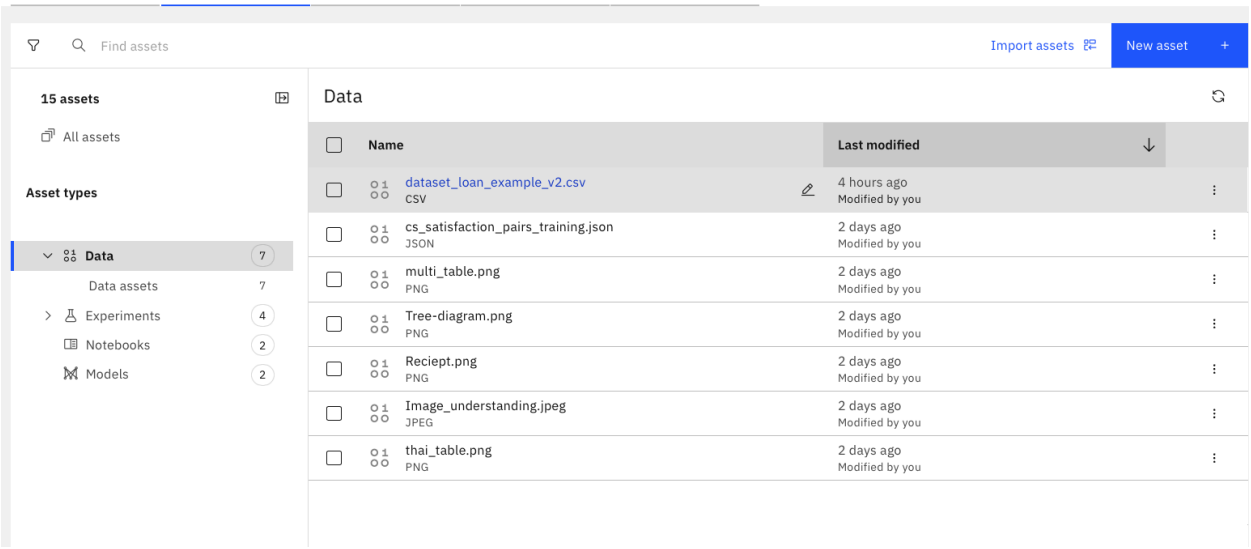
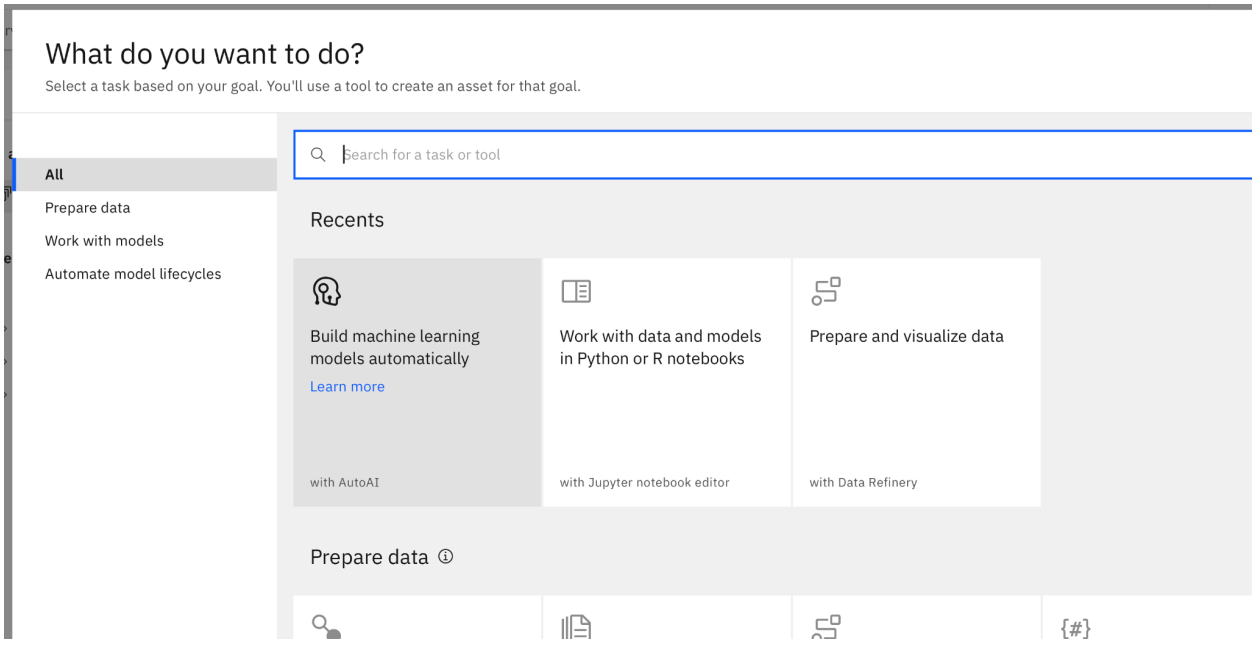
LAB 2 Auto AI deployment

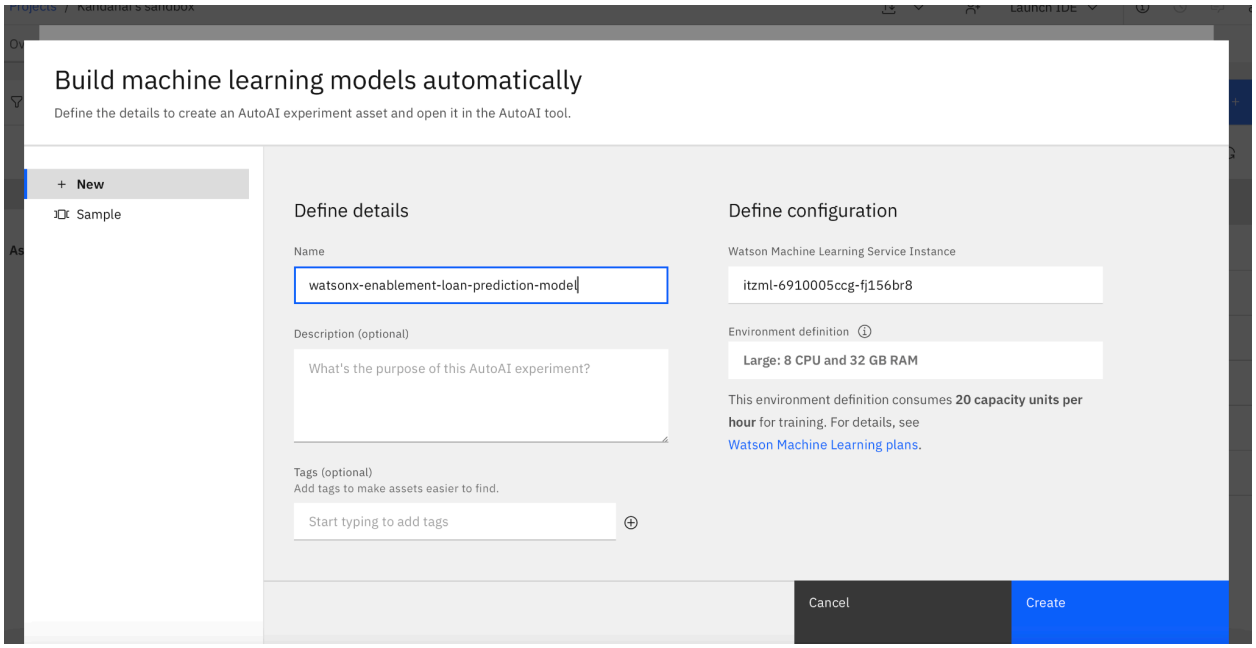
Please upload the example data dataset_loan_example_v2.csv
As a new asset (see lab1)

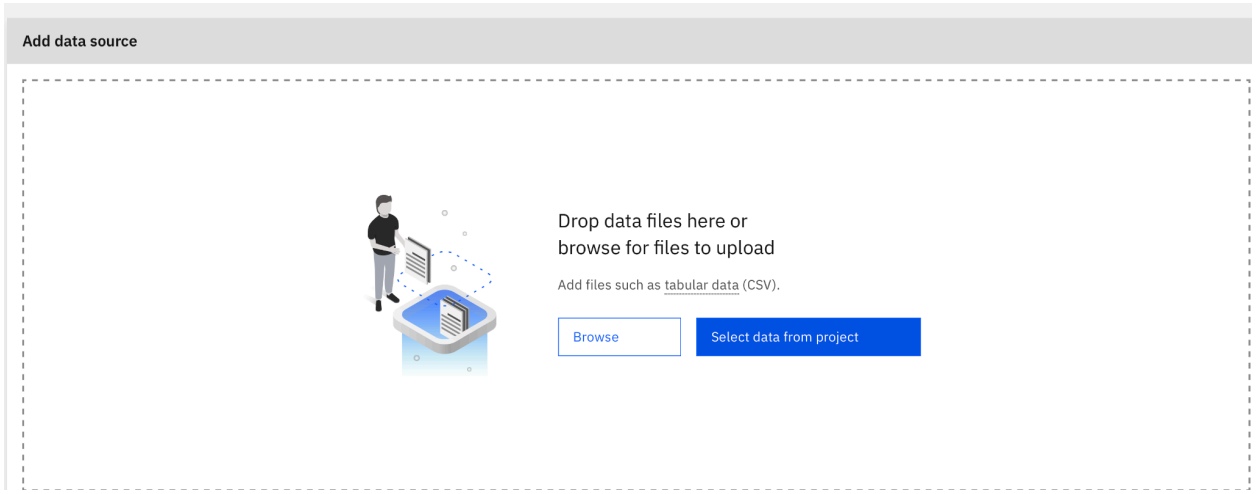


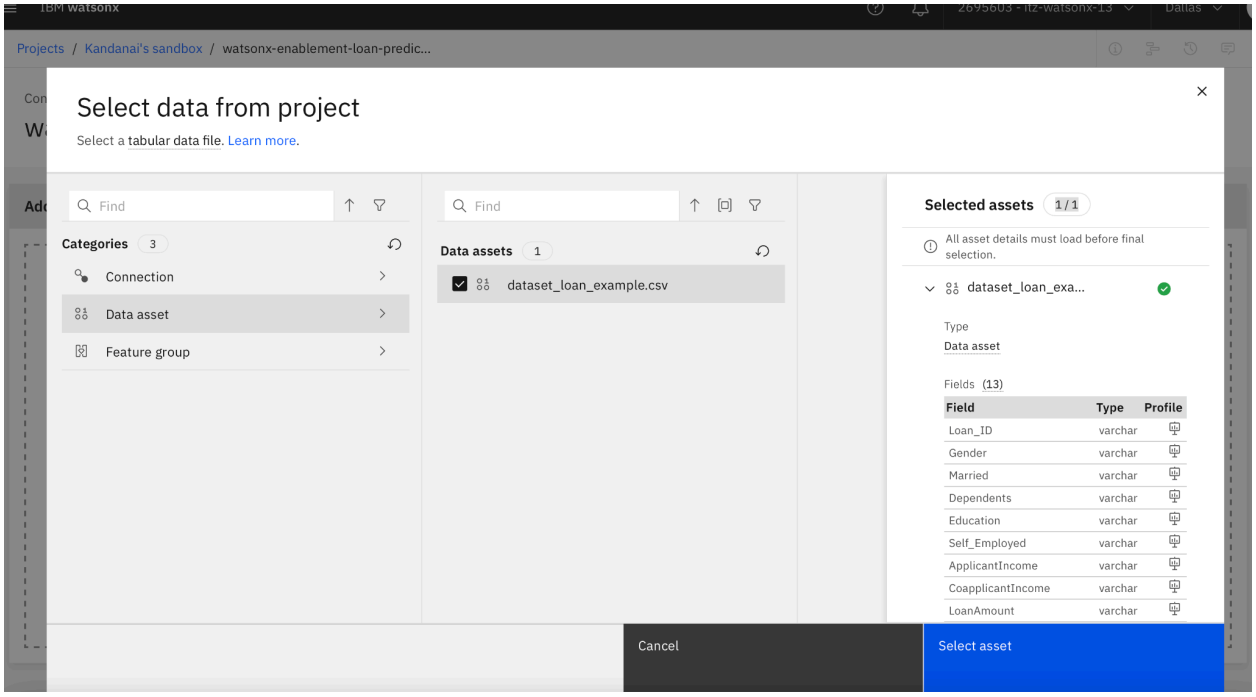
In this exercise, we will create a new asset called “AutoAI”.



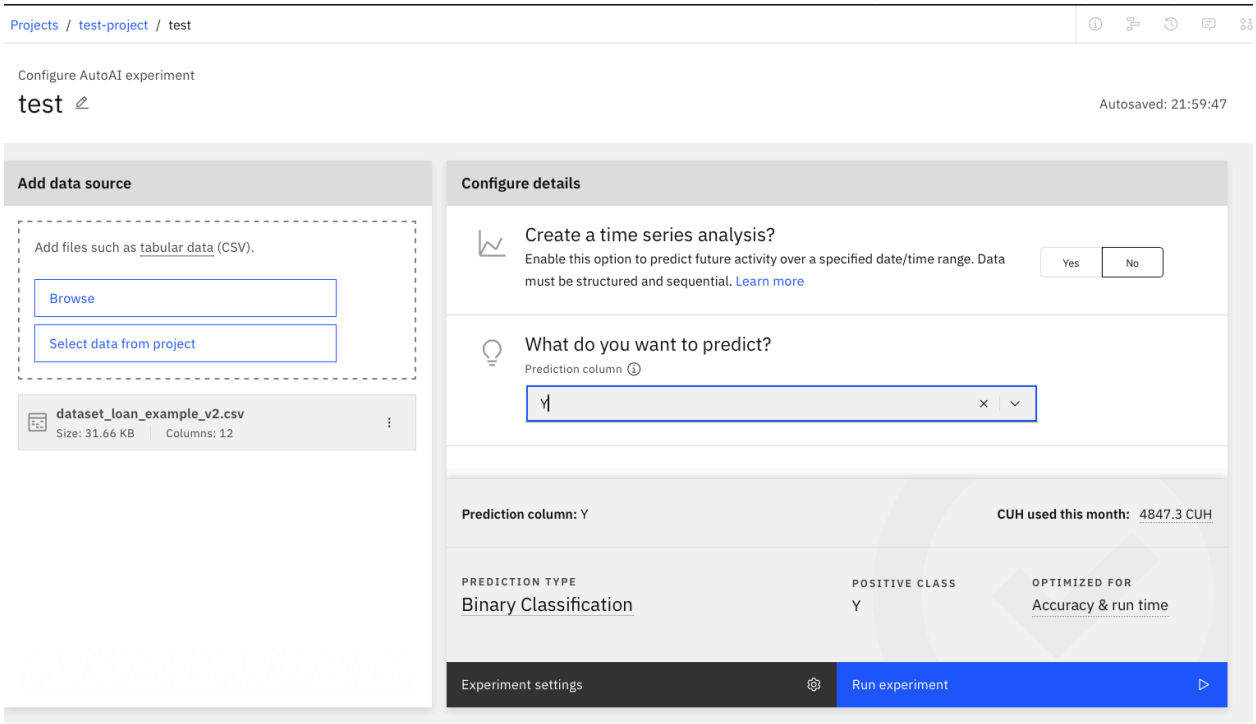
Please give a name to the asset then upload the data source into the asset by selecting data from project.


Build machine learning models automatically
Define the details to create an AutoAI experiment asset and open it in the AutoAI tool.
New
Sample
Define details
Name
watsonx-enablement-loan-prediction-model
Description (optional)
What's the purpose of this AutoAI experiment?
Tags (optional)
Add tags to make assets easier to find.
Start typing to add tags
Define configuration
Watson Machine Learning Service Instance
itzml-6910005ccg-fj156br8
Environment definition
Large: 8 CPU and 32 GB RAM
This environment definition consumes 20 capacity units per hour for training. For details, see Watson Machine Learning plans.
Cancel
Create

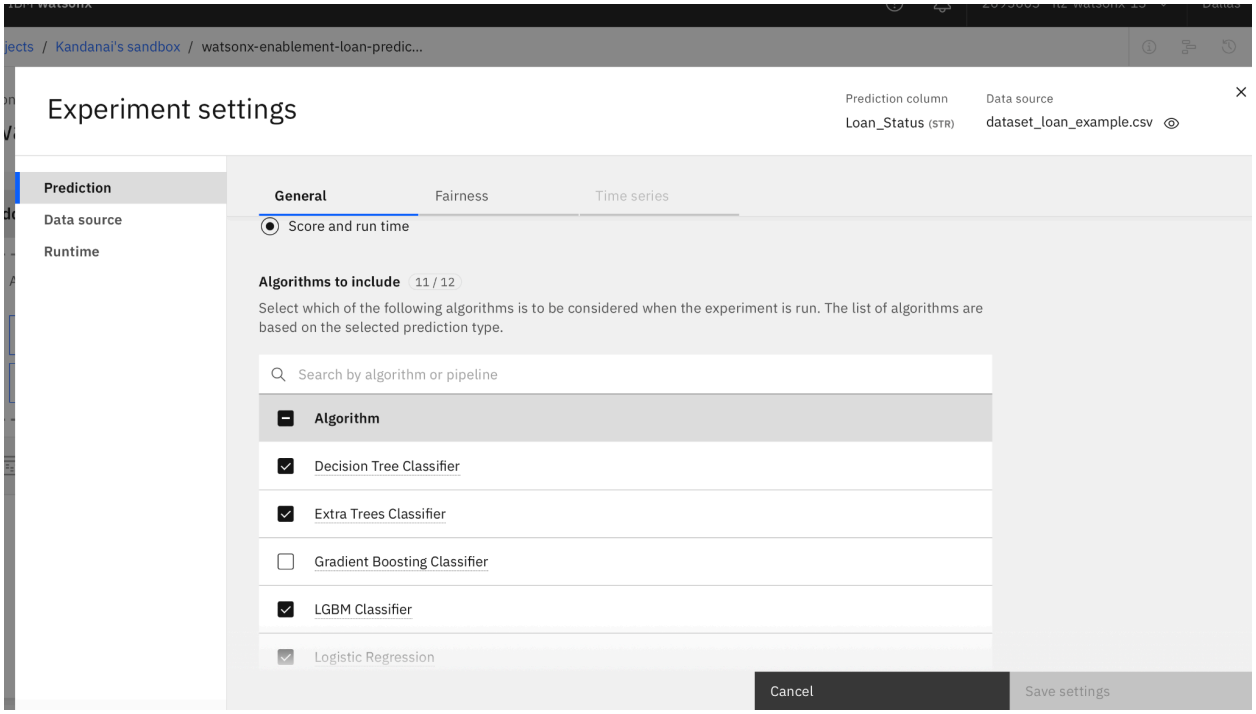

Add data source
Drop data files here or browse for files to upload
Add files such as tabular data (CSV).
Browse
Select data from project



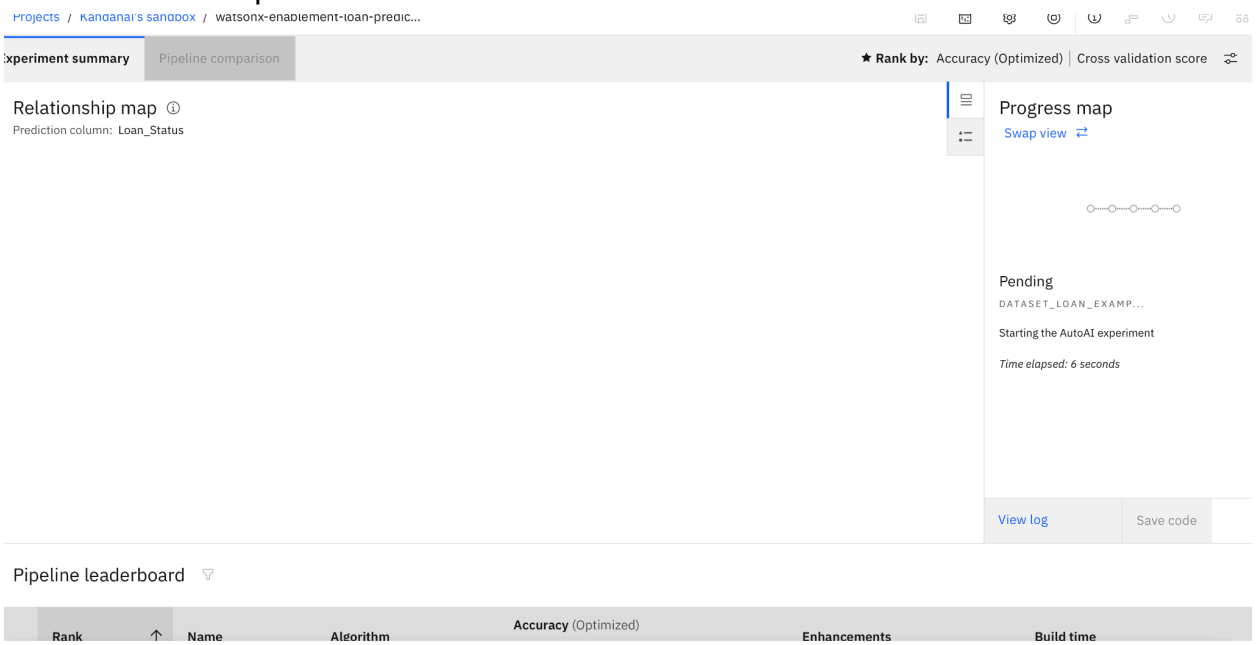
After, please fill in the form and select No for time series analysis and let the prediction column be Y. Here we will be doing a binary classification.



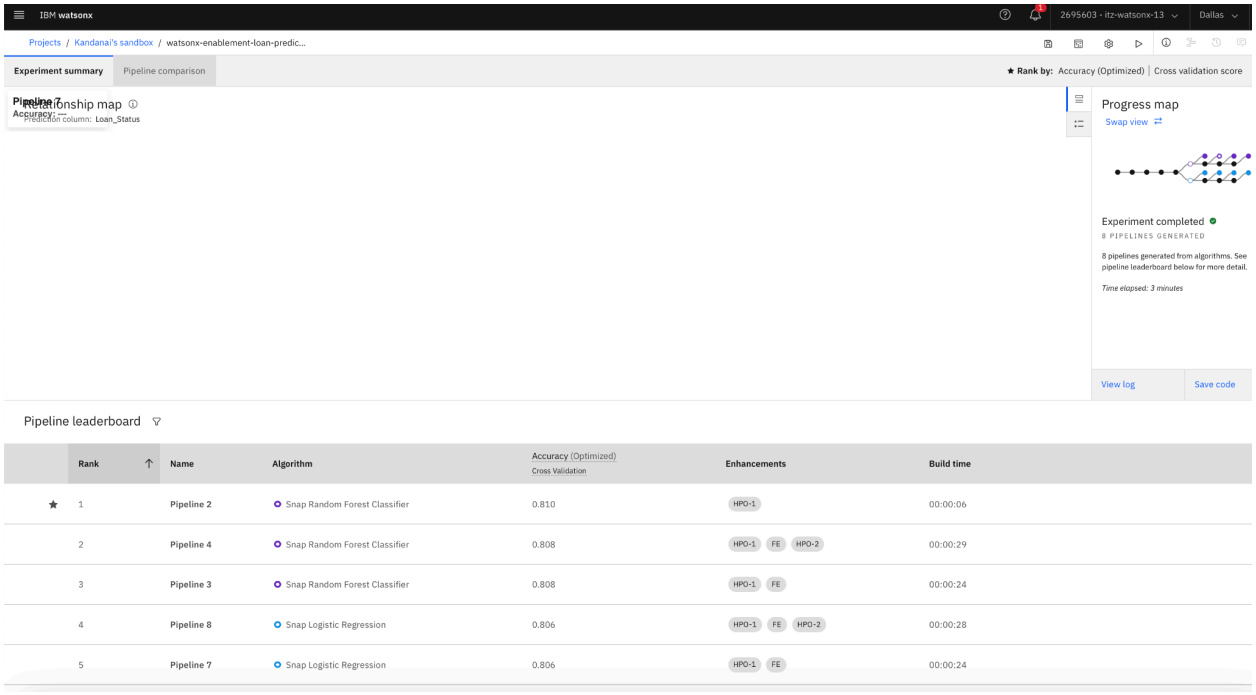
Take a moment and view the different algorithms supported and different usecases you can use AutoAI for.



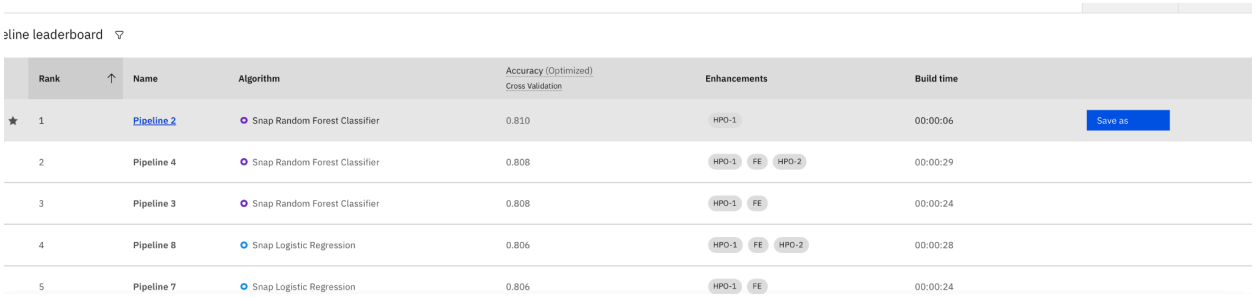
After creating an experiment, you will see the screen below. Please wait for a couple of minutes for the experiment to finish.

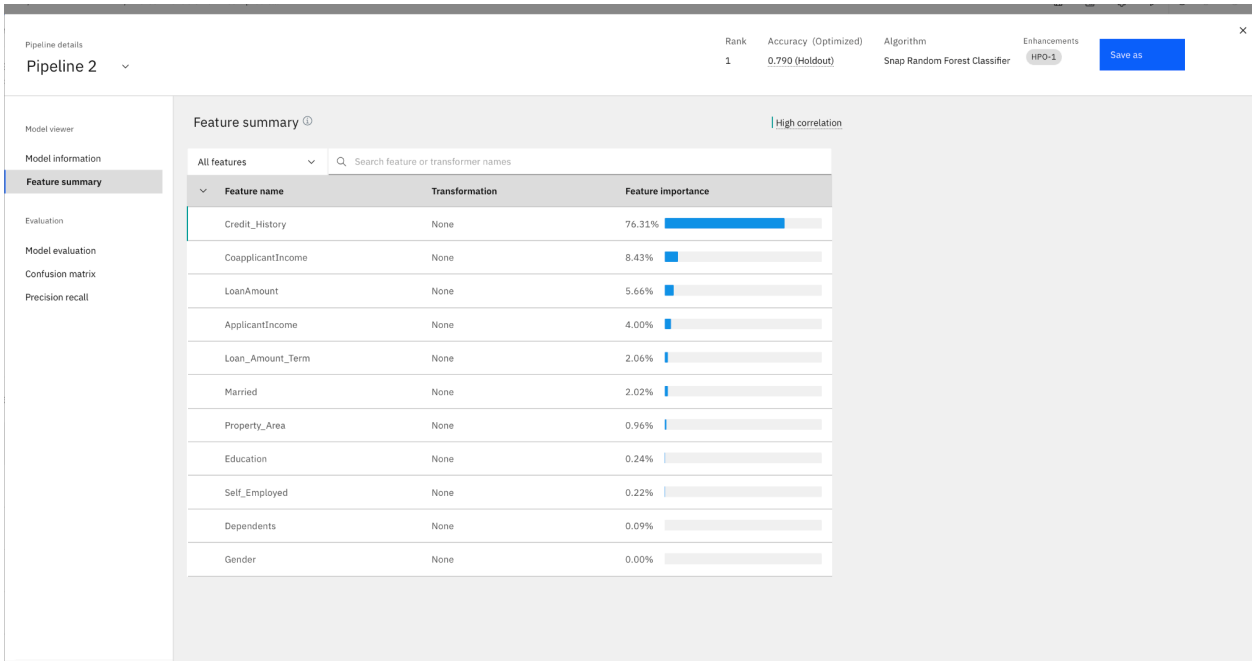


After completing the experiment, you will see a list of experiments (pipelines) ranking via accuracy (as we have selected before).

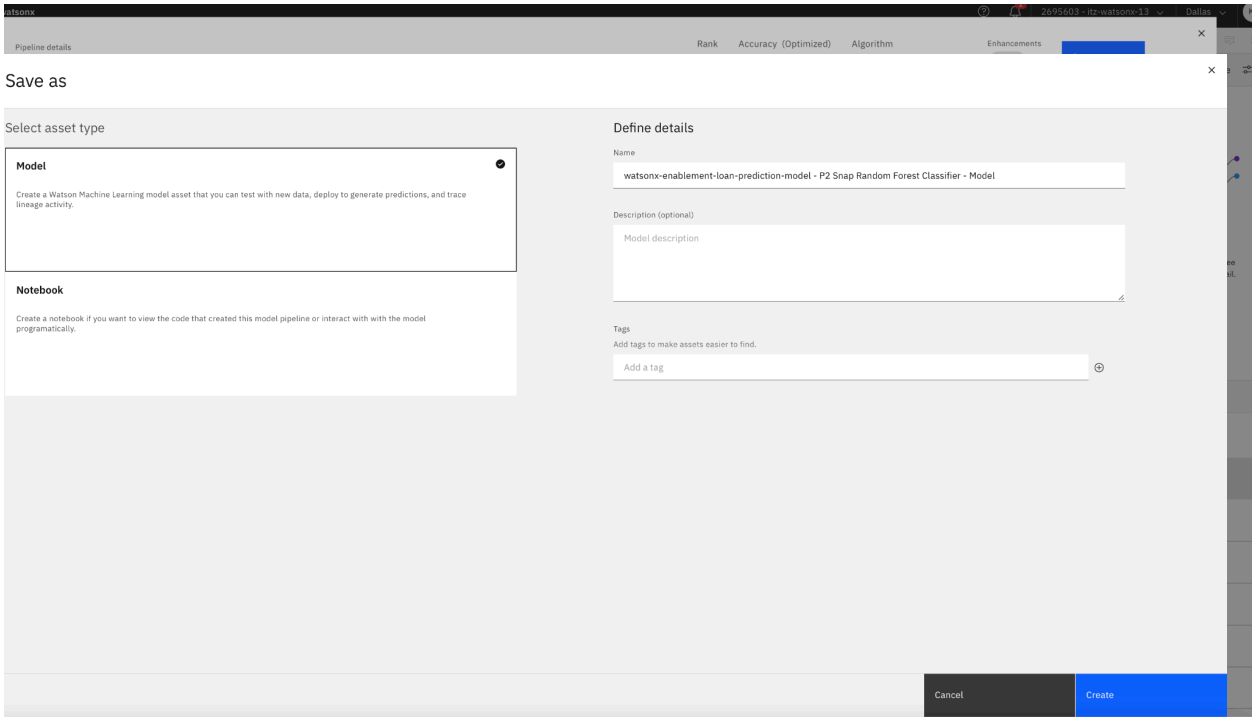


Please click on the first ranked experiment and view details such as feature summary, confusion matrix and Model evaluation. AutoAI will automatically perform experiments for you.

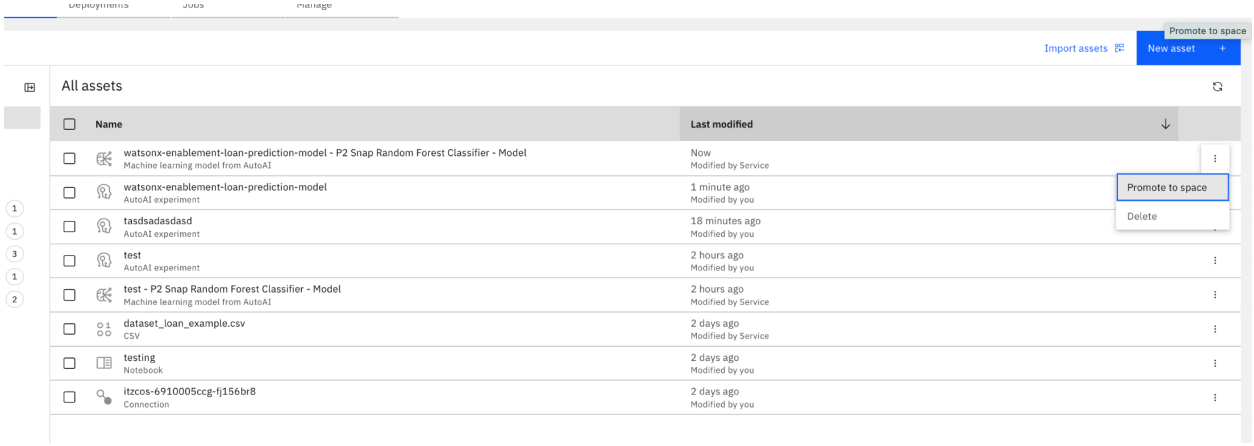


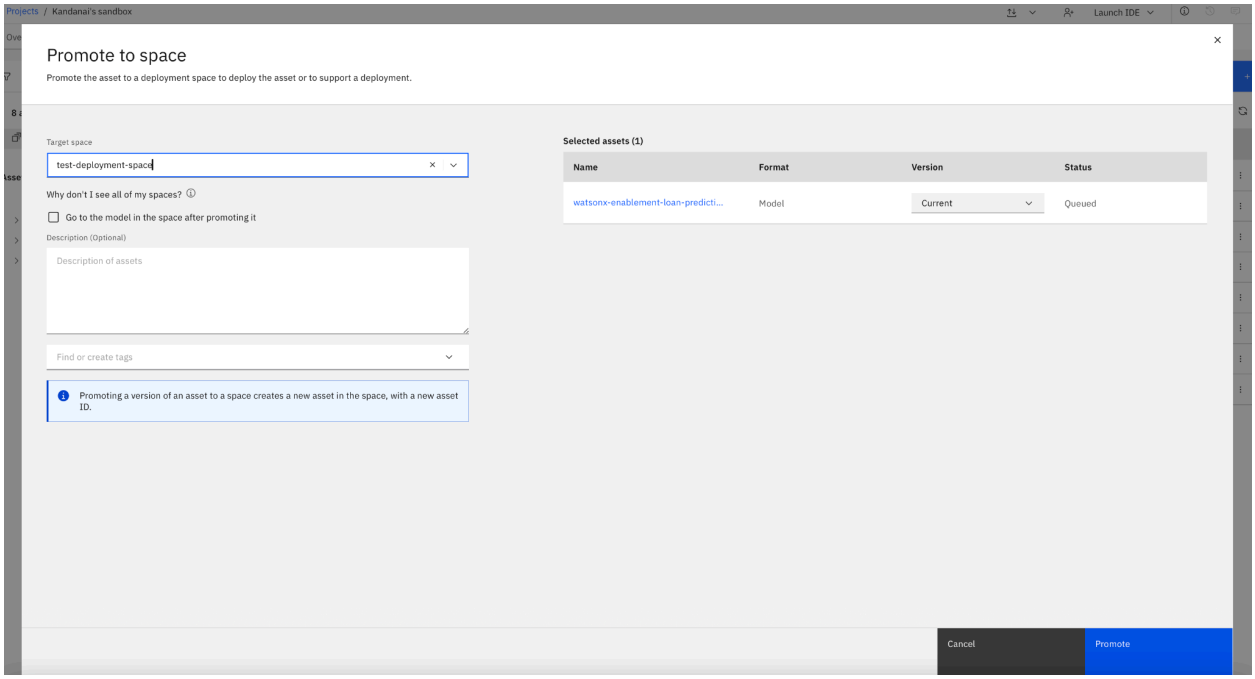


After visualizing all the results, click on ‘save as’. You can choose to save as a model which will be used later to deploy. (And also Notebook so that you can develop the model further)

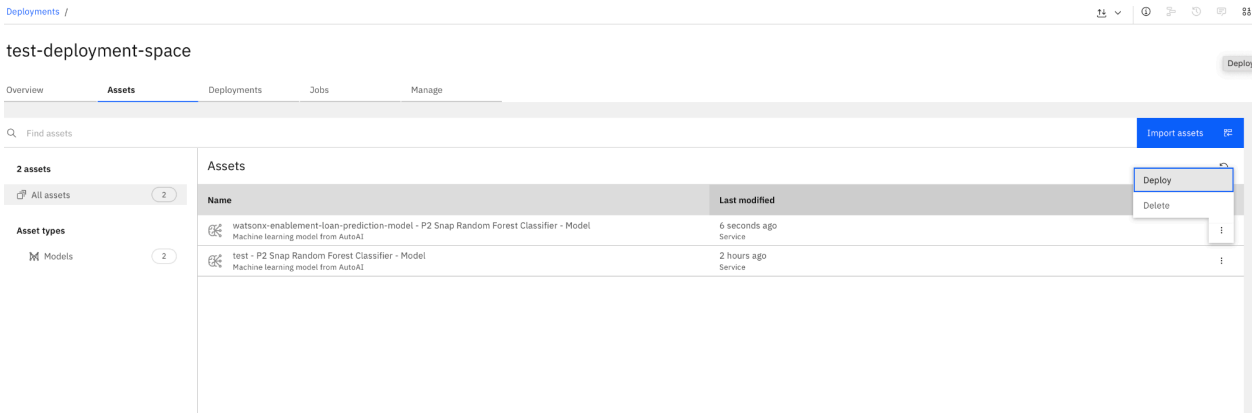


First, you must promote the model from your project, to a deployment space. (If you haven't created one already please create a deployment space)

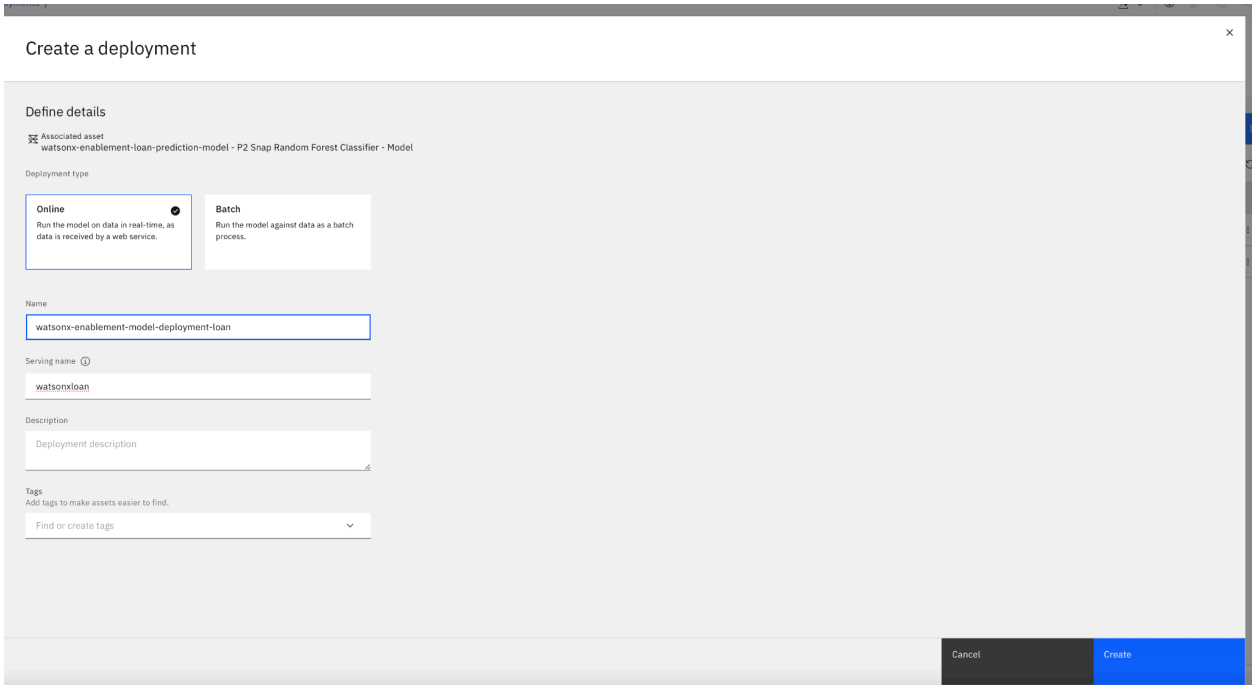


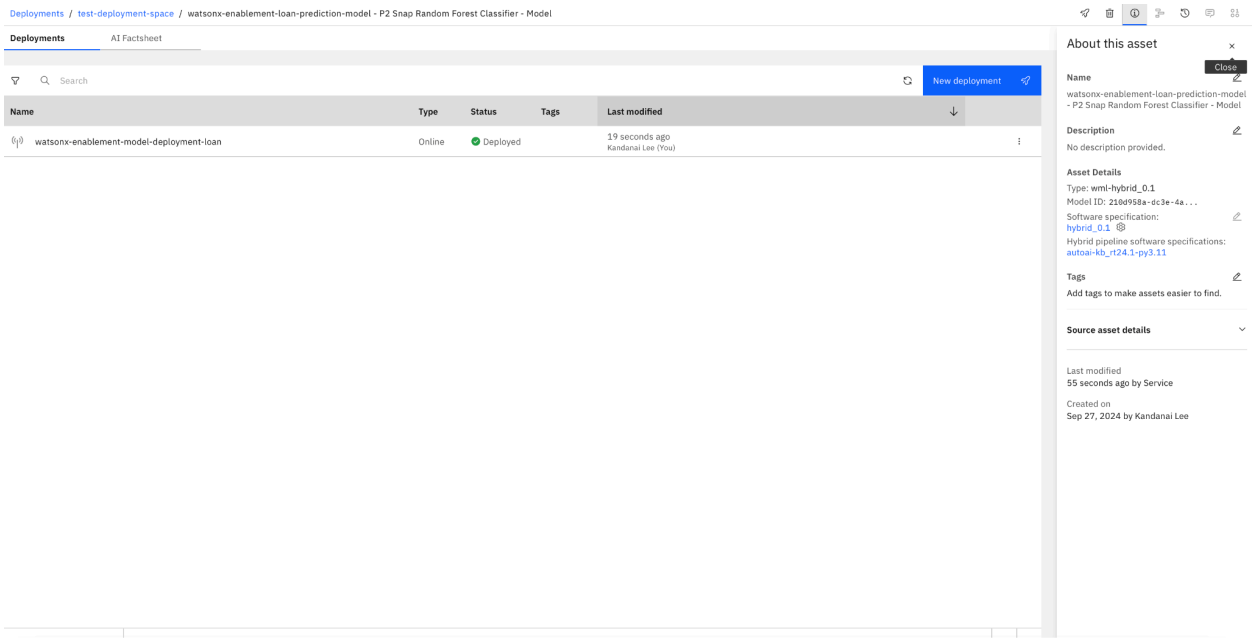


Locate your deployment space and please deploy the model.

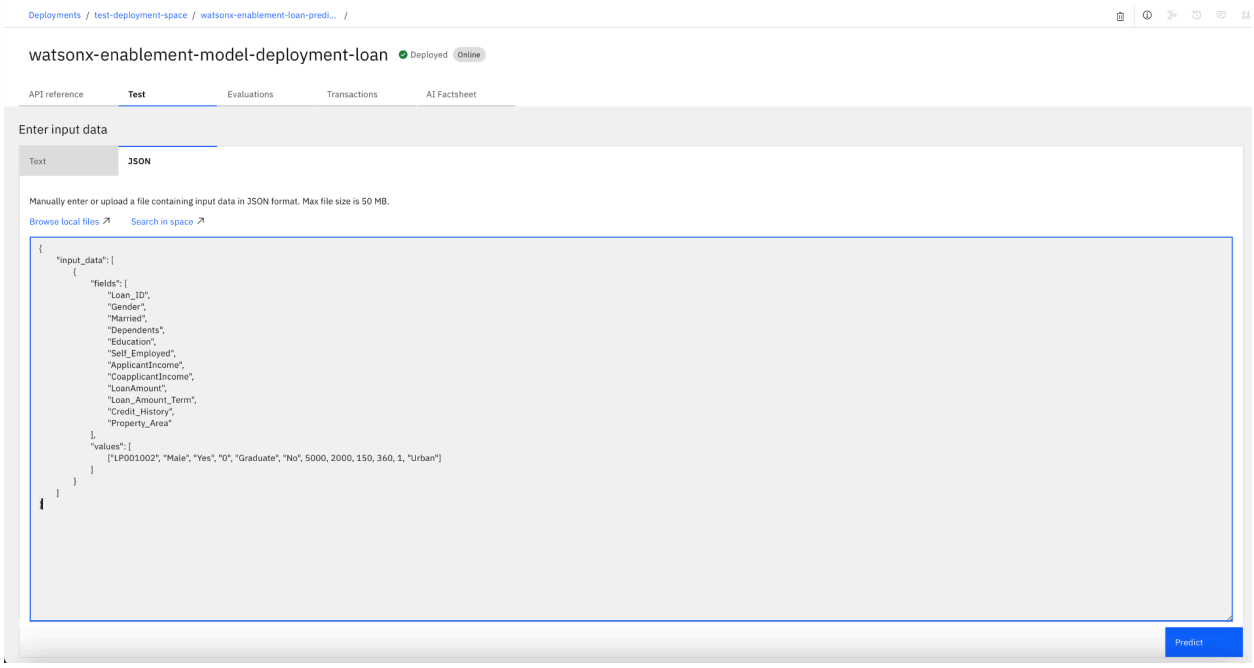


Here we will select Online deployment, please name your deployment with appropriate name





Once, the model is deployed you can test the deployed model via an example payload below



Example payload

```

{
        "input_data": [
                {
                        "fields": [
                                "Gender",
```

```
                                "Married",
                                "Dependents",
                                "Education",
                                "Self_Employed",
                                "ApplicantIncome",
                                "CoapplicantIncome",
                                "LoanAmount",
                                "Loan_Amount_Term",
                                "Credit_History",
                                "Property_Area"
                        ],
                        "values": [
                                ["Male", "Yes", "0", "Graduate", "No", 5000, 2000,
150, 360, 1, "Urban"]
                        ]
                }
        ]
}
```