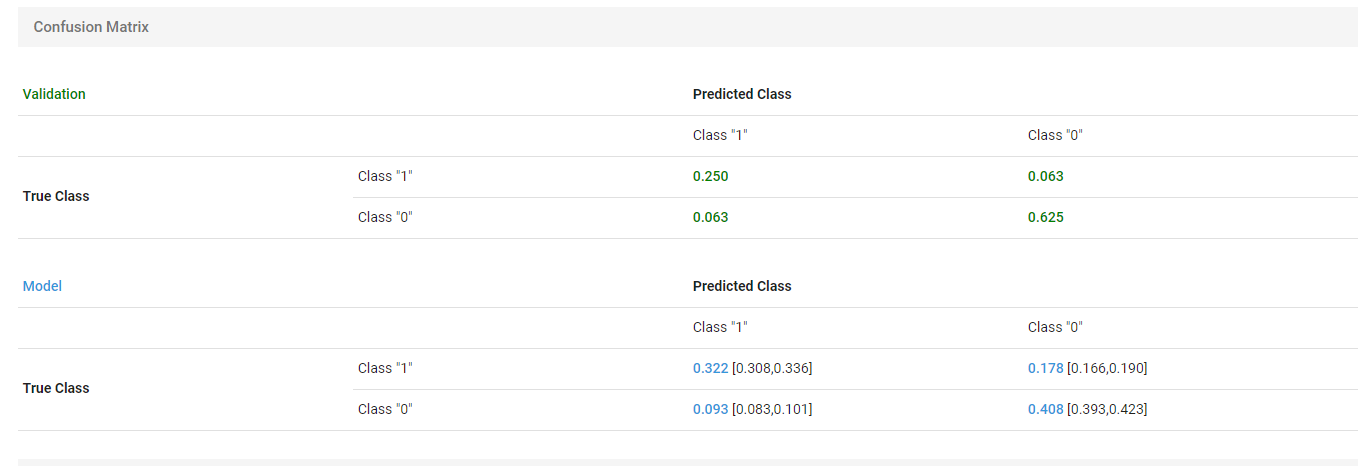


Applied Models :



**Step 6 :**

* Confusion Matrix : Indicates True Positive, False Positive, True Negative and False Negative
* Indicates accuracy of the classifier.



**Step 7:**

* View Predictions

