

Deployment of Vision Model

ios apps


ios


com.google.firebase.codelab.mlkit...


Add app

SDK setup and configuration


Need to reconfigure the Firebase SDKs for your app? Revisit the SDK setup instructions or just download the configuration file containing keys and identifiers for your app.

 See SDK instructions

 GoogleService-Info.plist


App ID 

1:990704915987:ios:06f22cd2ba387607b5d1e6

Encoded App ID 


app-1-990704915987-ios-06f22cd2ba387607b5d1e6


App nickname


Add a nickname 


Bundle ID

com.google.firebase.codelab.mlkit.automl

App Store ID 

Add an App Store ID 

Team ID 

Add a Team ID 



Register app

iOS bundle ID: com.google.firebase.codelab.mlkit.automl



Download config file



Add Firebase SDK

Instructions for CocoaPods | [Download ZIP](#) [Unity](#) [C++](#)

Google services use [CocoaPods](#) to install and manage dependencies. Open a terminal window and navigate to the location of the Xcode project for your app.

Create a Podfile if you don't have one:

```
$ pod init
```



Open your Podfile and add:

```
# add the Firebase pod for Google Analytics
pod 'Firebase/Analytics'
# add pods for any other desired Firebase products
# https://firebase.google.com/docs/ios/setup#available-pods
```



Save the file and run:

```
$ pod install
```



This creates an `.xcworkspace` file for your app. Use this file for all future development on your application.

[Previous](#)

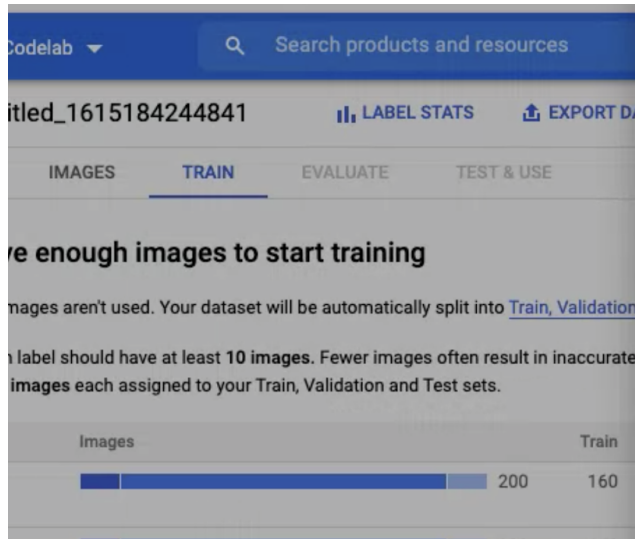
[Next](#)



Add initialization code



Next steps



1 Define your model

Model name *

image_vision

☒ Cloud hosted

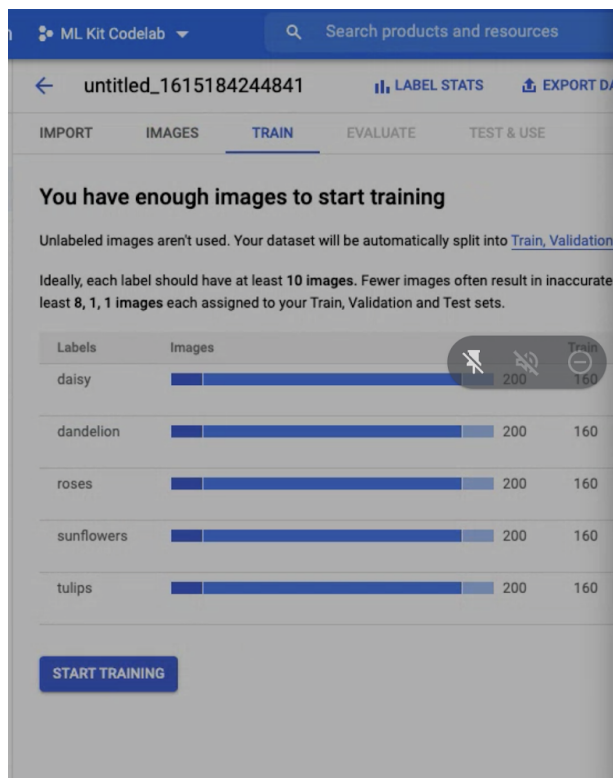
Host your model on Google Cloud for online predictions

☐ Edge

Download your model for offline/mobile use

CONTINUE

2 Set a node hour budget



✓ Define your model

2 Set a node hour budget

Enter the maximum number of node hours you want to spend training your model.

We recommend using **16 node hours** for your dataset. However, you can train for as little as 8 node hours. You may also be eligible to train with free node hours.

[Pricing guide](#)



Note to beta users: AutoML Vision has updated its pricing for node hours.

Set your budget *

16

node hours

Estimated completion date: Mar 8, 2021 2 PM GMT+5

☐ Deploy model to 1 node after training

Make your model available for REST API requests immediately after training. Deployment pricing applies.

START TRAINING

CANCEL

Google Cloud Platform ML Kit Codelab Search products and resources						
Vision	Datasets + NEW DATASET					
Dashboard						
Datasets						
Models						
Name	Type	Total Images	Labeled images	Last updated	Status	
untitled_1615184244841 ICN8845888254562533376	Single-Label Classification	0	0	Mar 8, 2021, 11:53:12 AM	Running: Importing images	

Models


TRAIN NEW MODEL

untitled_16151842_20210308121405

Training may take several hours. This includes node training as infrastructure set up and tear down, which you aren't charged for.

You will be emailed once training completes.

Training model...



CANCEL

Model
Image_Classifier

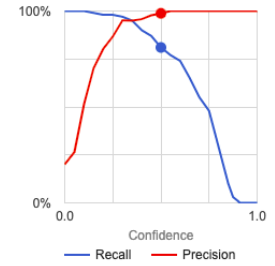
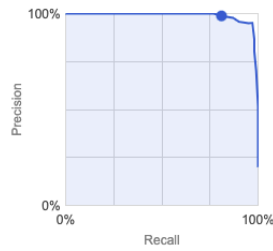
Confidence threshold 0.5

er l
abe
ls
All la... 0.98677
daisy 0.99511
dand... 1
roses 0.96815
sunfl... 0.99545
tulips 0.98970

All labels

Total images	900
Test items	100
Precision ?	98.78%
Recall ?	81%

Use the slider to see which confidence threshold works best for your model on the precision-recall tradeoff curve.
[Learn more about these metrics and graphs.](#)



Model
Image_Classifier

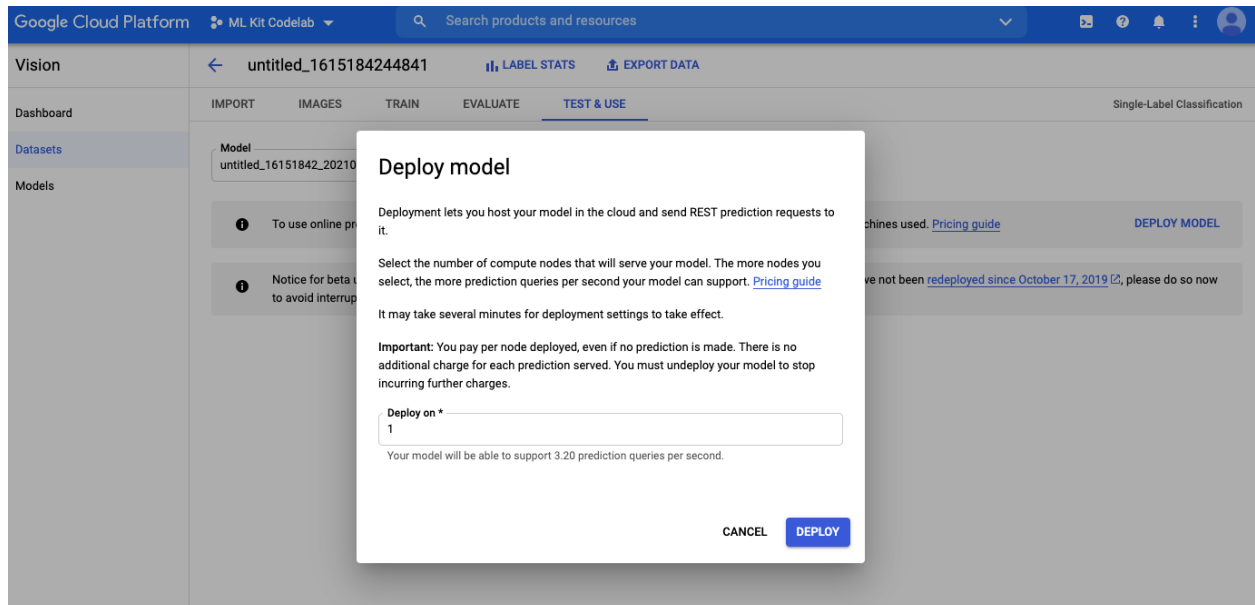
Confidence threshold 0.5

er l
abe
ls
All la... 0.98677
daisy 0.99511
dand... 1
roses 0.96815
sunfl... 0.99545
tulips 0.98970

Confusion matrix

This table shows how often the model classified each label correctly (in blue), and which labels were most often confused for that label (in gray). Note that this table is limited to the 10 most confused labels. You can download the entire confusion matrix as a CSV file.

True Label	Predicted Label				
	roses	daisy	tulips	dandelion	sunflowers
roses	85%	5%	5%	-	5%
daisy	-	95%	-	-	5%
tulips	-	-	95%	5%	-
dandelion	-	-	-	100%	-
sunflowers	-	-	-	-	100%



Cocopod installation:

```
balachandarpaulraj@BalachandarsAir mlkit-automl % sudo gem install cocoapods -v 1.8.4 -n /usr/local/bin
Successfully installed cocoapods-1.8.4
Parsing documentation for cocoapods-1.8.4
Installing ri documentation for cocoapods-1.8.4
Done installing documentation for cocoapods after 3 seconds
1 gem installed
balachandarpaulraj@BalachandarsAir mlkit-automl %
```

```
balachandarpaulraj@BalachandarsAir mlkit-automl % xcode-select --print-path
/Library/Developer/CommandLineTools
balachandarpaulraj@BalachandarsAir mlkit-automl % sudo xcode-select --install
xcode-select: note: install requested for command line developer tools
balachandarpaulraj@BalachandarsAir mlkit-automl %
balachandarpaulraj@BalachandarsAir mlkit-automl % xcode-select --print-path
/Library/Developer/CommandLineTools
balachandarpaulraj@BalachandarsAir mlkit-automl % pod install
Analyzing dependencies
Cloning spec repo 'cocoapods' from 'https://github.com/CocoaPods/Specs.git'
```



```
[balachandarpaulraj@BalachandarsAir mlkit-automl % pod install
```

```
Analyzing dependencies
```

```
Downloading dependencies
```

```
Installing FirebaseCore (6.0.0)
```

```
Installing FirebaseInstanceID (4.0.0)
```

```
Installing FirebaseMLCommon (0.16.0)
```

```
Installing FirebaseMLVision (0.16.0)
```

```
Installing FirebaseMLVisionAutoML (0.16.0)
```

```
Installing GTMSessionFetcher (1.2.1)
```

```
Installing GoogleAPIClientForREST (1.3.8)
```

```
Installing GoogleMobileVision (1.6.0)
```

```
Installing GoogleToolboxForMac (2.2.0)
```

```
Installing GoogleUtilities (6.0.0)
```

```
Installing Protobuf (3.7.0)
```

```
Installing TensorFlowLite (1.13.1)
```

```
Generating Pods project
```

```
Integrating client project
```

```
[!] Please close any current Xcode sessions and use `MLVisionExample.xcworkspace` for this project from now on.  
Pod installation complete! There are 3 dependencies from the Podfile and 12 total pods installed.
```

```
[!] FirebaseMLCommon has been deprecated
```

```
[!] FirebaseMLVision has been deprecated
```

```
[!] FirebaseMLVisionAutoML has been deprecated in favor of MLKitImageLabelingAutoML
```

