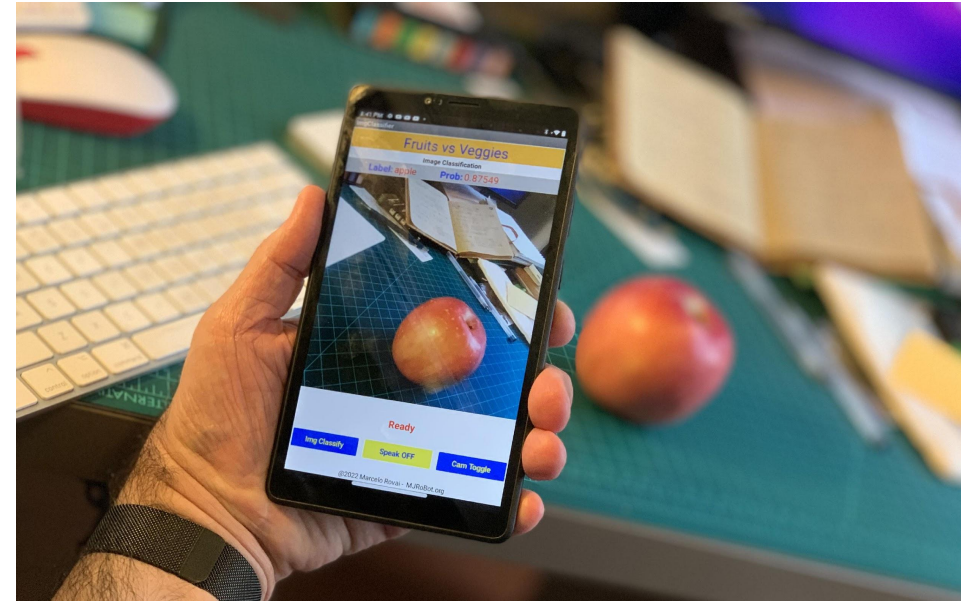


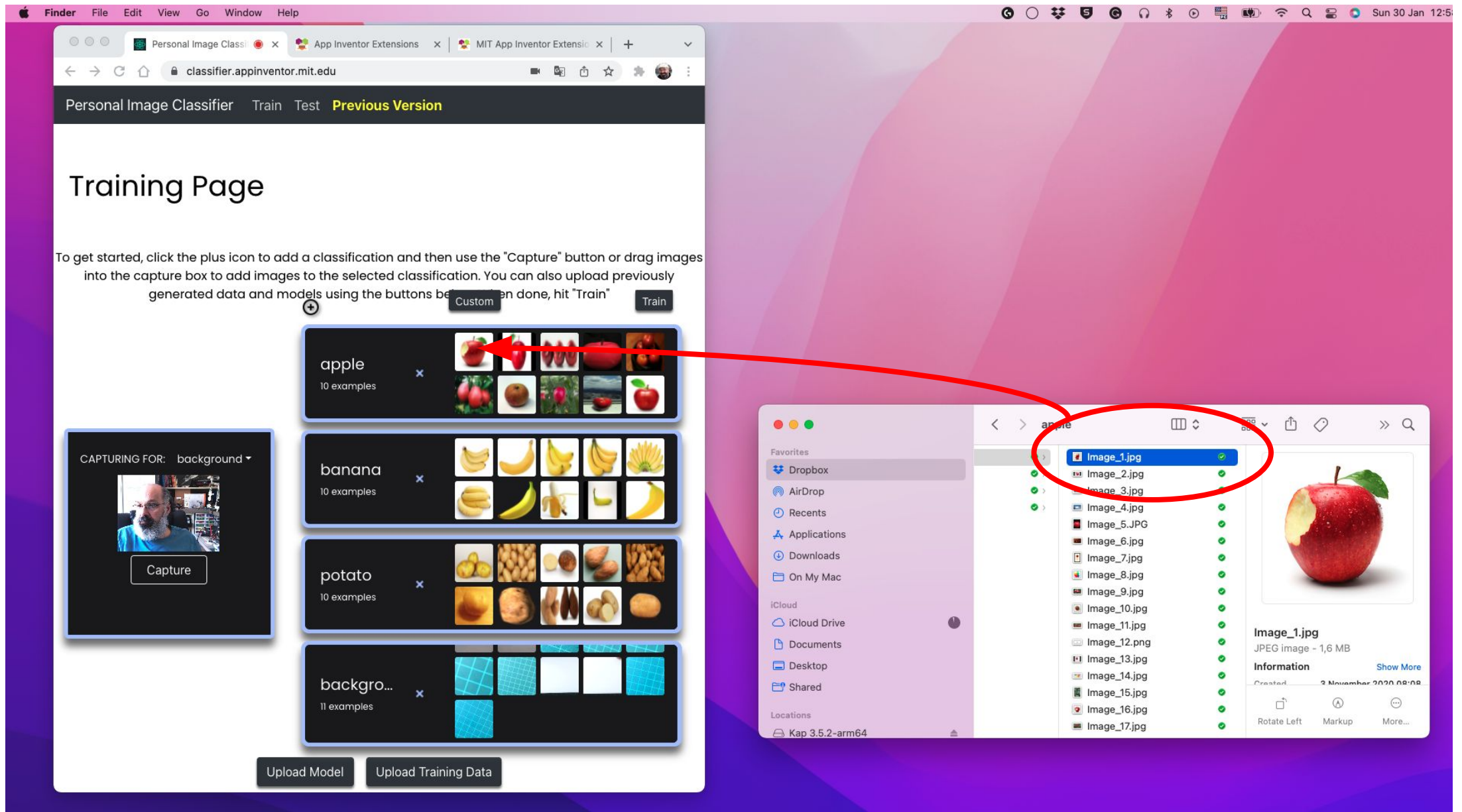


Image Classification

Fruits vs Veggies

@2022 - Marcelo Rovai





MIT - PIC (Personal Image Classifier)
<https://classifier.appinventor.mit.edu>


Personal Image Classifier Train Test **Previous Version**

Training Page

To get started, click the plus icon to add a classification and then use the "Capture" button or drag images into the capture box to add images to the selected classification. You can also upload previously generated data and models using the buttons below. When done, hit "Train"

Custom Train

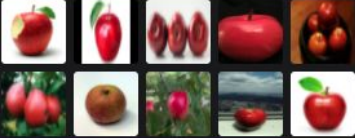
CAPTURING FOR: background ▾



Capture


apple ×

10 examples




banana ×

10 examples



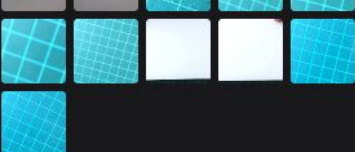
potato ×

10 examples



backgro... ×

11 examples




Upload Model Upload Training Data

Personal Image Classifier Train Test **Previous Version**

Training Page

To get started, click the plus icon to add a classification and then use the "Capture" button or drag images into the capture box to add images to the selected classification. You can also upload previously generated data and models using the buttons below. When done, hit "Train"

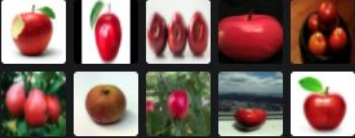
CAPTURING FOR: background ▾



Capture


apple ×

10 examples




banana ×

10 examples



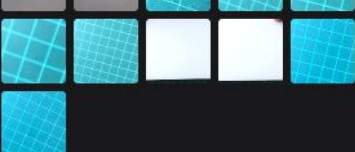
potato ×

10 examples



backgro... ×

11 examples



Upload Model Upload Training Data

Customize Hyperparameters

Learning Rate

0,0001

Optimizer

Adam ▾

Epochs

20

Training Data Fraction

,4

Close **Train Model**

Personal Image Classifier

App Inventor Extensions

MIT App Inventor Extensions


+

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Personal Image Classifier Train Test


Testing Page

With a model now generated, you can simply add images as you did in the Training portion to classify them. You can then scroll down to see an overview of the results. When done, you can export the model and data for later use.



Capture

CAPTURED PIC:



CLASSIFICATION:

apple

background

banana

potato

Export Model

Export Training Data

Personal Image Classifier

App Inventor Extensions

MIT App Inventor Extensions


+

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Personal Image Classifier Train Test


Testing Page

With a model now generated, you can simply add images as you did in the Training portion to classify them. You can then scroll down to see an overview of the results. When done, you can export the model and data for later use.



Capture

CAPTURED PIC:



Left: Fruit with seeds from a wild banana plant.
Right: seedless fruit from a cultivated banana from the Cavendish group (© A. Strong/Corbis)

CLASSIFICATION:

apple

background

banana

potato

Export Model

Export Training Data

Personal Image Classifier

App Inventor Extensions


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classifier.appinventor.mit.edu/test

Personal Image ClassifierTrainTest


Testing Page

With a model now generated, you can simply add images as you did in the Training portion to classify them. You can then scroll down to see an overview of the results. When done, you can export the model and data for later use.



Capture

CAPTURED PIC:



CLASSIFICATION:

apple

background

banana

potato

Export Model

Export Training Data

Personal Image Classifier

App Inventor Extensions


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Personal Image ClassifierTrainTest

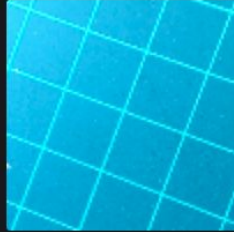
Testing Page

With a model now generated, you can simply add images as you did in the Training portion to classify them. You can then scroll down to see an overview of the results. When done, you can export the model and data for later use.



Capture

CAPTURED PIC:



CLASSIFICATION:

apple

background

banana

potato

Export Model

Export Training Data

Test Results

apple



87%

background



98%

banana



67%

potato



96%

Personal Image Classifier

App Inventor Extensions

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Personal Image Classifier

Train

Test

Testing Page

With a model now generated, you can simply add images as you did in the Training portion to classify them. You can then scroll down to see an overview of the results. When done, you can export the model and data for later use.



Capture

CAPTURED PIC:

CLASSIFICATION:

apple

background

banana

potato

Export Model

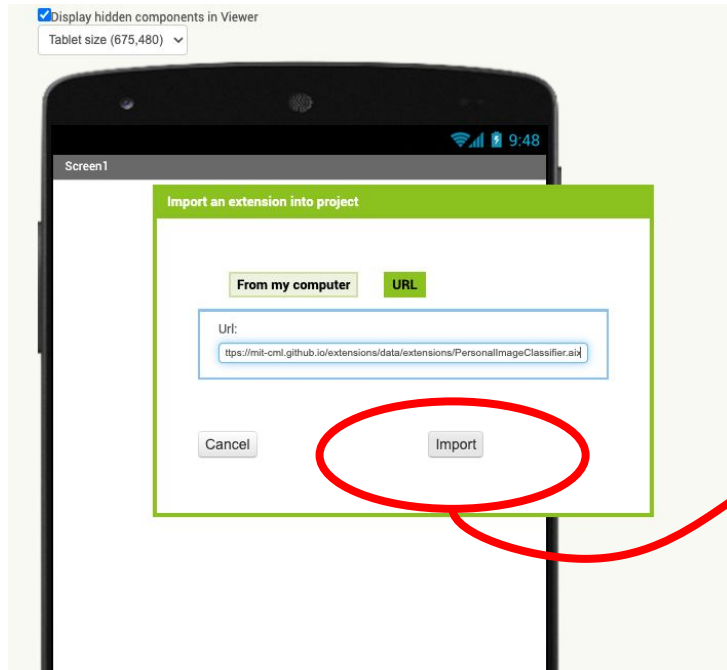
Export Training Data

model.mdl

⌵

Show All

×



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Projects Connect Build Settings Help My Projects View Trash Guide Report an Issue English mjrovai@gmail.com

fruits_vs_veggies Screen1 Add Screen Remove Screen Publish to Gallery Designer Blocks

Palette

Search Components...

User Interface

Layout

Media

Drawing and Animation

Maps

Sensors

Social

Storage

Connectivity

LEGO® MINDSTORMS®

Experimental

Extension

Import extension

PersonallImageClassifier

Viewer

☒ Display hidden components in Viewer

Phone size (505,320)

Screen1

Non-visible components

PersonallImageClassifier1

Components

Screen1

PersonallImageClassifier1

Properties

PersonallImageClassifier1

InputMode

Video

MinimumInterval

0

Model

None

Upload File ...

Cancel OK

Upload File ...

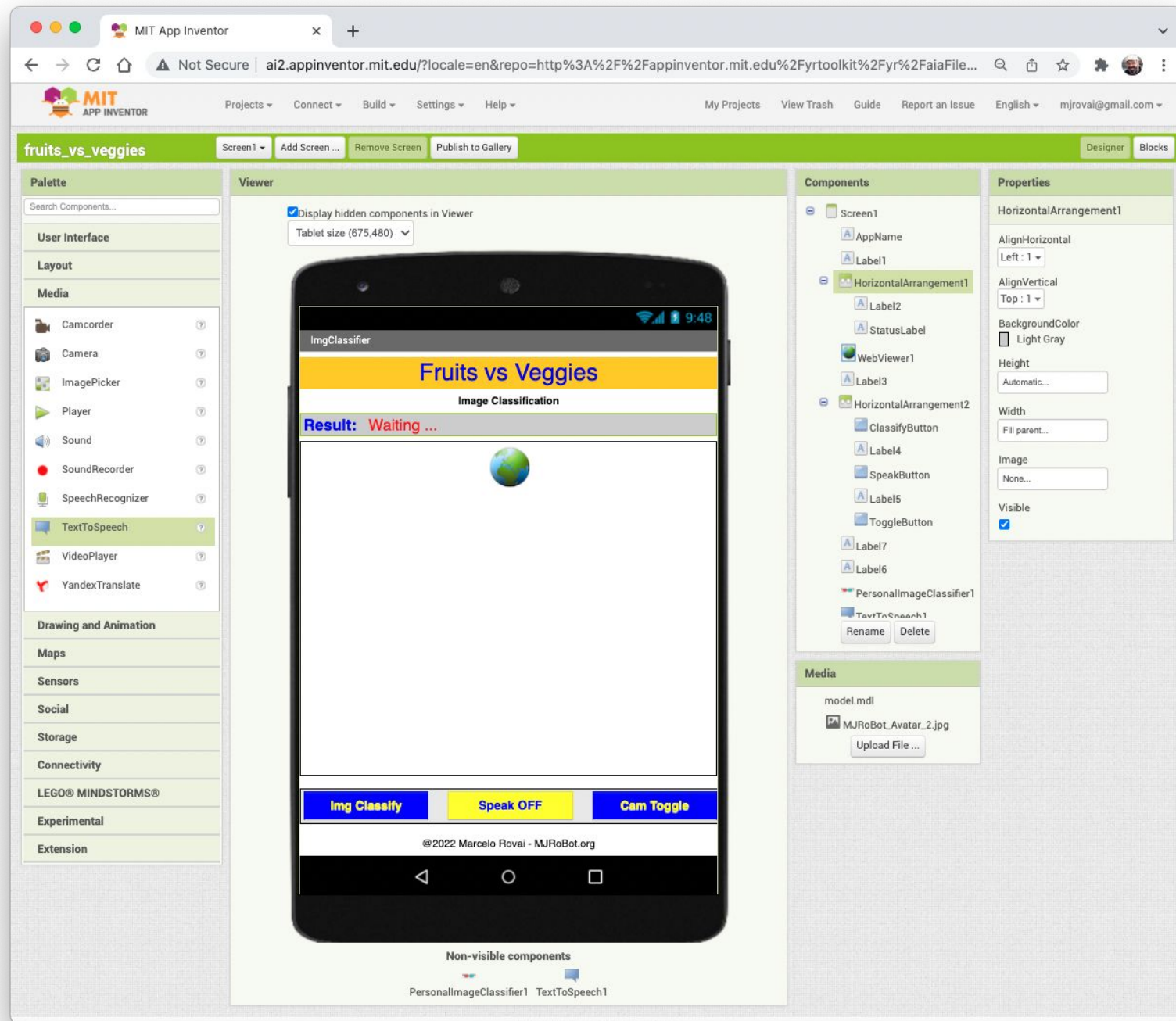
Choose File model.mdl

Cancel OK

Media

Upload File ...

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ProjectsConnectBuildSettingsHelp

My ProjectsView TrashGuideReport an IssueEnglishmjrrovai@gmail.com

fruits_vs_veggiesScreen1Add Screen ...Remove ScreenPublish to GalleryDesignerBlocks

Search Components...

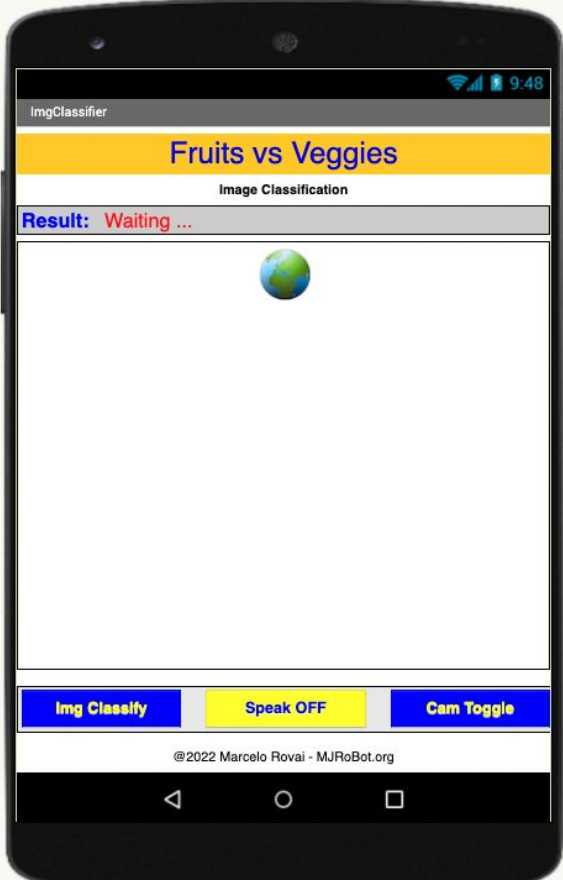
User InterfaceLayoutMedia

CamcorderCameraImagePickerPlayerSoundSoundRecorderSpeechRecognizerTextToSpeechVideoPlayerYandexTranslate

Drawing and AnimationMapsSensorsSocialStorageConnectivityLEGO® MINDSTORMS®ExperimentalExtension

Display hidden components in Viewer

Tablet size (675,480)



Non-visible components: PersonalImageClassifier1, TextToSpeech1

Components

Screen1

AppNameAppInfoHorizontalArrangement1Label2StatusLabelWebView1Label3HorizontalArrangement2ClassifyButtonLabel4SpeakButtonLabel5ToggleButtonLabel7Label6PersonalImageClassifier1TextToSpeech1

Media

MJRoBot_Avatar_2.jpgmodel.mdlUpload File ...

Properties

PersonalImageClassifier1

InputModeVideoMinimumInterval0Modelmodel.mdl...WebViewWebView1...

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ProjectsConnectBuildSettingsHelp

My ProjectsView TrashGuideReport an IssueEnglishmjirovai@gmail.com

fruits_vs_veggies

Screen1Add Screen ...Remove ScreenPublish to Gallery

DesignerBlocks

StatusLabel

Label8

Label9

StatusProb

WebView1

ErrorCode

Label3

HorizontalArrangement2

ClassifyButton

Label4

SpeakButton

Label5

ToggleButton

Label7

Label6

PersonalImageClassifier1

TextToSpeech1

Any component

RenameDelete

Media

MJRoBot_Avatar_2.jpg

model.mdl

Upload File ...

initialize global speak to false

initialize global label to " "

initialize global Prob to 0

when SpeakButton .Click

do

if

get global speak = false

then

set SpeakButton .Text to " Speak ON "

set global speak to true

else

set SpeakButton .Text to " Speak OFF "

set global speak to false

when ToggleButton .Click

do

call PersonalImageClassifier1 .ToggleCameraFacingMode

when PersonalImageClassifier1 .ClassifierReady

do

set ClassifyButton .Enabled to true

set ErrorCode .Text to " Ready "

when ClassifyButton .Click

do

call PersonalImageClassifier1 .ClassifyVideoData

set ErrorCode .Text to " Ready "

when PersonalImageClassifier1 .Error

do

set ErrorCode .Text to join " Error Code: "get errorCode

when PersonalImageClassifier1 .GotClassification

do

set global label to select list item listget resultindex 1

set StatusLabel .Text to select list item listget global labelindex 1

set StatusProb .Text to select list item listget global labelindex 2

if

get global speak = true

then

call TextToSpeech1 .Speak

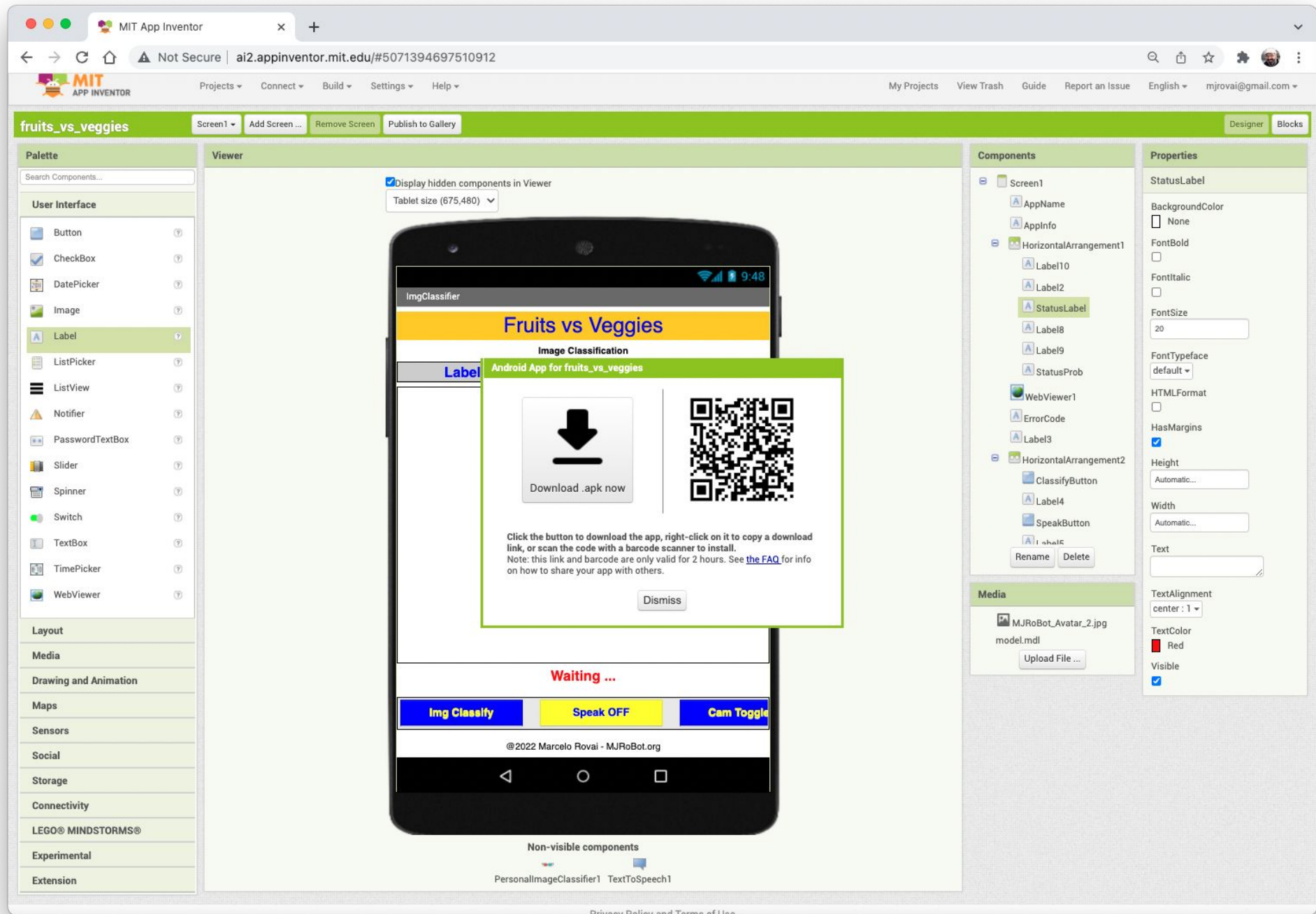
message select list item listget resultindex 1

0

0

Show Warnings

Privacy Policy and Terms of Use



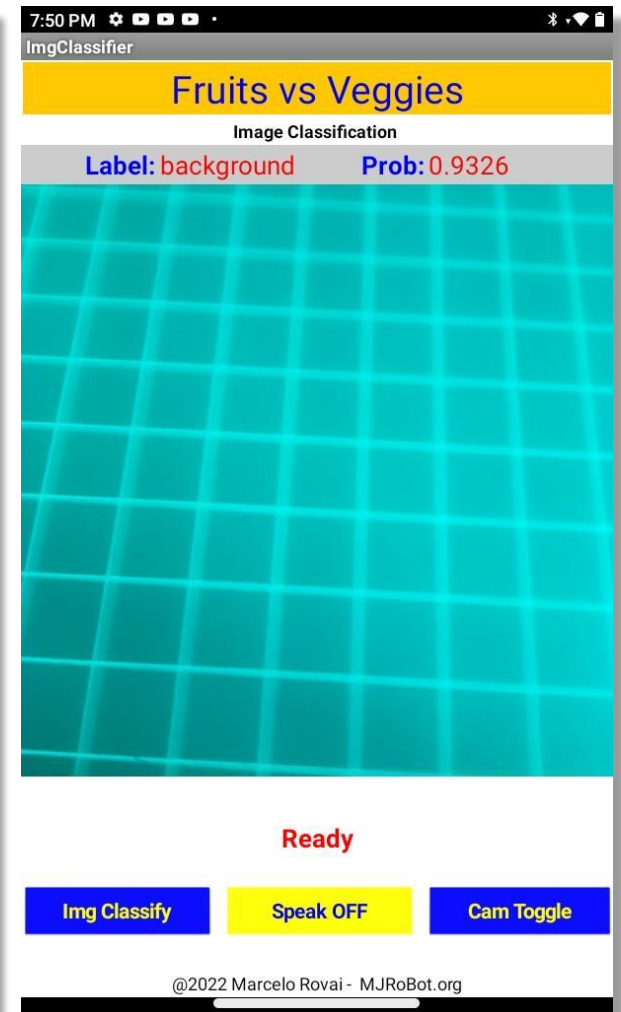
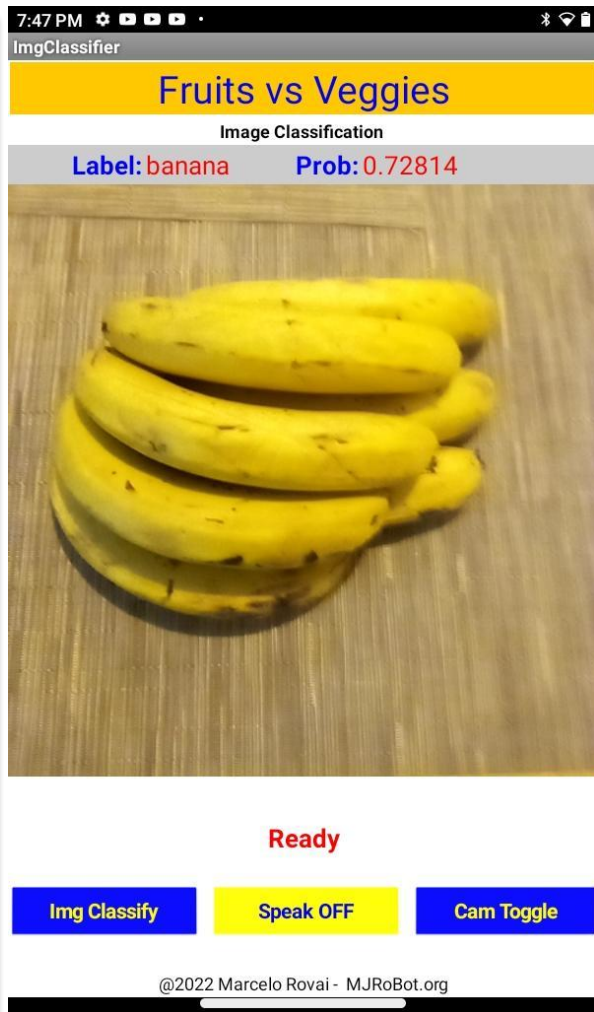
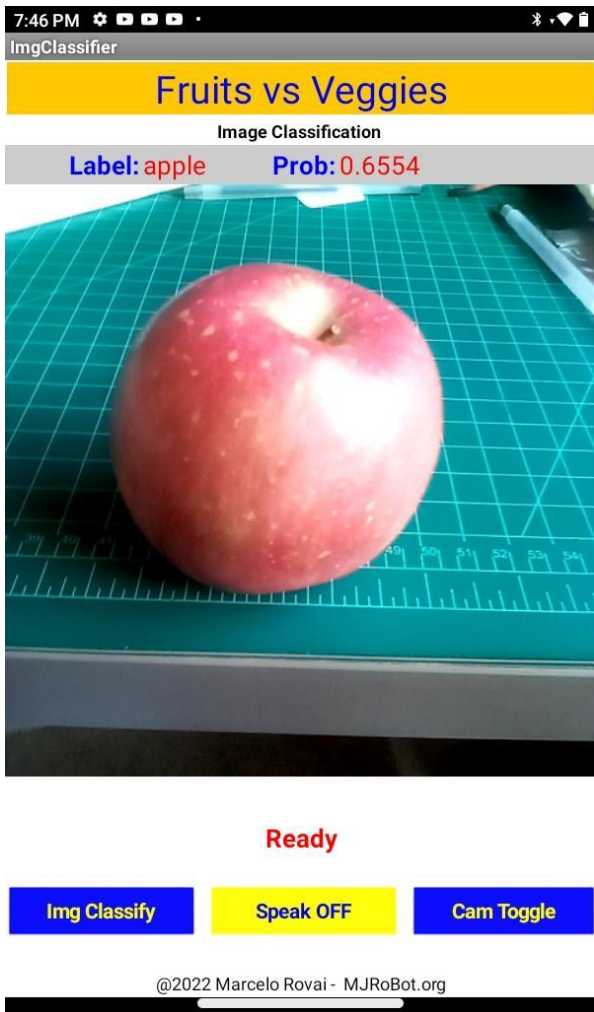


Image Classification with AppInventor

App Inventor Extensions

<http://ai2.appinventor.mit.edu/reference/other/extensions.html>

MIT App Inventor Extensions Repo

- <https://mit-cml.github.io/extensions/>
- Image Classification (ImageNet)
- <https://mit-cml.github.io/extensions/data/extensions/LookExtension-20181124.aix>
- PersonalAudioClassifier (PAC)
- <https://mit-cml.github.io/extensions/data/extensions/PersonalAudioClassifier.aix>
- PersonalImageClassifier (PIC)
- <https://mit-cml.github.io/extensions/data/extensions/PersonalImageClassifier.aix>
- PosenetExtension
- <https://mit-cml.github.io/extensions/data/extensions/edu.mit.appinventor.ai.posenet.aix>