Churn prediction in Azure ML studio

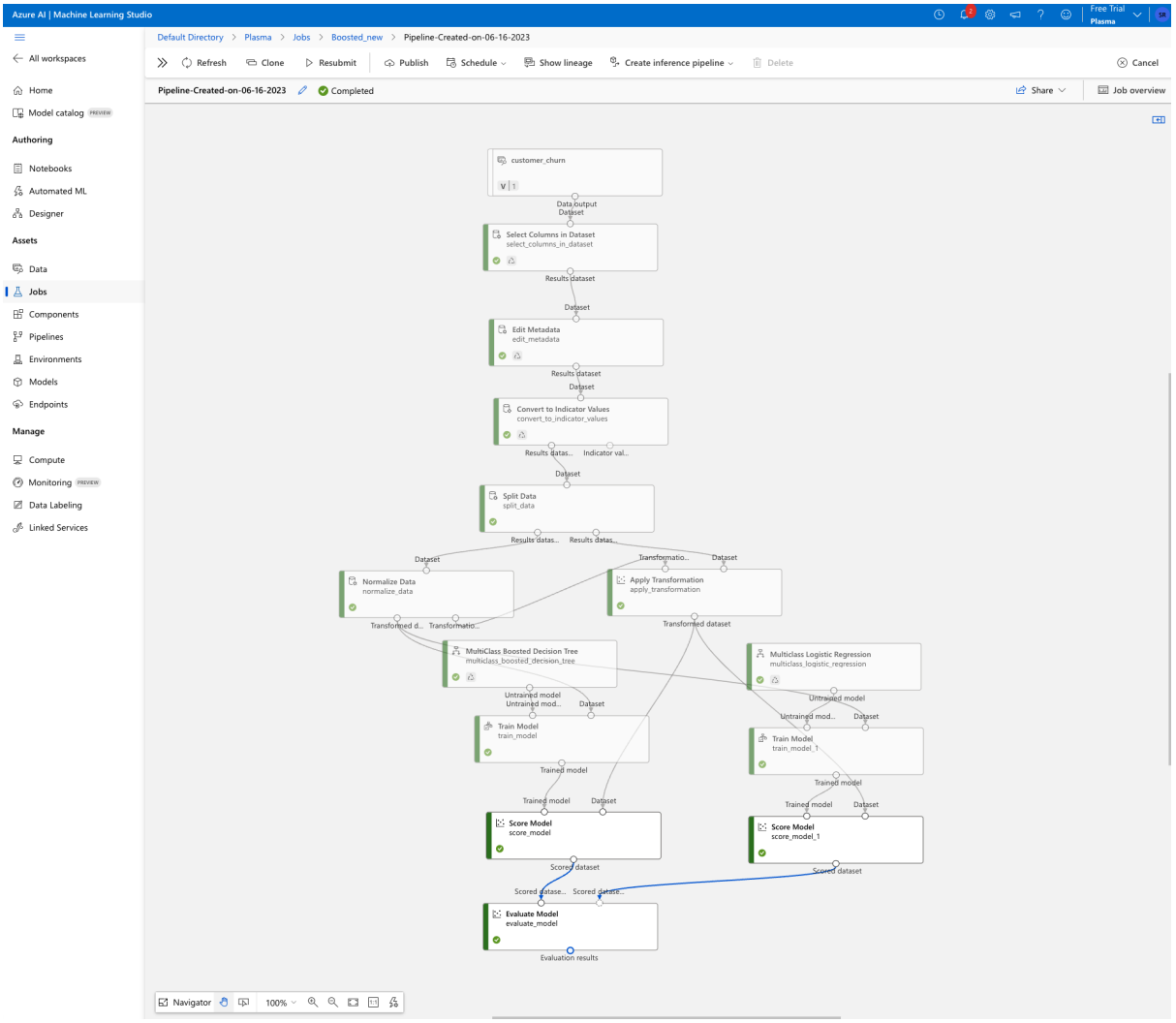
The first step in the process was data preparation, where I carefully curated and preprocessed the customer dataset to ensure its quality and suitability for analysis. This involved cleaning the data, handling missing values, and transforming variables as necessary.

Next, I explored and selected appropriate machine learning algorithms available in Azure ML Studio. This step involved assessing various algorithms such as logistic regression, decision trees, or random forests, and choosing the most suitable one for the specific churn prediction task.

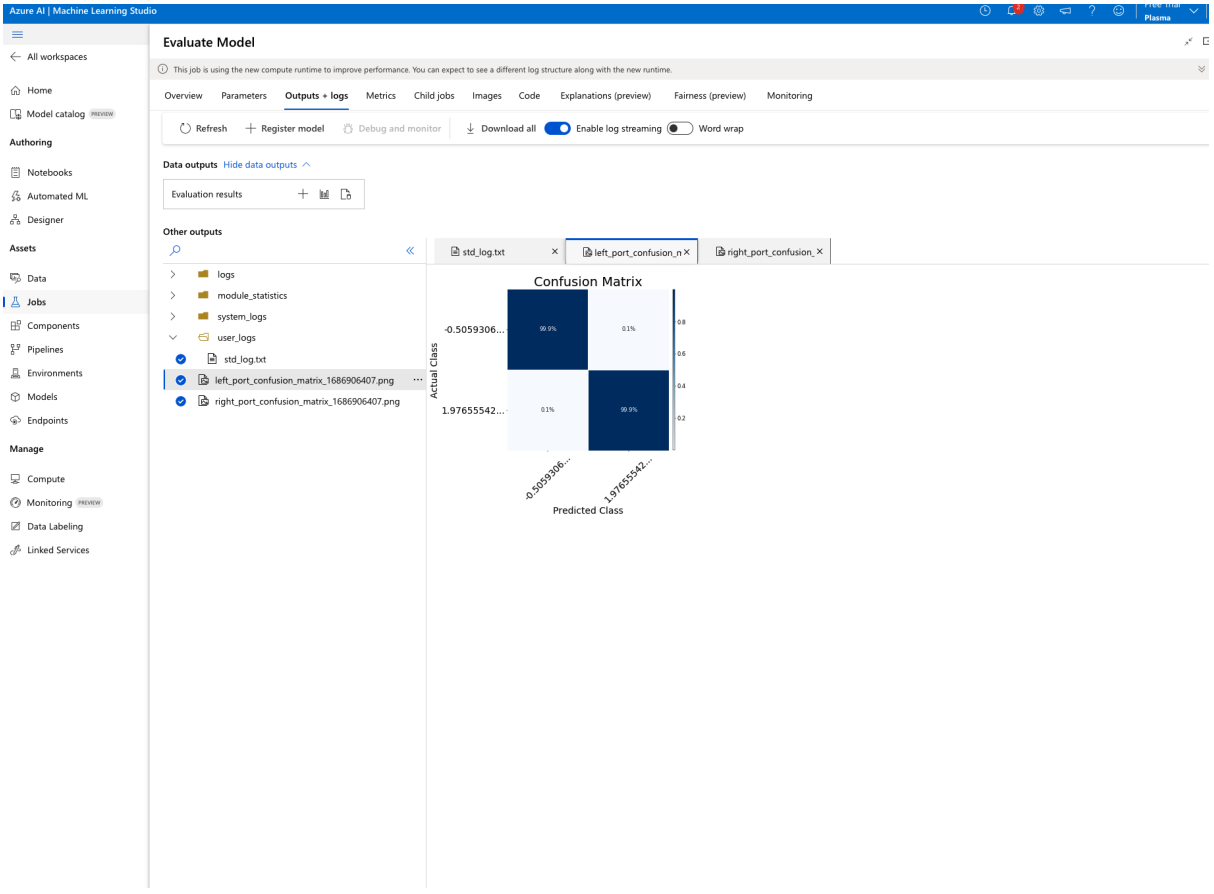
After selecting the algorithm, I proceeded with the model training phase. Azure ML Studio provided a seamless environment to train the chosen model on the preprocessed dataset. I tuned the model's hyperparameters and utilised cross-validation techniques to enhance its performance and robustness.

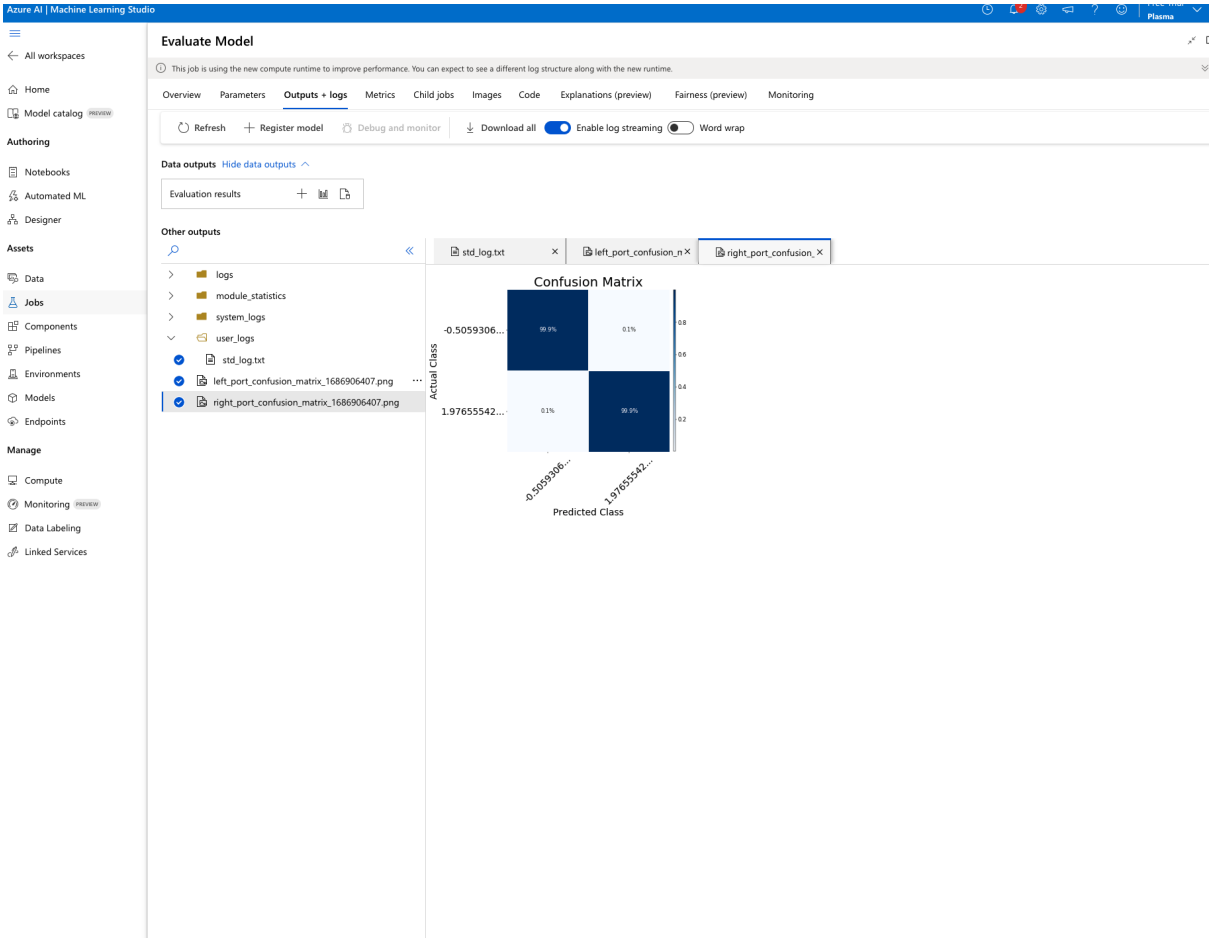
Once the model training was completed, I evaluated its performance using relevant metrics such as accuracy, precision, recall, and F1 score. This evaluation step helped me gauge the effectiveness of the model in predicting customer churn accurately.

Pipeline in Azure ML Studio



Model Rsults


Azure AI | Machine Learning Studio
Evaluate Model
This job is using the new compute runtime to improve performance. You can expect to see a different log structure along with the new runtime.
Overview
Parameters
Outputs + logs
Metrics
Child jobs
Images
Code
Explanations (preview)
Fairness (preview)
Monitoring
Refresh
Register model
Debug and monitor
Download all
Enable log streaming
Word wrap
Data outputs
Hide data outputs
Evaluation results
Other outputs
std_log.txt
left_port_confusion_n
right_port_confusion_
logs
module_statistics
system_logs
user_logs
std_log.txt
left_port_confusion_matrix_1686906407.png
right_port_confusion_matrix_1686906407.png
Confusion Matrix
Actual Class
Predicted Class
-0.5059306...
1.97655542...
99.9%
0.1%
0.1%
99.9%
All workspaces
Home
Model catalog
Authoring
Notebooks
Automated ML
Designer
Assets
Data
Jobs
Components
Pipelines
Environments
Models
Endpoints
Manage
Compute
Monitoring
Data Labeling
Linked Services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