

REAL TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED

Deployment Sequence report

PRESENTED BY : TEAM ID-PNT2022TMID26077

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Sanjai raj

Rupesh v

Rithwin

The screenshot shows the IBM Cloud login page in a web browser. The browser's address bar displays "cloud.ibm.com". The page title is "IBM CLOUD LOGIN". The navigation bar includes the IBM Cloud logo, a search bar, and links for "Catalog", "Manage", and "Sanjai P's Account". A dropdown menu for "Sanjai P's Account" is open, showing "Sanjai P's Account" and "Upgrade account". A "Create resource" button is visible. The main content area is titled "Dashboard" and features a "For you" section with six cards: "Build", "Set up your IBM Cloud account", "Build a web app with Watson Speech to Text", "Get Started with Watson Studio", "Build a Virtual Private Cloud (VPC)", and "Create". Each card includes a brief description and a "Getting started" button with a duration. Below the "For you" section, there are three more sections: "User access" with a "Manage users" link, "News" with a "View all" link, and "Planned maintenance" with a "View all" link. The Windows taskbar is visible at the bottom, showing the search bar and various application icons.

IBM Cloud

cloud.ibm.com

IBM CLOUD LOGIN

IBM Cloud

Search resources and products...

Catalog Manage Sanjai P's Account

Sanjai P's Account

Upgrade account

Create resource

Dashboard

Edit dashboard

For you

Select an option

Build

Explore IBM Cloud with this selection of easy starter tutorials and services.

Set up your IBM Cloud account

Learn how to set up your IBM Cloud account, manage your account settings, organize resources, and control access to those resources.

Getting started 10 min

Build a web app with Watson Speech to Text

Deploy a conversational interface compatible with any application, device, or channel.

Getting started 15 min

Get Started with Watson Studio

Get started with using AI and Cloud Object Storage in 15 minutes.

Popular 2 hr

Build a Virtual Private Cloud (VPC)

Upgrade to a paid account to create your own protected space in the IBM Cloud.

Getting started 7 min

Create

Deploy available Hat Op Cloud.

Getting started

User access

Manage users

Enter email addresses below to jump directly into the invite user setup?

News

View all

All About IBM Storage's Price and Supply Guarantee

IBM Tech Now: November 7, 2022

Planned maintenance

View all

Type here to search

21:24 10-11-2022

Service Details - IBM Cloud

WATSON STUDIO FOR ML

cloud.ibm.com/services/pe... 41156a09%3Aa3929f87-0a3a...

IBM Cloud Search resources and products... Catalog Manage Sanjai P's Account

Resource list /

Watson Machine Learning-iy

Active [update](#)

Details Actions...

Manage Plan Connections

Watson Machine Learning in Cloud Pak for Data

Use Watson Machine Learning on Cloud Pak for Data to put AI models to work. Deploy, monitor, and update models to get the insights you need from your data modeling.

[Launch in IBM Cloud Pak for Data](#)



IBM Watson Machine Learning in Cloud Pak for Data

IBM Cloud Pak for Data Unifying platform

IBM Cloud Base cloud infrastructure

IBM Watson Machine Learning is part of IBM Cloud Pak for Data and serves as the data science capability of the data fabric architecture.

Helpful links

- Documentation**
Learn about the tools and capabilities you
- Learning path**
Check out sample projects, notebooks, and
- Videos**
Watch videos to learn about Watson

https://dataplatform.cloud.ibm.com/registration?step=next&app=watson_machine_learning&enc_account_id=4ac4242a7a41016a26b0c8423f6a08&redirectFromAccount=&utm_source=watson_ml_FMG&utm_medium=CPD&utm_campaign=CPD40Days2020&code=1&om_yr=ca1-0003BLA...

Type here to search

22:38 10-11-2022

Service Details - IBM Cloud x IBM Watson Studio x +

← → ↻ dataplatform.cloud.ibm.com/.../creating-new-project.../watsonstudio_experience

CREATING NEW PROJECT

IBM Watson Studio

Welcome, Sanja

Build and manage ML models with Watson Studio

Watson Studio is a service that you use to build, deploy, and manage AI models and to optimize decisions. Work within a project to build models. Customize how you work by choosing from notebooks, graphical canvases, and no-code tools.

Take a tutorial
Step through implementing a Databricks use case in a sample project.

Get started

Sample project
Open a sample project with pre-built Watson Studio assets.

New project
Create a project and then add your own data to get started.

Quick start

Create data pipelines with DataStage

Build customer profiles with IBM Match 360 with Watson

Cancel Next

Feedback

20:18 10-11-2022

 Type here to search

LINKING CLOUD OBJECT SERVICE

IBM Watson Studio

Search in your workspaces

Buy

Rupesh Vijayan's Account

Dallas

Services catalog /

Cloud Object Storage

Author: IBM • Date of last update: Jul 6, 2022 • Docs • API Docs

Create About

workloads.

Configure your resource

Service name

Cloud Object Storage-mv

Select a resource group

Default

Tags

Example: amCdev, version-1

Summary

Cloud Object Storage

Region: Global

Plan: Lite

Service name: Cloud Object Storage-mv

Resource group: Default

Creating...

[View terms](#)

Type here to search

10:06 11-11-2022

UPLOADING THE PYTHON FILES

The screenshot shows the IBM Watson Studio web interface. A modal dialog is open for creating a new project. The dialog has a 'Name' field containing 'Model Building' and a 'Description (optional)' field containing 'This file contains the code for building the model and training the model.' The 'Select runtime' dropdown is set to 'Runtime 22.1 on Python 3.9 XXS (1 vCPU 4 GB RAM)'. Below this, there is a 'Notebook file' section with a text box for uploading files, which currently contains the text 'Drag and drop files here or upload.' A file named 'Model_building.ipynb' is shown in a preview window at the bottom of the dialog. The dialog has 'Cancel' and 'Create' buttons at the bottom right. The background shows the IBM Watson Studio dashboard with a project named 'RealTime Communication For Sp...' and a sidebar with navigation options like 'Home', 'Workspace', and 'Recent Projects'.

Service Details - IBM Cloud x IBM Watson Studio x New Tab x

← → ↻ dataplatform.cloud.ibm.com/project/... 171177... x

IBM Watson Studio Search Recent Projects

Home Workspace Recent Projects

Projects / RealTime Communication For Sp...

Launch IDE

Name

Model Building

Select runtime

Runtime 22.1 on Python 3.9 XXS (1 vCPU 4 GB RAM) v

Description (optional)

This file contains the code for building the model and training the model.

Notebook file

Upload only .ipynb files. 52 MB max file size.

Drag and drop files here or upload.

Model_building.ipynb

Cancel Create

Type here to search

23:21 10-11-2022

LINKING WATSON MACHINE LEARNING

Services catalog /

Watson Machine Learning

Author: IBM SPSS • Date of last update: Oct 6, 2022 • Docs • API Docs

Create About

Select a region

Select a region

Dallas

Pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: United States

Plan	Features	Pricing
Life	Service instance 20 capacity unit-hours (CUH) included	Free

Create

View terms

Summary

Watson Machine Learning

Region: Dallas
Plan: Life
Service name: Watson Machine Learning-at
Resource group: Default

Feedback

Type here to search

17:39 11-11-2022

ADDING ASSETS TO PROJECT

Service Details - IBM Cloud

IBM Watson Studio

dataplatform.cloud.ibm.com/projects/.../assets

Buy

Sanjay P's Account

Dallas

SP

Real Time Communication For Sp...

Assets

Jobs

Manage

Assets

Assets that you create with tools show here. See data assets on the Assets page.

[View all](#)

Resource usage

For this month in this project

0 CUH

Project history

You created project [Real Time Communication For Specially Abled People](#) Today at 10:49 PM

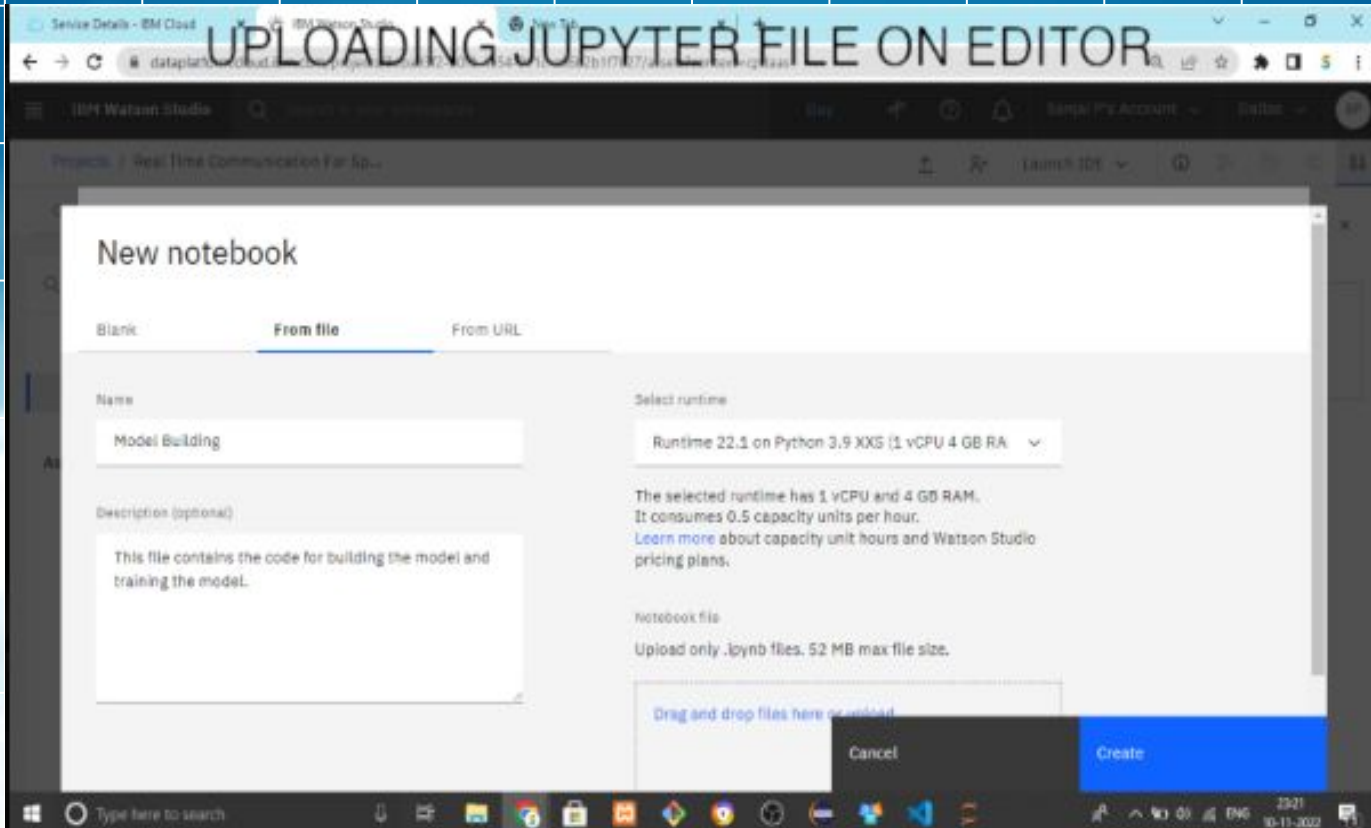
Readme

Type project notes, reminders, or instructions

Type here to search

22:50 10-11-2022

The screenshot shows the 'New notebook' dialog in IBM Watson Studio. The 'Blank' tab is active. The notebook name is 'Model Building'. The selected runtime is 'Runtime 22.1 on Python 3.9 XS (2 vCPU 8 GB RAM)'. The language is 'Python 3.9'. A description box contains the text: 'This file contains the code for building the model and training the model.' The 'Create' button is highlighted in blue.




Service Details - IBM Cloud x Model Building - IBM Watson St... x New Tab x +

← → ↻ dataplatform.cloud.ibm.com/analytics/notebooks/v2/safw2n81-F106-4335-58b6-5a04992a599f/projectId=3aba9302-b0d0-4a54-911c-466b2b1f7027?context...

IBM Watson Studio Search in your workspaces Buy Sanjai P's Account Dallas 6P

Projects / Real Time Communication For Sp... / Model Building

UPLOADING



87%

Instantiating runtime for Model Building

The selected runtime has 1 vCPU and 4 GB RAM.
It consumes 0.5 capacity units per hour.

Type here to search

23:21 10-11-2022

ADDING STREAMING BODY

Model Building - x Downloads - x IBM Cloud

datapatform.cloud.ibm.com/analytic/notebooks/v2/cd-w0d37a-cbfa-4065-954b-477197a0115b/projectcd=074444d8-1441-4209-7cd-ed722a27b78context=cp...

IBM Watson Studio

Search in your workspace

Buy

Rupesh Vijayan's Account

Dallas

Projects / Real Time Communication for sp... / Model Building

File Edit View Insert Cell Kernel Help

Format

Code

```
In [580]: import os, types
import pandas as pd
from botocore.client import Config
import ibm_botocore

def __iter__(self): return 0

#@hidden_cell
# The following code accesses a file in your IBM Cloud Object Storage. It includes your credentials.
# You might want to remove those credentials before you share the notebook.
cos_client = ibm_botocore.client(service_name='s3',
                                ibm_api_key_id='agprH2FvH5SECUW60RH4qyV5_K3FrI2AW13TQ-wQEx',
                                ibm_auth_endpoint='https://iam.cloud.ibm.com/oidc/token',
                                config=Config(signature_version='auth'),
                                endpoint_url='https://s3.private.us.cloud-object-storage.appdomain.cloud')

bucket = 'realtimecommunicationforspecially-donotdelete-pr-rfandcvugch0fs'
object_key = 'Dataset.zip'

streaming_body_4 = cos_client.get_object(Bucket=bucket, Key=object_key)['Body']

# Your data file was loaded into a botocore.response.StreamingBody object.
# Please read the documentation of ibm_botocore and pandas to learn more about the possibilities to load the data.
# ibm_botocore documentation: https://ibm.github.io/ibm-cos-sdk-python/
# pandas documentation: http://pandas.pydata.org/
```

Data

Files

Connections

Upload one file at a time. All file types accepted. 5 GB max file size.

Drag and drop files here or upload.

1.png

Insert to code

Dataset.zip

Insert to code

Type here to search

23:46 11-11-2022

Service Details - IBM Cloud x Model Building - IBM Watson Studio x New Tab

dataplatform.cloud.ibm.com/analytics/notebooks/v2/aa4e2b83-f10b-4339-b88e-da349692a699?projectId=3eba9312-b0d0-4a54-911c-466b2b1f7027&connect...

IBM Watson Studio Search in your workspace Buy Single P's Account Details

Projects / Real Time Communication For Us / Model Building

File Edit View Insert Cell Kernel Help Not Trained [Python 3.8]

Run Panel Code

```

In [14]: model.add(Dense(units=102, activation='relu'))
In [15]: model.add(Dense(units=5, activation='softmax'))
In [14]: model.compile(loss='categorical_crossentropy', optimizer='adam', metrics=['accuracy'])
In [17]: model.fit_generator(x_train, steps_per_epoch=14, epochs=10, validation_data=(x_test, validation_steps=40))

```

/usr/local/lib/python3.8/dist-packages/keras/backend.py:101: UserWarning: 'model.fit_generator' is deprecated and will be removed in a future version. Please use 'model.fit', which supports generators.
***entry point for launching an python kernel.

```

Epoch 1/10
24/24 [=====] - 17s 608ms/step - loss: 1.9780 - accuracy: 0.5025
Epoch 2/10
24/24 [=====] - 16s 603ms/step - loss: 1.4128 - accuracy: 0.6275
Epoch 3/10
24/24 [=====] - 16s 679ms/step - loss: 0.9500 - accuracy: 0.6840
Epoch 4/10
24/24 [=====] - 16s 679ms/step - loss: 0.7676 - accuracy: 0.7240
Epoch 5/10
24/24 [=====] - 16s 603ms/step - loss: 0.6180 - accuracy: 0.7485
Epoch 6/10
24/24 [=====] - 16s 663ms/step - loss: 0.5886 - accuracy: 0.8060
Epoch 7/10
24/24 [=====] - 17s 679ms/step - loss: 0.4164 - accuracy: 0.8364
Epoch 8/10
24/24 [=====] - 16s 713ms/step - loss: 0.3480 - accuracy: 0.8594
Epoch 9/10
24/24 [=====] - 16s 658ms/step - loss: 0.2641 - accuracy: 0.9020
Epoch 10/10
24/24 [=====] - 16s 668ms/step - loss: 0.1676 - accuracy: 0.9670

```

Out[17]: <keras.callbacks.History at 0x7fa9c27774d0>

```

In [14]: model.save("E01.78")

```

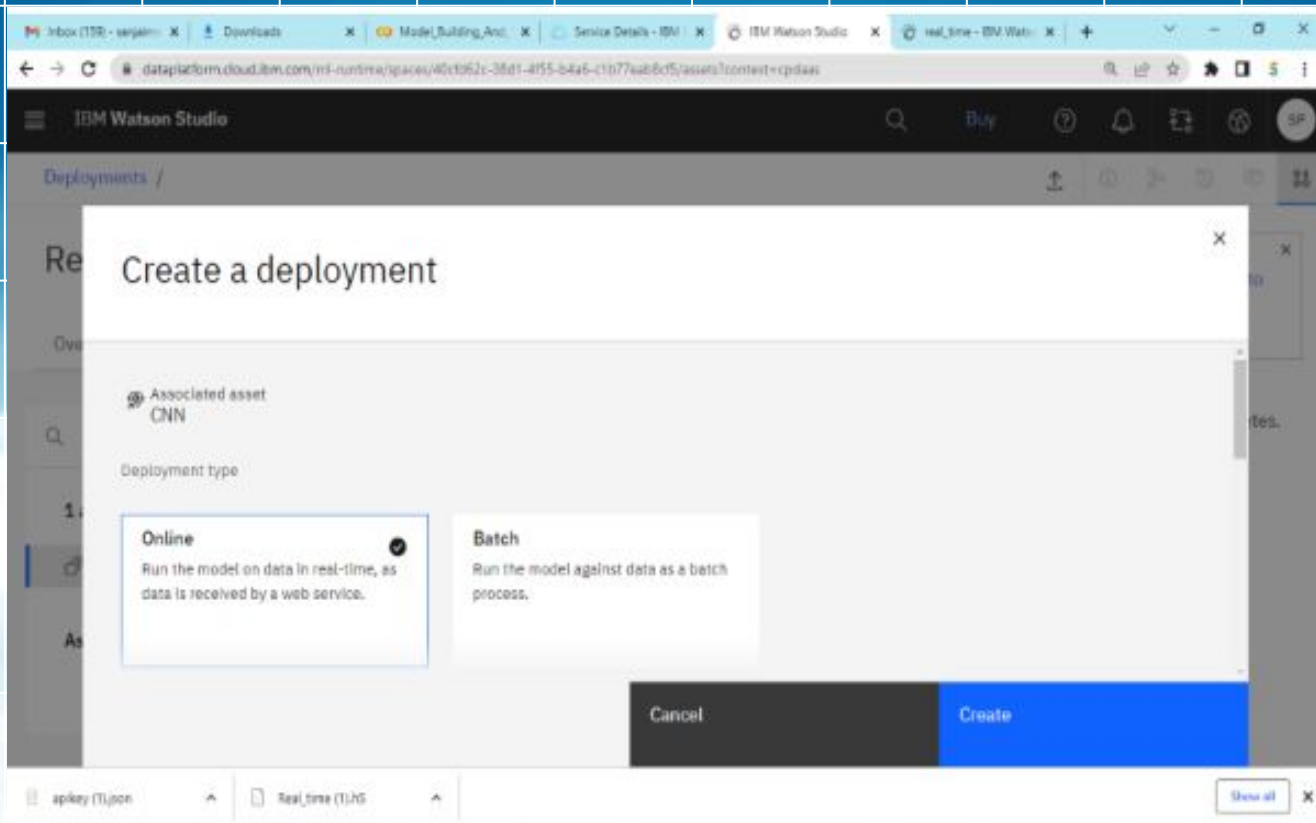
File Edit View Insert Cell Kernel Help

Type here to search

23:25 10-11-2022

MODEL FITTING








IBM Watson Studio

Deployments /

Real_Time


Overview Assets **Deployments** Jobs

🔍 Search

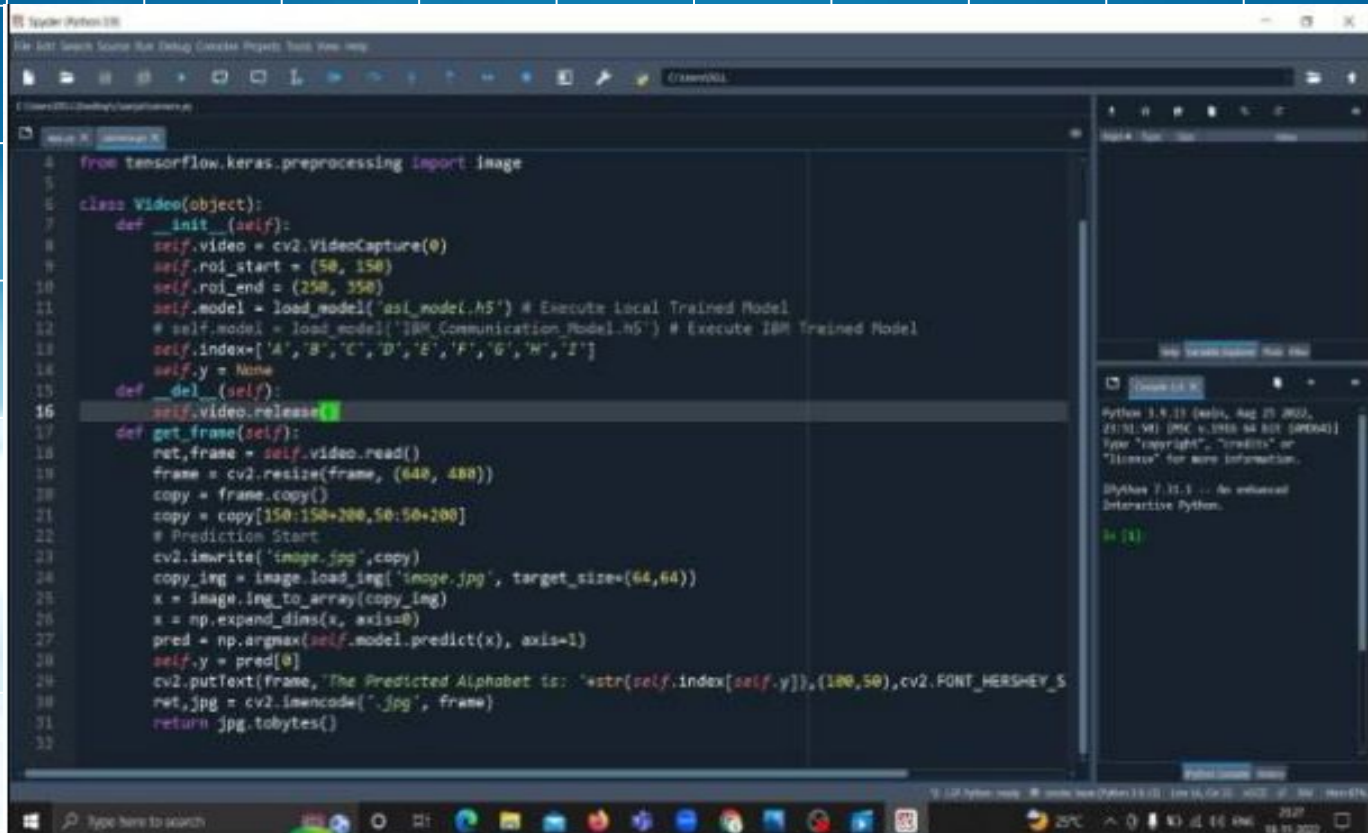
Name	Type	Status	Asset	Last modified	
 Real Time Communication For Specially Abled People	Online	 Deployed	CNN	25 seconds ago Sanjai P (You)	

Items per page: 20 1-1 of 1 items 1 of 1 pages

Notifications

-  **Online deployment ready**
The online deployment Real Time Communication For Specially Abled People in space Real_Time is ready to accept requests.
Today 12:55 AM

[View all](#)



Spyside (Python 3.8.0)

File Edit Search Source Run Debug Consolas Projects Tools View Help

home/veeratrighavan/Desktop/sanjai/app.py

Banner-Heading-Image.css X Navbar-Centered-Brand.css X index.html X app.py X camera.py X styles.css X

```

1 from flask import Flask, Response, render_template
2 from camera import Video
3
4 app = Flask(__name__)
5 @app.route('/')
6 def index():
7     return render_template('index.html')
8
9 def gen(camera):
10     while True:
11         frame = camera.get_frame()
12         yield (b'--frame\r\n'
13               + Content-Type: image/jpeg\r\n\r\n' + frame
14               + b'\r\n\r\n')
15
16 @app.route('/video_feed')
17 def video_feed():
18     video = Video()
19     return Response(gen(video), mimetype='multipart/mixed')
20
21 if __name__ == '__main__':
22     app.run()

```

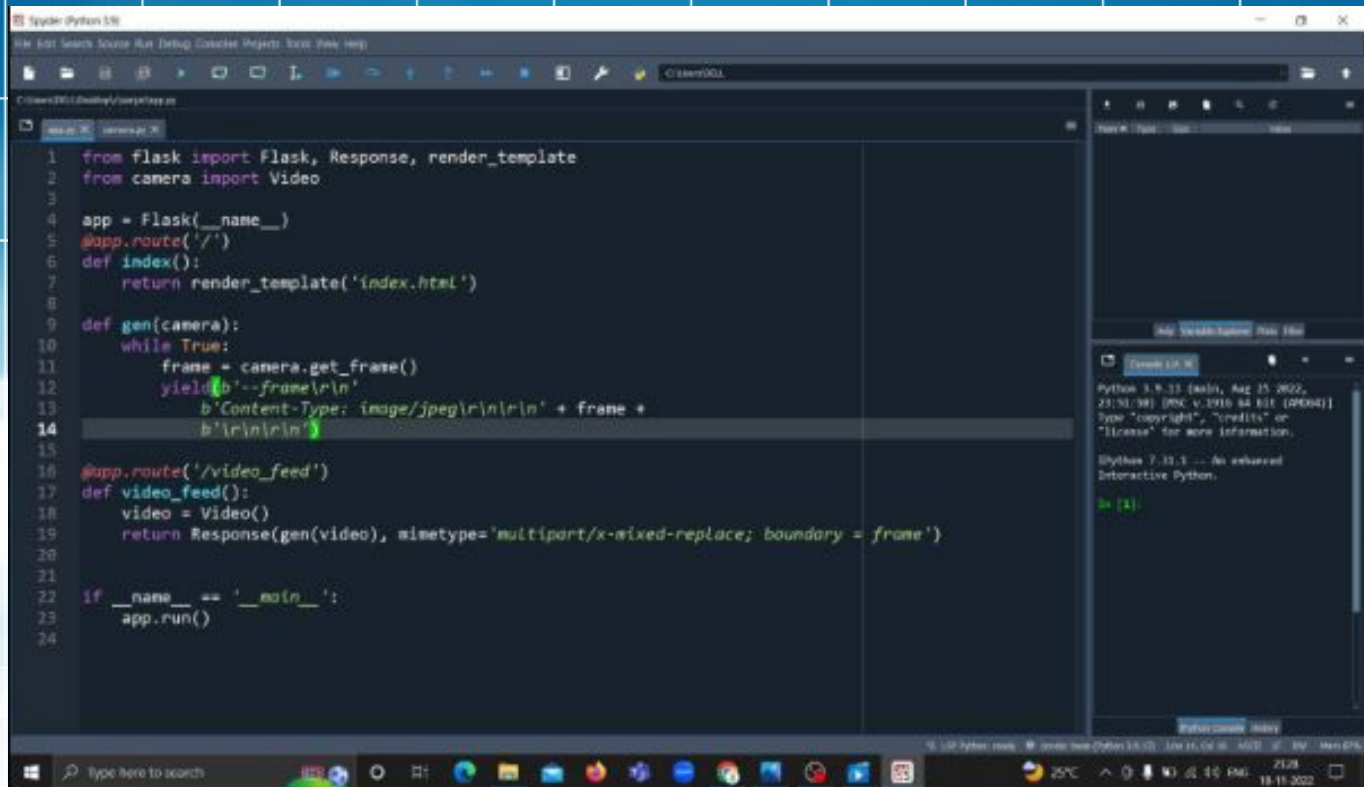
root@veeratrighavan:/home/veeratrighavan: -

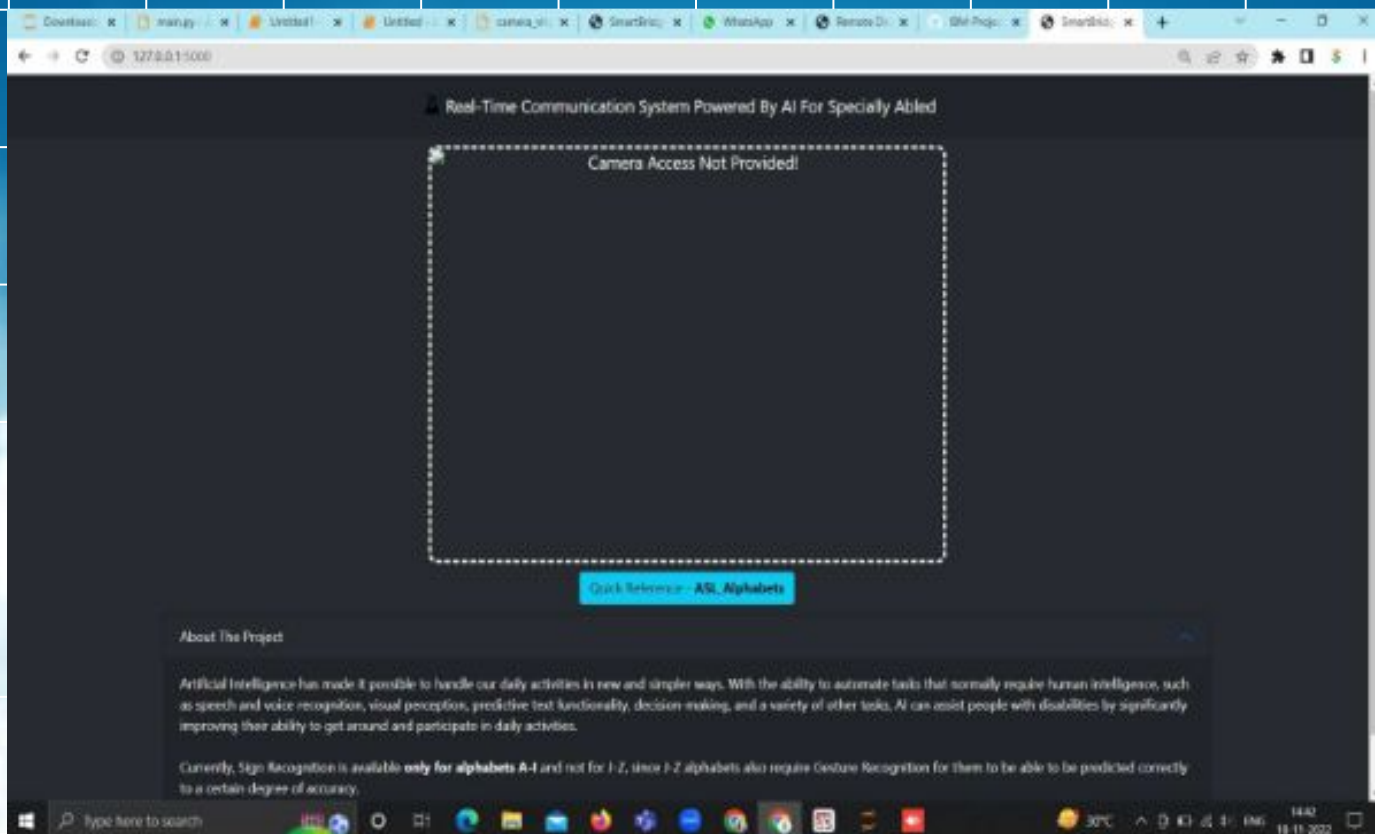
```

2022-11-18 18:47:52.529362: I tensorflow/stream_executor/cuda/cudart_stub.cc:29]
Ignore above cudart dlerror if you do not have a GPU set up on your machine.
2022-11-18 18:47:52.971073: E tensorflow/stream_executor/cuda/cudablas.cc:2961]
Unable to register cuBLAS factory: Attempting to register factory for plugin cu
BLAS when one has already been registered
2022-11-18 18:47:59.482648: W tensorflow/stream_executor/platform/default/dso.la
ader.cc:64] Could not load dynamic library 'libwinfer.so.7': dlerror: libwinfer
r.so.7: cannot open shared object file: No such file or directory; LD_LIBRARY_P
ATH: /usr/local/lib/python3.8/dist-packages/cv2/../../lib64:
2022-11-18 18:47:59.482752: W tensorflow/stream_executor/platform/default/dso.la
ader.cc:64] Could not load dynamic library 'libwinfer.plugin.so.7': dlerror: li
binfer.plugin.so.7: cannot open shared object file: No such file or directory;
LD_LIBRARY_PATH: /usr/local/lib/python3.8/dist-packages/cv2/../../lib64:
2022-11-18 18:47:59.482772: W tensorflow/compiler/tf2tensorrt/utils/py_utils.cc:
38] TF-TRT Warning: Cannot dlopen some TensorRT libraries. If you would like to
use Nvidia GPU with TensorRT, please make sure the missing libraries mentioned a
bove are installed properly.
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment.
Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit

```

Nov 18 6:48 PM





Download: x | many: x | Untitled: x | Untitled: x | panew: x | SmartBrid: x | WhatsApp: x | Remote D: x | Old-Proj: x | SmartBrid: x

127.0.0.1:5000

Real- Abled

American Sign Language - Alphabets

Aa	Bb	Cc	Dd	Ee	
Ff	Gg	Hh	Ii	Jj	
Kk	Ll	Mm	Nn	Oo	
Pp	Qq	Rr	Ss	Tt	
Uu	Vv	Ww	Xx	Yy	Zz

About The Project

Developed By

Close

Type here to search

30°C 14:40 18-11-2022

