CMPE 258 – Deep Learning Assignment 2

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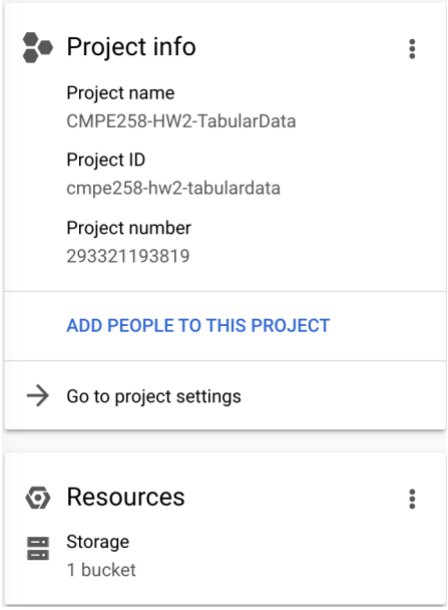
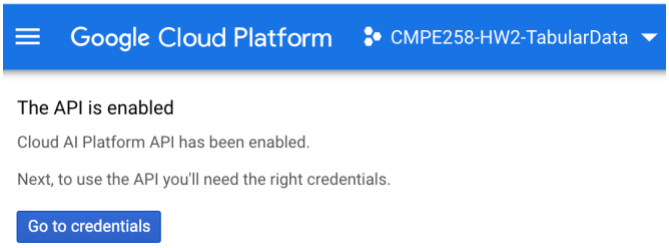
5. Hello Structured Data:

PROJECT SETUP:

- On the project selector page, created a project named: **CMPE258-HW2-TabularData**



- Enabled the API for the above created project:



- Set up the authentication:

Private key saved to your computer

CMPE258-HW2-TabularData-8f068cc4ed7b.json allows access to your cloud resources, so store it securely. Learn more

CLOSE

Service Accounts

Email	Name
arpitha-gurumurthy@cmpe258-hw2-tabulardata.iam.gserviceaccount.com	Arpitha Gurumurthy

- Set up the environment variable to the path of the JSON file downloaded from the previous step.

```
Last login: Wed Feb 24 10:06:51 on ttys000
(base) arpitha@Arpithas-MacBook-Air ~ % export GOOGLE_APPLICATION_CREDENTIALS="/
Users/arpitha/Downloads/CMPE258-HW2-TabularData-8f068cc4ed7b.json"
(base) arpitha@Arpithas-MacBook-Air ~ %
```

CREATING A TABULAR DATASET:

Hello AI Platform Customer,

AI Platform finished training model "Structured_AutoML_Tutorial".
Additional Details:
Operation State: Succeeded
Resource Name: projects/293321193819/locations/us-central1/trainingPipelines/924627706308460544

To continue your progress, go back to your training pipeline using https://console.cloud.google.com/ai/platform/models?project=cmpe258-hw2-tabulardata

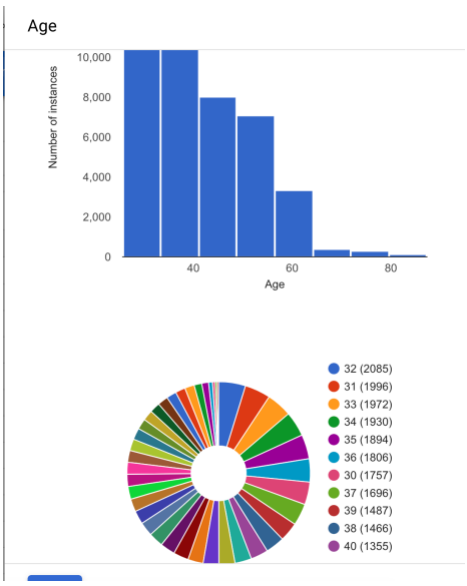
Sincerely,
The Google Cloud AI Team

Filter datasets

Name	ID	Region	Type	Items	Labels	Last updated	Status
Structured_AutoML_Tutorial	4325232453066162176	us-central1	Tabular	-	-	February 24, 2021	Created dataset

Field Name	Missing % (count)	Distinct values
Age	-	77
Balance	-	7168
Campaign	-	48
Contact	-	3
Day	-	31
Default	-	2
Deposit	-	2
Duration	-	1573
Education	-	4
Housing	-	2
Job	-	12
Loan	-	2
MaritalStatus	-	3
Month	-	12
PDays	-	559

After generating statistics, showing only Age feature:

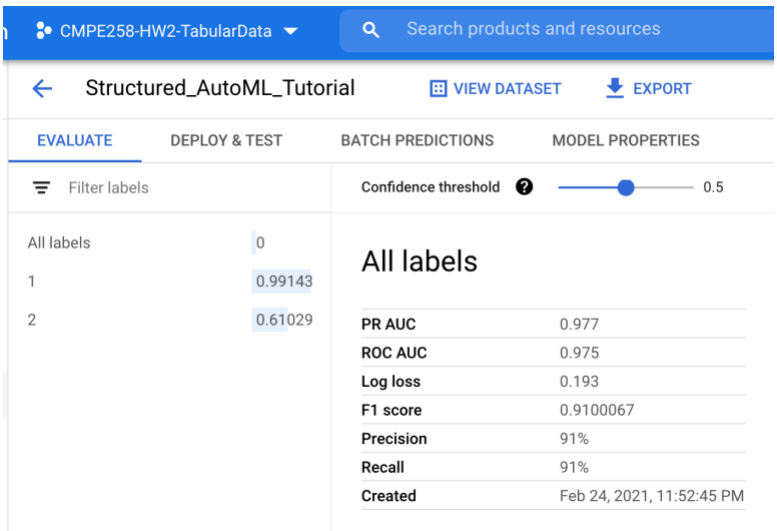


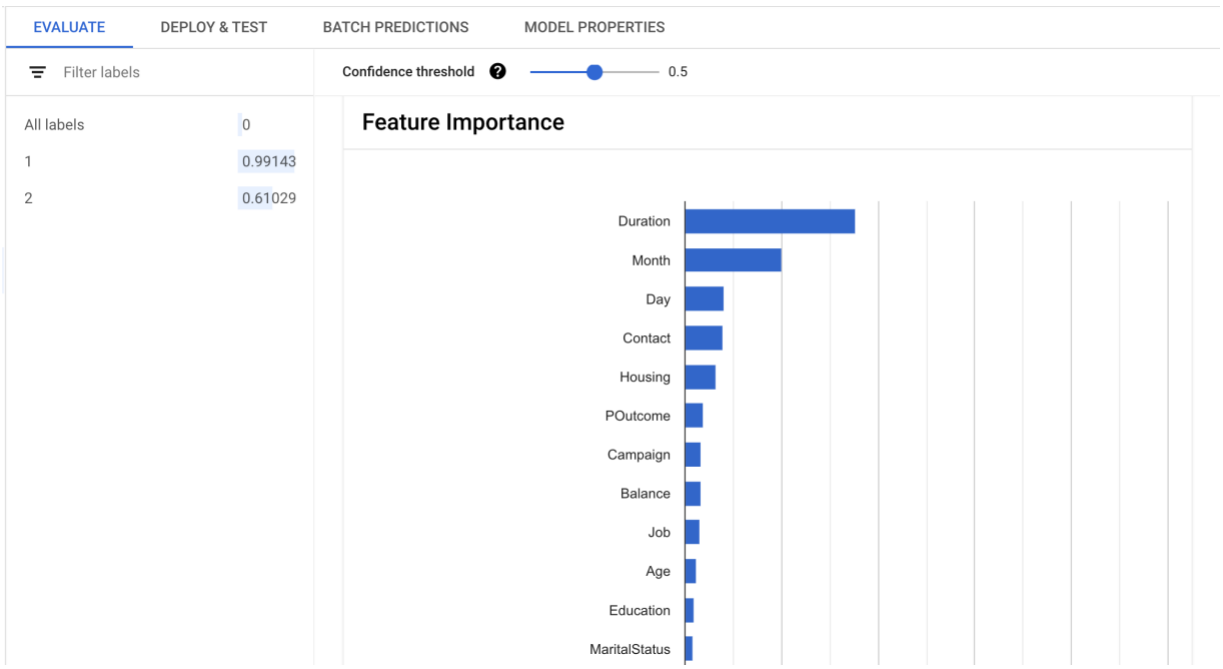
TRAINING THE AUTO ML TEXT CLASSIFICATION MODEL:

Name	ID	Data	Endpoints	Region	Type	Created
Structured_AutoML_Tutorial	5106818094647476224	Structured_AutoML_Tutorial	1	us-central1	Tabular	Feb 24, 2021, 10:47:26 PM

DEPLOYING THE MODEL TO ENDPOINT:

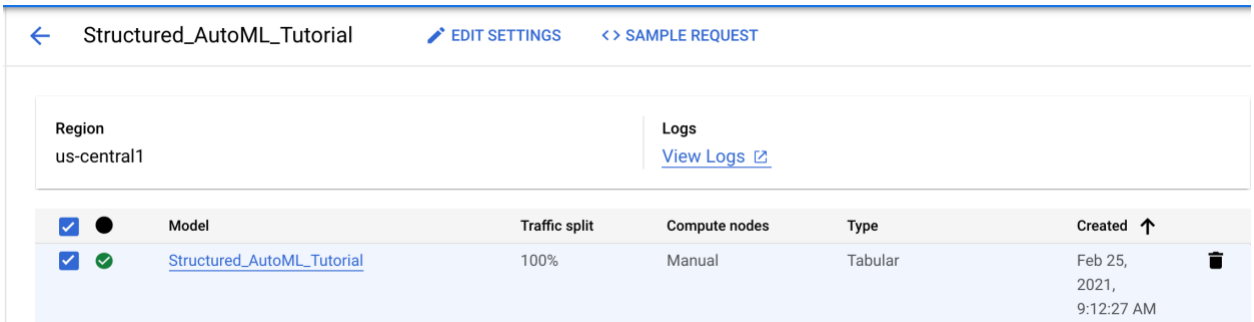
Model Evaluation:



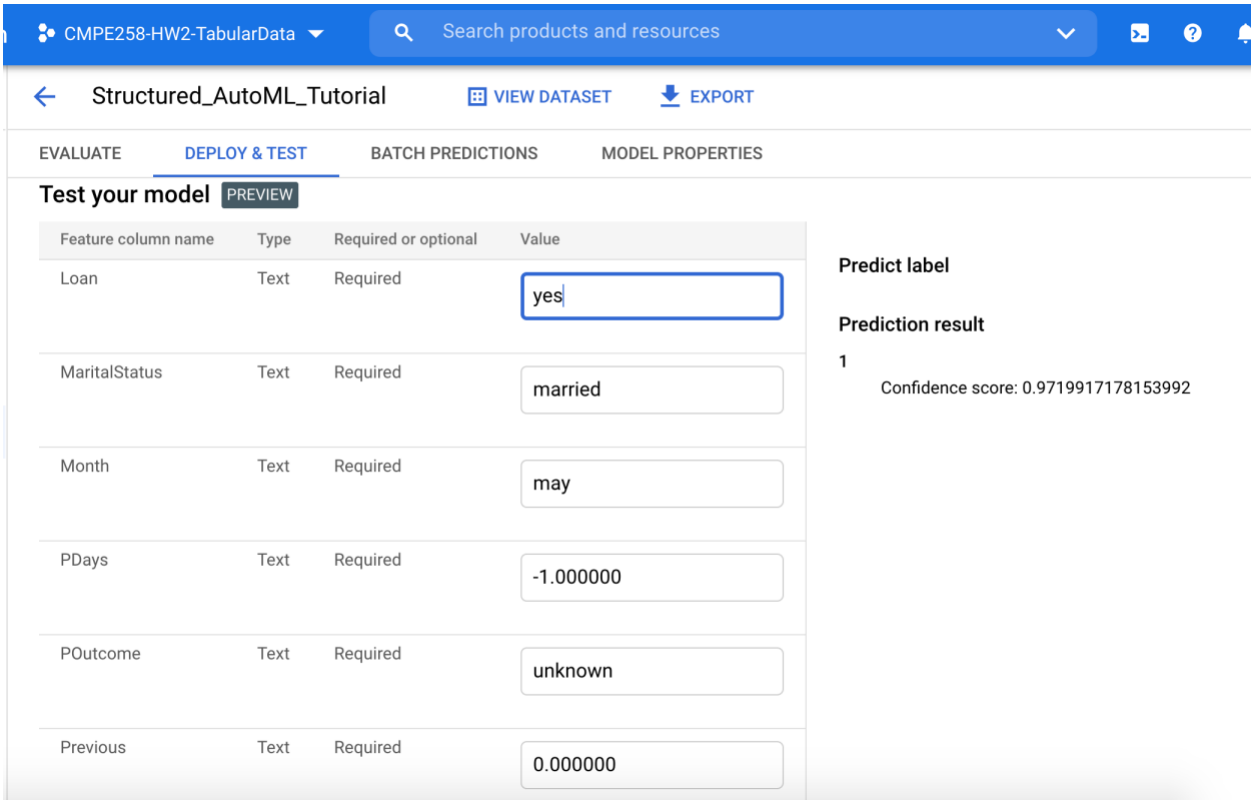


Deploy and test:

	Endpoint	ID	Models	Region	Last updated	API	Notification	Metadata	Encryption
✓	Structured_AutoML_Tutorial	6766482518263726080	1	us-central1	Feb 25, 2021, 9:23:51 AM	Sample request			Google-managed key



Testing the model predictions by assigning values to each of the feature to check if a deposit was made at the bank or not for that data:
1 – negative outcome: deposit not made at the bank.
2 – positive outcome: deposit made at the bank.



For the above test data, we can see that the prediction result is that a deposit is not made at the bank.