**ASSIGNMENT 3**

Azure Machine Learning



**FREDDIE MAC SINGLE FAMILY LOAN DATASET**

http://www.freddiemac.com/research/datasets/sf\_loanlevel\_dataset.html

**TEAM 5**

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UNDER THE GUIDANCE OF:

Prof. SRIKANTH KRISHNAMURTHY

# **TREE DIAGRAM(WORKFLOW)**

WEB SCRAPING and PRE-PROCESSING

BUILDING and EVALUATING MODELS in Azure ML

PREDICTION

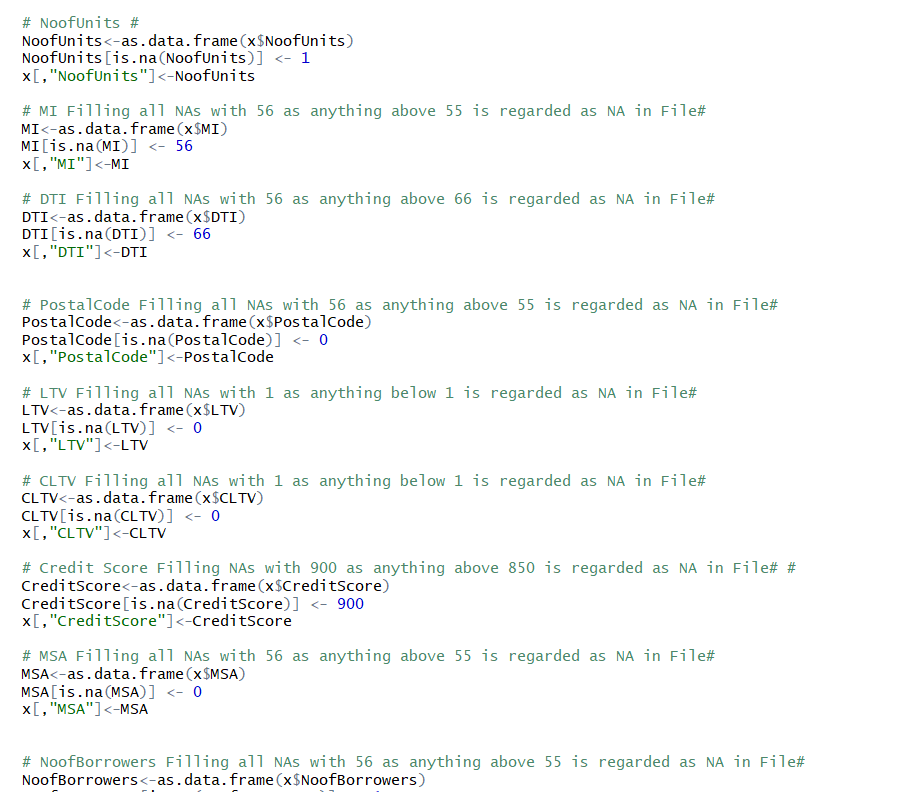
CLASSIFICATION



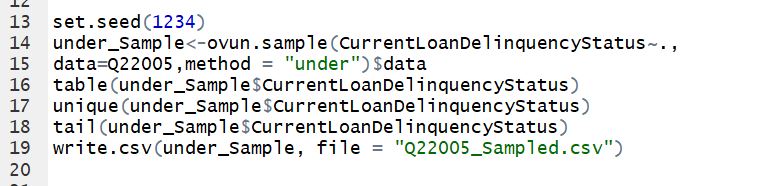
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#### **4.1. Pre-Processing and Balancing the Data**

1. A screenshot on how we are handling the missing values based on the documentation.

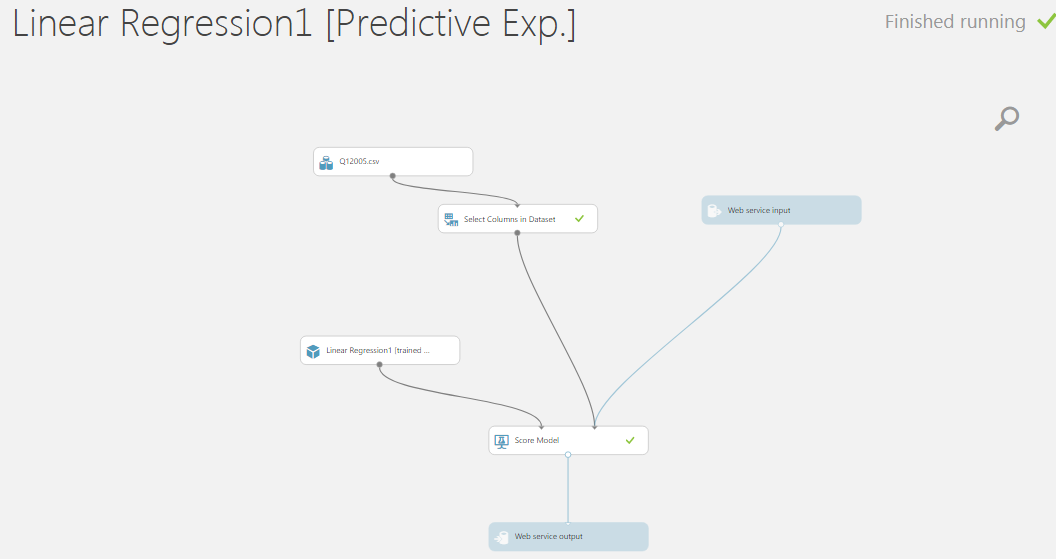


**Balancing the Data:**

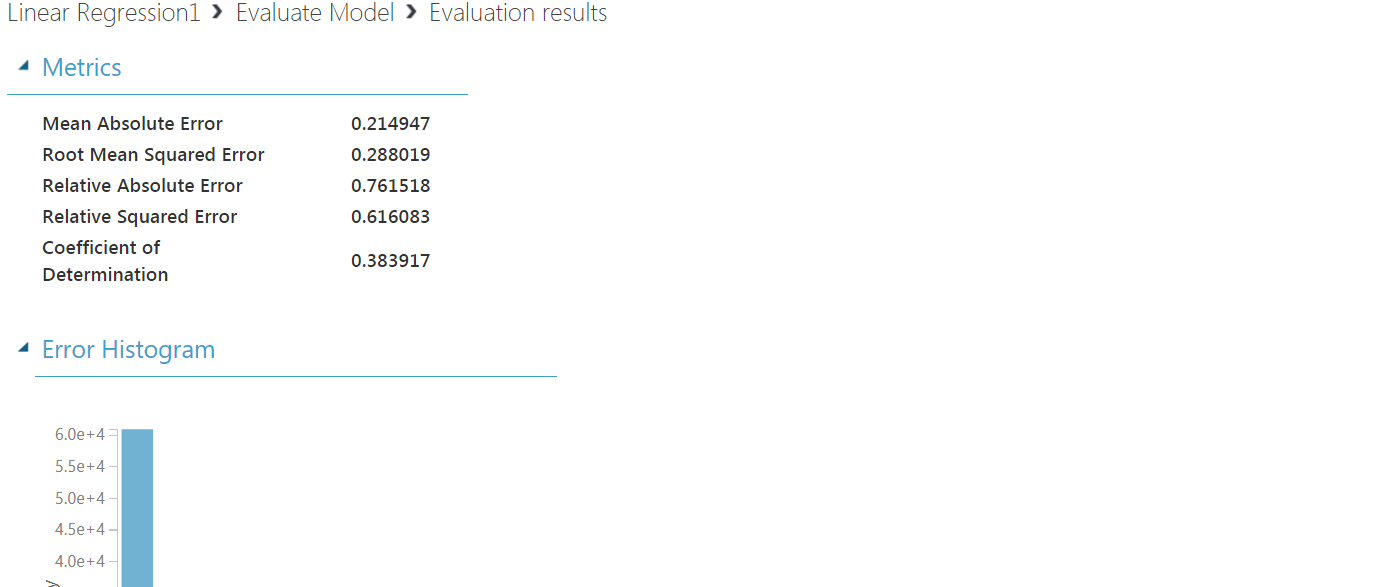


**PREDICTION:**

1. LINEAR REGRESSION:



ACCURACY:

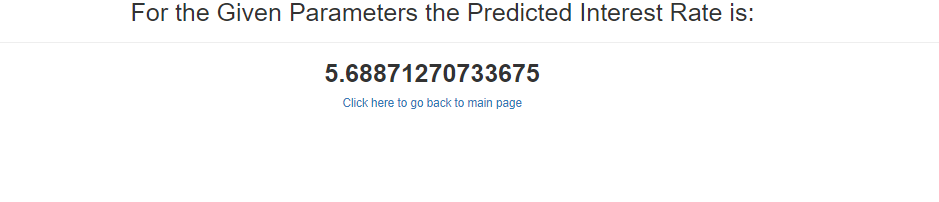


**DEMO:** [**linearprediction.mybluemix.net**](https://linearprediction.mybluemix.net/)

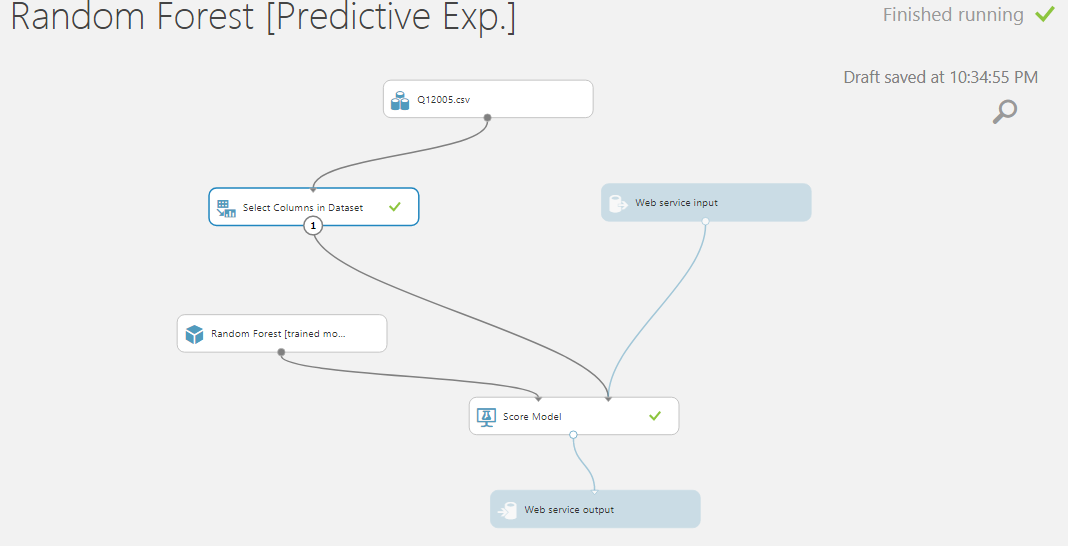
**INPUT**

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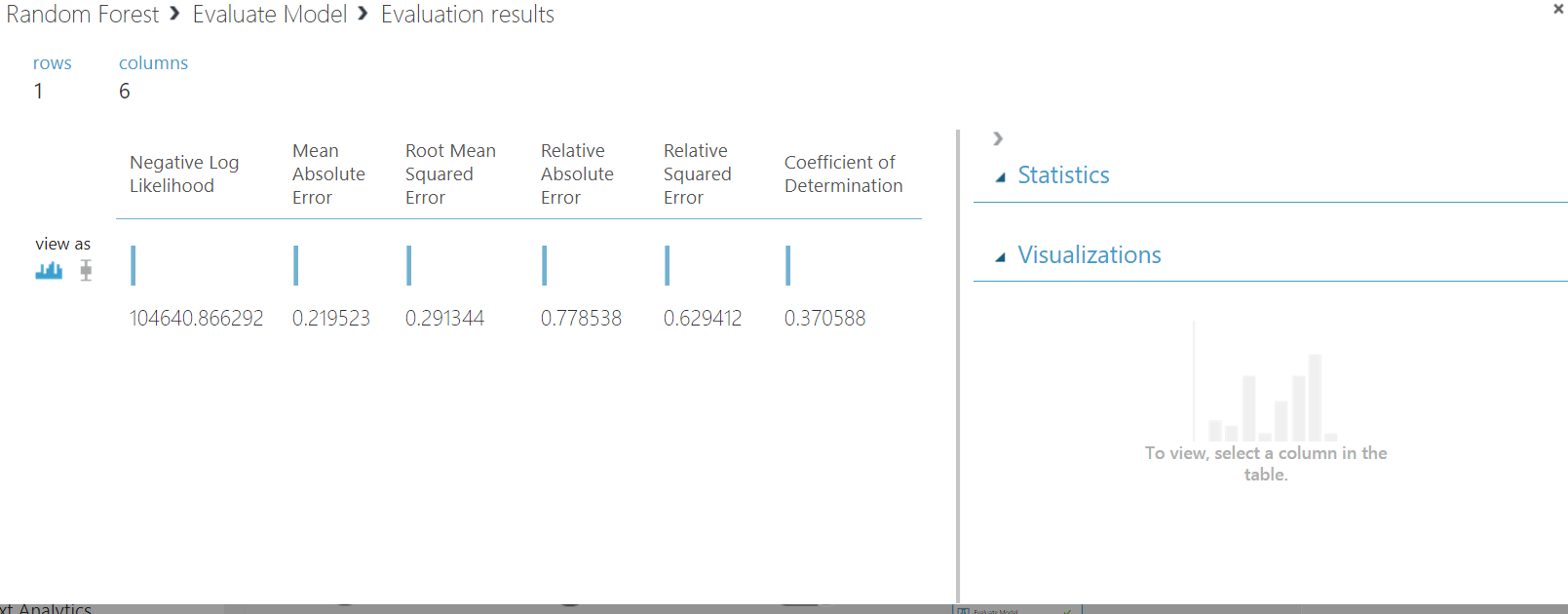
**OUTPUT:**

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1. RANDOM FOREST:

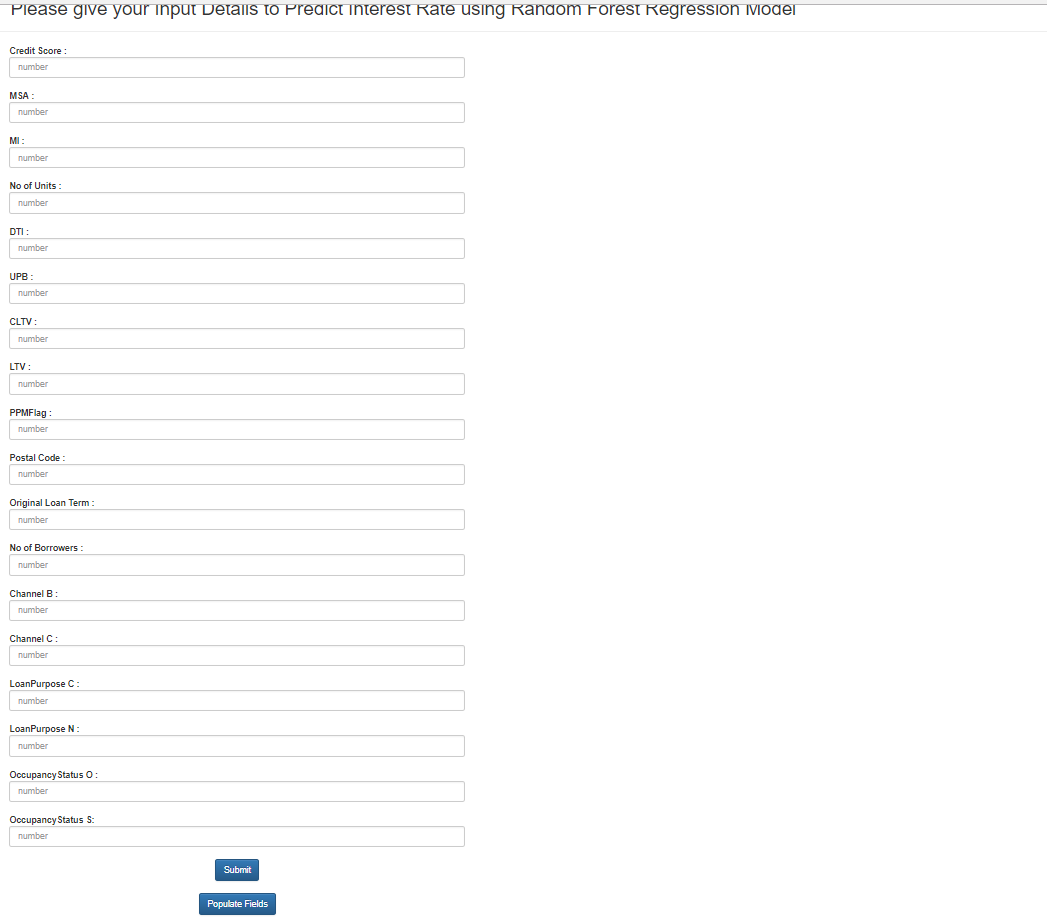


ACCURACY:

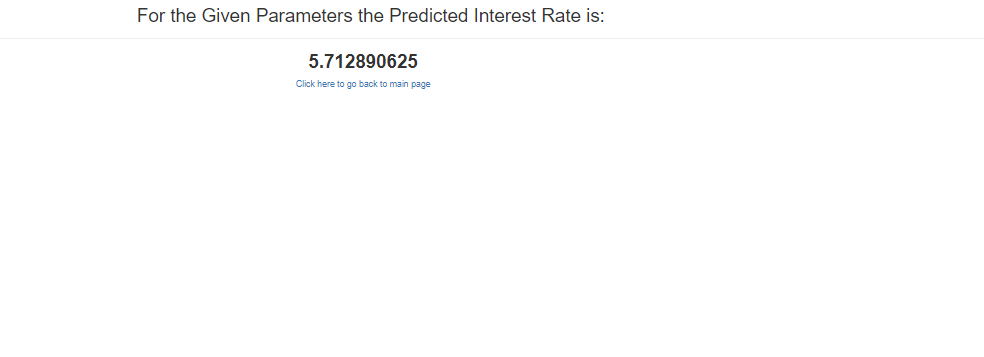


**DEMO:** [**linearprediction.mybluemix.net**](https://linearprediction.mybluemix.net/)

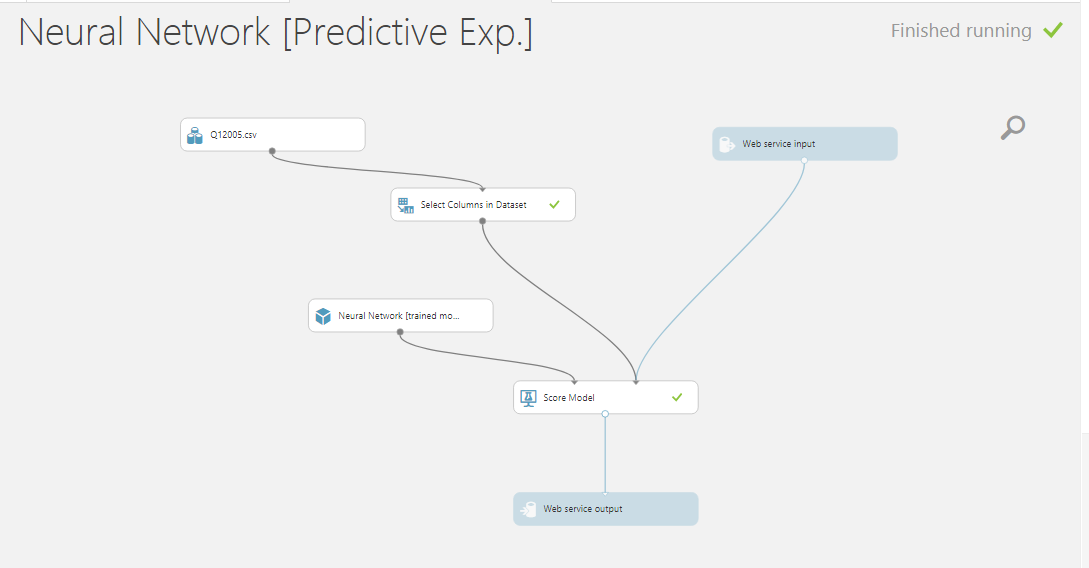
**INPUT:**

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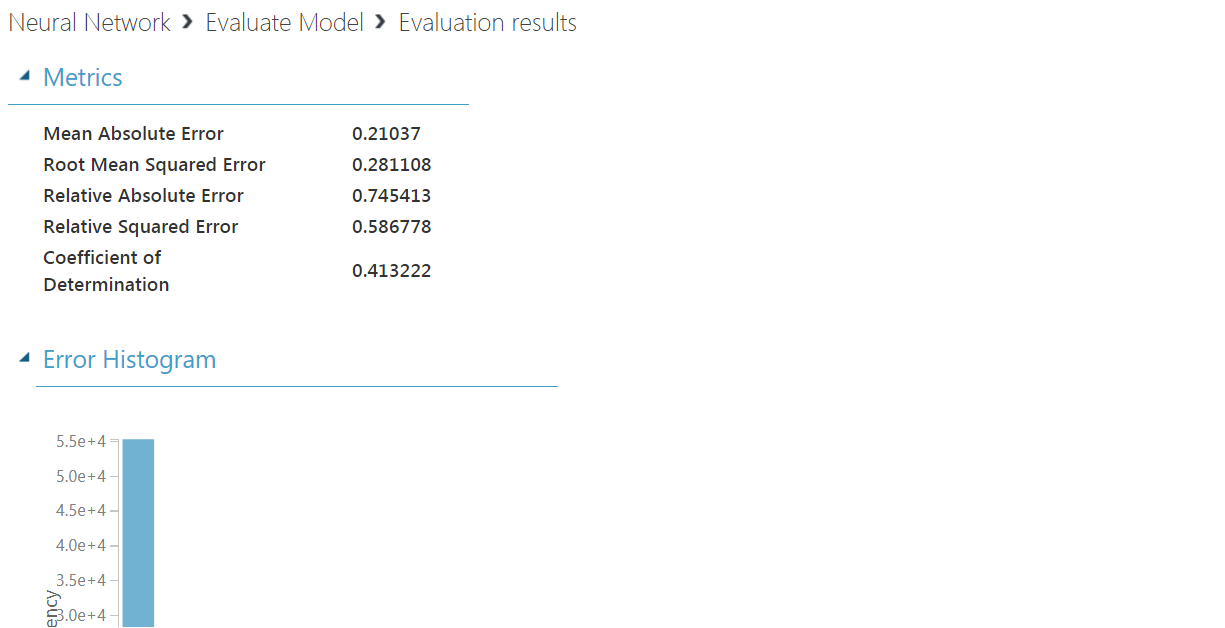
**OUTPUT:**

****

1. NEURAL NETWORK:

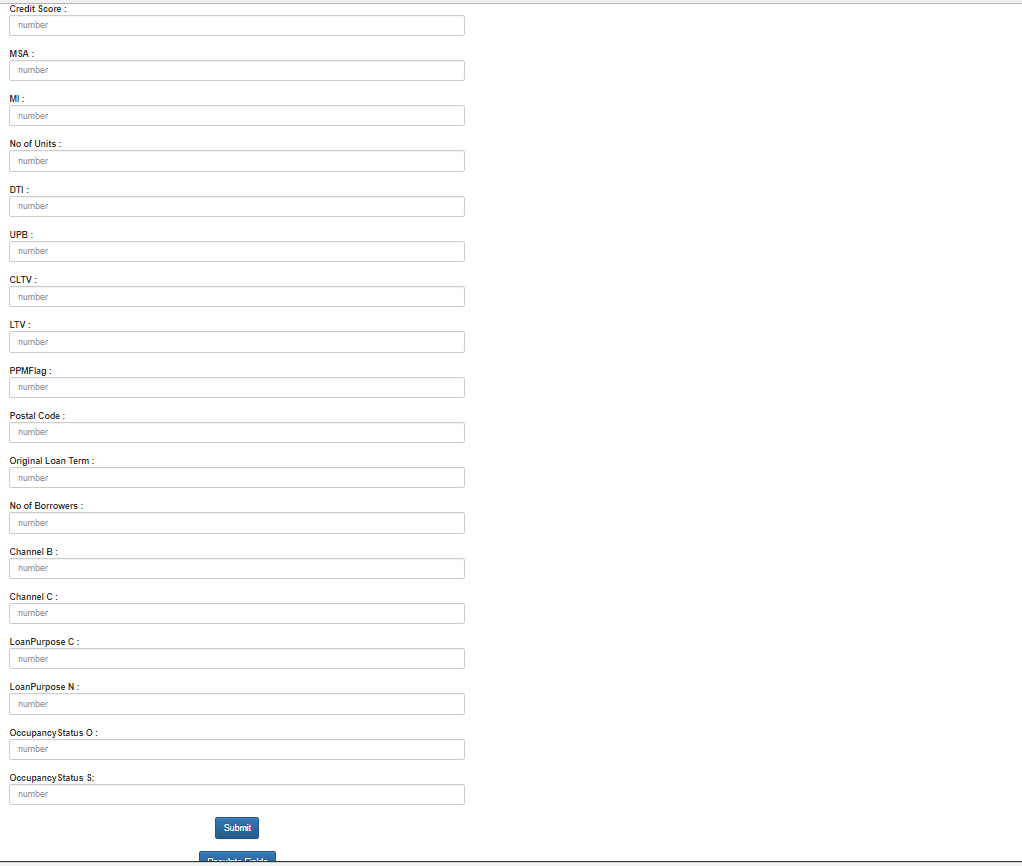


ACCURACY:

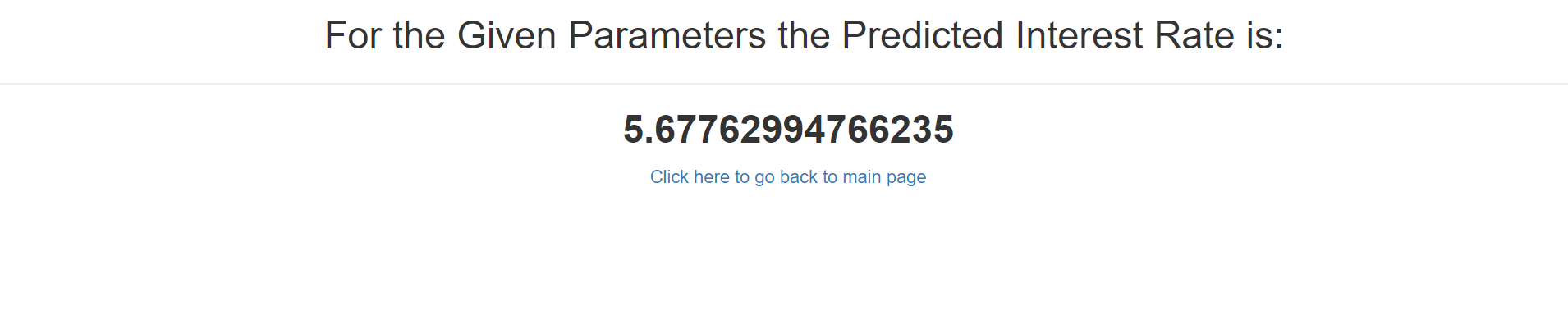


**DEMO: https://neuralnetworkprediction.mybluemix.net/**

**INPUT:**

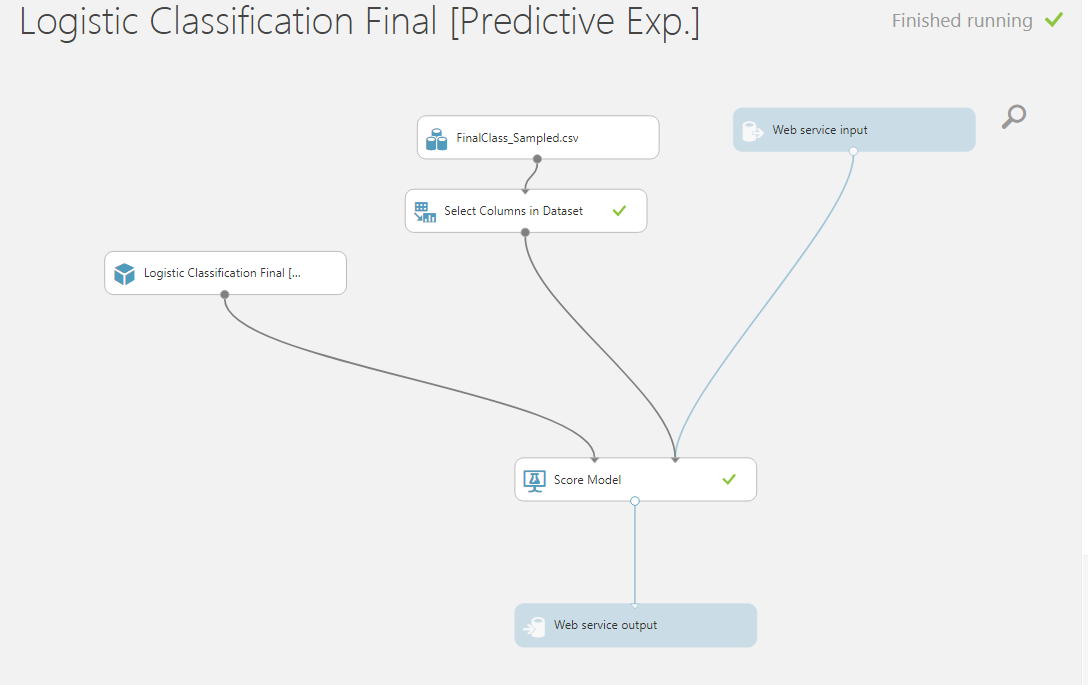
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**OUTPUT:**

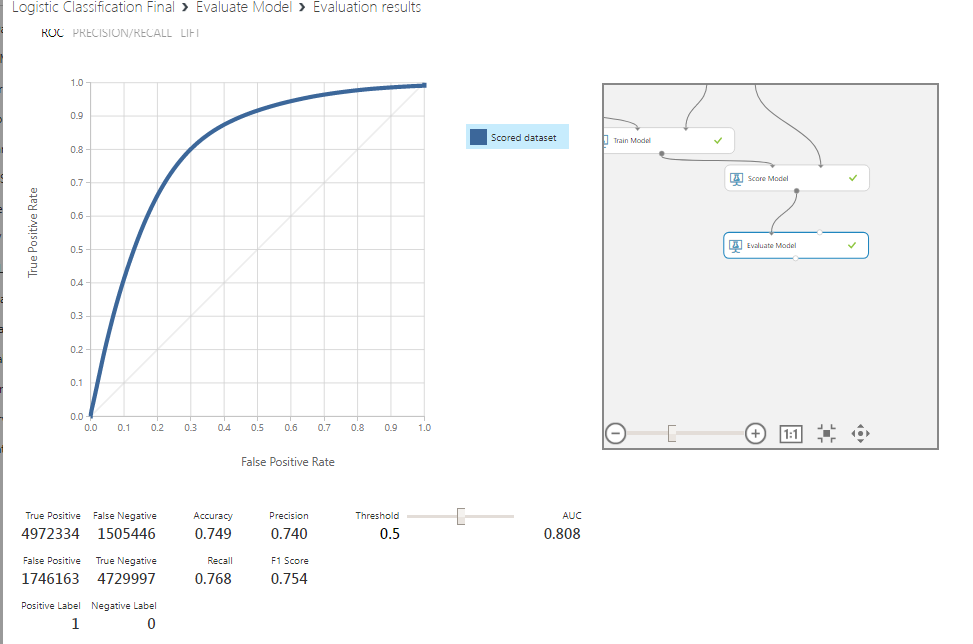
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**CLASSIFICATION:**

1. **LOGISTIC CLASSIFICATION:**

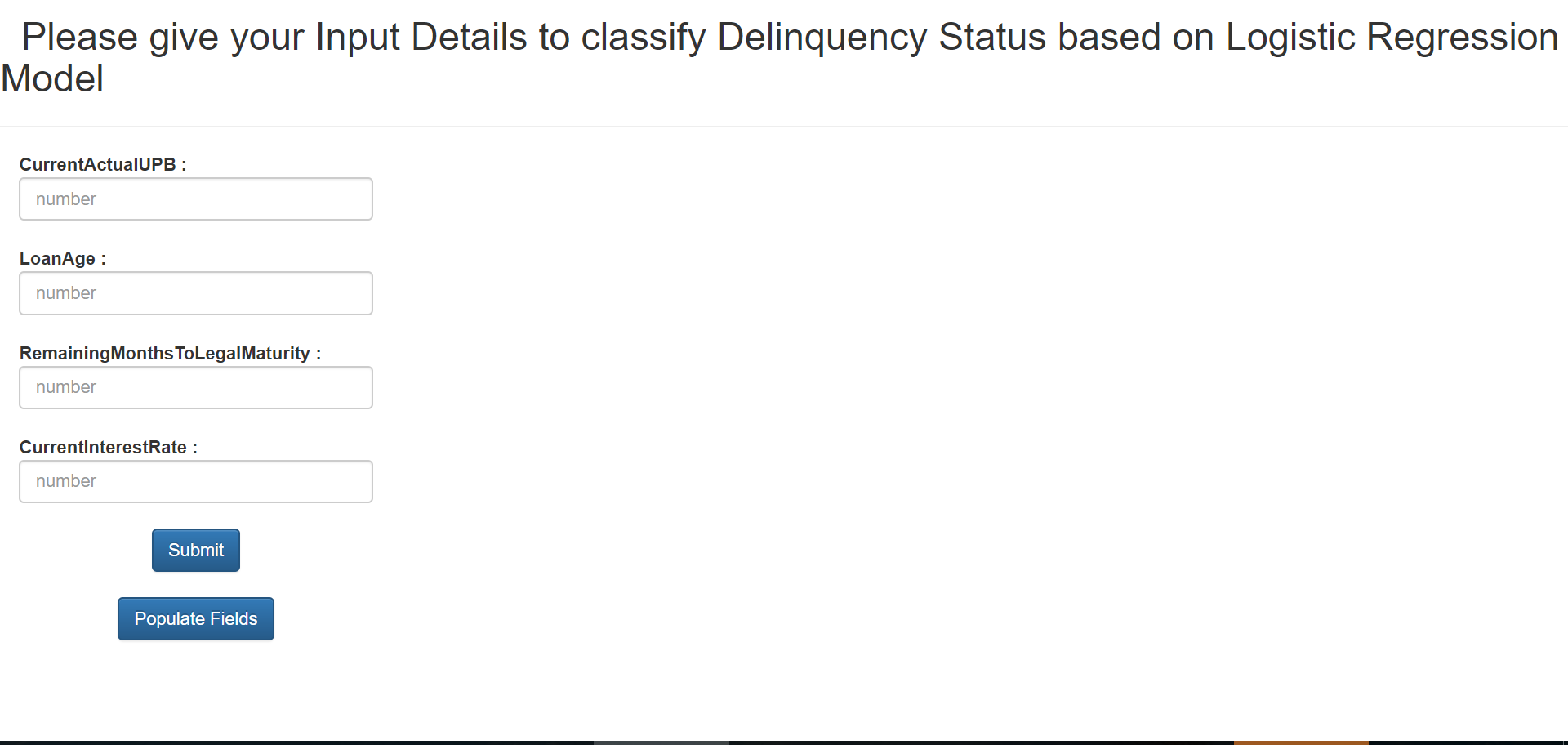
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**ROC CURVE:**

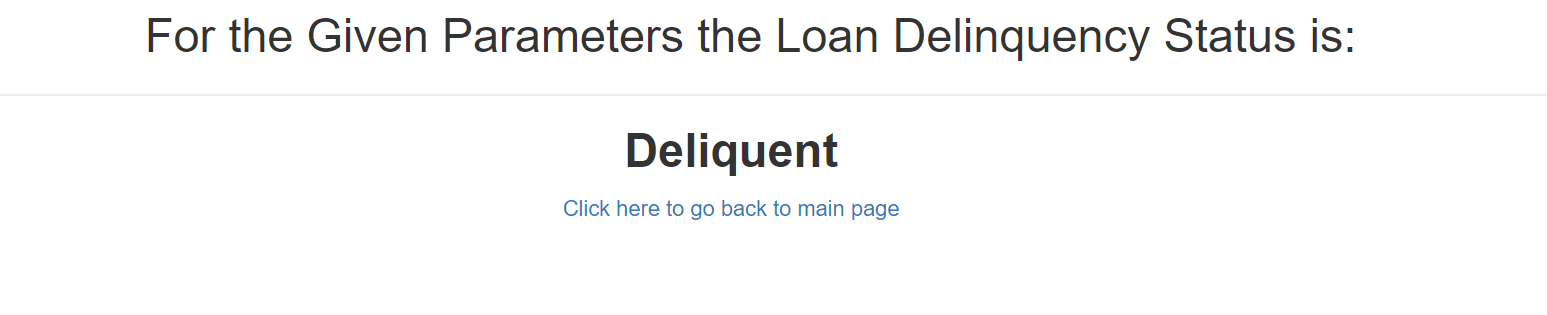
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**DEMO:** [**logisticclassification.mybluemix.net**](https://logisticclassification.mybluemix.net/)

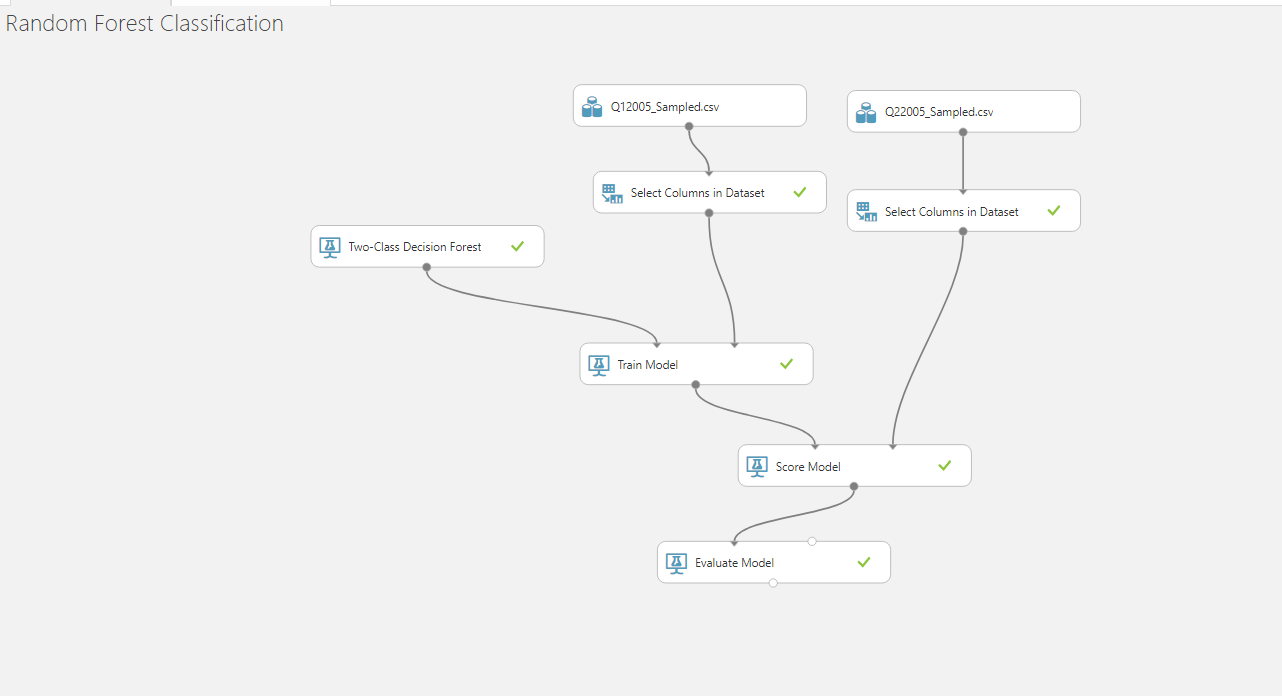
**INPUT:**

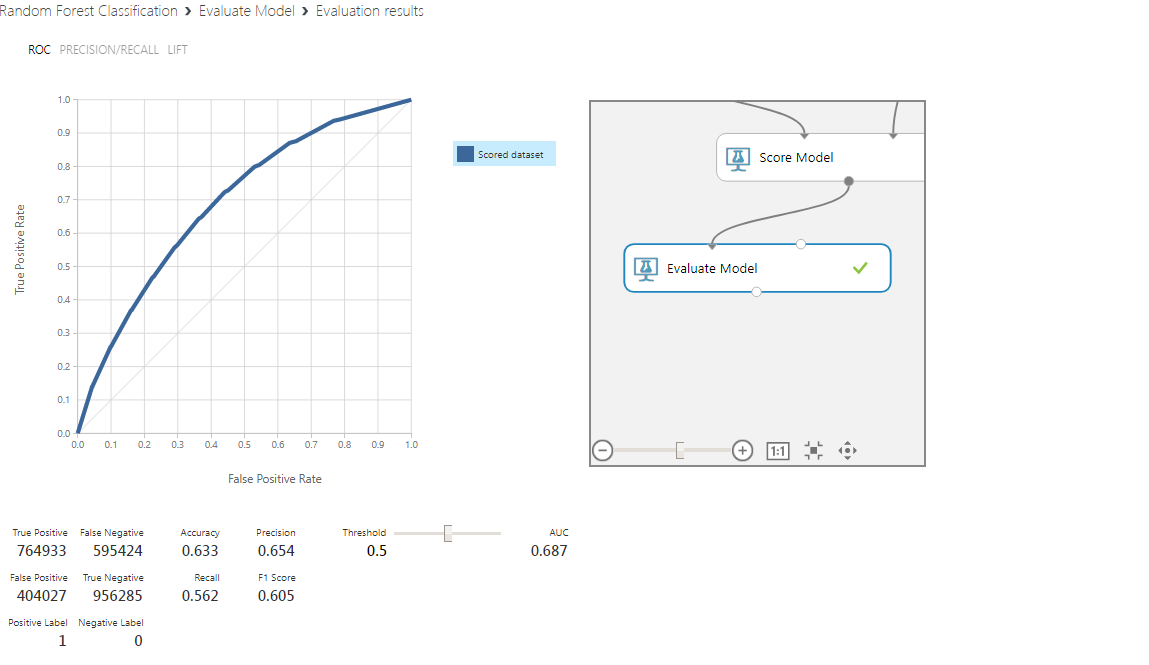
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**OUTPUT:**

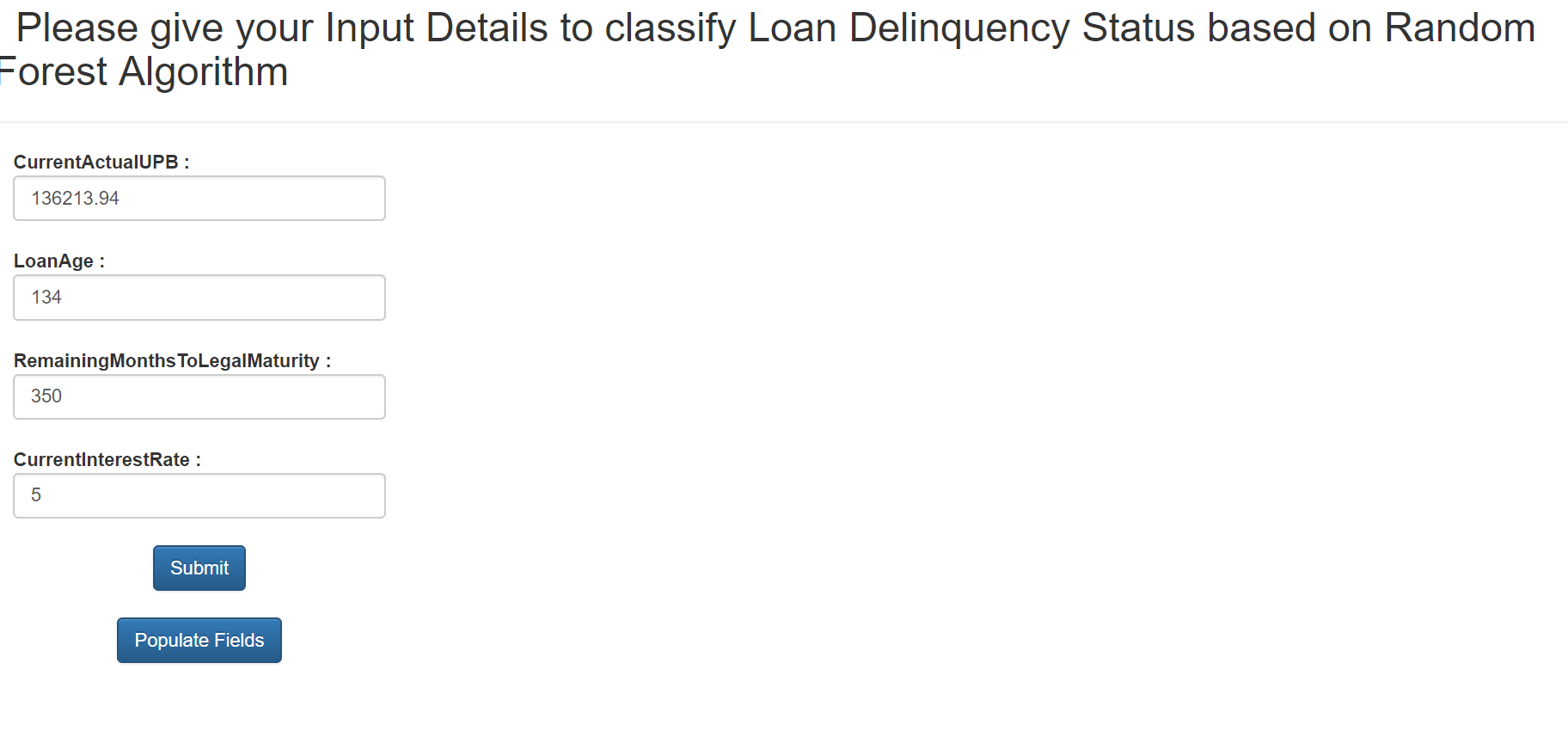
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**RANDOM FOREST:**

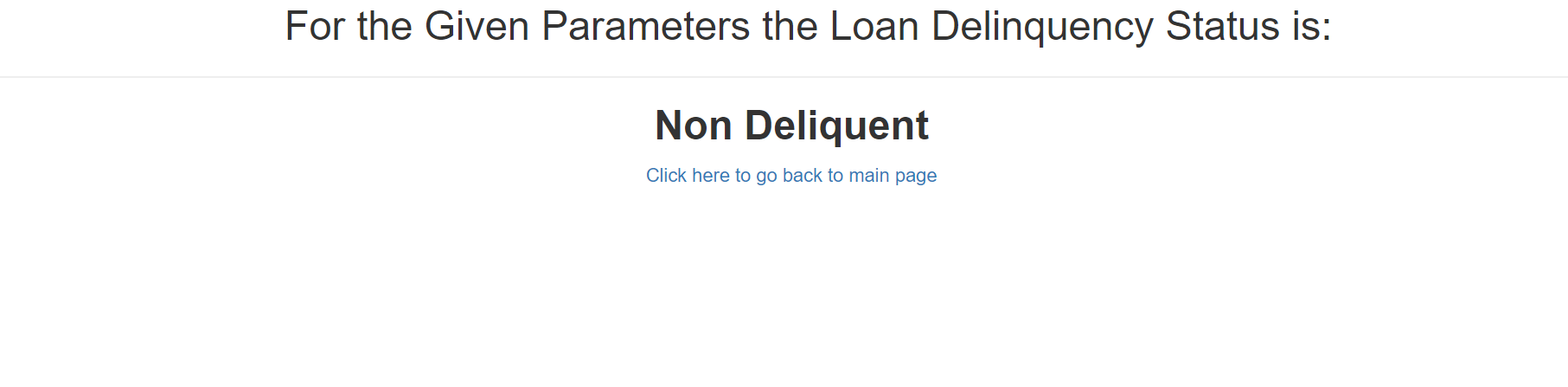
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**ROC CURVE:**

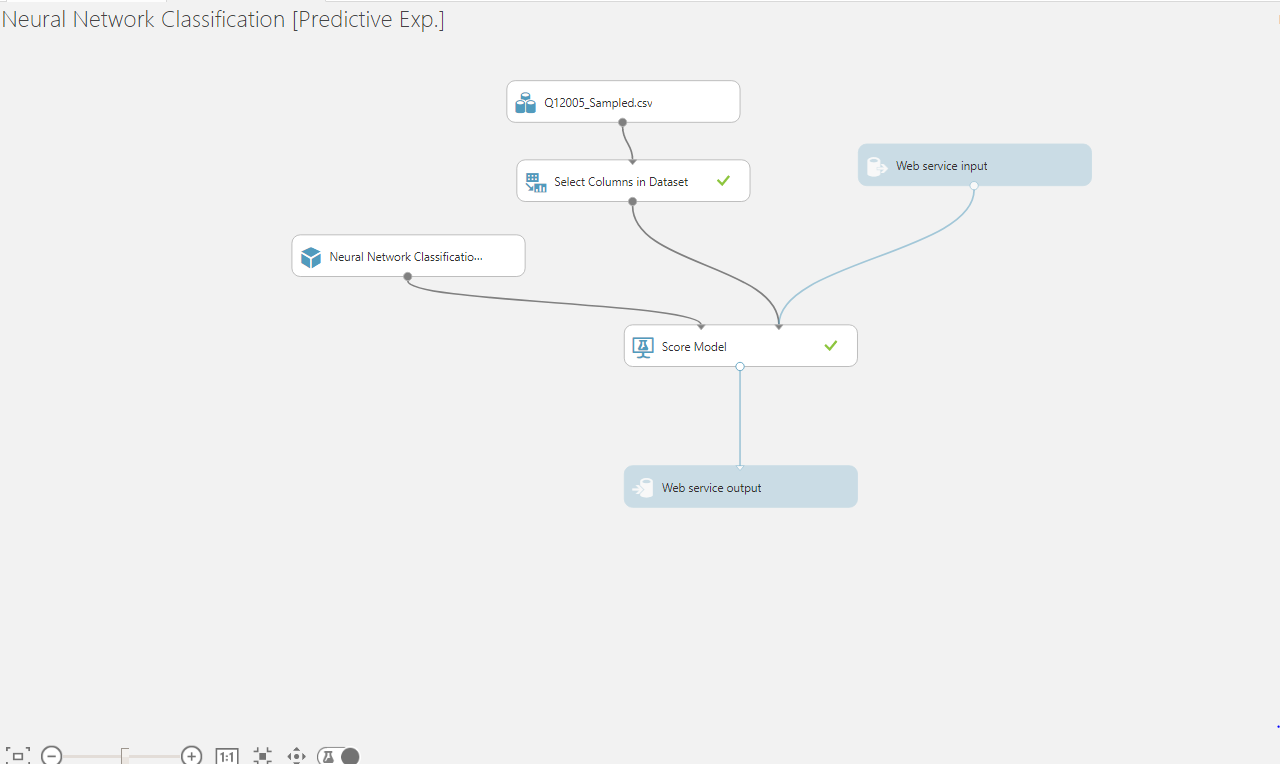
**DEMO: https://randomforestclassification.mybluemix.net/**

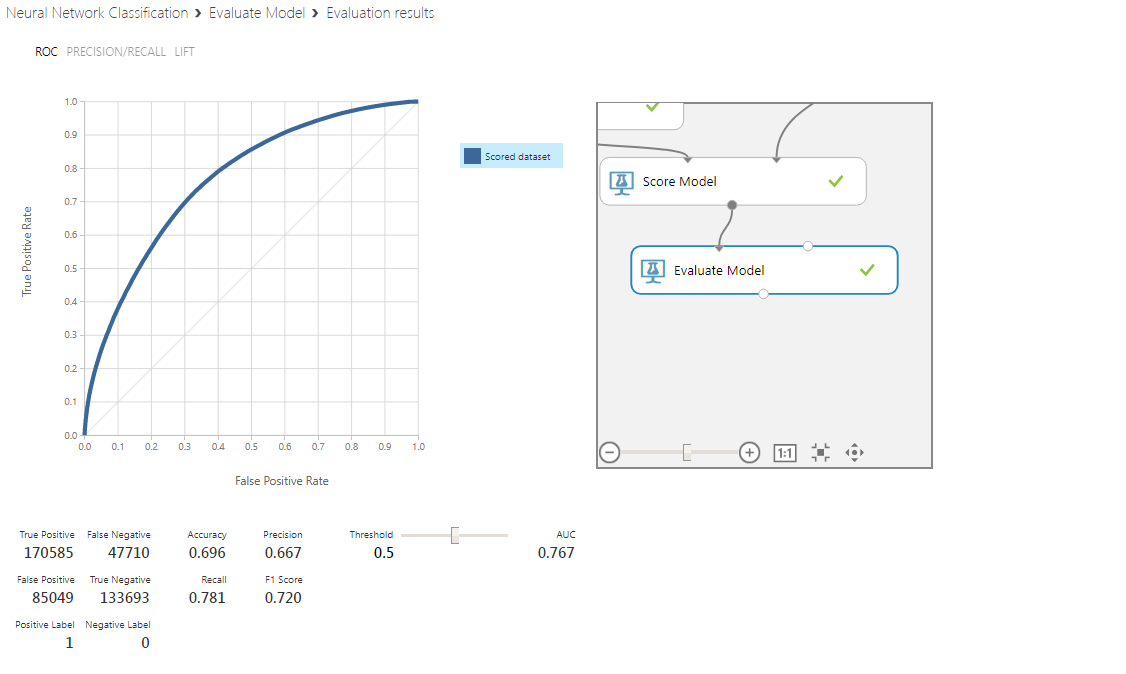
**INPUT: **

**OUTPUT:**

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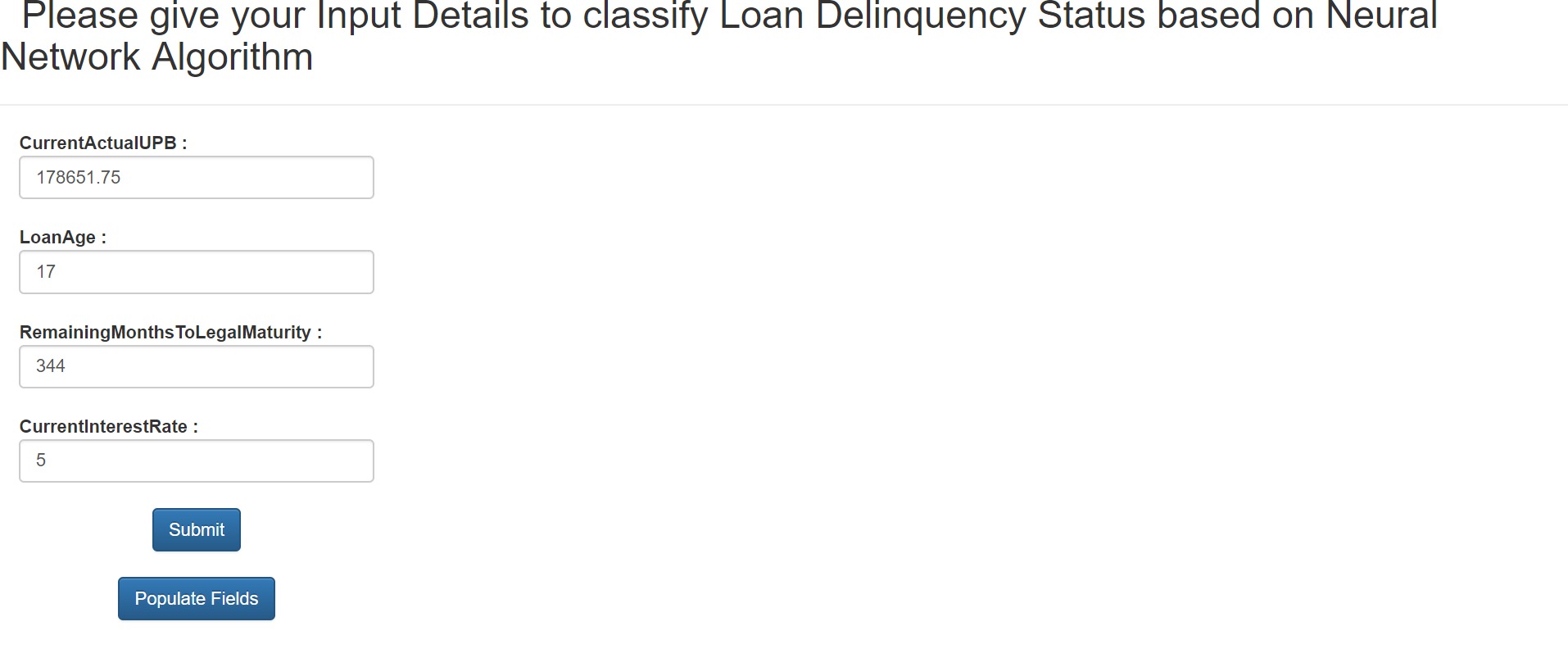
**NEURAL NETWORK:**

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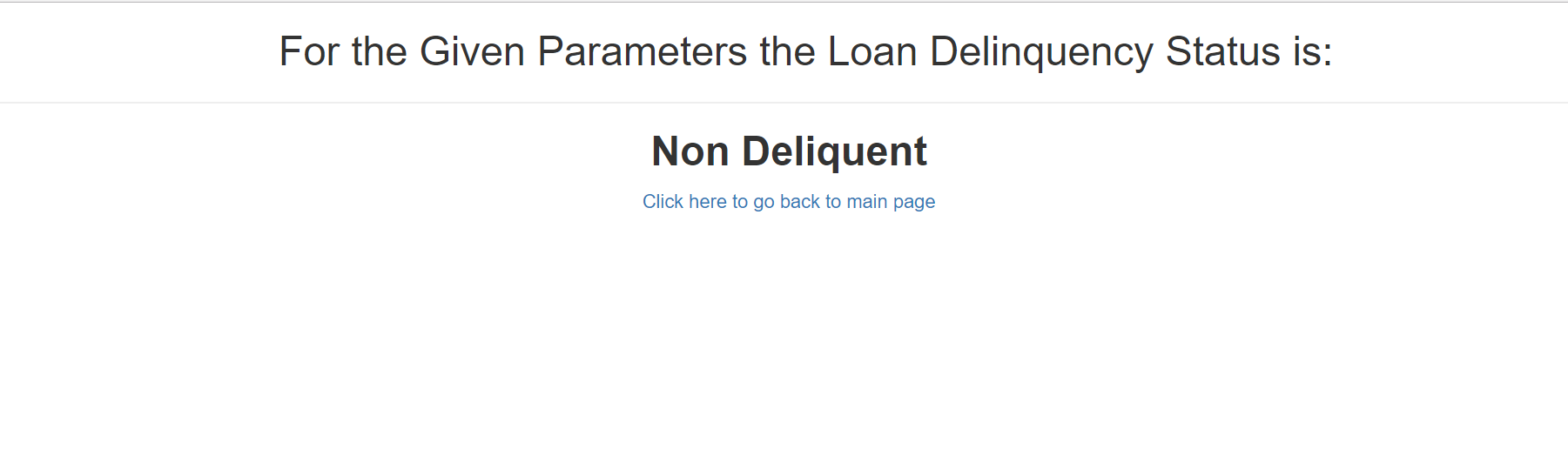
**ROC CURVE:**

**DEMO: https://neuralnetworkclassification.mybluemix.net/**

**INPUT:**

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**OUTPUT:**

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