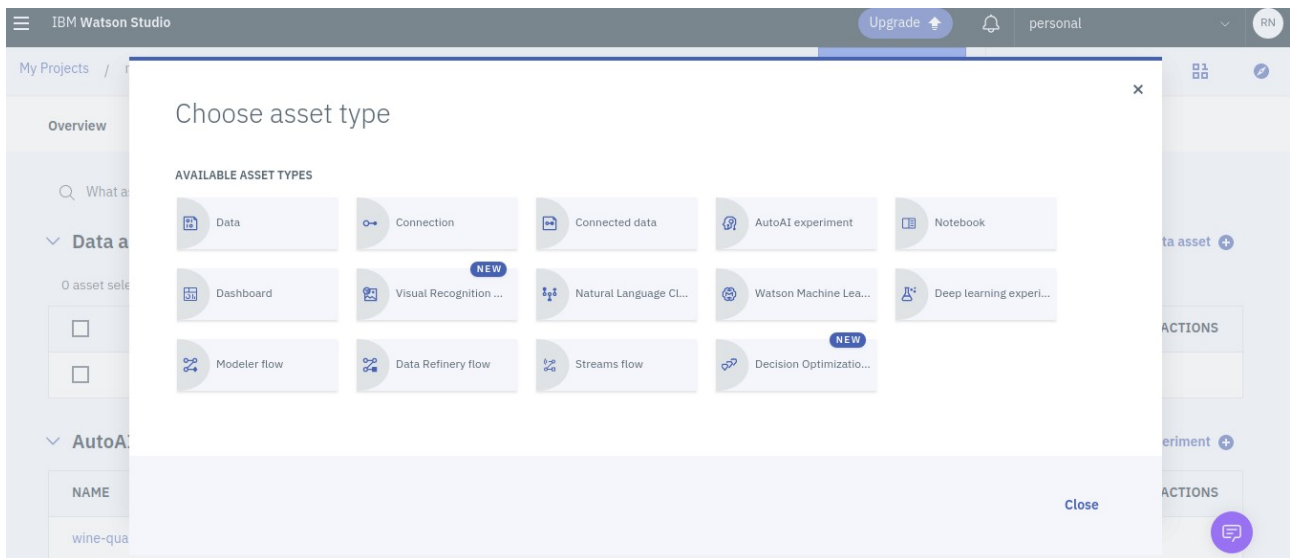
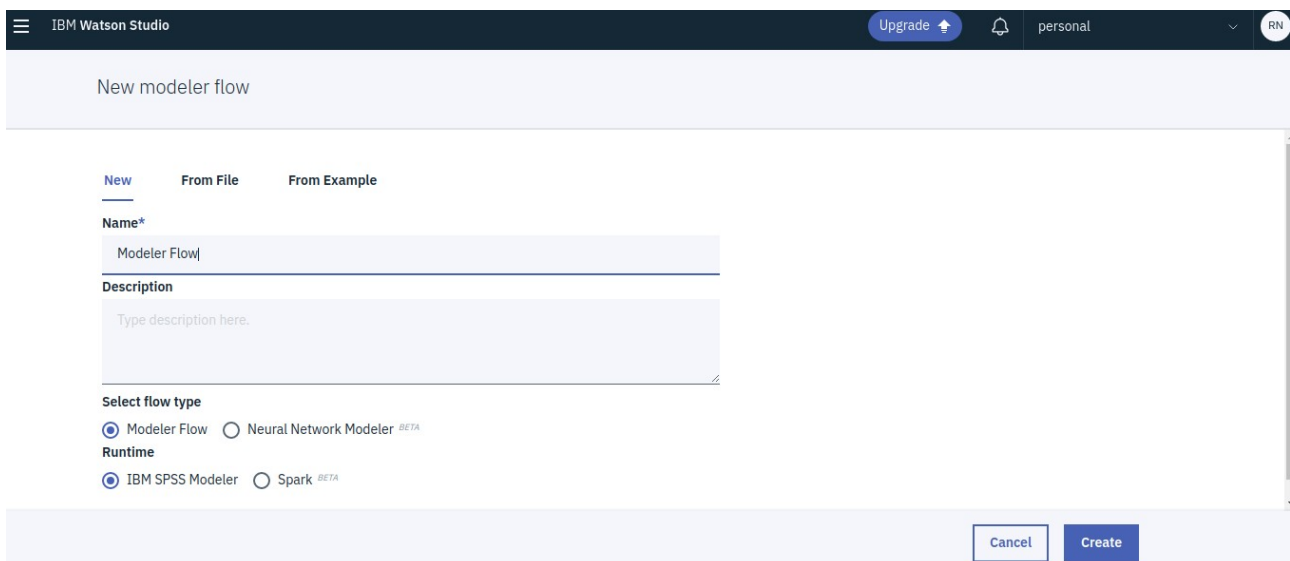


# Creating a simple modeler SPSS flow and deploying it

1. On the main project page, Click on “Add to Project”. On the window that appears, select “Modeler Flow”



2. On the new modeler flow page, give a name to the flow and click on **Create**



3. It will take a while to load the flow creation page. It will look like the below image when fully loaded.

Import : Section related to importing dataset

Record Operation : Flow related to modifying records in dataset

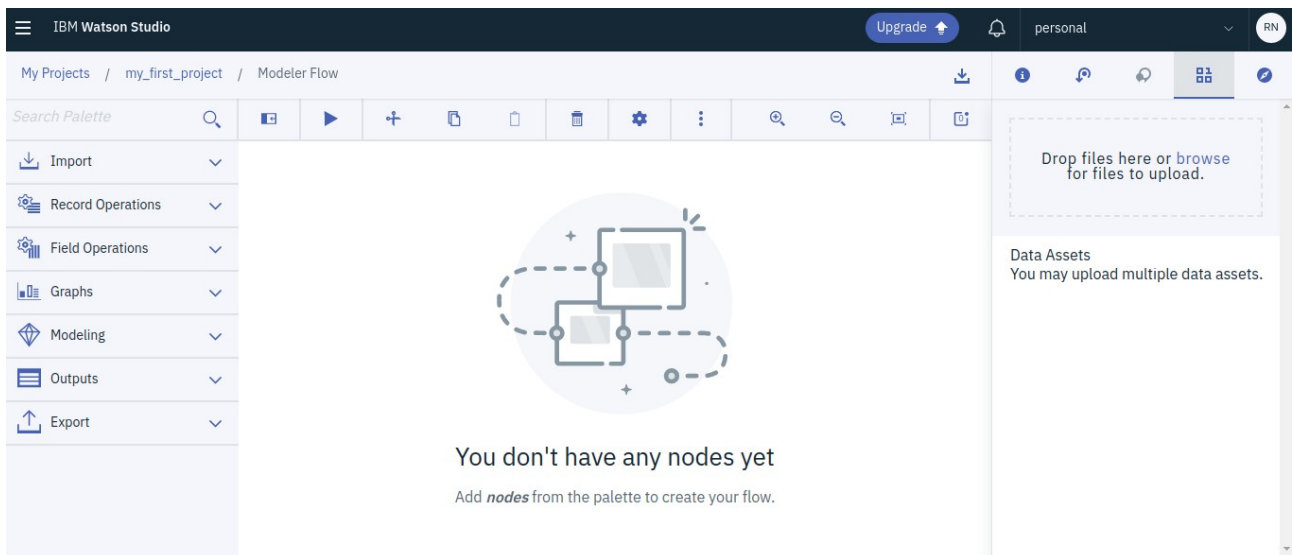
Field Operation : Flow related to modifying column properties

Graphs : Flow related to visualization

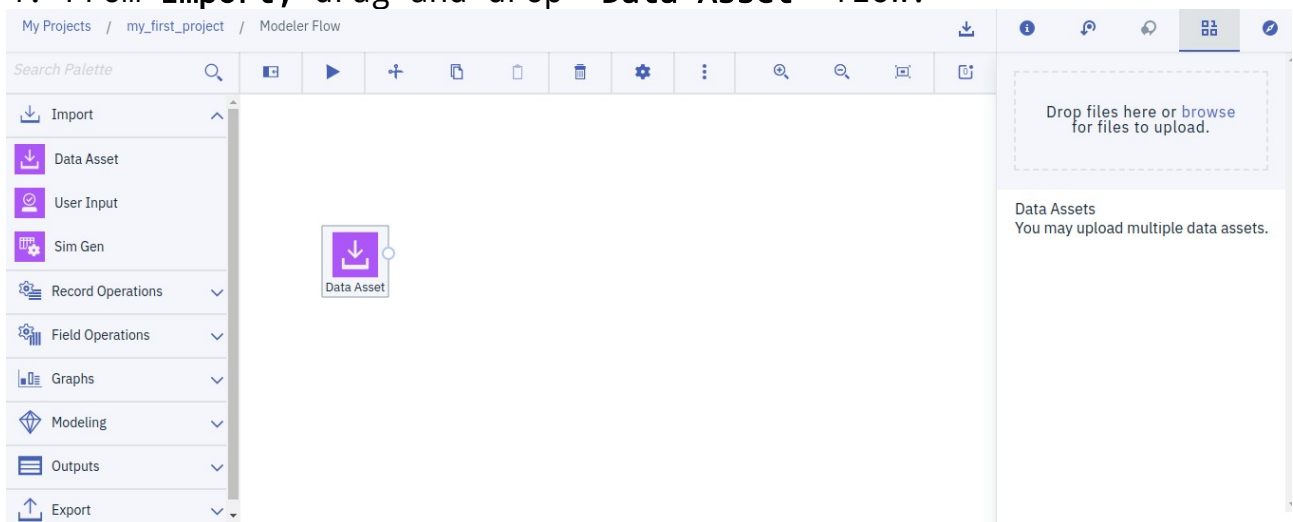
Modeling : Flow related to ML/DL Algorithms

Output : Flow related to output generation

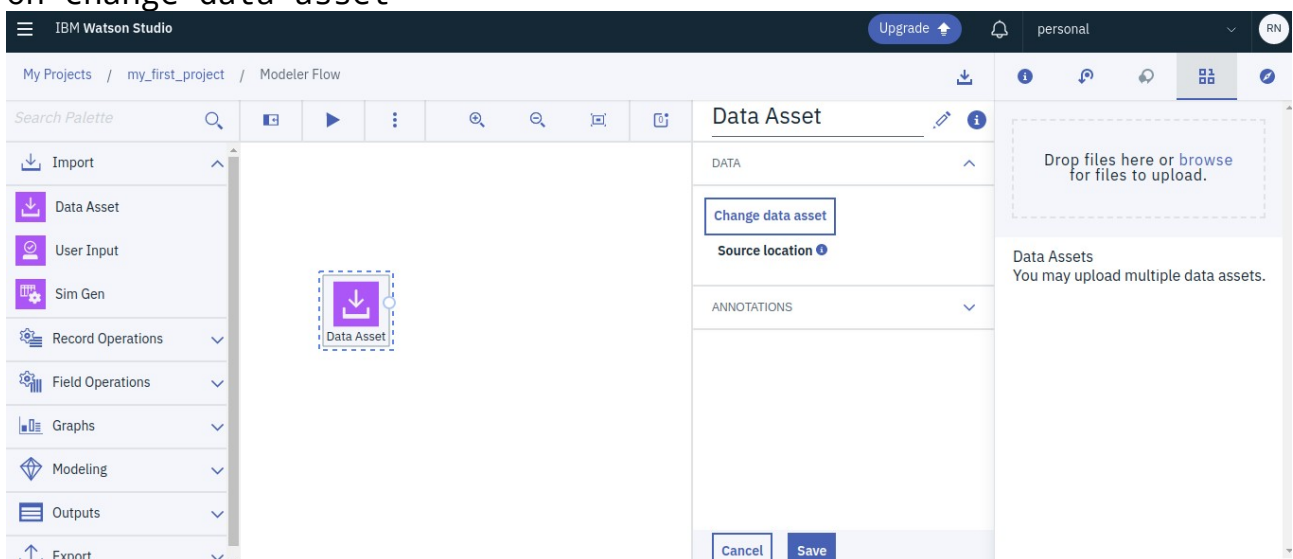
Export : Flow related to output export into a file



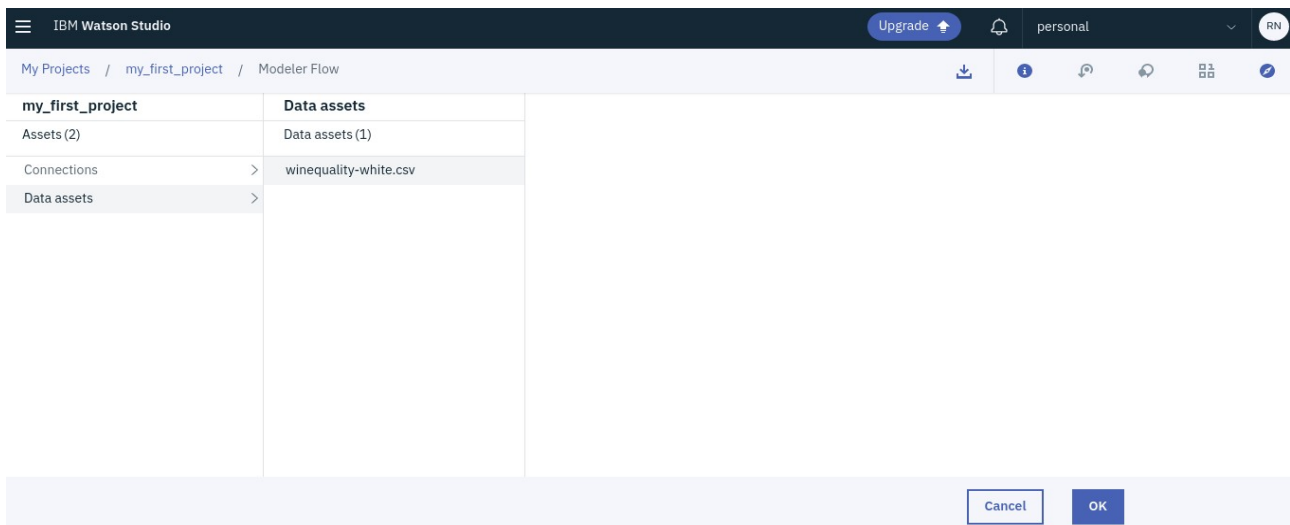
#### 4. From Import, drag and drop "Data Asset" flow.



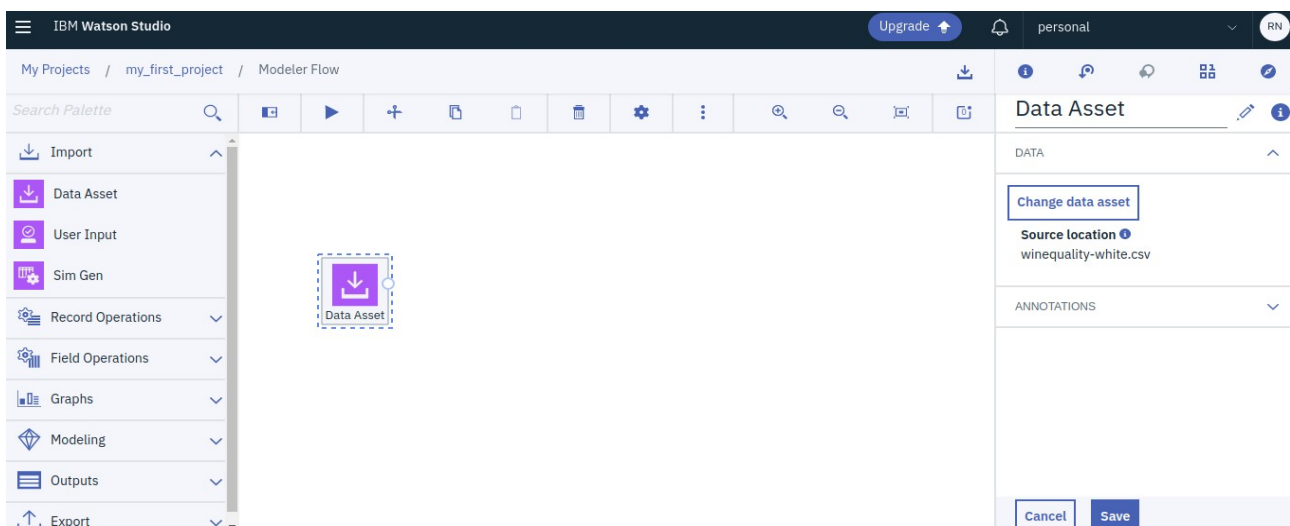
#### 5. Double click on the data asset flow. On the new panel, click on change data asset



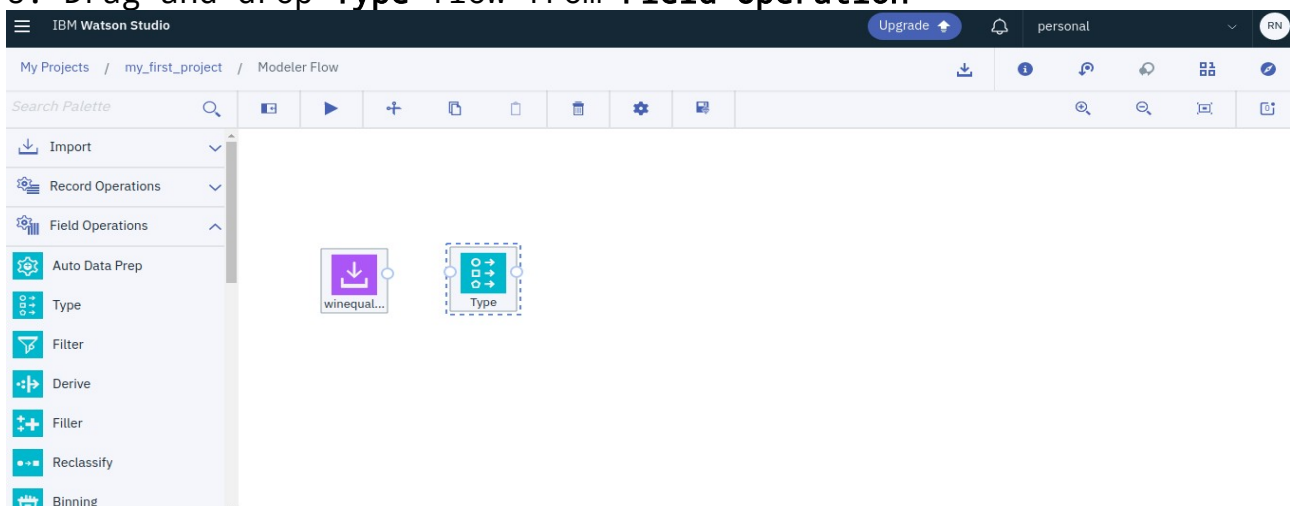
6. On the newly loaded page, click on Data assets and select your dataset (csv) from the list. Upon selection you will be returned to the flow page



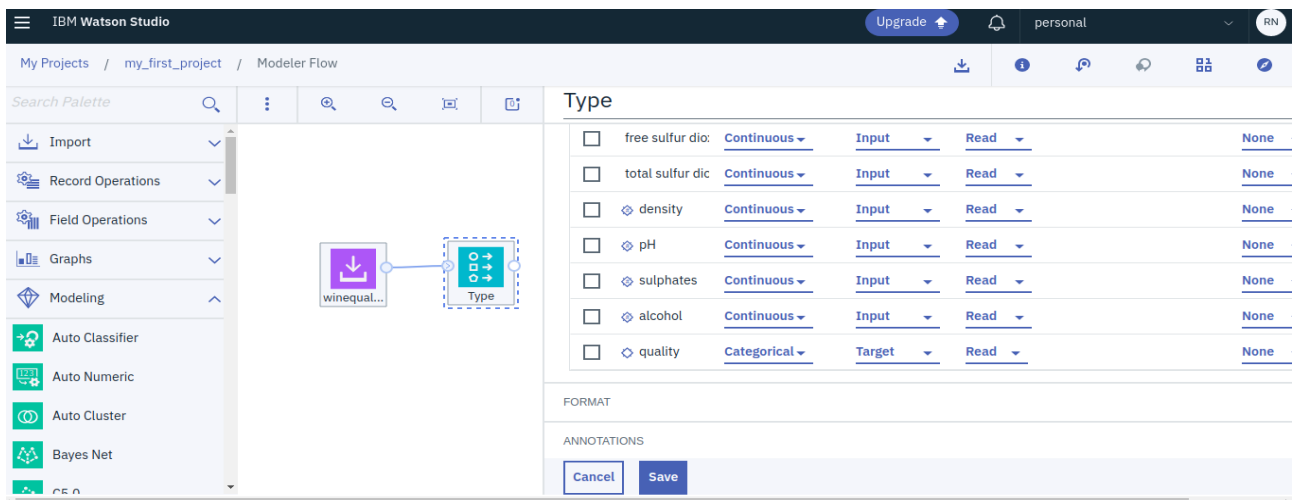
7. click on **save** button on the side panel.



8. Drag and drop **Type** flow from **Field Operation**



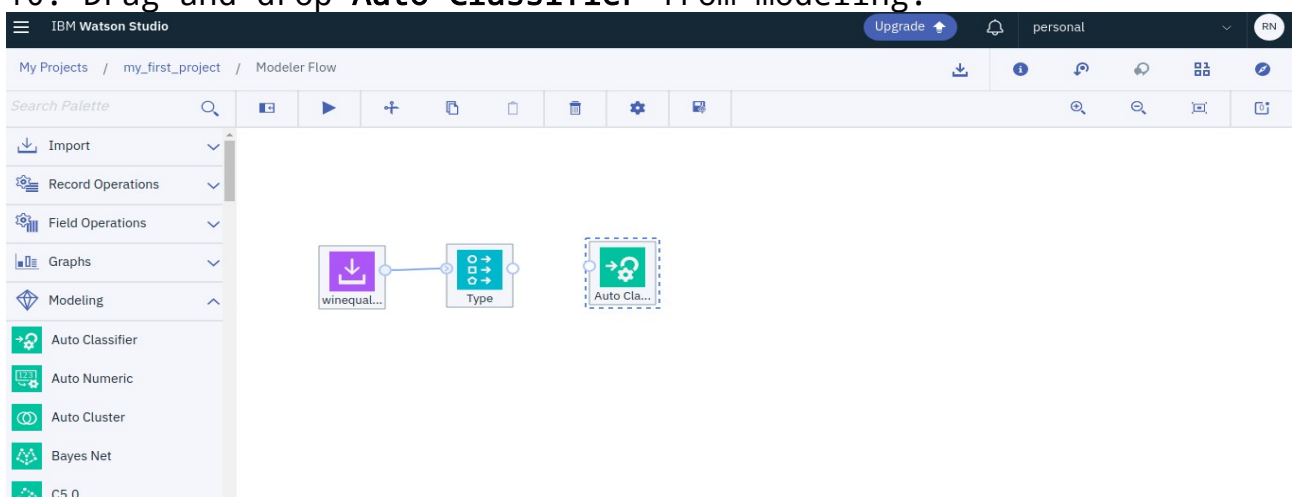
9. Connect the flow by clicking on nearest nodes / bubbles in the flow components. Once connected, double click on "Type". Set the *quality* role as "target" and type as "categorical". Click on **save** button to proceed.



The screenshot shows the IBM Watson Studio interface. On the left is the 'Search Palette' with categories like Import, Record Operations, Field Operations, Graphs, and Modeling. The 'Modeling' section is expanded, showing options like Auto Classifier, Auto Numeric, Auto Cluster, Bayes Net, and C5.0. In the center, a flow diagram shows a 'winequal...' node connected to a 'Type' node. On the right, the 'Type' configuration panel is open. It contains a table with various fields and their roles. The 'quality' field is highlighted with a blue border, and its role is set to 'Target' and its type is 'Categorical'. Below the table are sections for 'FORMAT' and 'ANNOTATIONS'. At the bottom of the panel are 'Cancel' and 'Save' buttons.

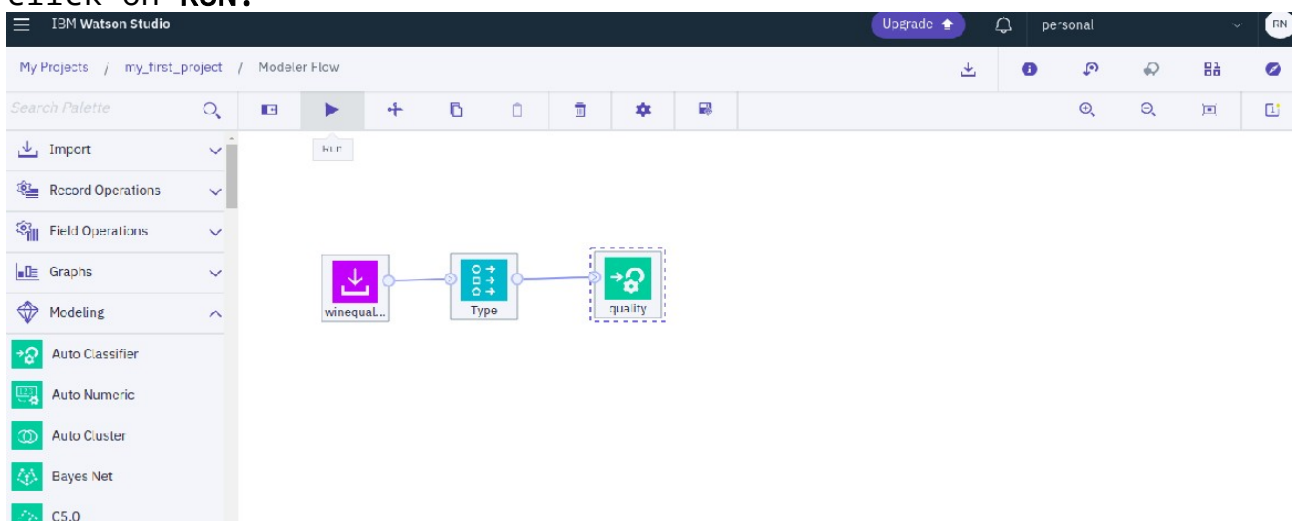
Field	Type	Role	Read
free sulfur dio:	Continuous	Input	Read
total sulfur dic	Continuous	Input	Read
density	Continuous	Input	Read
pH	Continuous	Input	Read
sulphates	Continuous	Input	Read
alcohol	Continuous	Input	Read
quality	Categorical	Target	Read

10. Drag and drop Auto Classifier from modeling.



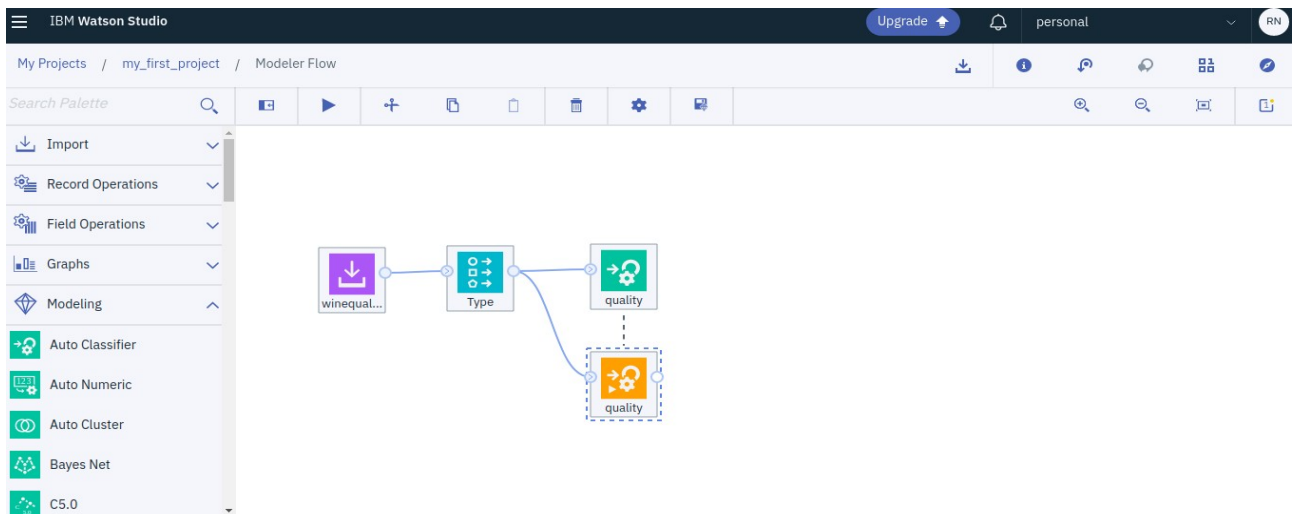
The screenshot shows the IBM Watson Studio interface. The 'Auto Classifier' node has been added to the flow diagram, positioned to the right of the 'Type' node. The flow diagram now consists of three nodes: 'winequal...', 'Type', and 'Auto Cla...'. The 'Auto Classifier' node is highlighted with a dashed border.

11. Connect the flow between type and the newly added model and click on **RUN**.

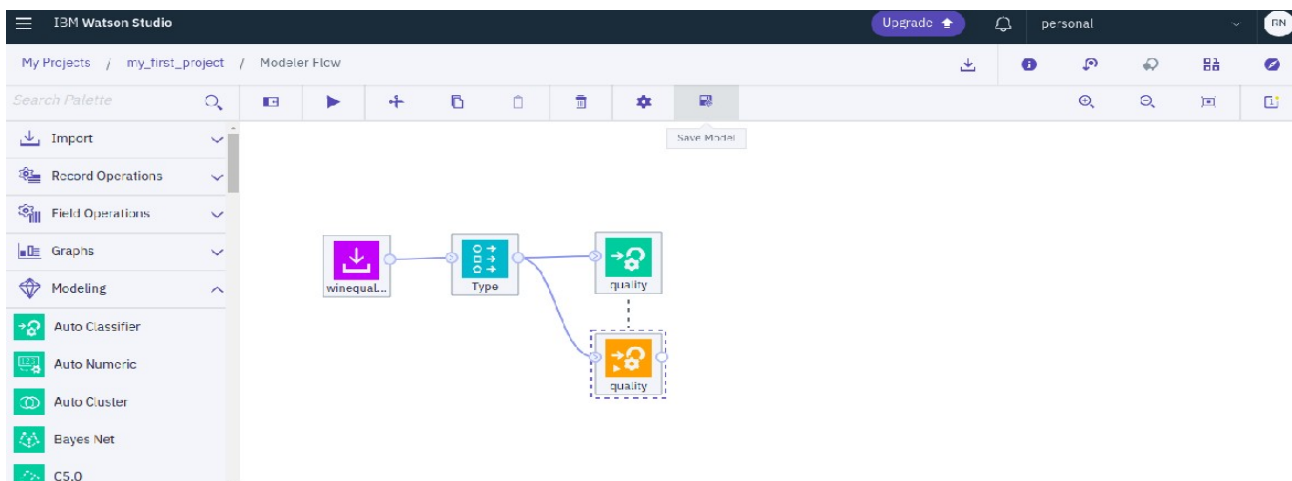


The screenshot shows the IBM Watson Studio interface. The flow diagram now consists of three nodes: 'winequal...', 'Type', and 'quality'. The 'quality' node is highlighted with a dashed border. The 'Run' button is highlighted in the top toolbar.

12. Wait for the processing to finish. Once completed, you will see an orange flow got created.



13. Click on **Save as Model**



14. Once the save model pop up, select branch node as quality (model) and set a model name. To proceed click on Save.

The screenshot shows the 'Save Model' dialog box. It has a title 'Save Model' and a 'Saving Mode' section with two radio buttons: 'Scoring branch' (selected) and 'Individual algorithm as PMML'. Below this is a 'Branch Terminal Node\*' dropdown menu with 'quality' selected. There is a 'Model name\*' text field containing 'quality-classifier' and a 'Model description' text area. At the bottom, there is a 'Machine Learning Service' dropdown menu with 'WatsonMachineLearning' selected. 'Cancel' and 'Save' buttons are at the bottom right.

15. You can see the saved model in home page of your project. Deploy model by clicking on "Deploy"

IBM Watson Studio

My Projects / my\_first\_project

Upgrade

personal

Launch IDE

Add to project

Models

Watson Machine Learning models

Import model

NAME	TYPE	RUNTIME	LAST MODIFIED	ACTIONS
quality-classifier	spss-modeler-18.1	spss-modeler-18.1	6 Dec 2019	<ul style="list-style-type: none"> <li>Deploy</li> <li>Publish to Catalog</li> <li>Delete</li> </ul>

Modeler flows

NAME	TYPE	CREATED BY	LAST MODIFIED
Modeler Flow	SPSS Modeler	Rahul Nair	6 Dec 2019, 9:05:55 pm

Data Refinery flows

New Data Refinery flow

16. Set a name for the deployment and click on save

IBM Watson Studio

Upgrade

personal

Create Deployment

Define deployment details

Name

classifier

Description

Deployment description

Deployment type

☒ Web service

Cancel Save

17. Similar to Auto AI deployment, you will get the implementation code in various languages to consume the webservice.

IBM Watson Studio

Upgrade

personal

My Projects / my\_first\_project / quality-classifier / classifier

application/json

Code Snippets

cURL Java JavaScript Python Scala

```
import urllib3, requests, json

# NOTE: generate iam_token and retrieve ml_instance_id based on provided documentation
header = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + iam_token, 'ML-Instance-ID': ml_instance_id}

# NOTE: manually define and pass the array(s) of values to be scored in the next line
payload_scoring = {"fields": ["fixed acidity", "volatile acidity", "citric acid", "residual sugar", "chlorides", "free sulfur dioxide", "total sul

response_scoring = requests.post('https://us-south.ml.cloud.ibm.com/v3/wml_instances/56b47638-128d-4b76-a89c-6eb10f5bfcae/deployments/6595686e-15f
print("Scoring response")
print(json.loads(response_scoring.text))
```