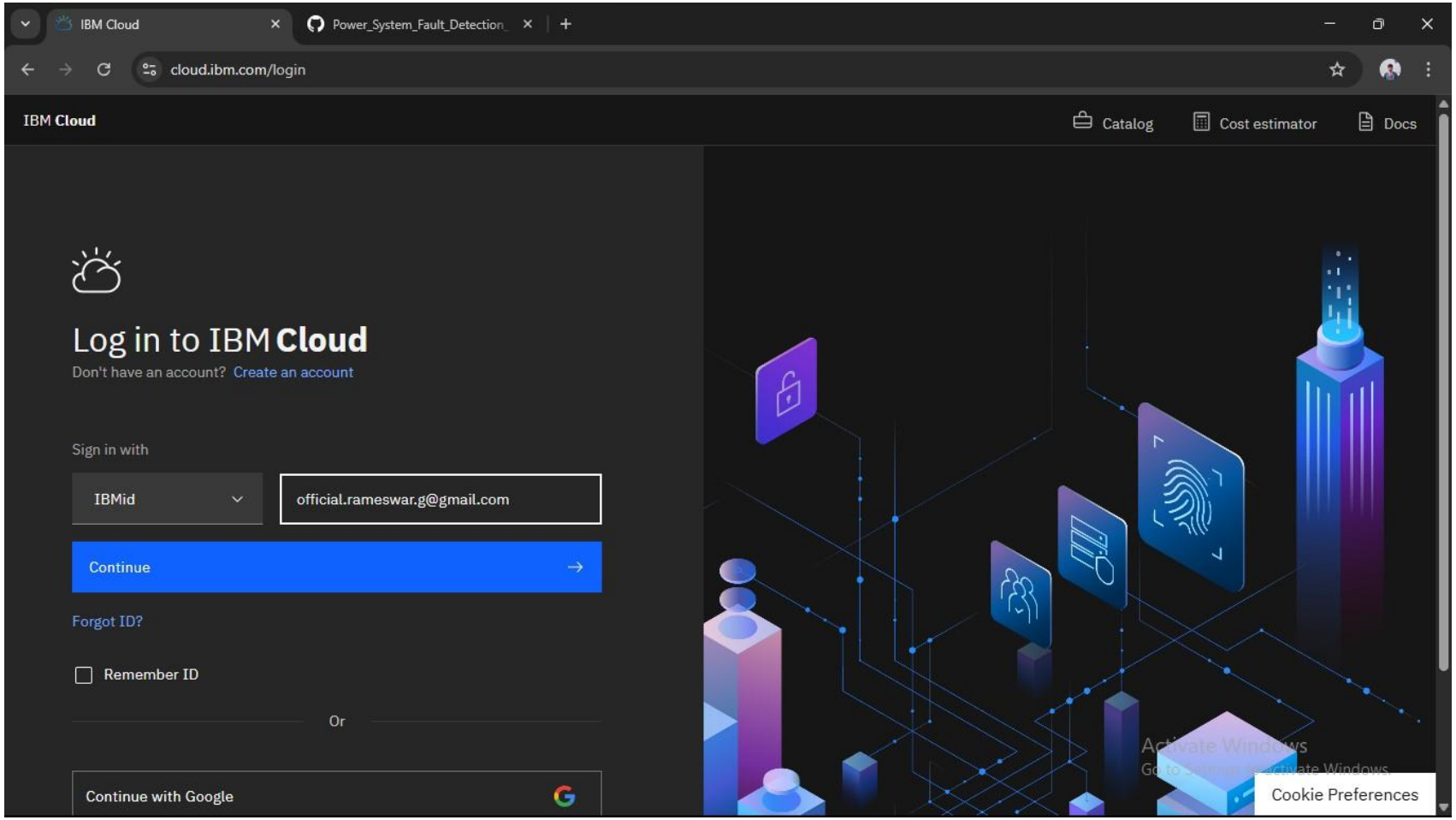
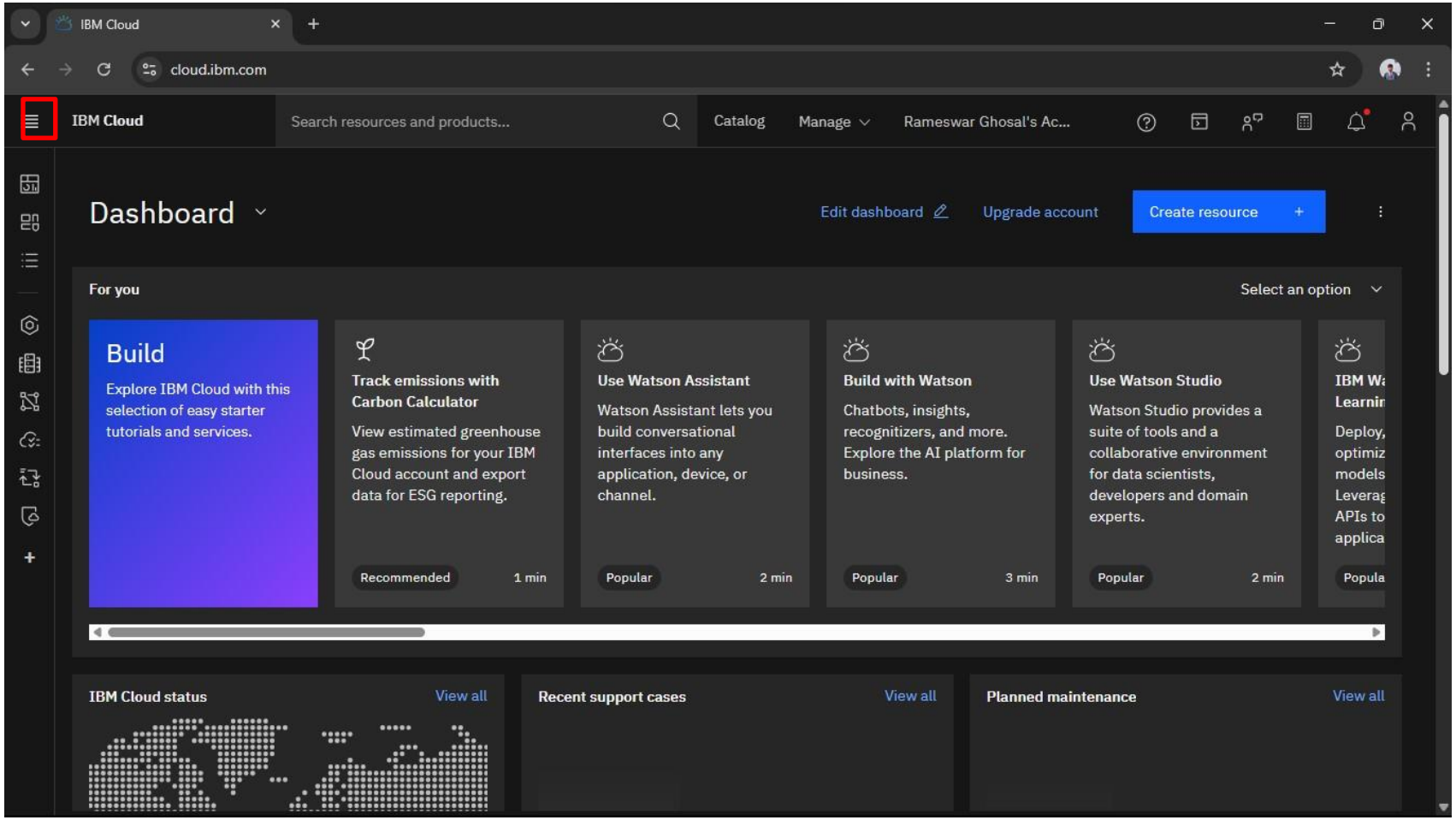
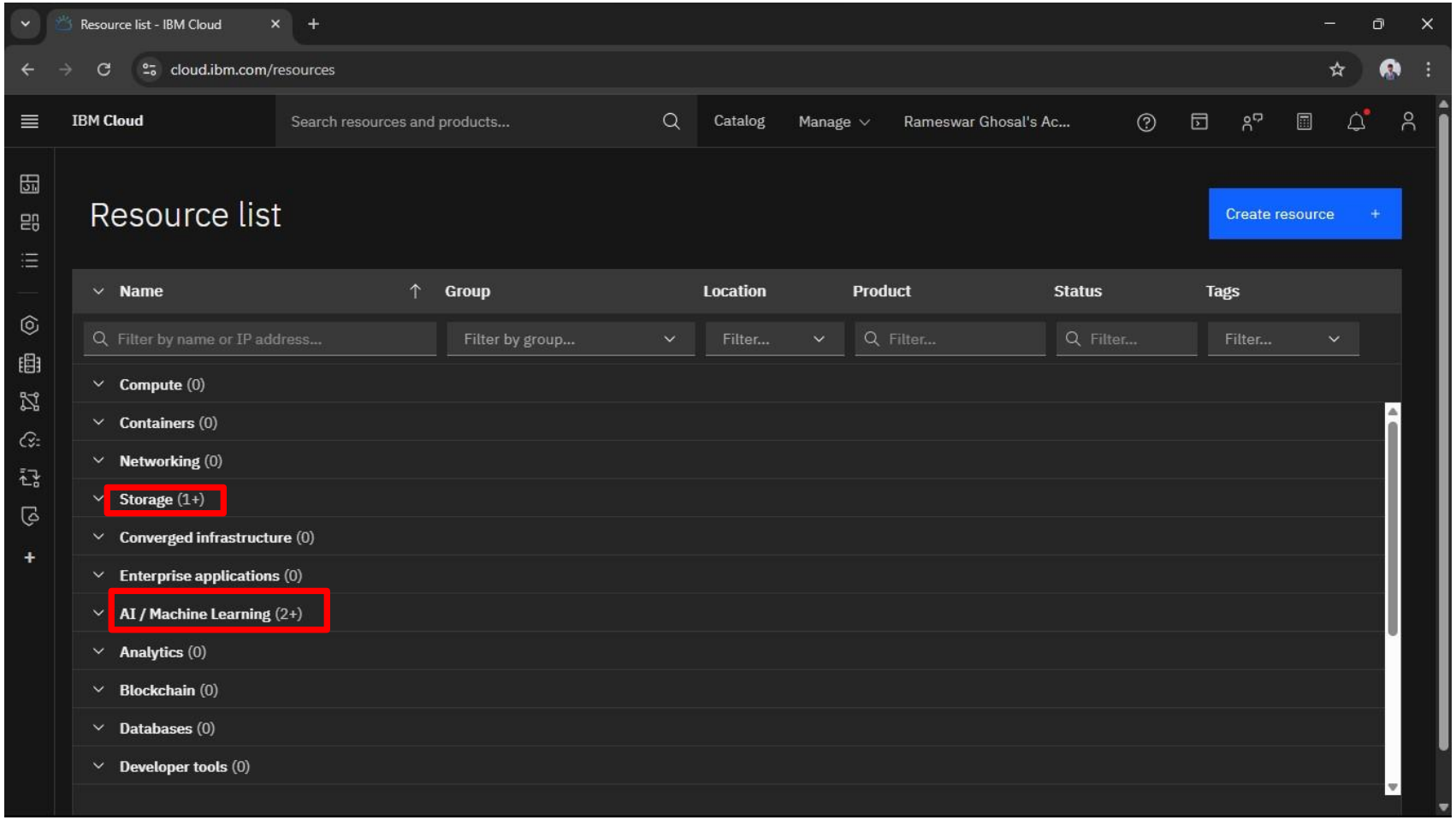
1.Log in to your IBM Cloud account.



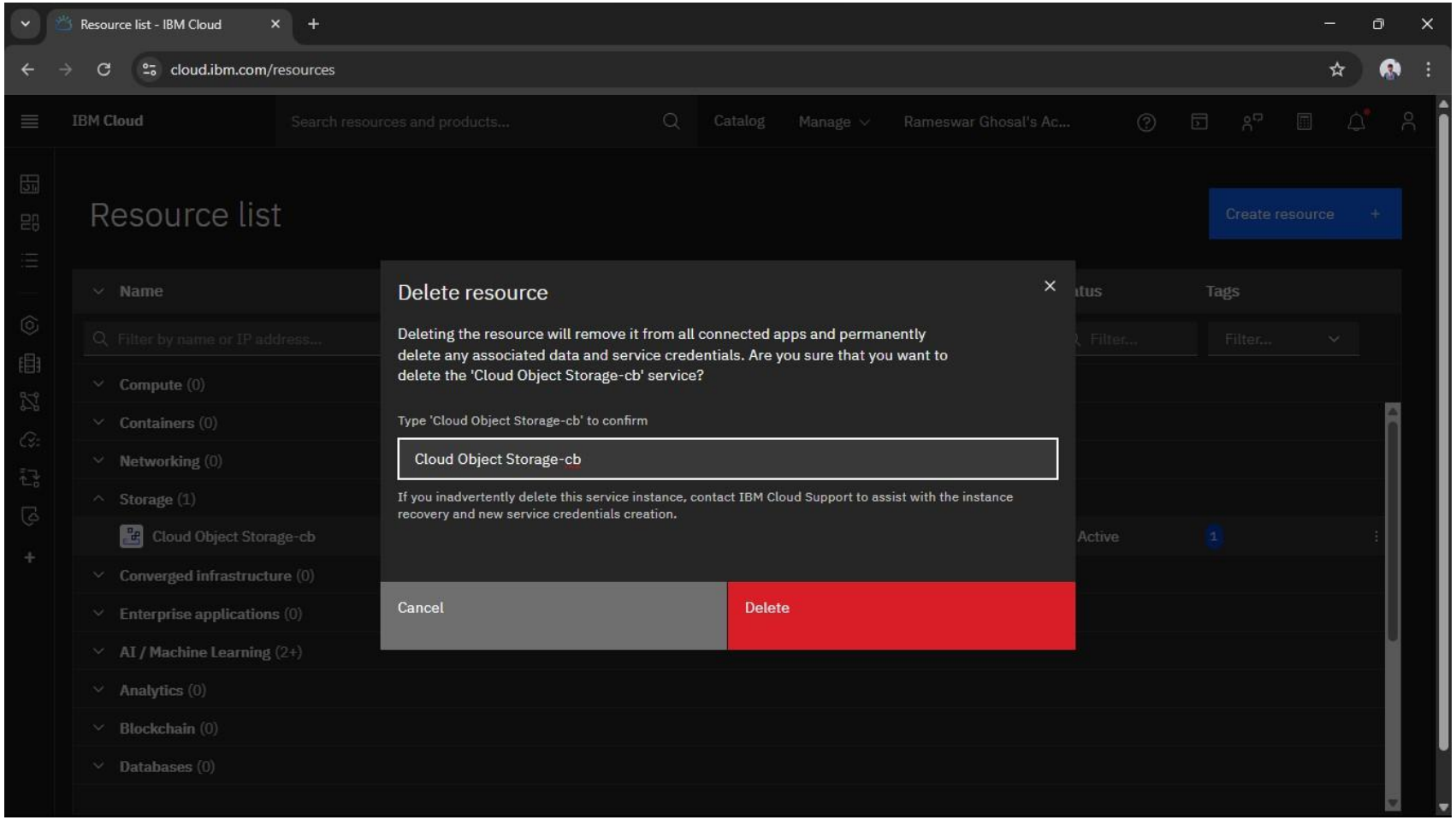
2. Click on navigation manu in the IBM cloud dashboard.



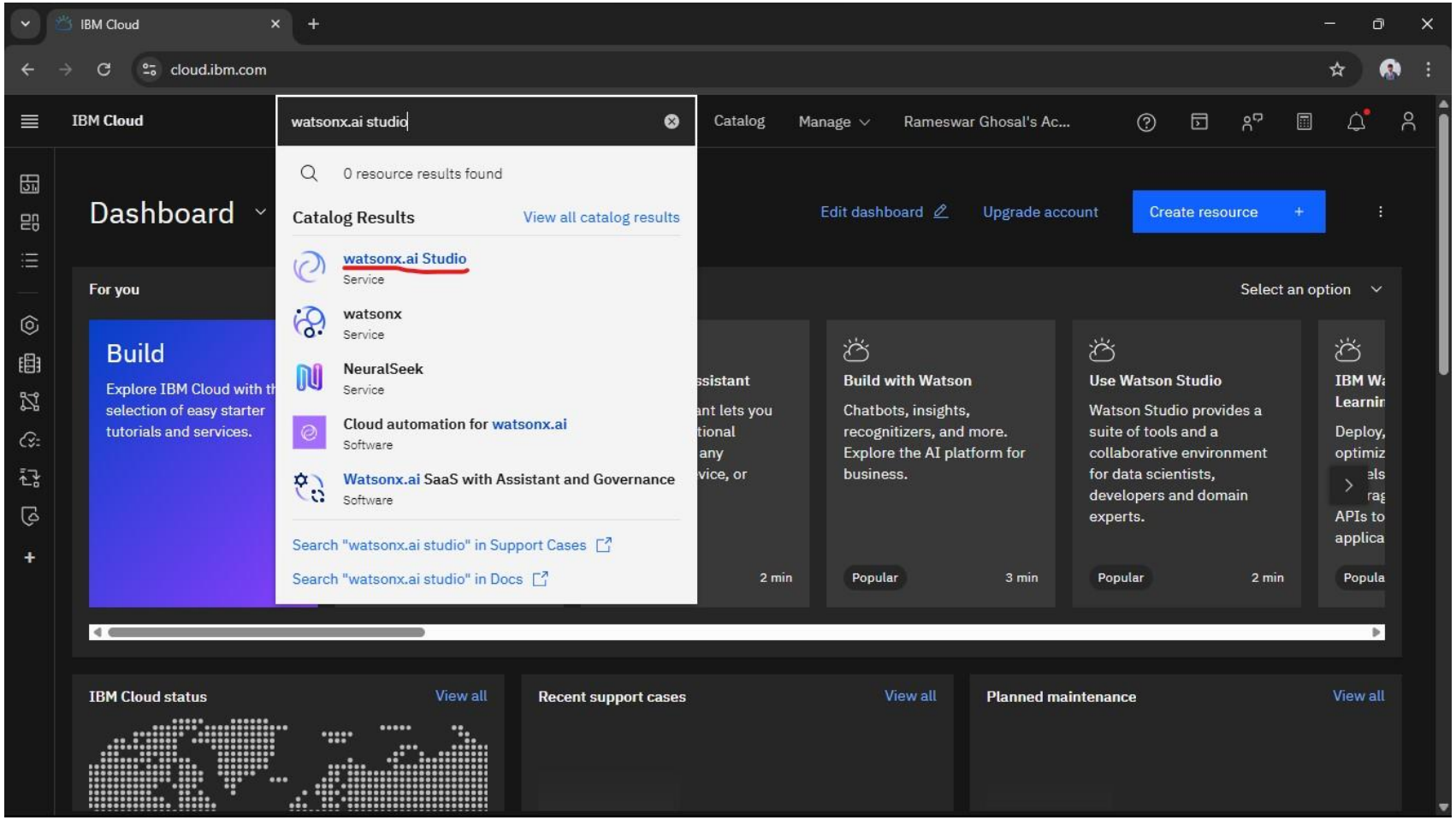
3. Delete all resources from the resource list.



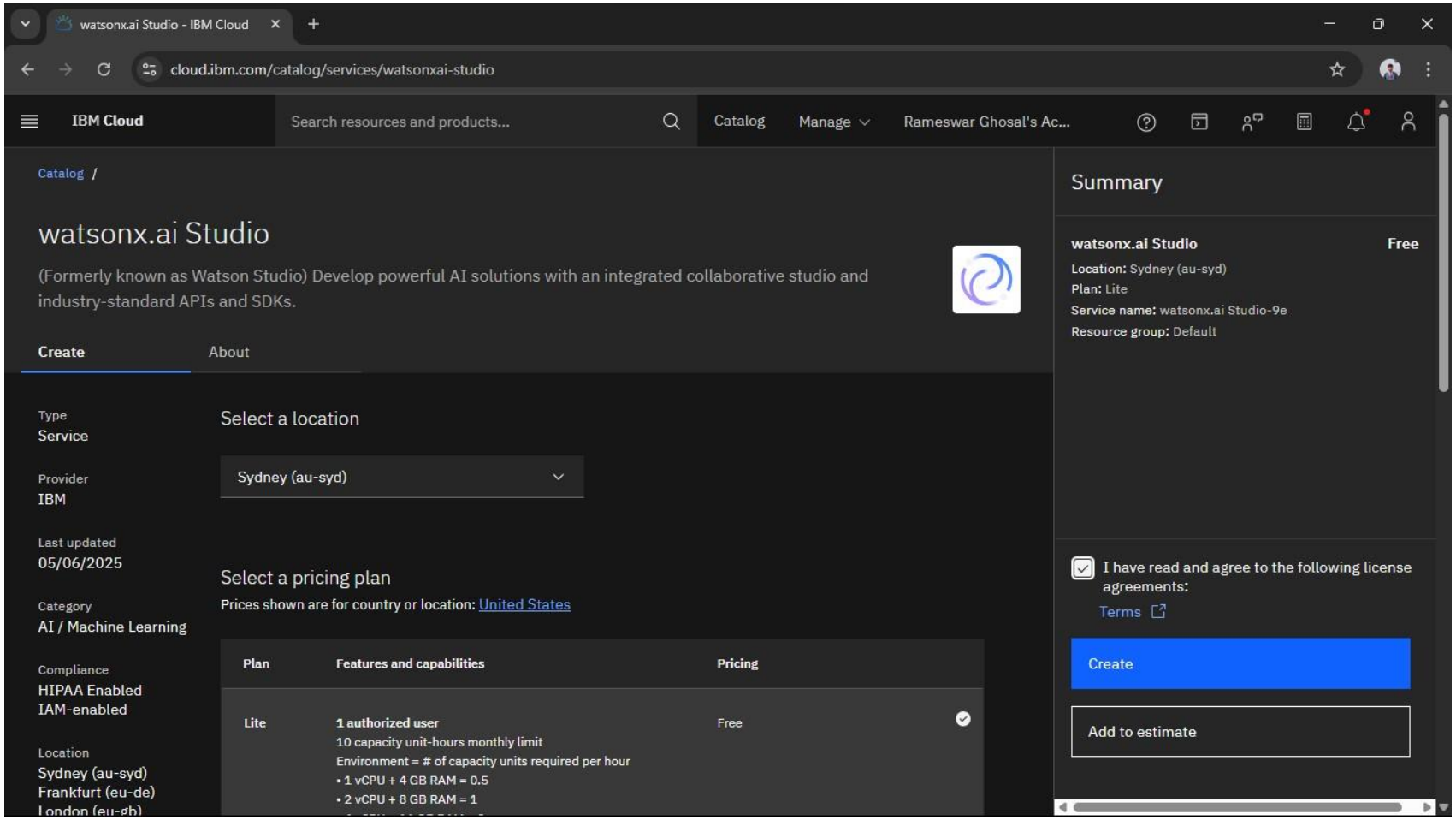
4. Copy the resource name and paste it in the box for deleting the resource.



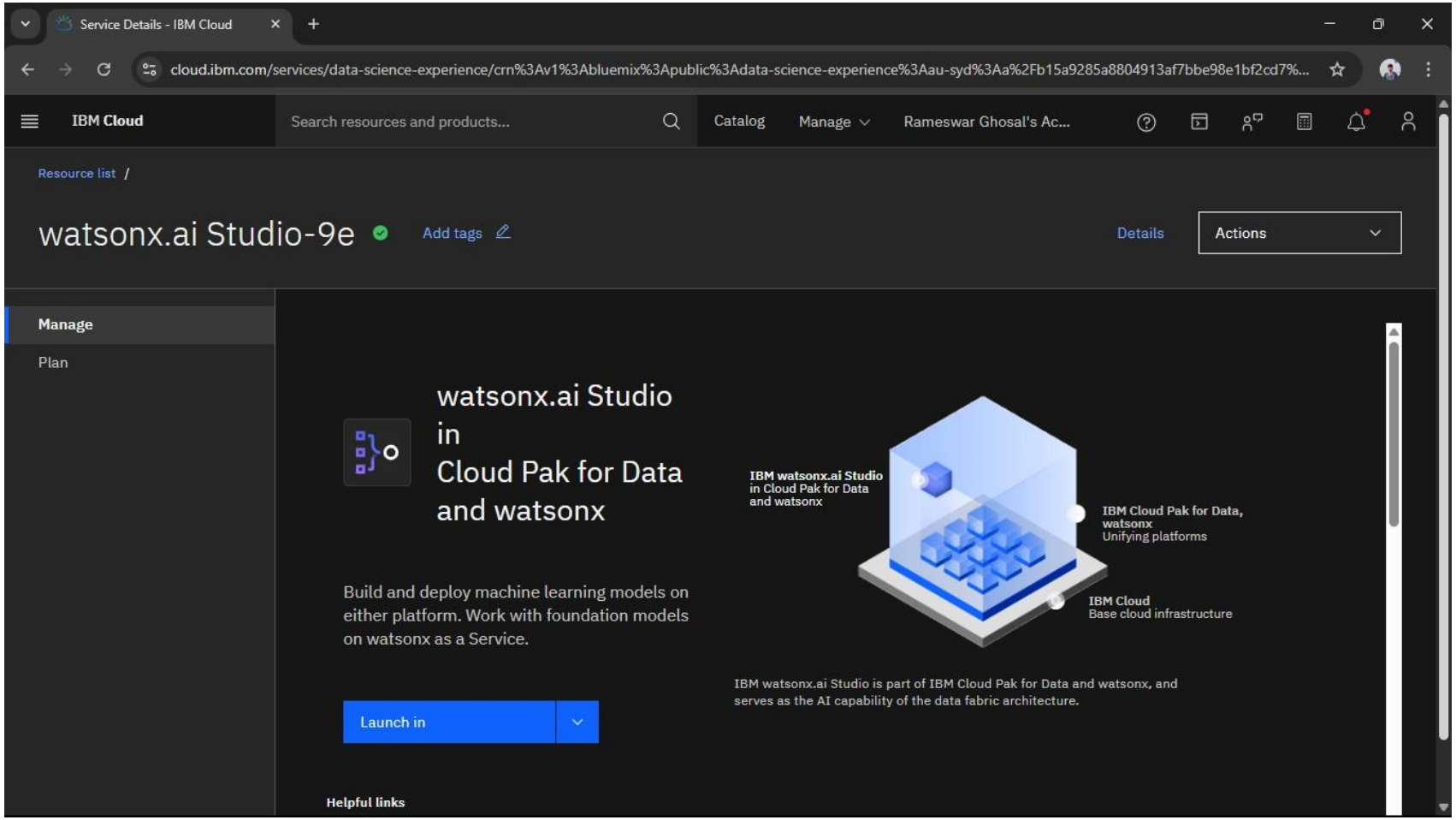
5. Click on search bar and type “watsonx.ai Studio”. Select the service.



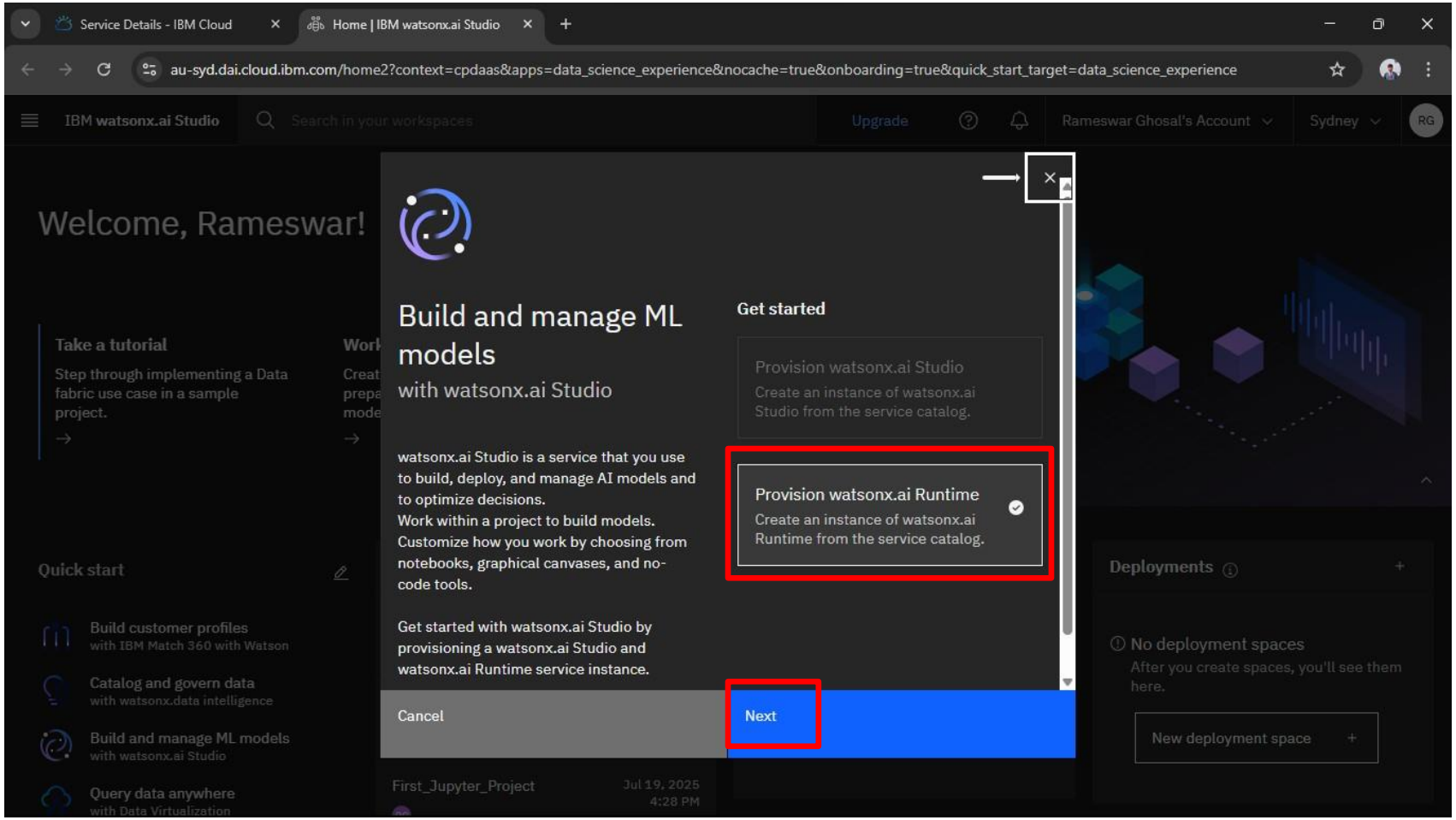
6. Click on the checkbox and click on create button.



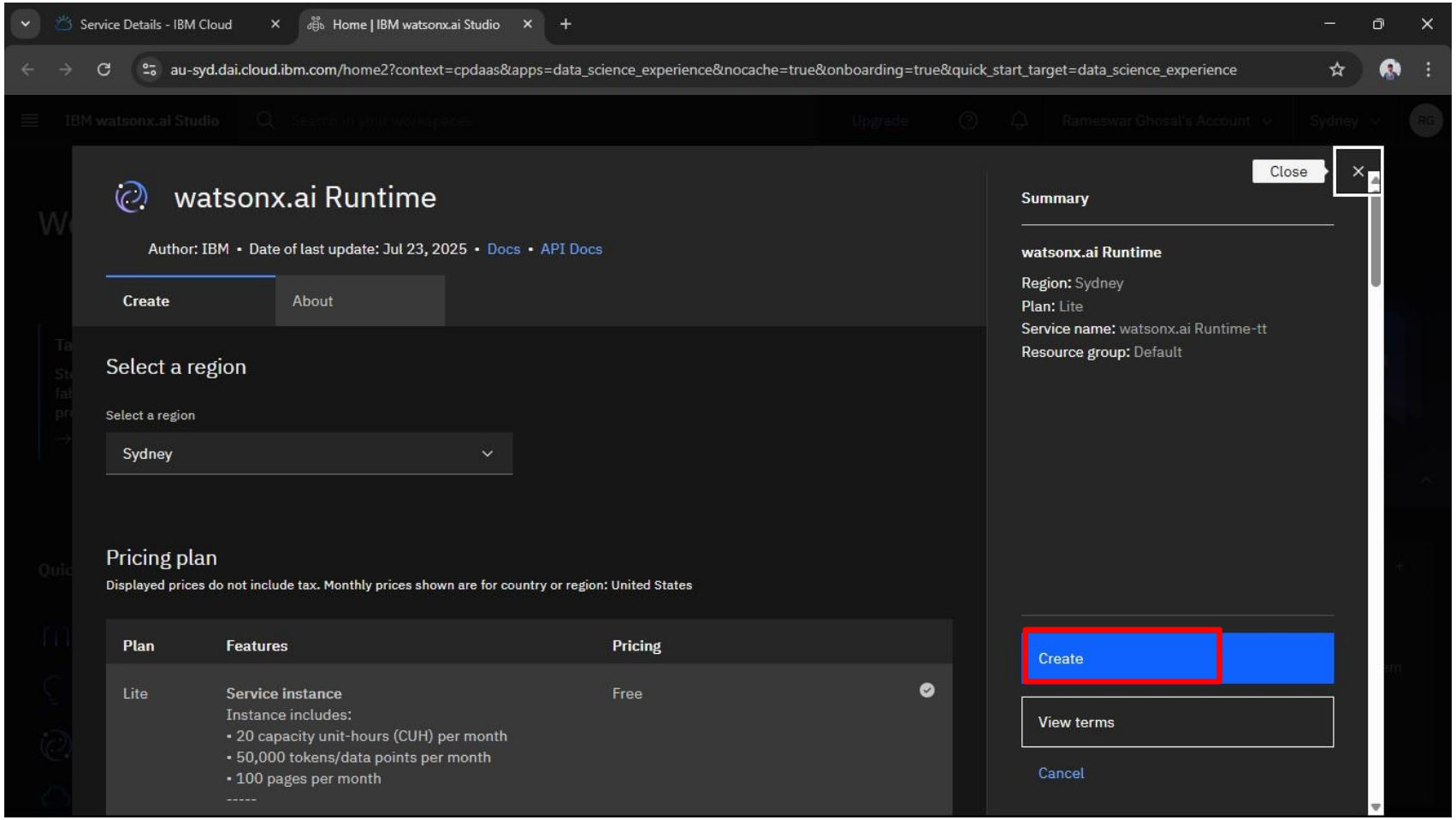
7. Click on the “Launch in”.



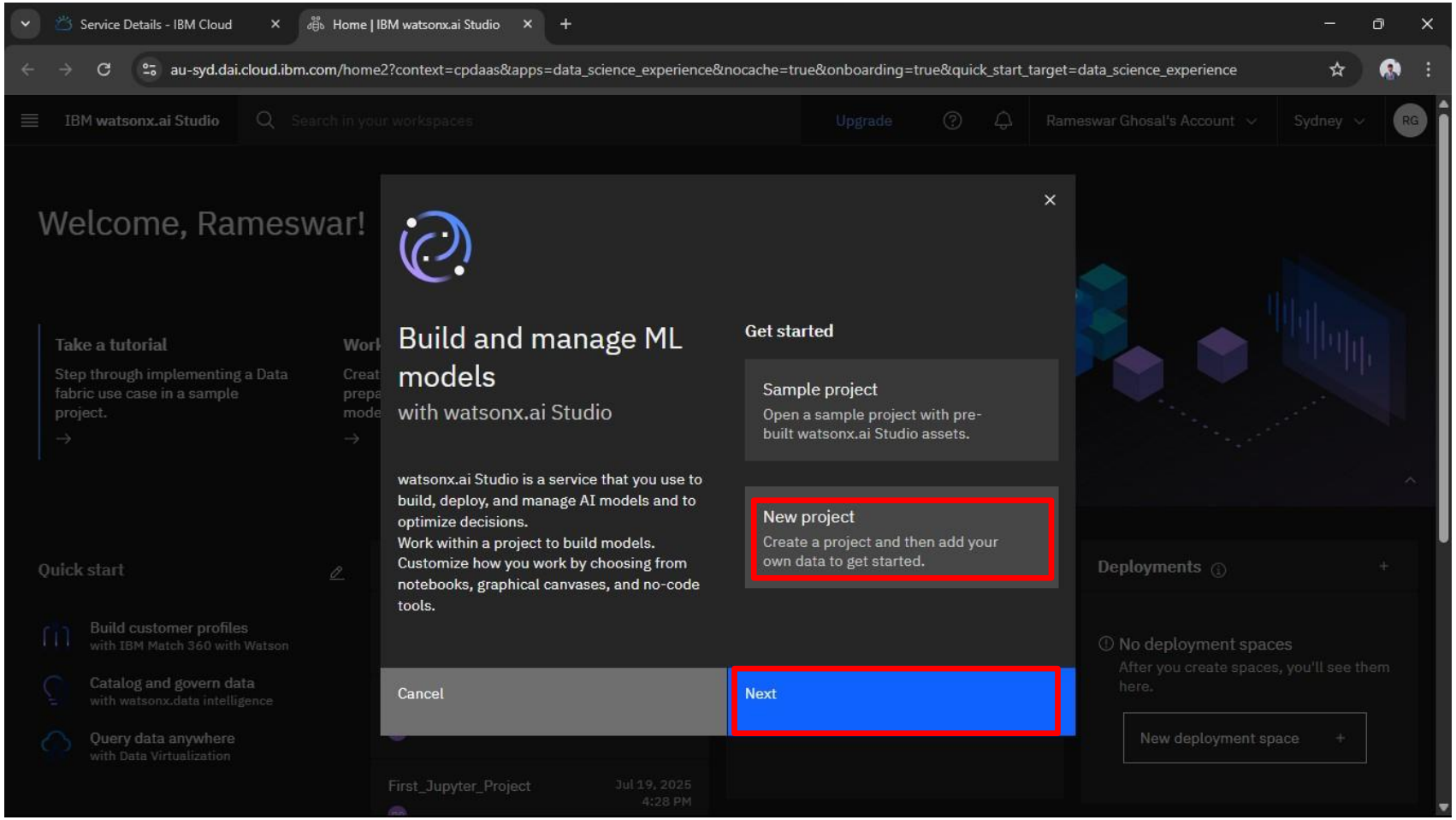
8. Select “provision watsonx.ai Runtime” and click on next button.



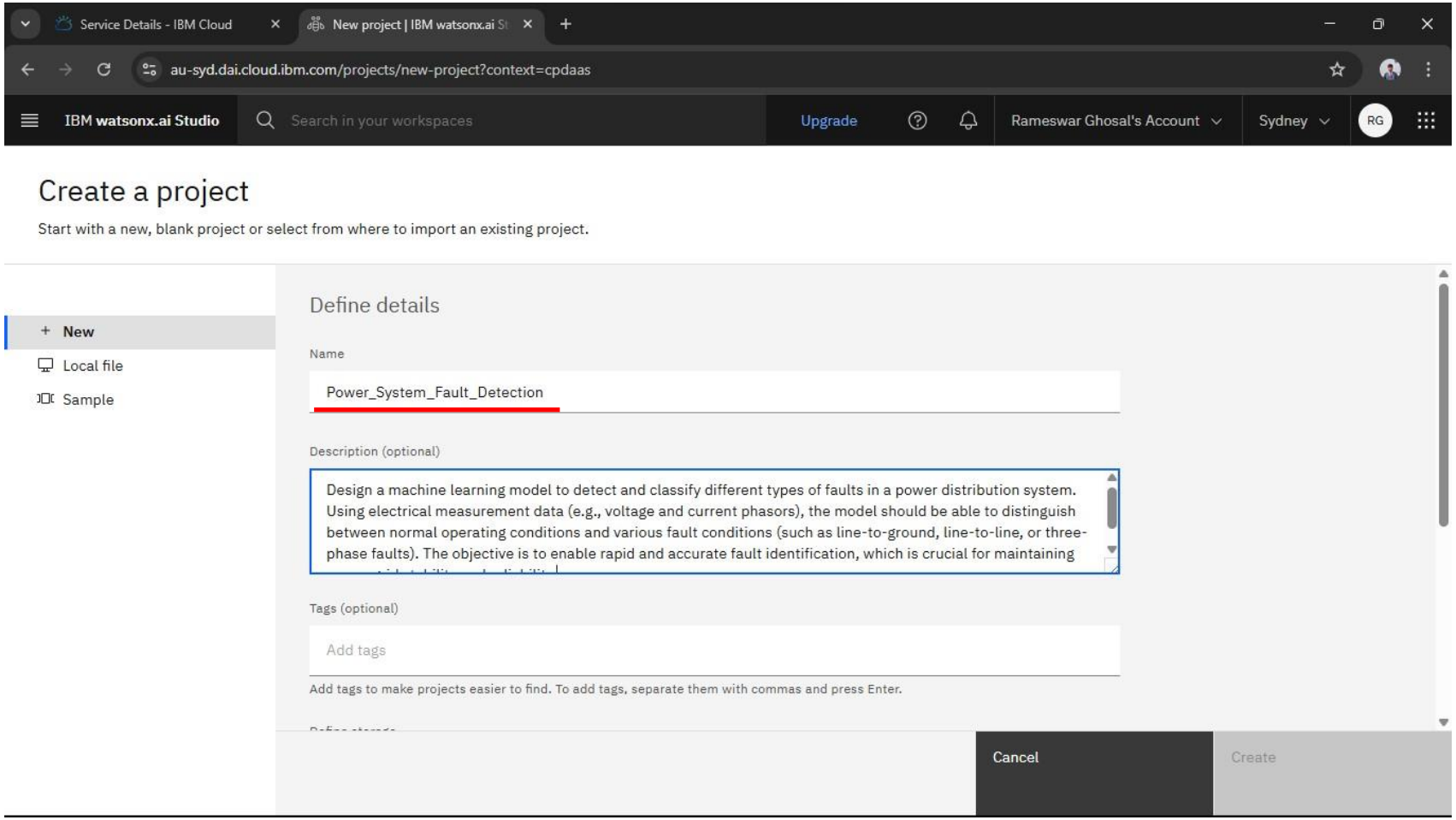
9. Click on “create” button.



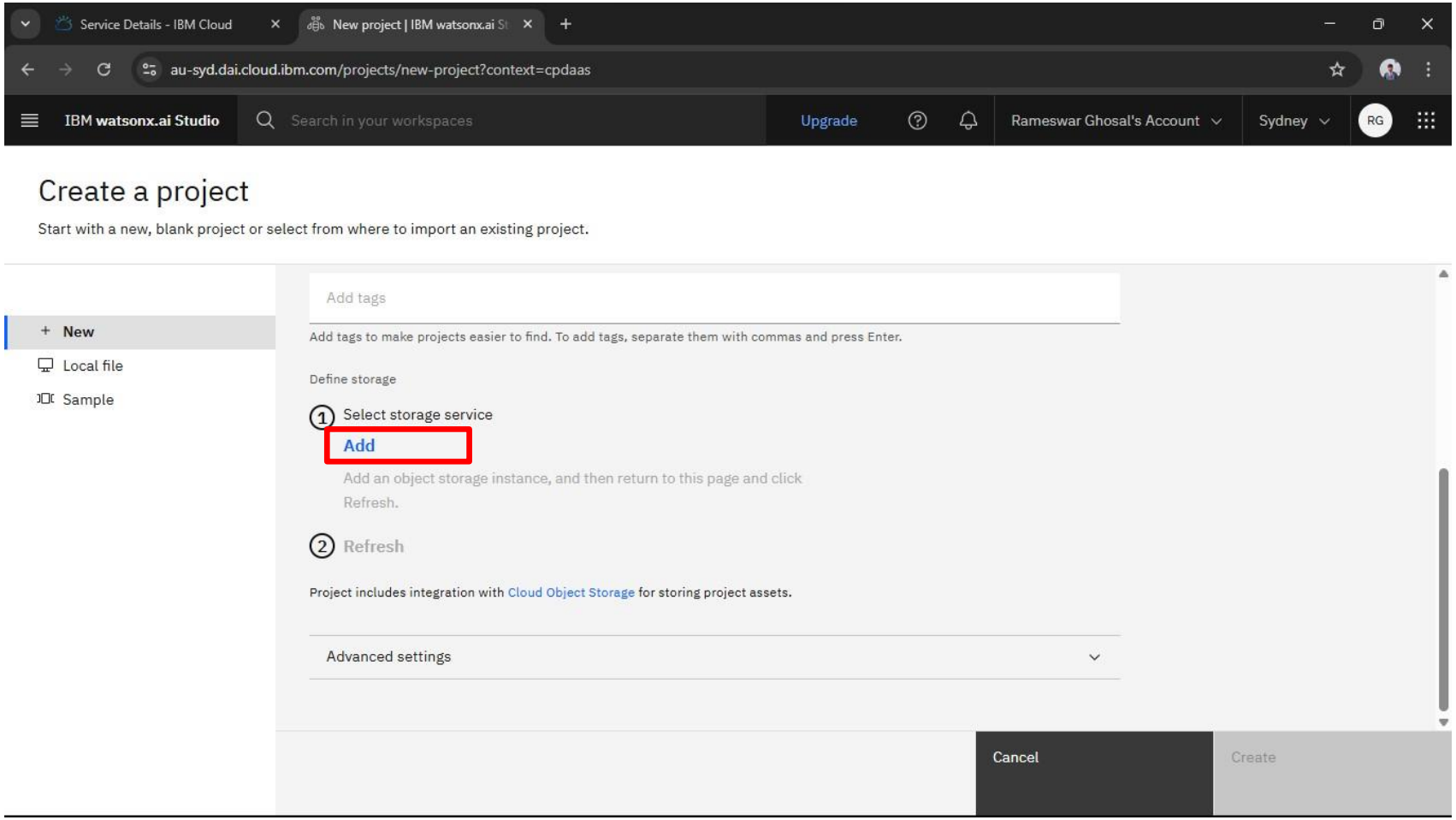
10. Select “New project” and click on “next”.



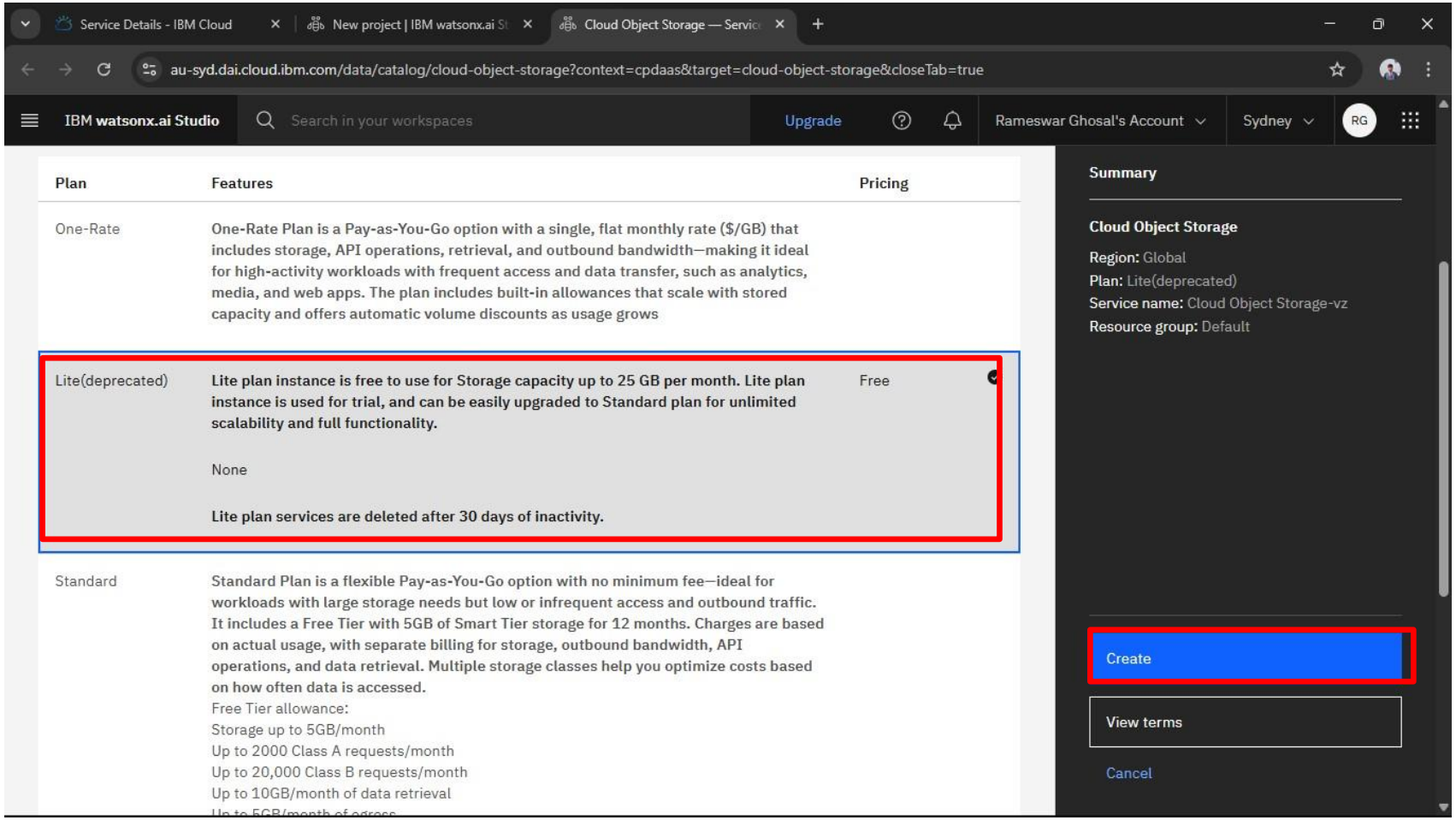
11. Give a name to your project and give some description.



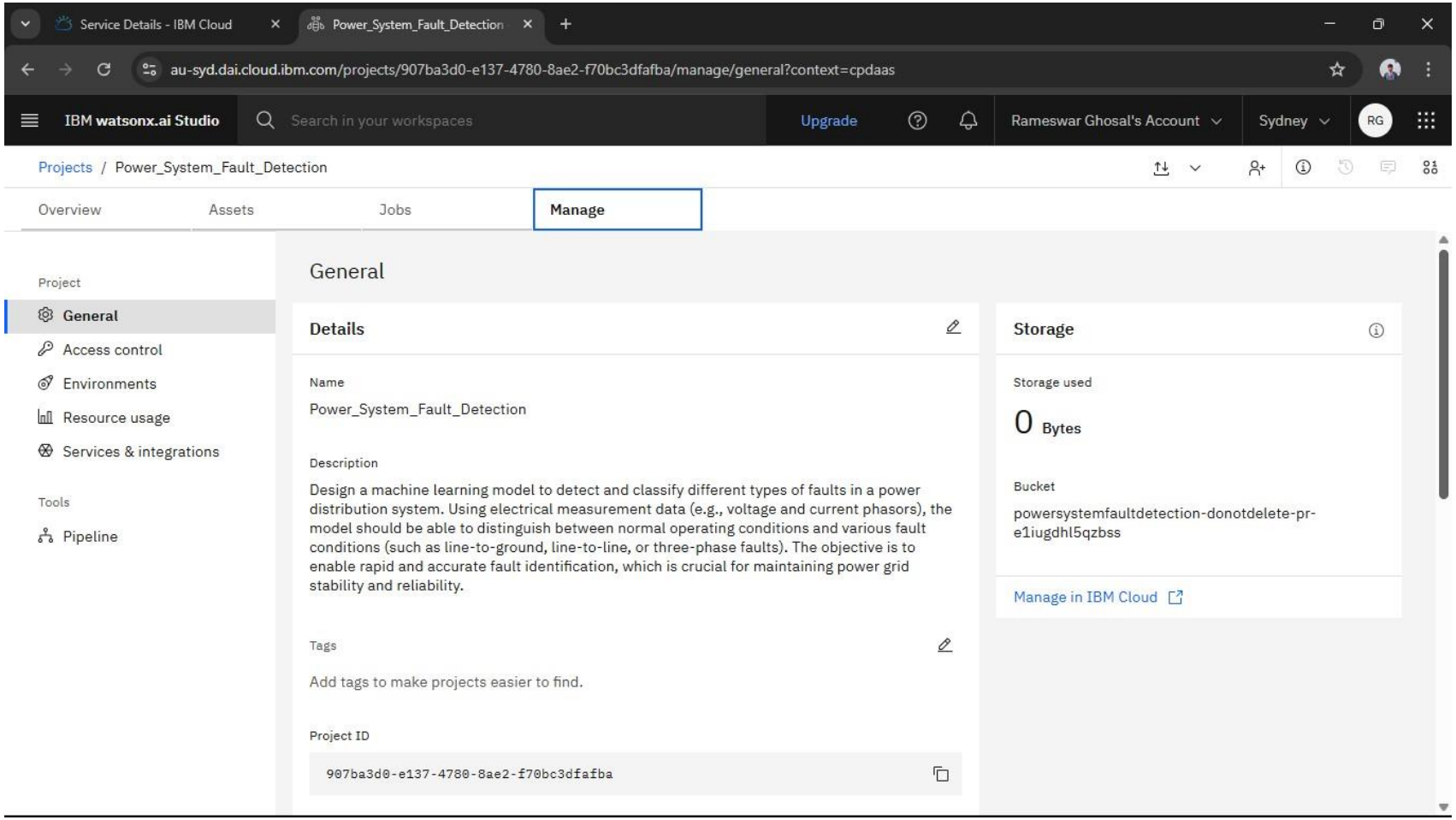
12. Click on add button to add some storage space. After selecting the storage click on the “Refresh” button.



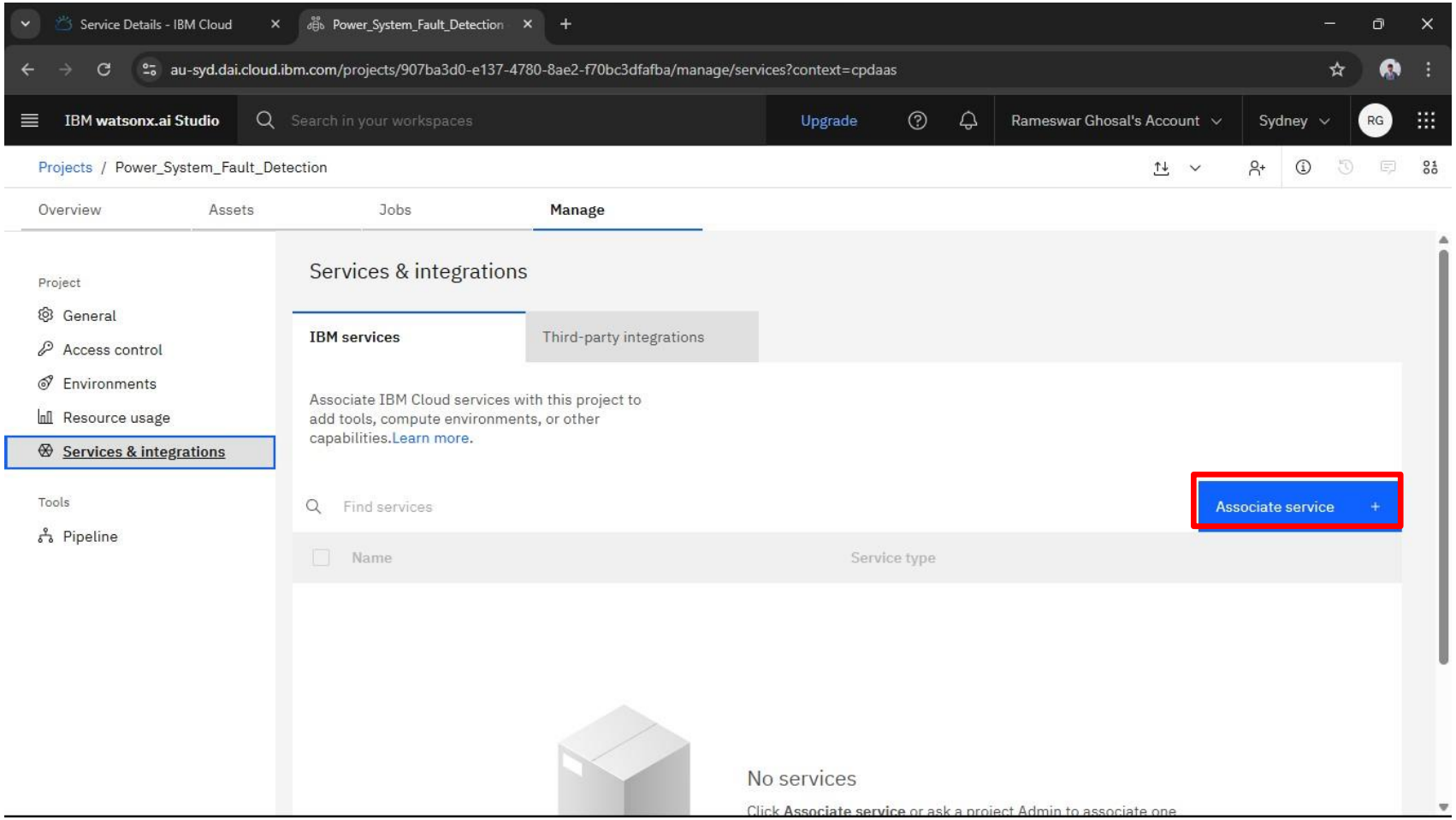
13. Select the “Lite(deprecated)” plan and click on “Create” button.



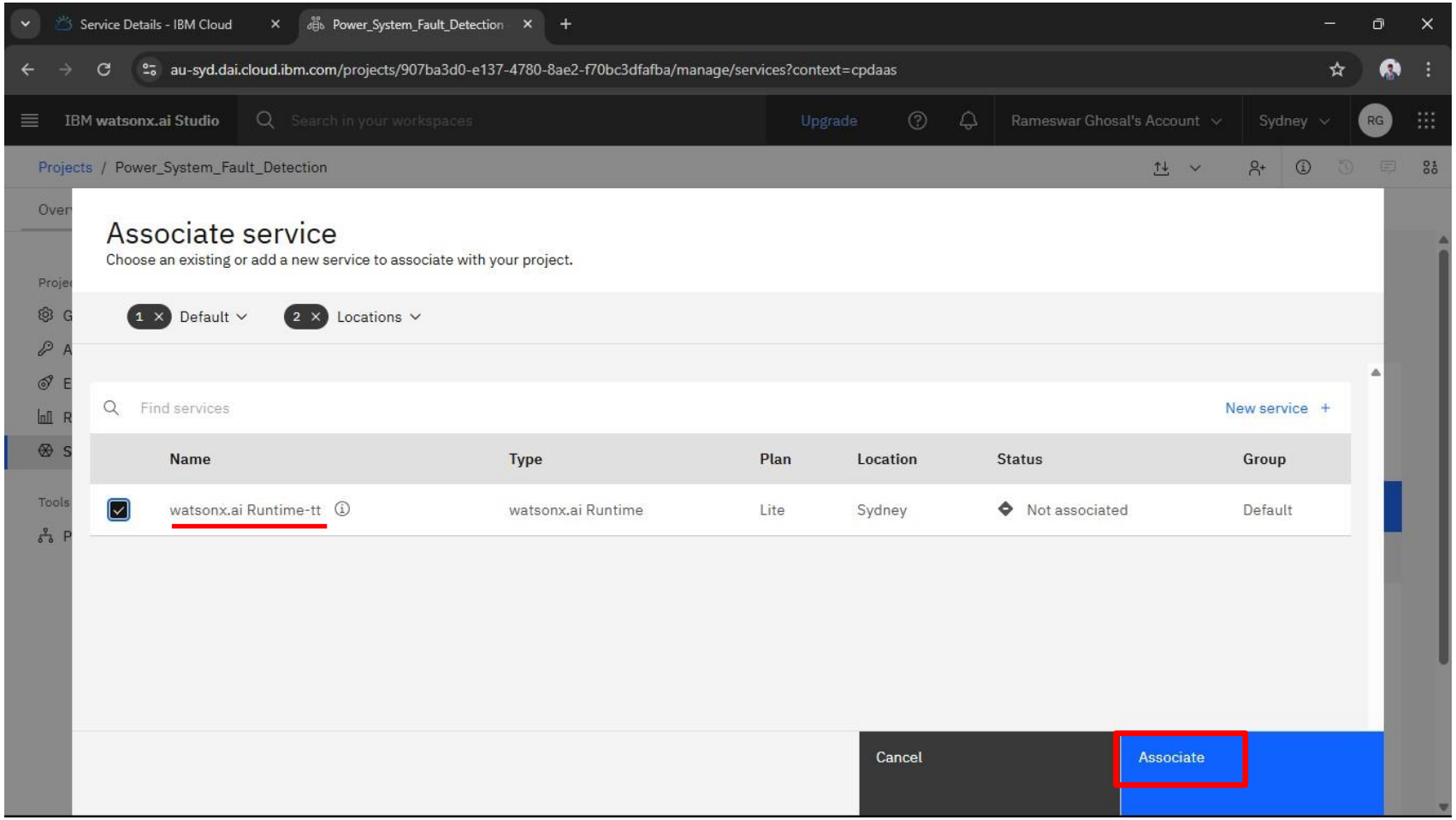
14. Click on manage section and click “Services & integration” for selecting the service.



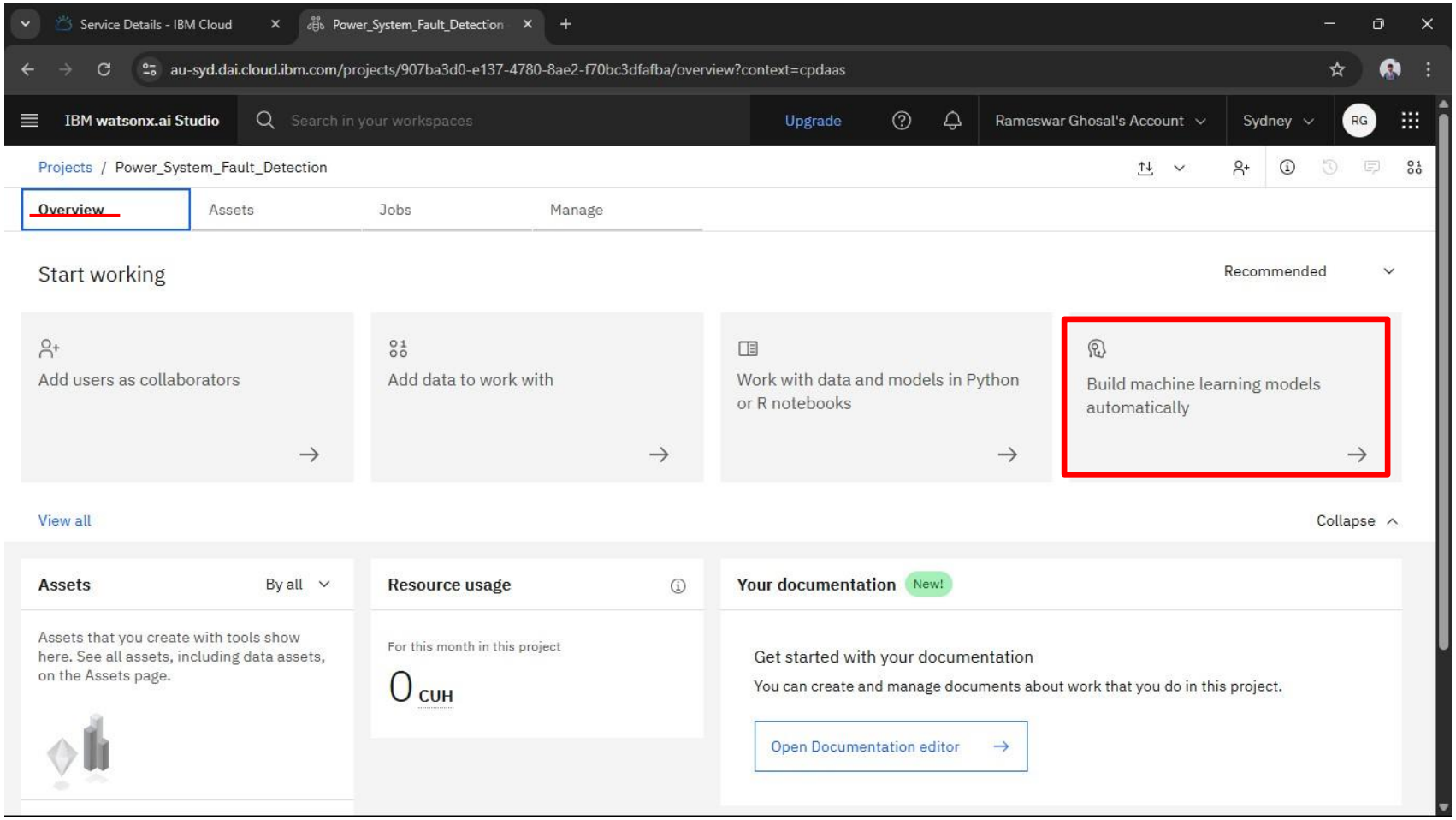
15. Click on associate service.



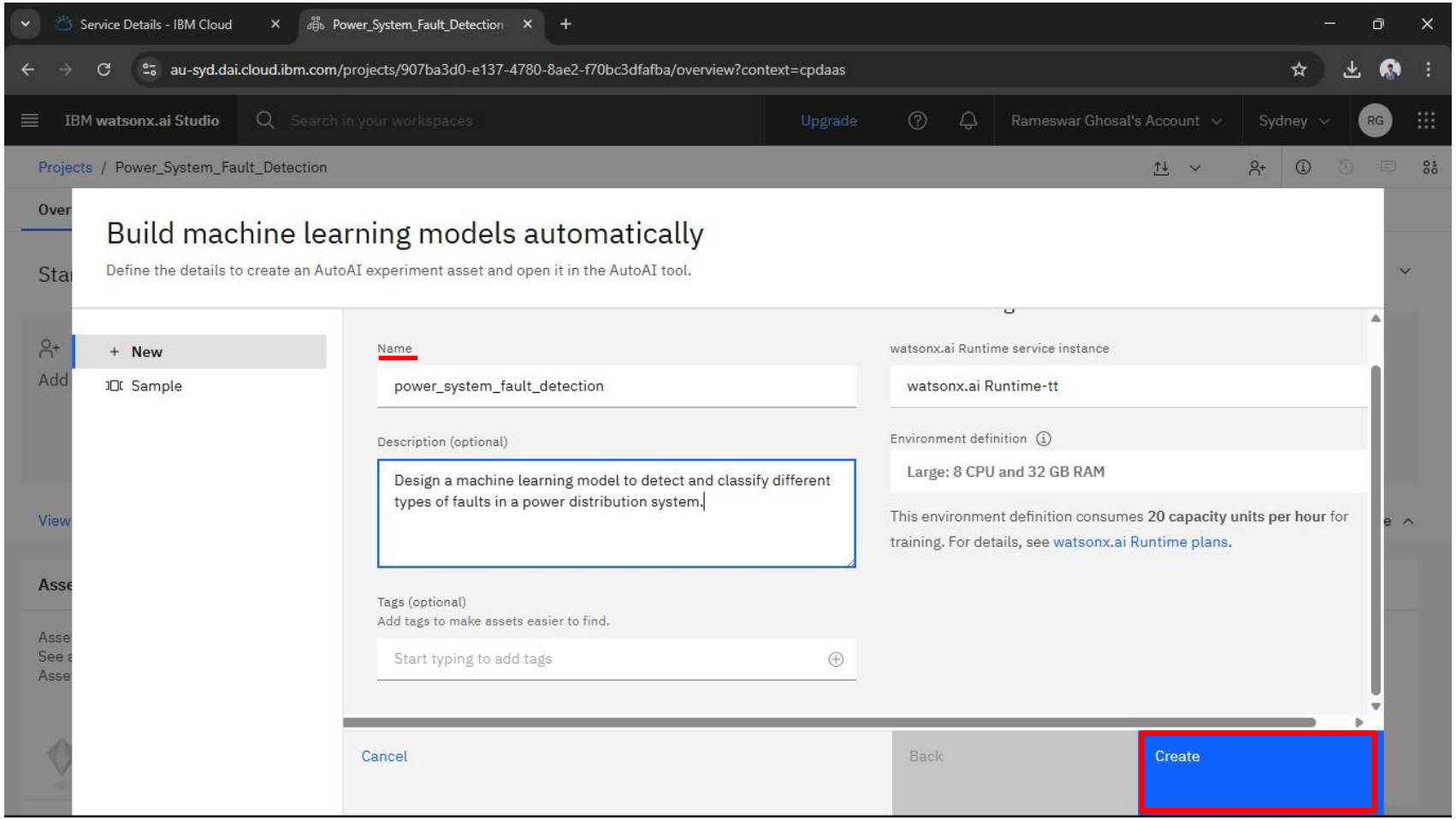
16. Select “watsonx.ai runtime” and click on “Associate”.



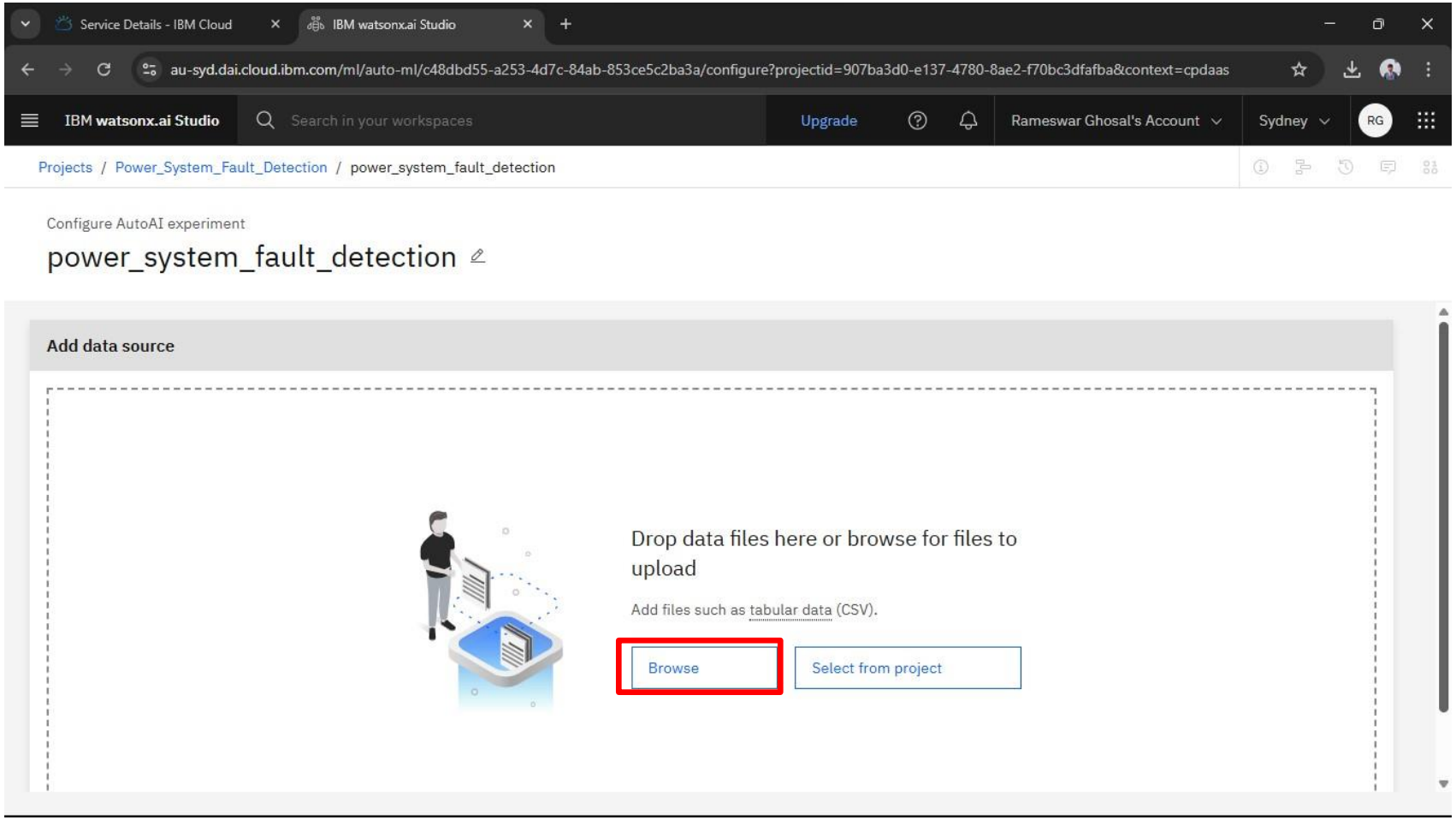
17. Go to “Overview” section and click on “Build machine learning models automatically”.



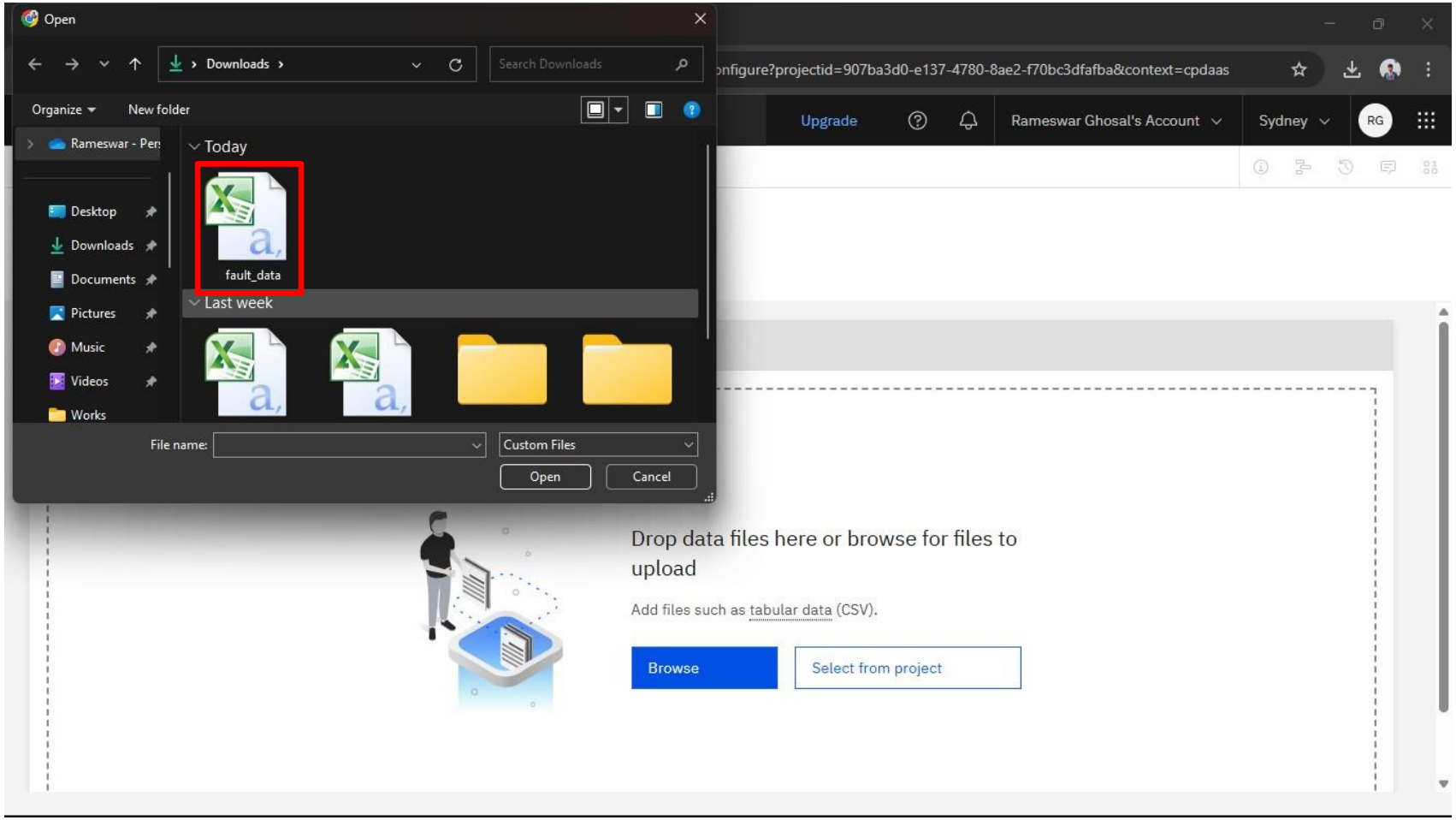
18. Give a name to the model and click “Create” button.



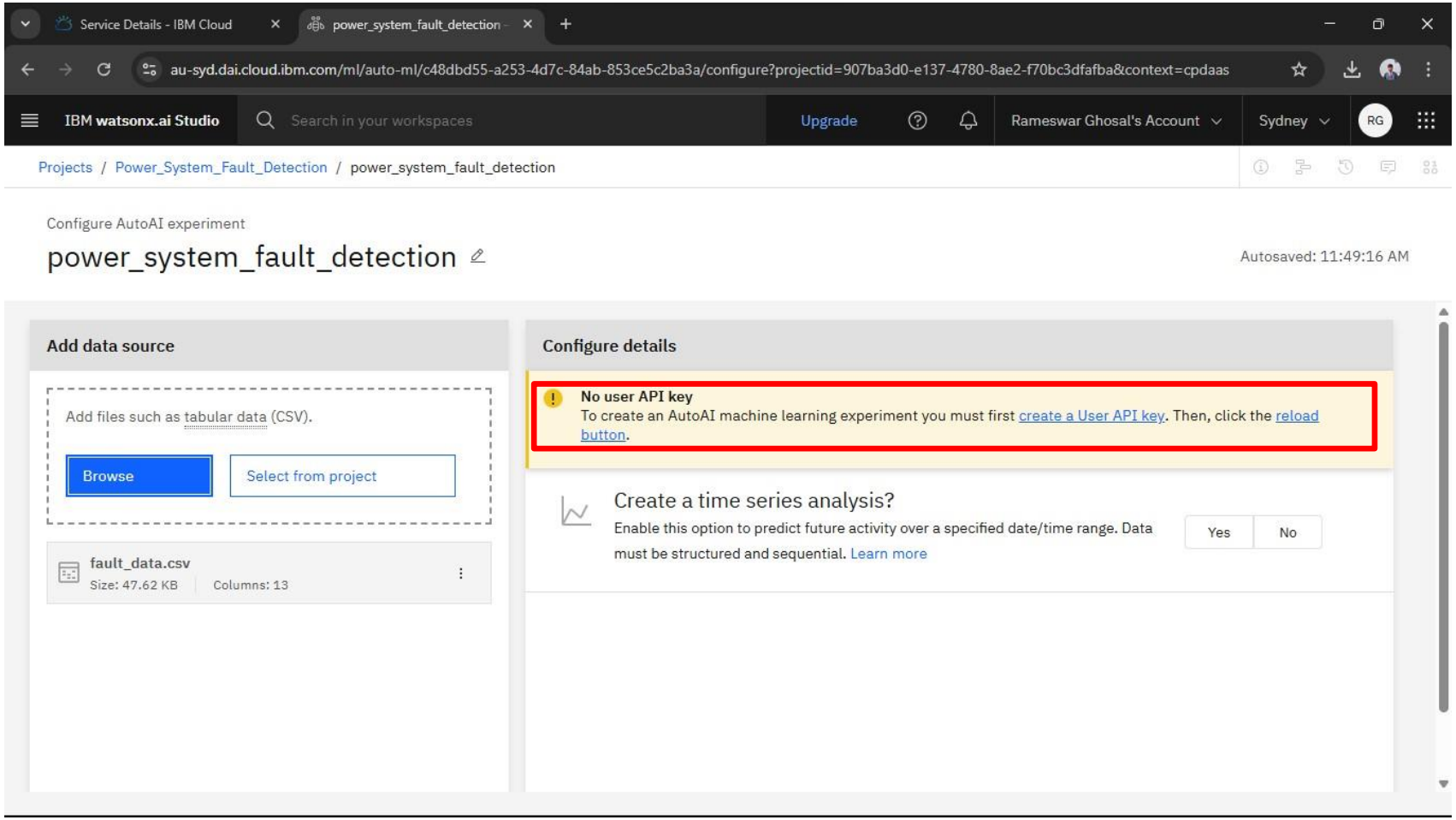
19. Browse the dataset from local storage.



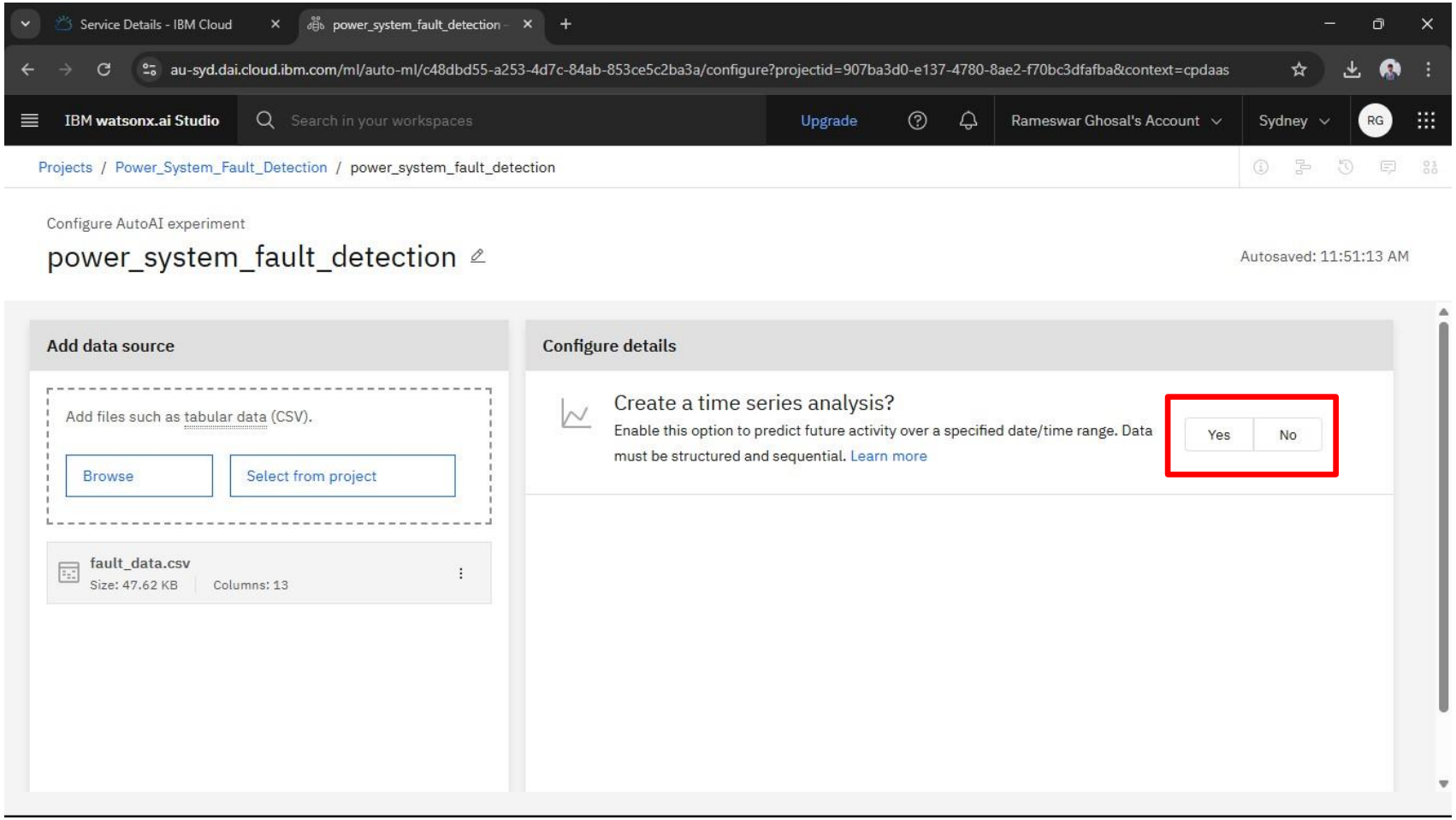
20. Select the .csv file of datasets and click on “Open” button.



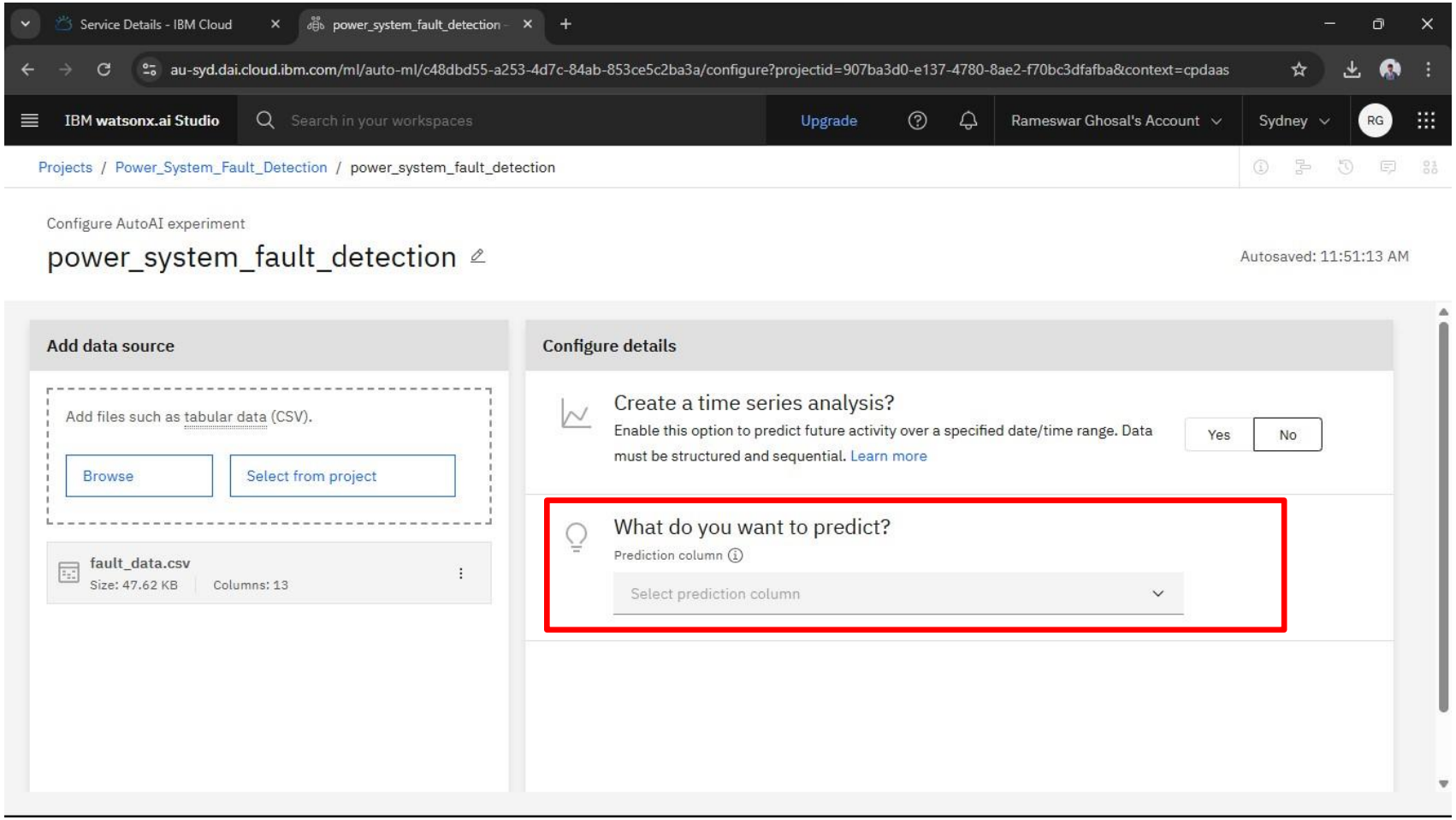
21. Create a user API key and click ‘reload’ button.



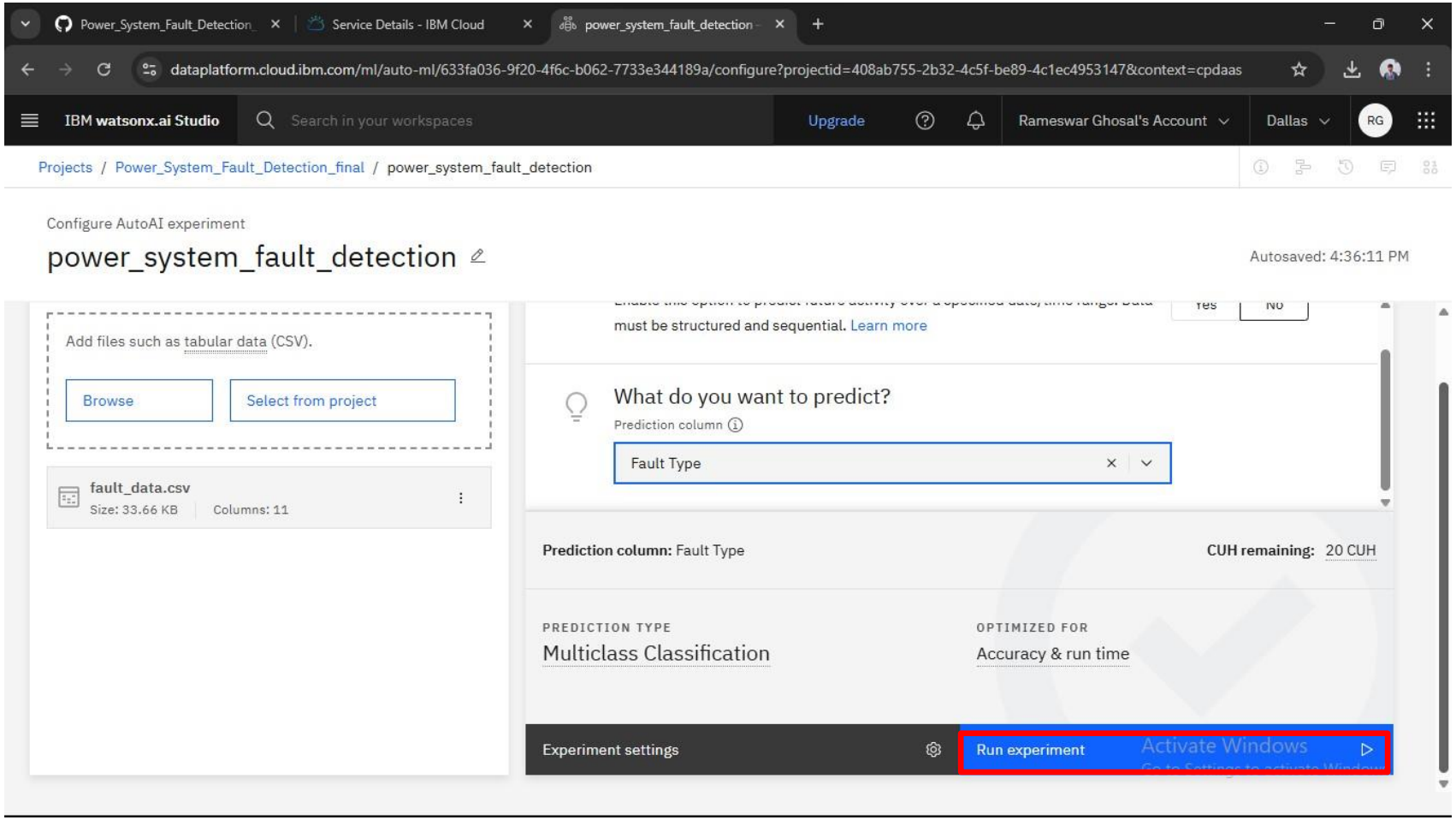
22. If you want to do a time series analysis then click on ‘yes’ or else click ‘no’.

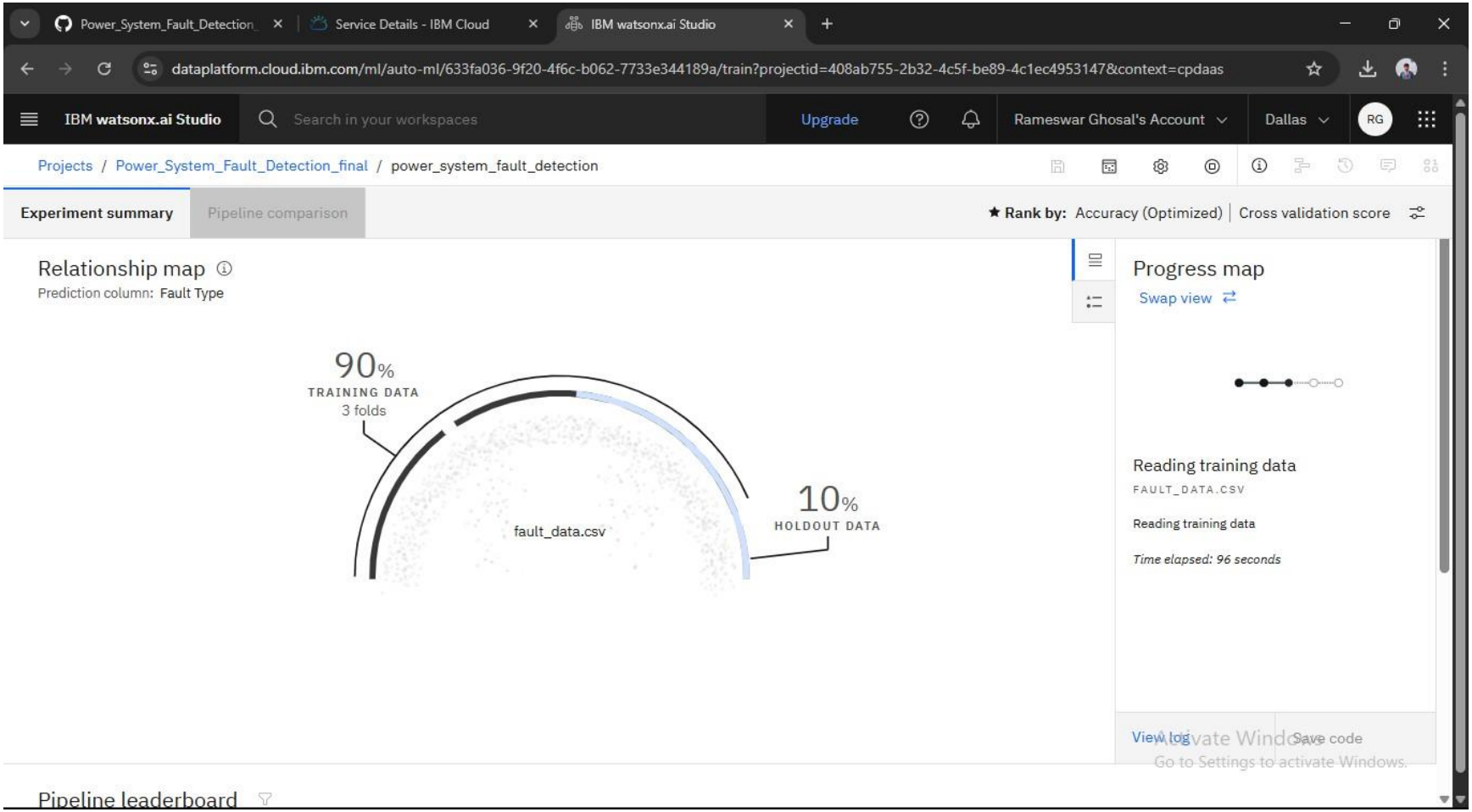


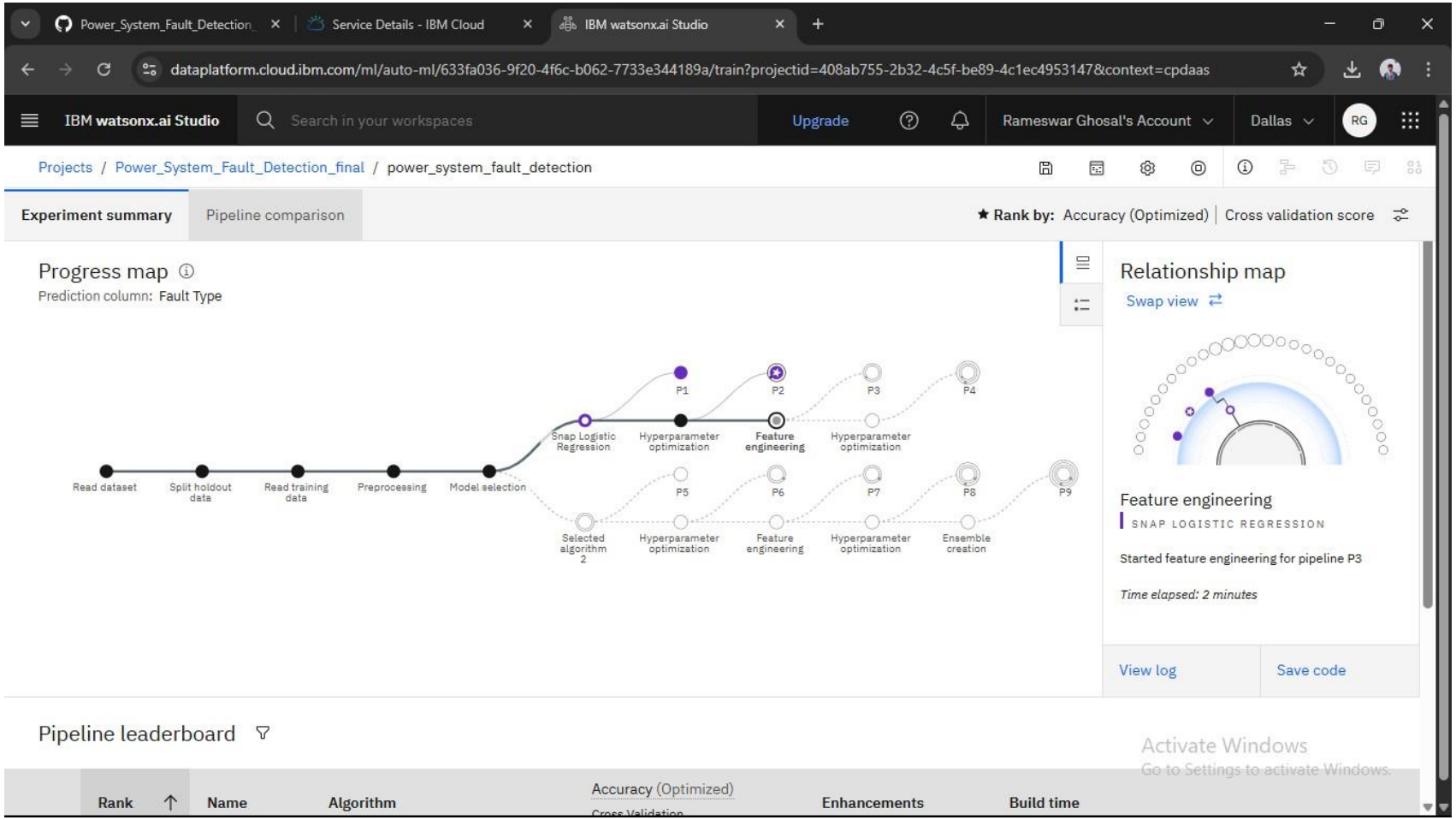
23. Select the output column which you want to predict.



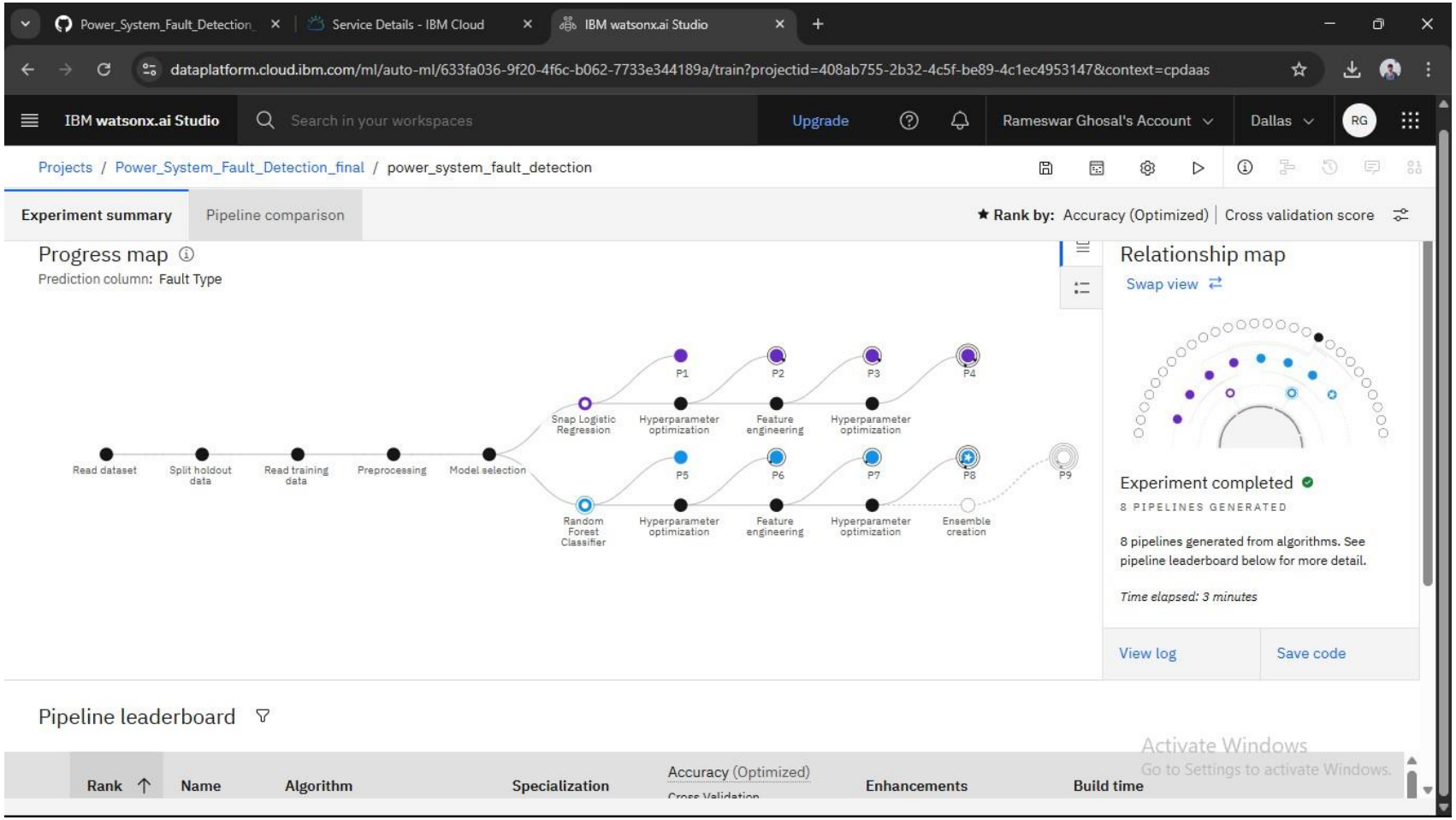
24. Click on ‘Run experiment’.



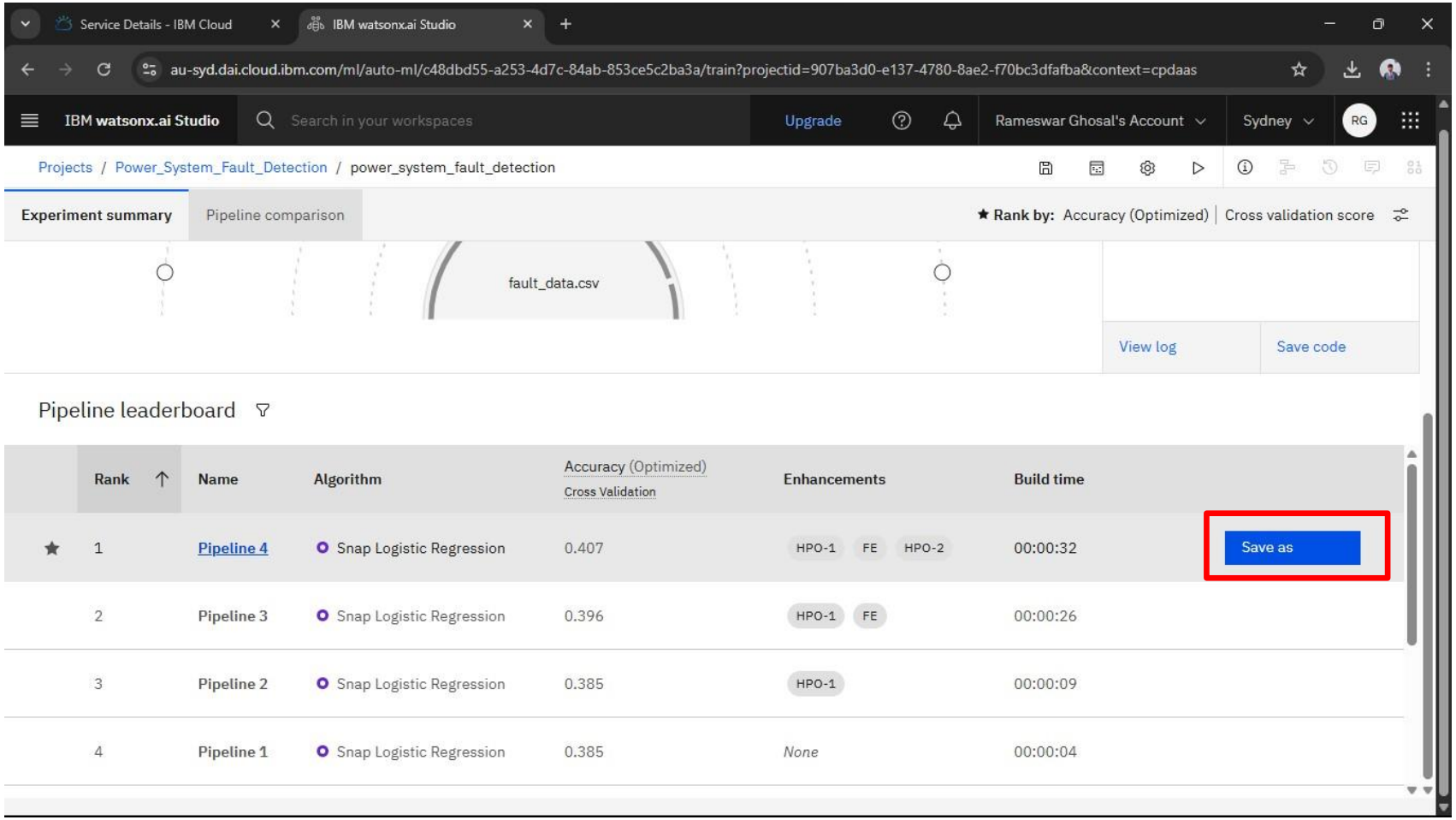

Power_System_Fault_Detection_final
Service Details - IBM Cloud
IBM watsonx.ai Studio
dataplatform.cloud.ibm.com/ml/auto-ml/633fa036-9f20-4f6c-b062-7733e344189a/train?projectid=408ab755-2b32-4c5f-be89-4c1ec4953147&context=cpdaas
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Dallas
RG
Projects / Power_System_Fault_Detection_final / power_system_fault_detection
Experiment summary
Pipeline comparison
Rank by: Accuracy (Optimized) | Cross validation score
Relationship map
Prediction column: Fault Type
90%
TRAINING DATA
3 folds
fault_data.csv
10%
HOLDOUT DATA
Progress map
Swap view
Reading training data
FAULT_DATA.CSV
Reading training data
Time elapsed: 96 seconds
View log
Save code
Activate Windows
Go to Settings to activate Windows.
Pipeline leaderboard


Power_System_Fault_Detection
Service Details - IBM Cloud
IBM watsonx.ai Studio
dataplatform.cloud.ibm.com/ml/auto-ml/633fa036-9f20-4f6c-b062-7733e344189a/train?projectid=408ab755-2b32-4c5f-be89-4c1ec4953147&context=cpdaas
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Dallas
RG
Projects / Power_System_Fault_Detection_final / power_system_fault_detection
Experiment summary
Pipeline comparison
Rank by: Accuracy (Optimized) | Cross validation score
Progress map
Prediction column: Fault Type
Read dataset
Split holdout data
Read training data
Preprocessing
Model selection
Snap Logistic Regression
Hyperparameter optimization
Feature engineering
Hyperparameter optimization
Selected algorithm 2
Hyperparameter optimization
Feature engineering
Hyperparameter optimization
Ensemble creation
P1
P2
P3
P4
P5
P6
P7
P8
P9
Relationship map
Swap view
Feature engineering
SNAP LOGISTIC REGRESSION
Started feature engineering for pipeline P3
Time elapsed: 2 minutes
View log
Save code
Pipeline leaderboard
Rank
Name
Algorithm
Accuracy (Optimized)
Cross Validation
Enhancements
Build time
Activate Windows
Go to Settings to activate Windows.

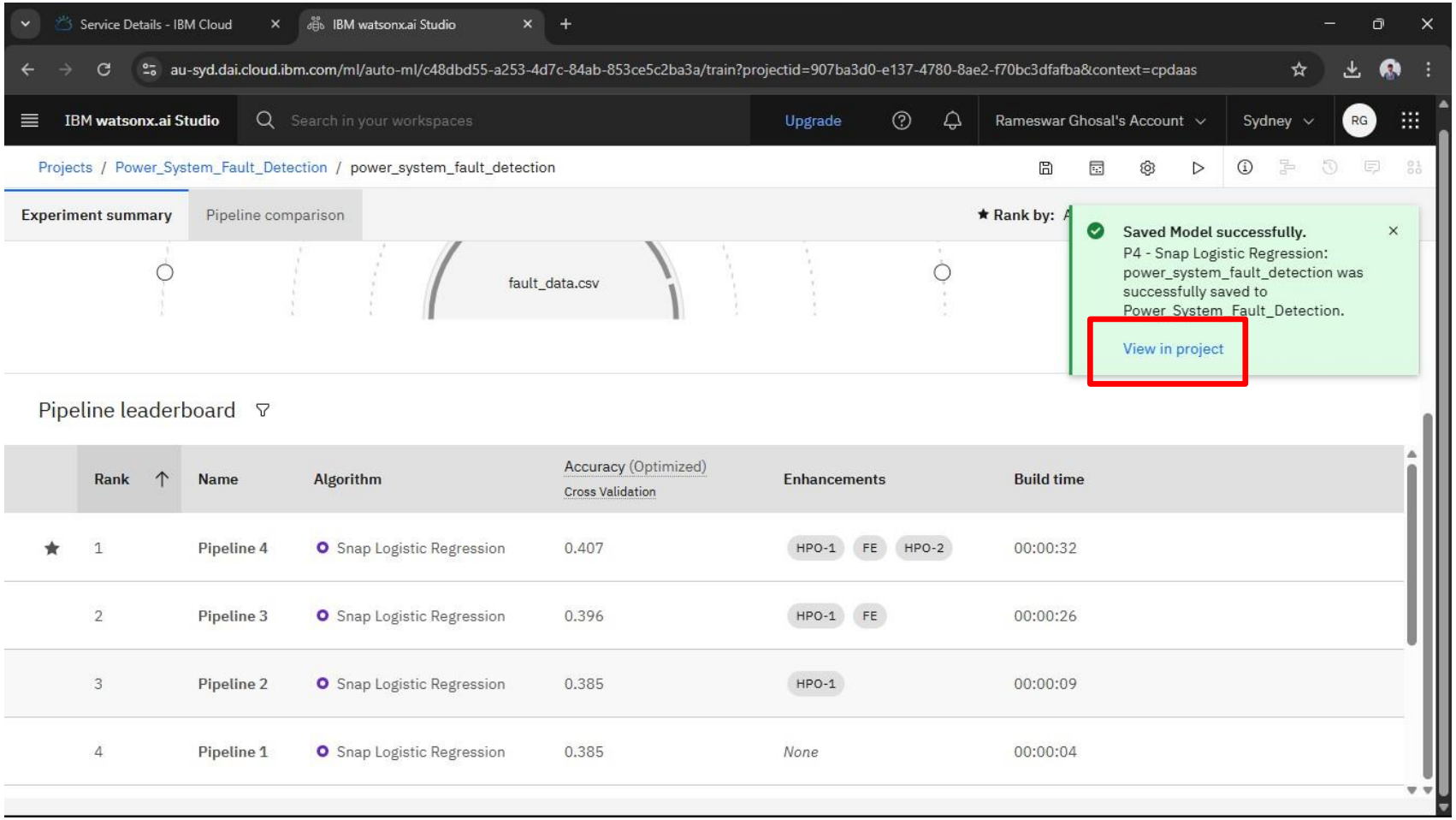
The experiment is completed.



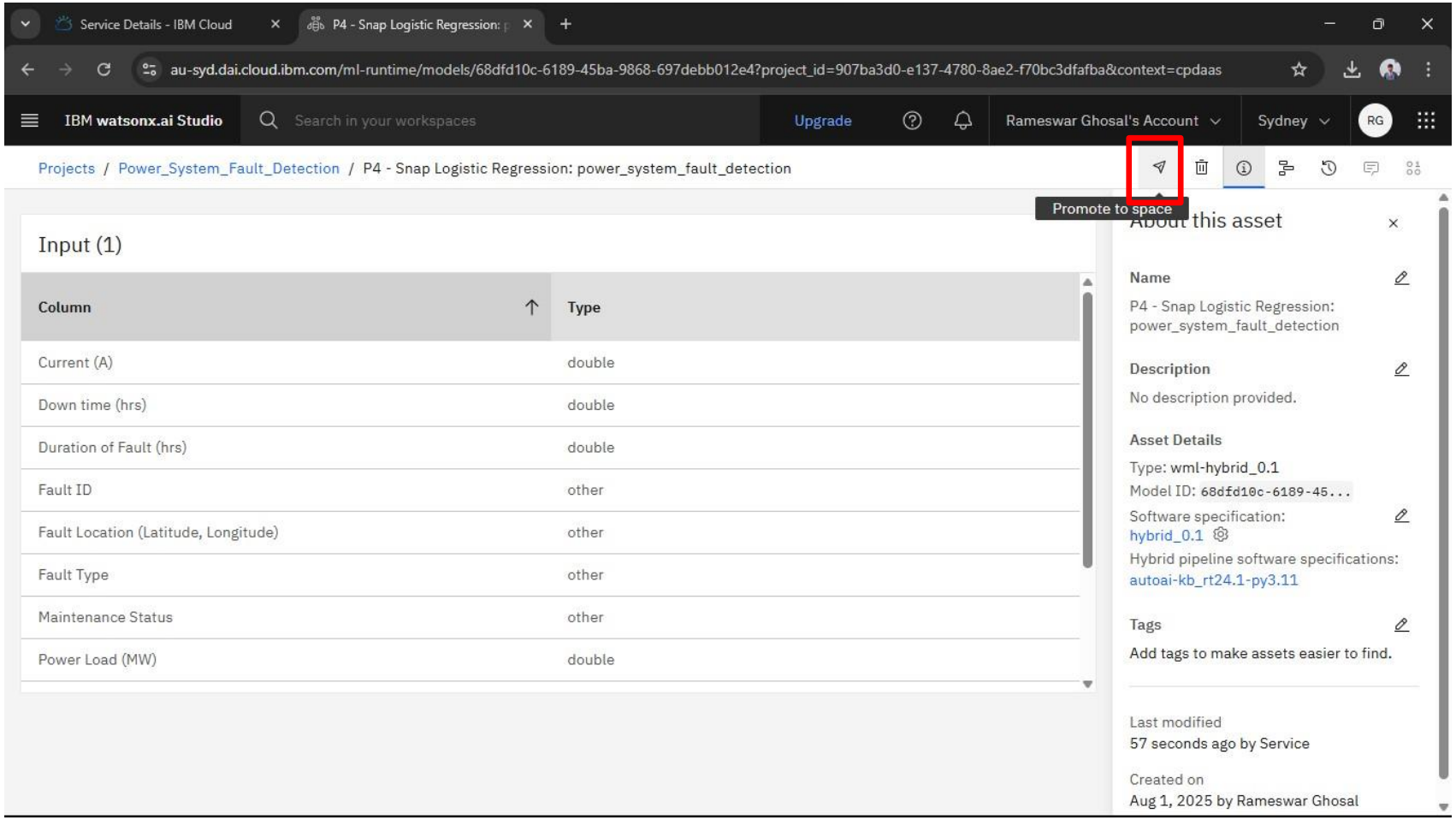
25. Click on ‘Save as’ button.



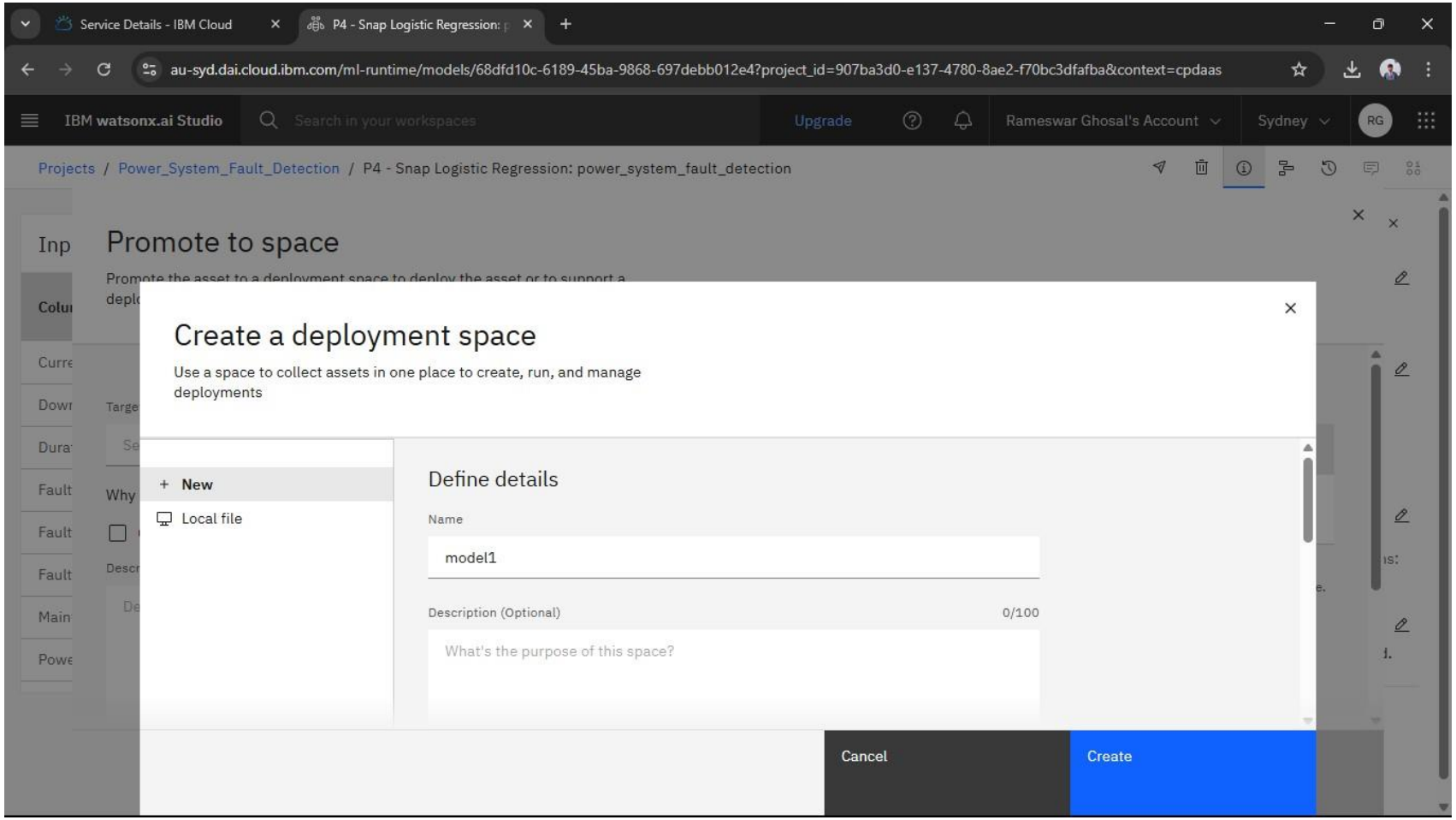
26. Click ‘View in project’.



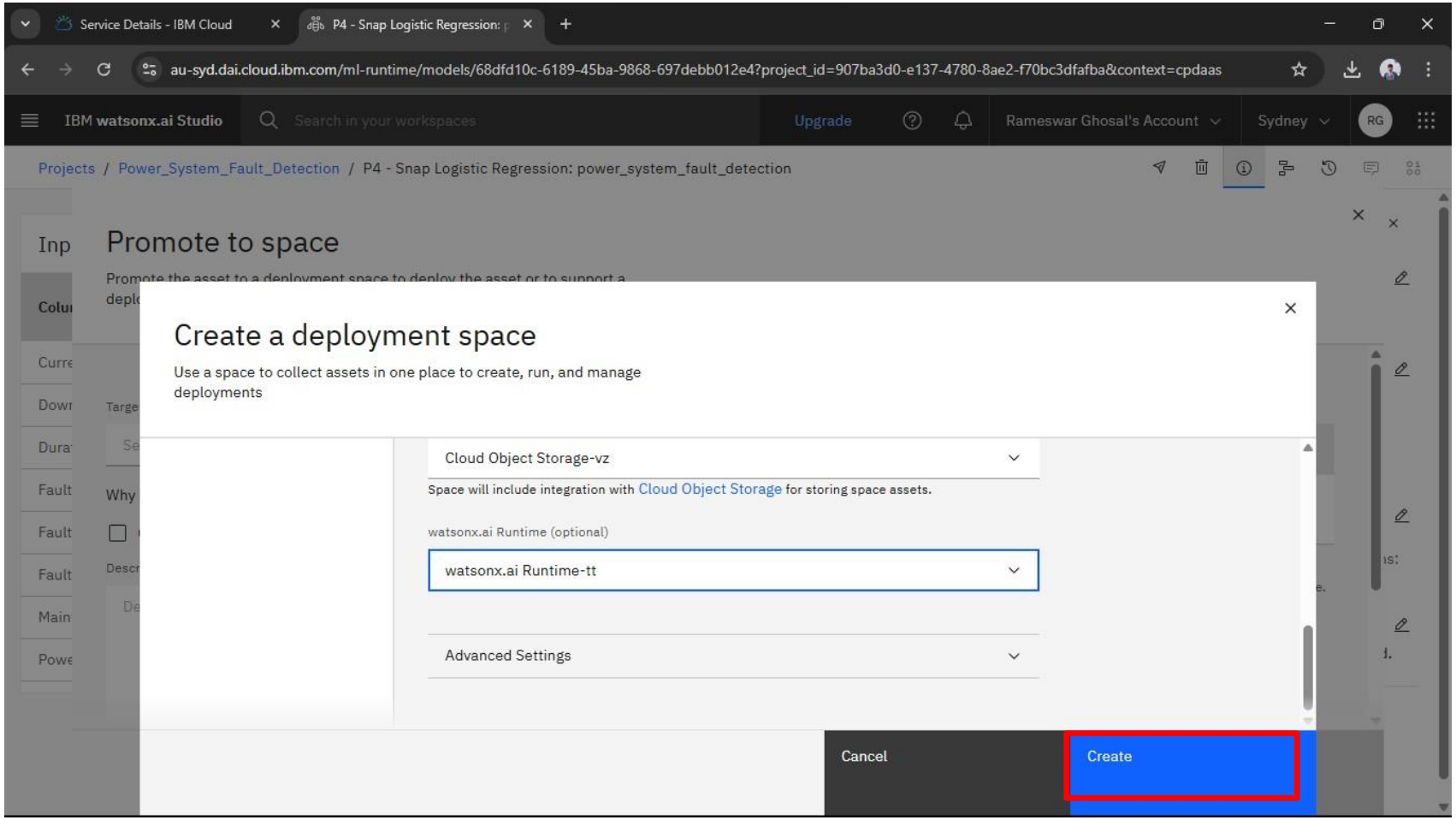
27. Click on ‘promote to space’.

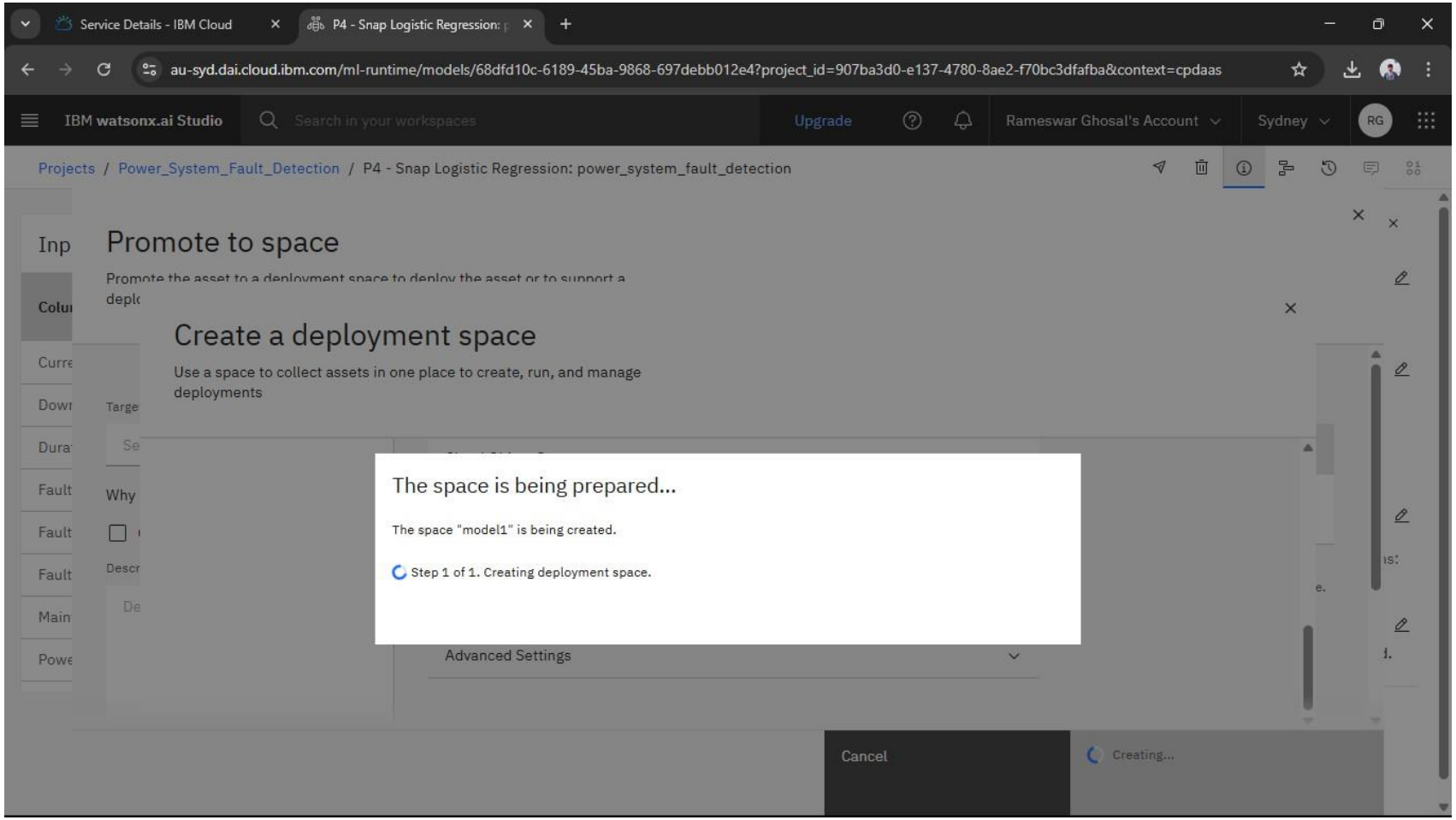


28. Give a name to the deployment space and scroll down.

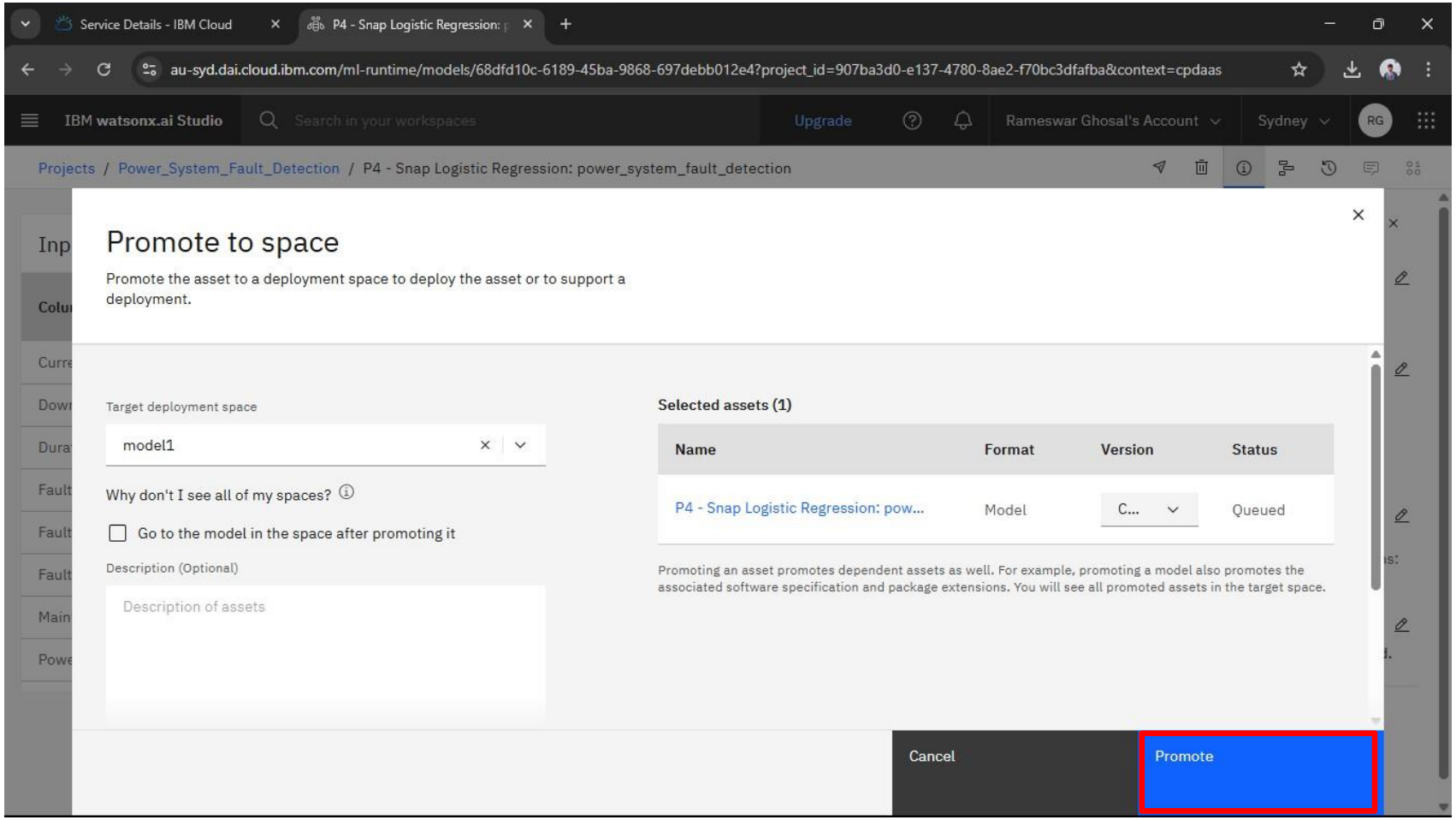


29. Select watsonx.ai runtime and click on ‘create’ button.

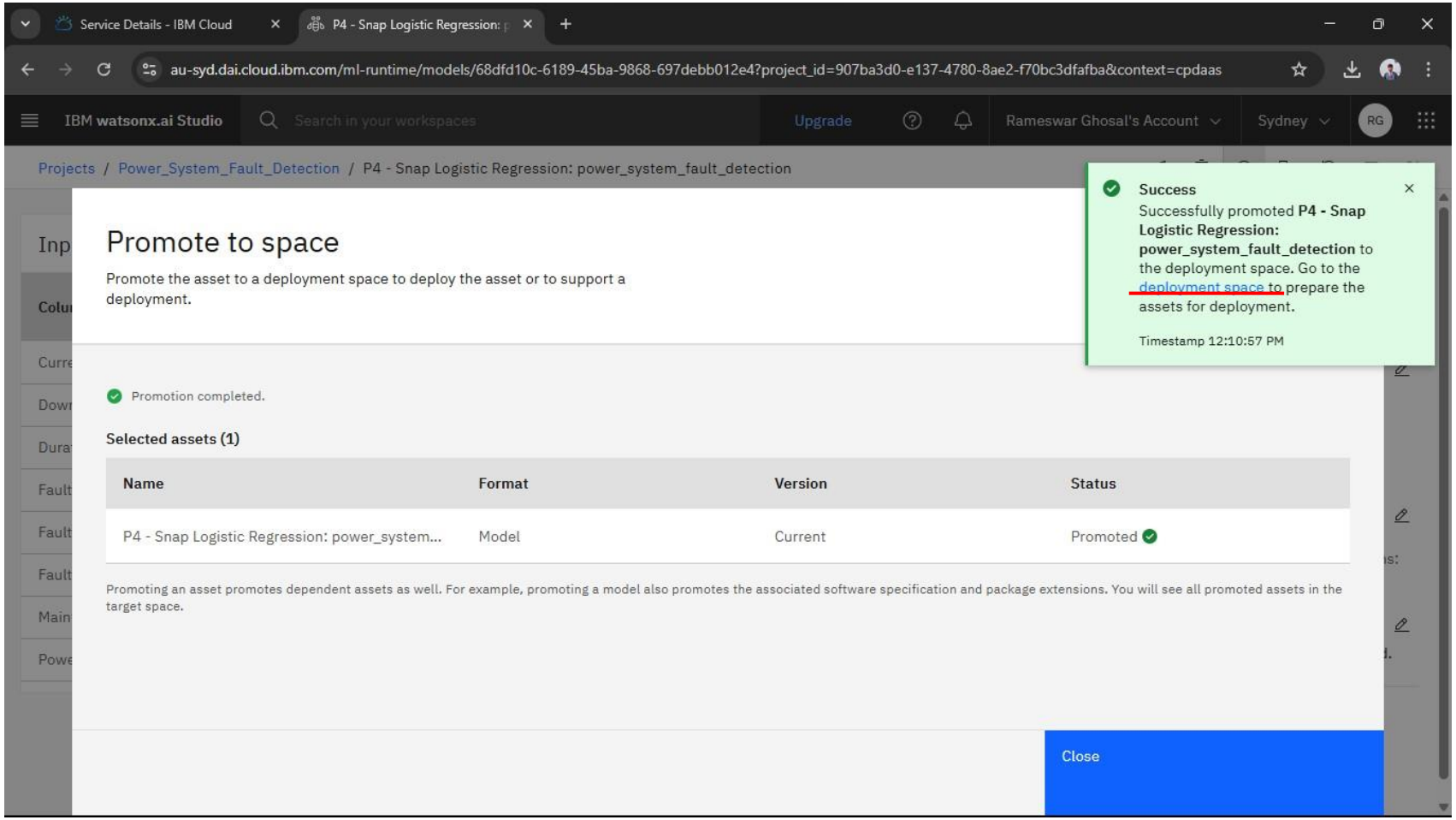



Service Details - IBM Cloud
P4 - Snap Logistic Regression:
au-syd.dai.cloud.ibm.com/ml-runtime/models/68dfd10c-6189-45ba-9868-697debb012e4?project_id=907ba3d0-e137-4780-8ae2-f70bc3dfafba&context=cpdaas
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Sydney
RG
Projects / Power_System_Fault_Detection / P4 - Snap Logistic Regression: power_system_fault_detection
Promote to space
Create a deployment space
Use a space to collect assets in one place to create, run, and manage deployments
The space is being prepared...
The space "model1" is being created.
Step 1 of 1. Creating deployment space.
Advanced Settings
Cancel
Creating...

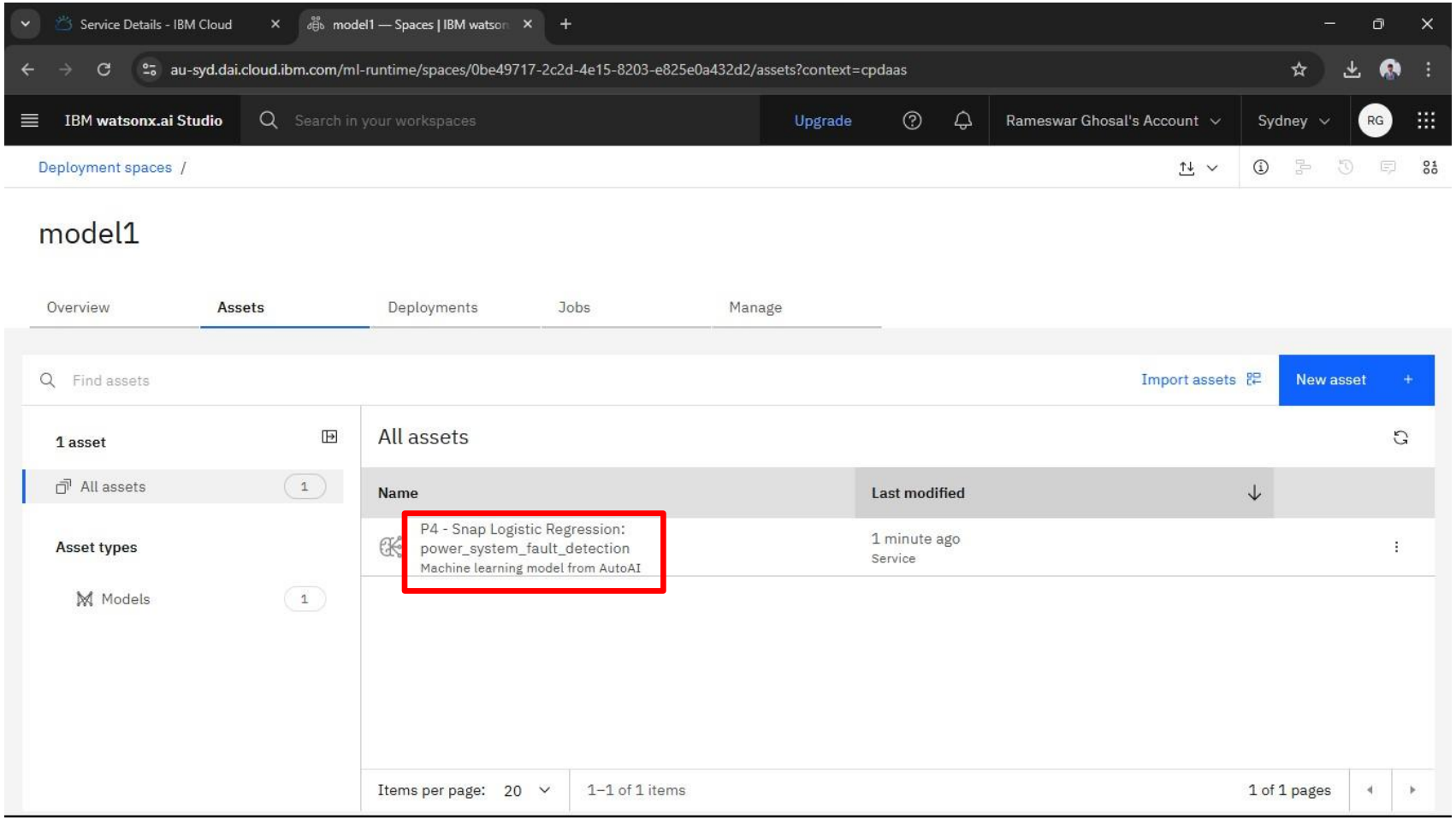
30. Click ‘promote’.



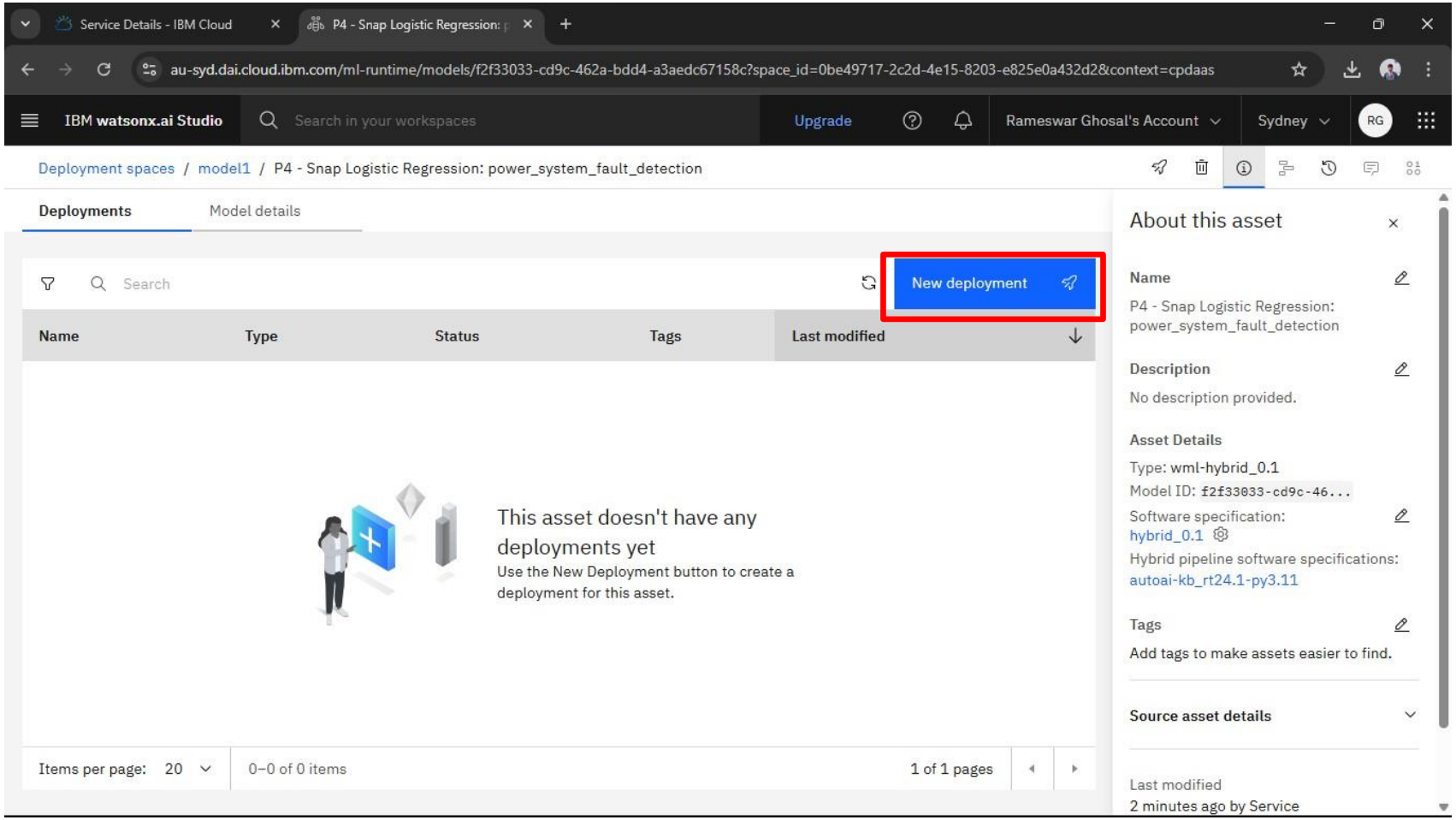
31. Click on ‘deployment space’.



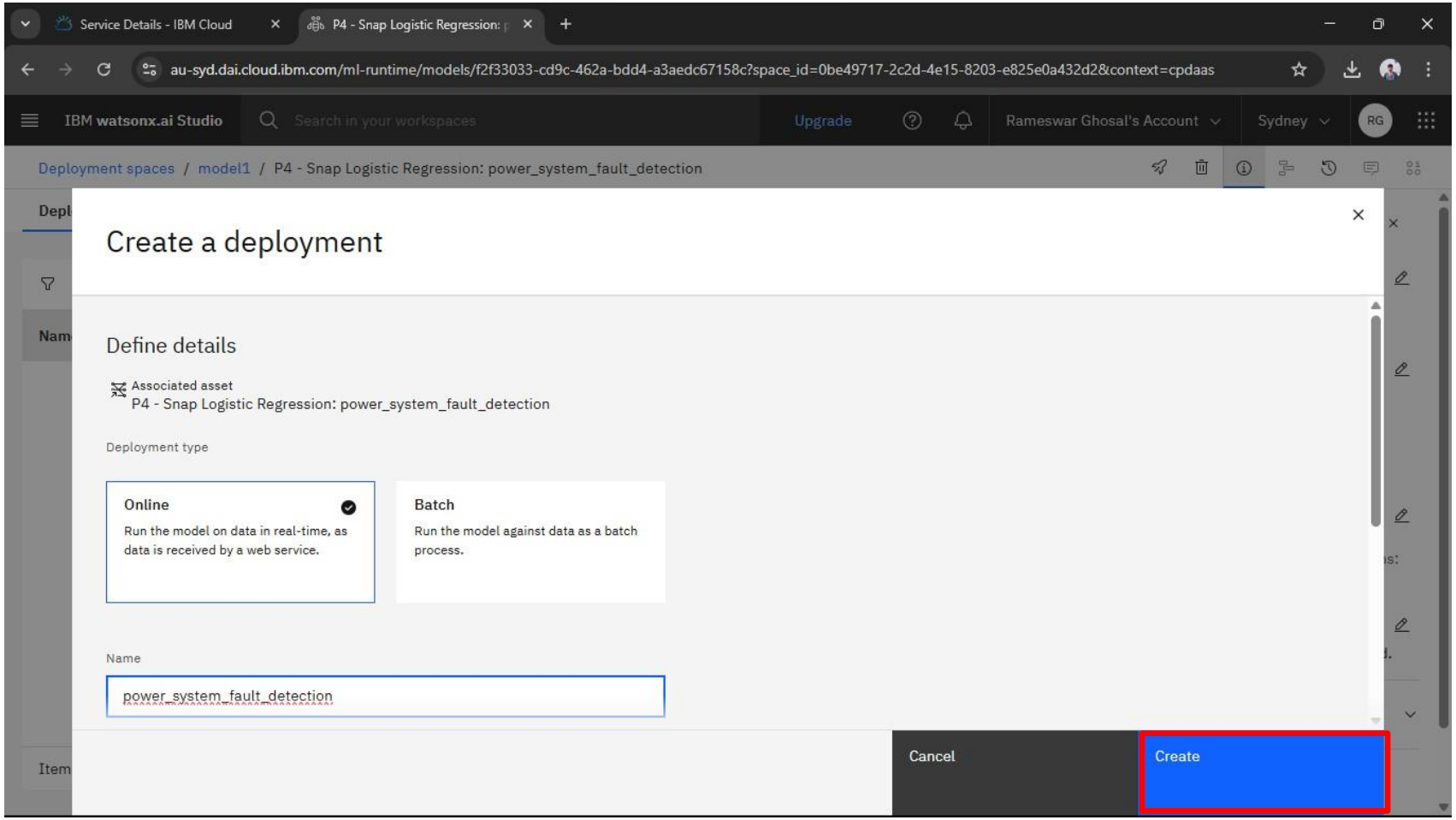
32. Click on the model name.



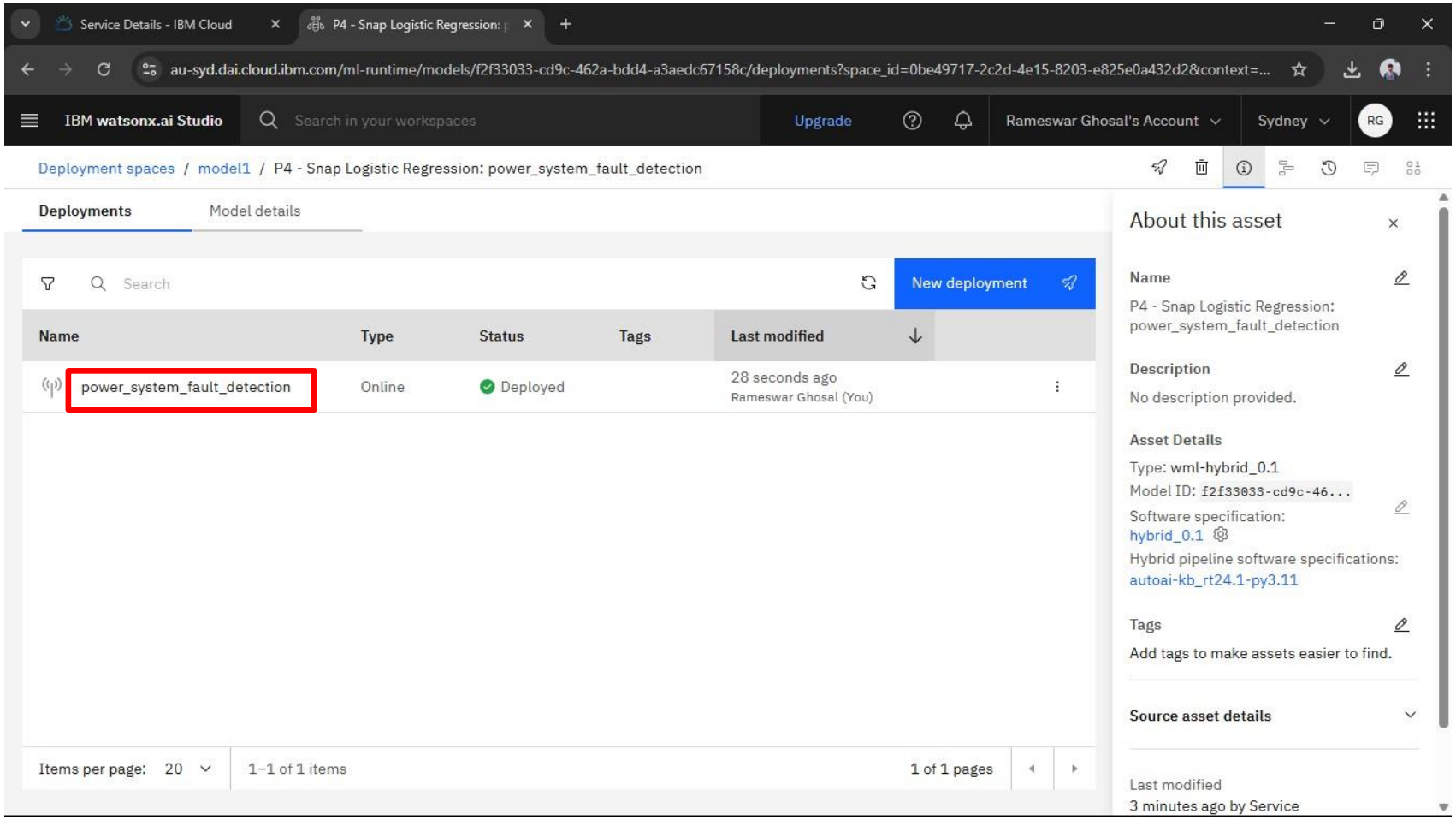
33. Click on ‘New deployment’.



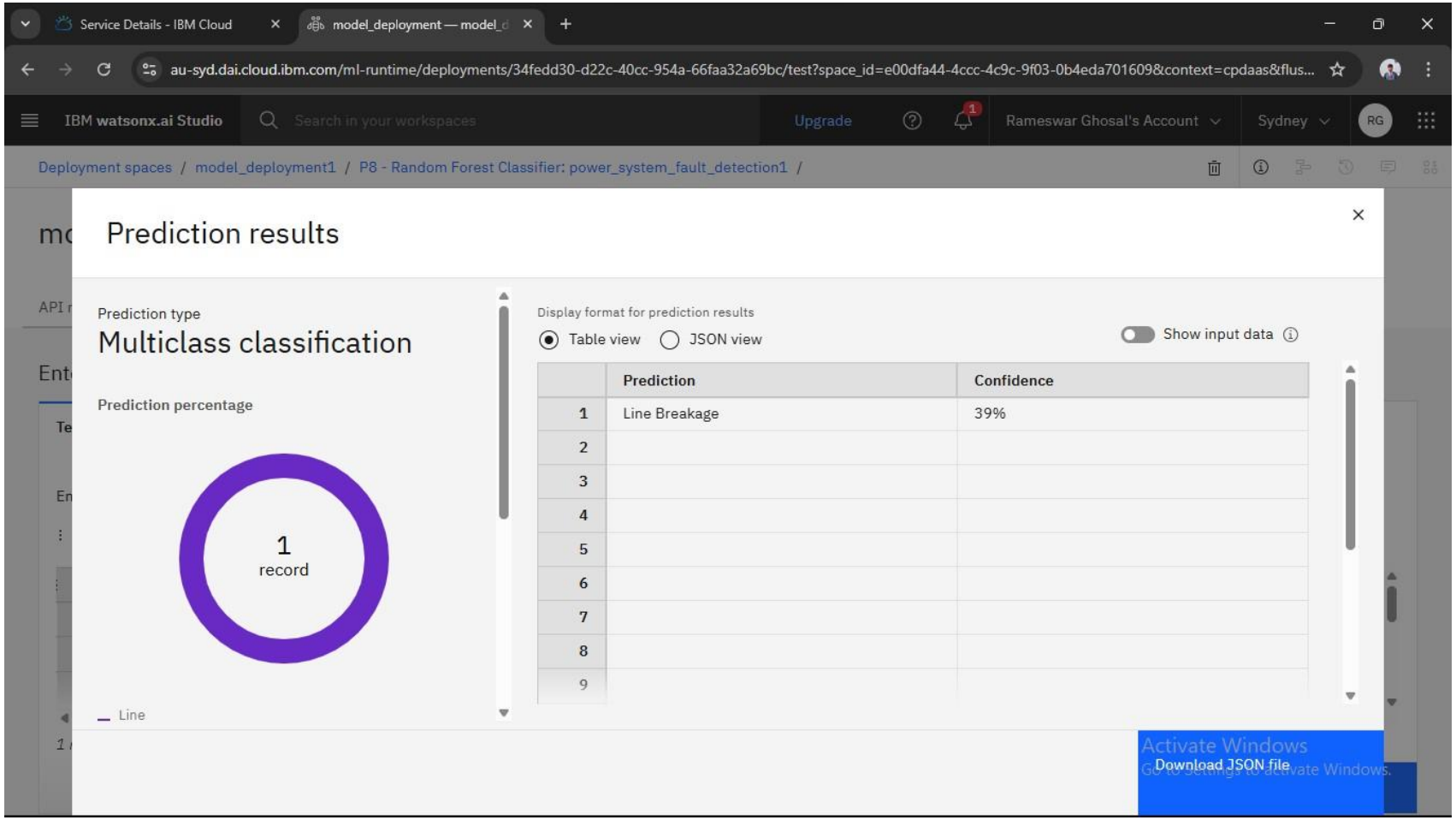
34. Click on ‘create’ button.



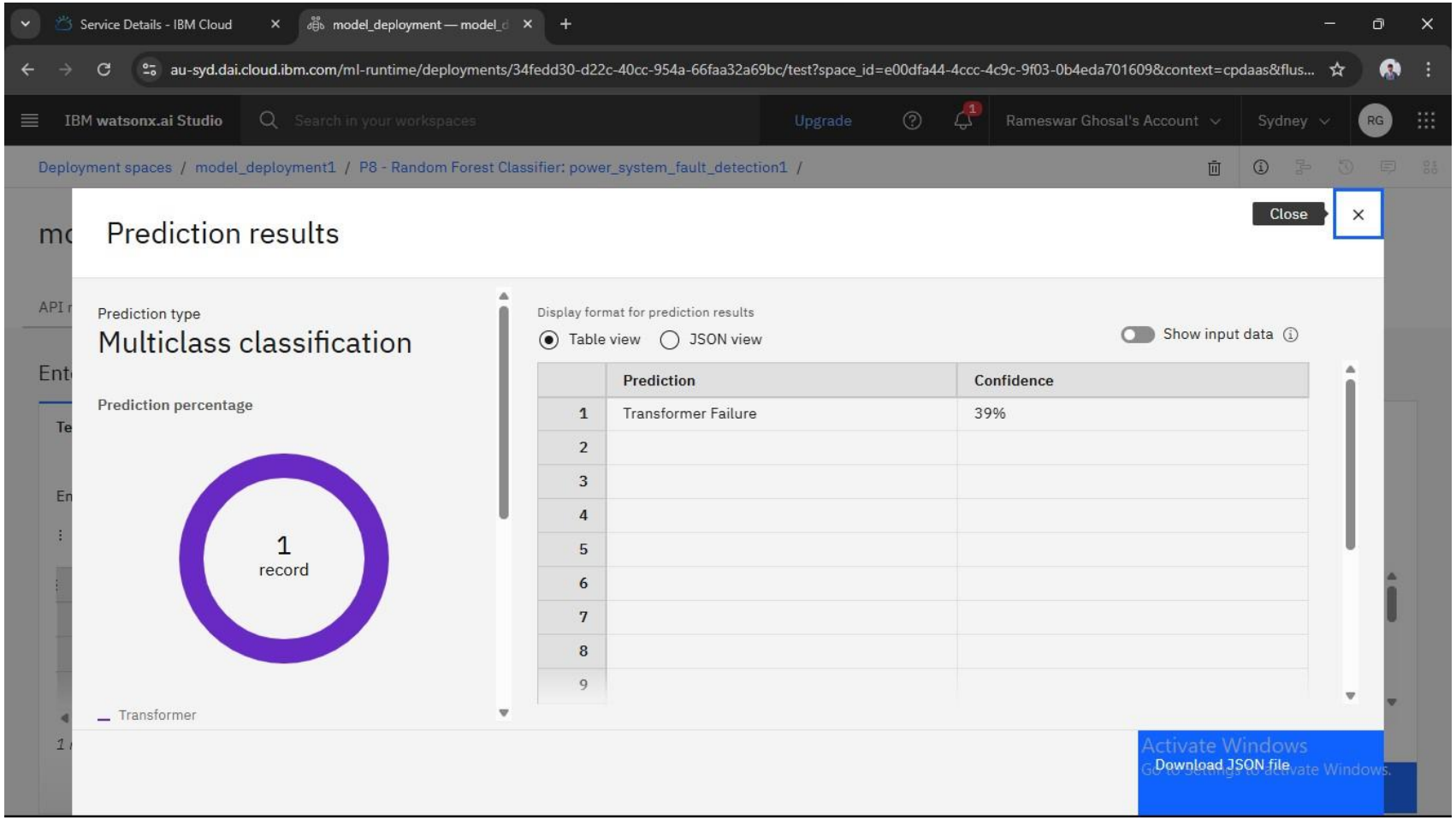
35. Click on the deployment to execute the model.



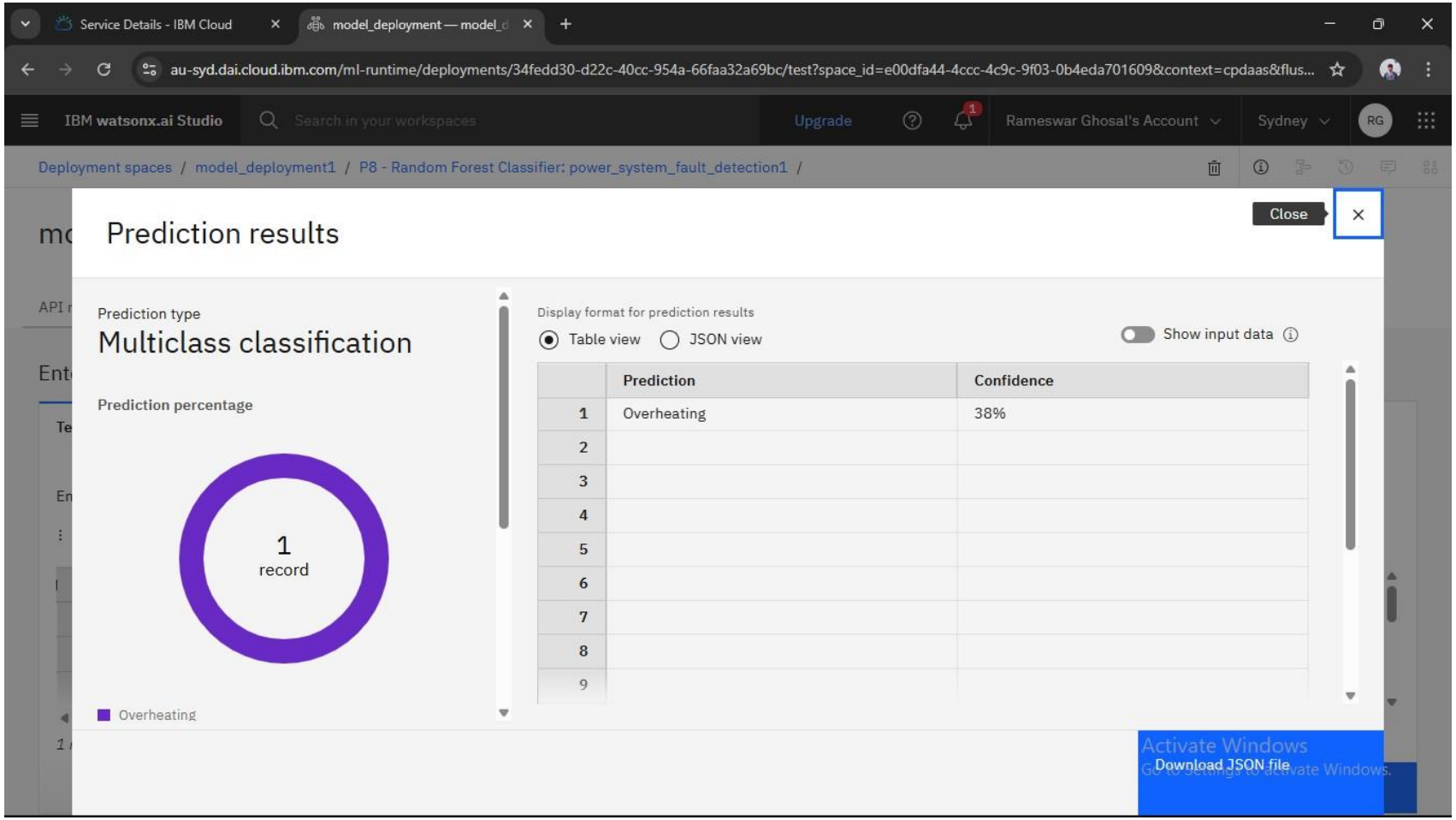
Result 1


Service Details - IBM Cloud
model_deployment — model_d
au-syd.dai.cloud.ibm.com/ml-runtime/deployments/34fedd30-d22c-40cc-954a-66faa32a69bc/test?space_id=e00dfa44-4ccc-4c9c-9f03-0b4eda701609&context=cpdaas&flus...
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Sydney
RG
Deployment spaces / model_deployment1 / P8 - Random Forest Classifier: power_system_fault_detection1 /
Prediction results
Prediction type
Multiclass classification
Prediction percentage
1
record
Line
Display format for prediction results
Table view
JSON view
Show input data
Prediction
Confidence
1
Line Breakage
39%
2
3
4
5
6
7
8
9
Activate Windows
Download JSON file

Result 2


Service Details - IBM Cloud
model_deployment — model_d
au-syd.dai.cloud.ibm.com/ml-runtime/deployments/34fedd30-d22c-40cc-954a-66faa32a69bc/test?space_id=e00dfa44-4ccc-4c9c-9f03-0b4eda701609&context=cpdaas&flus...
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Sydney
RG
Deployment spaces / model_deployment1 / P8 - Random Forest Classifier: power_system_fault_detection1 /
Prediction results
Close
Prediction type
Multiclass classification
Prediction percentage
1
record
Transformer
Display format for prediction results
Table view
JSON view
Show input data
Prediction
Confidence
1
Transformer Failure
39%
2
3
4
5
6
7
8
9
Download JSON file
Activate Windows

Result 3


Service Details - IBM Cloud
model_deployment — model_d
au-syd.dai.cloud.ibm.com/ml-runtime/deployments/34fedd30-d22c-40cc-954a-66faa32a69bc/test?space_id=e00dfa44-4ccc-4c9c-9f03-0b4eda701609&context=cpdaas&flus...
IBM watsonx.ai Studio
Search in your workspaces
Upgrade
Rameswar Ghosal's Account
Sydney
RG
Deployment spaces / model_deployment1 / P8 - Random Forest Classifier: power_system_fault_detection1 /
Prediction results
Close
Prediction type
Multiclass classification
Prediction percentage
1
record
Overheating
Display format for prediction results
Table view
JSON view
Show input data
Prediction
Confidence
1
Overheating
38%
2
3
4
5
6
7
8
9
Activate Windows
Download JSON file