Date	7 November 2022
Team ID	PNT2022TMID14463
	Real time Communication Powered by Al for specially abled
Maximum Marks	8 Marks

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"train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,
horizontal_flip= True)\n",
   "test_datagen=ImageDataGenerator(rescale=1./255)"
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h_size=300, class_mode='categorical',color_mode=\"grayscale\")"
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"Found 2250 images belonging to 9 classes.\n"
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 "from keras.models import
 Sequential\n", "from keras.layers
 import Dense\n",
              keras.layers
  "from
                                 import
 Convolution2D\n", "from keras.layers
            MaxPooling2D\n",
 import
                                  "from
 keras.layers import Dropout\n",
 "from keras.layers import Flatten"
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`Model.fit_generator` is deprecated and will be removed in a future version. Please
use `Model.fit`, which supports generators.\n",
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"Epoch 1/10\n",

"24/24 [======] - ETA: 0s - loss: 1.2714 - accuracy: 0.6219"

]

},

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"WARNING:tensorflow:Your input ran out of data; interrupting training. Make sure that your dataset or generator can generate at least `steps_per_epoch * epochs` batches (in this case, 40 batches). You may need to use the repeat() function when building your dataset.\n"

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val_loss: 0.4031 - val_accuracy: 0.8982\n",

 "Epoch 2/10\n",

"24/24 [========] - 33s 1s/step - loss: 0.2827 - accuracy: 0.9211\n",

"Epoch 3/10\n",

"24/24 [===========] - 34s 1s/step - loss: 0.1448 - accuracy: 0.9615\n",

```
"Epoch 4/10\n",
accuracy: 0.9746\n",
"Epoch 5/10\n",
"24/24 [===================================] - 34s 1s/step - loss: 0.0679 -
accuracy: 0.9826\n",
"Epoch 6/10\n",
"24/24 [===================] - 32s 1s/step - loss: 0.0424 -
accuracy: 0.9909\n",
"Epoch 7/10\n",
accuracy: 0.9908\n",
"Epoch 8/10\n",
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13

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 resize\n", "def detect(frame):\n",
  " img = resize(frame,(64,64,1))\n",
  " img =
 np.expand_dims(img,axis=0)\n","
 if(np.max(img)>1):n",
  " img = img/255.0\n",
  " prediction =
```

```
model.predict(img)\n","
print(prediction)\n",

" prediction = np.argmax(prediction,axis=1)\n",
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```
" print(prediction)"
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