



## New project

### Define details

Name

Real Time Communication For Specially Abled People

Description

The project deals on building an application which helps the specially challenged people to communicate between them and the common people. Communication between a person with hearing/speech impairment and a normal person has always been a challenging task. This application tries to reduce the barrier of communicating to

### Storage

Cloud Object Storage-uk

### Choose project options

☐ Restrict who can be a collaborator ⓘ

☐ Add no sensitive data ⓘ

Cancel

Create



IBM Watson Studio

Search in your workspace


Buy

Rupesh Vijayan's Account

Details

99

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: env:dev, version: 1

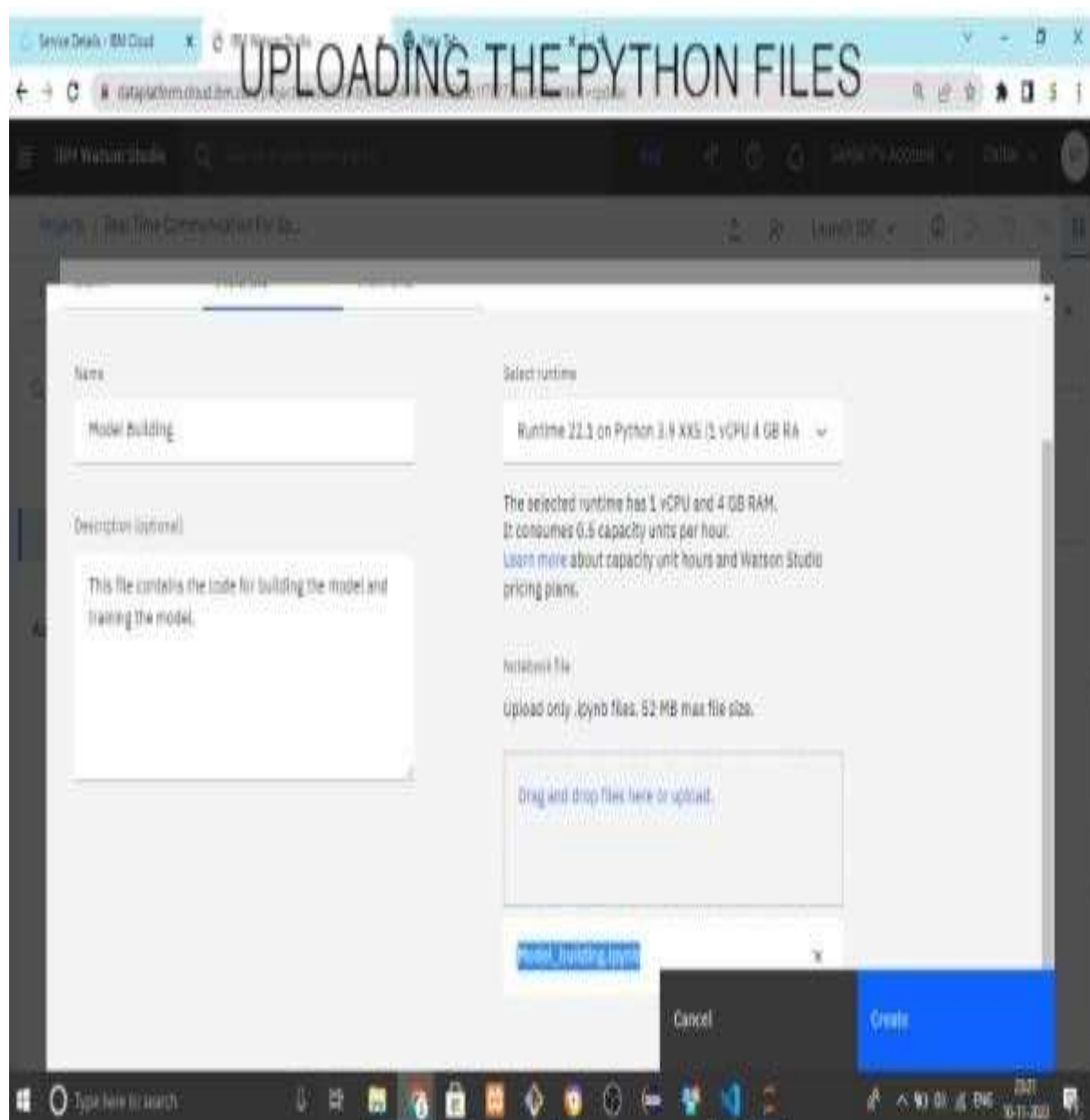
Creating...

[View terms](#)

Type here to search



100% 11/11/2022



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

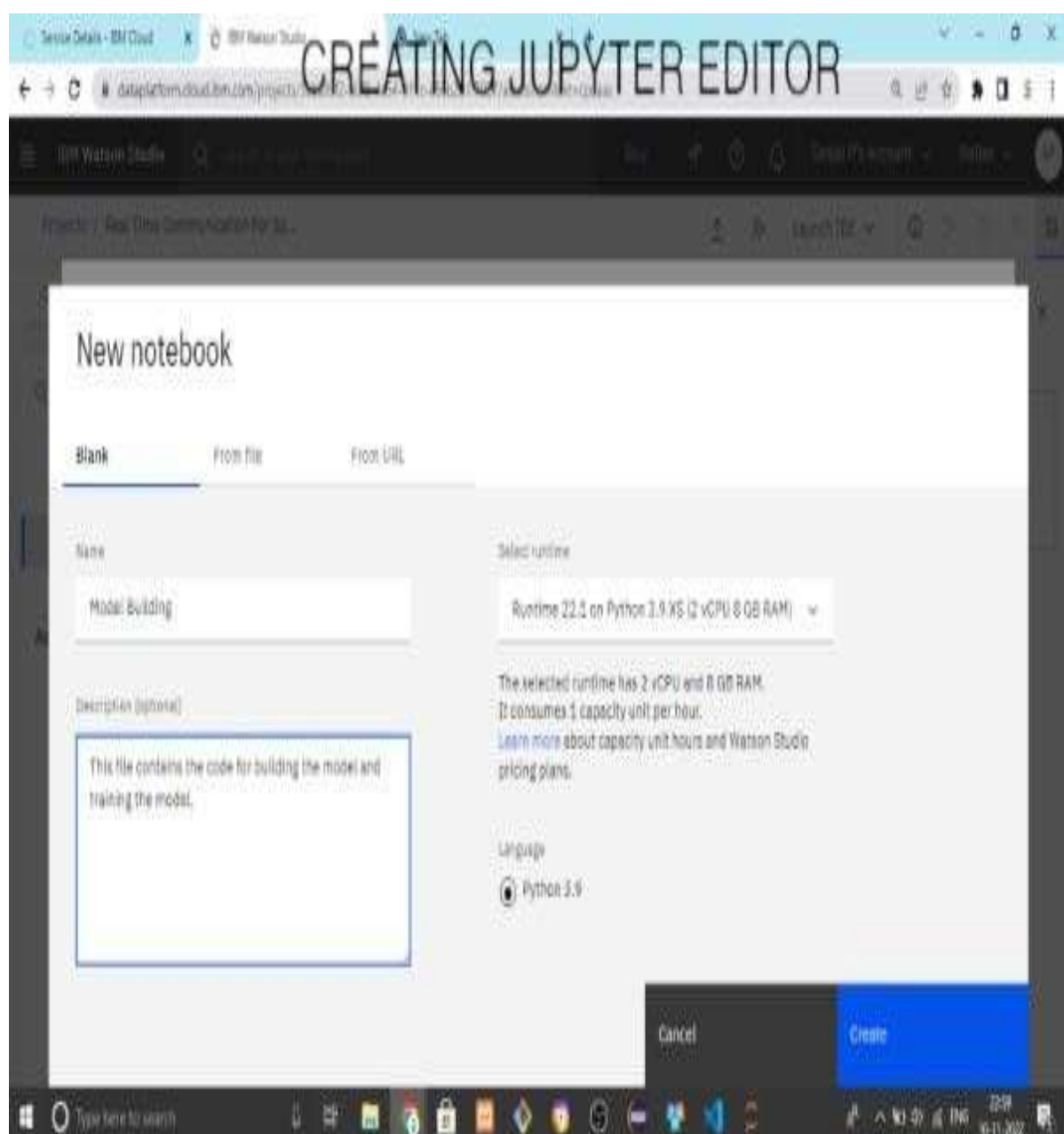
Feedback

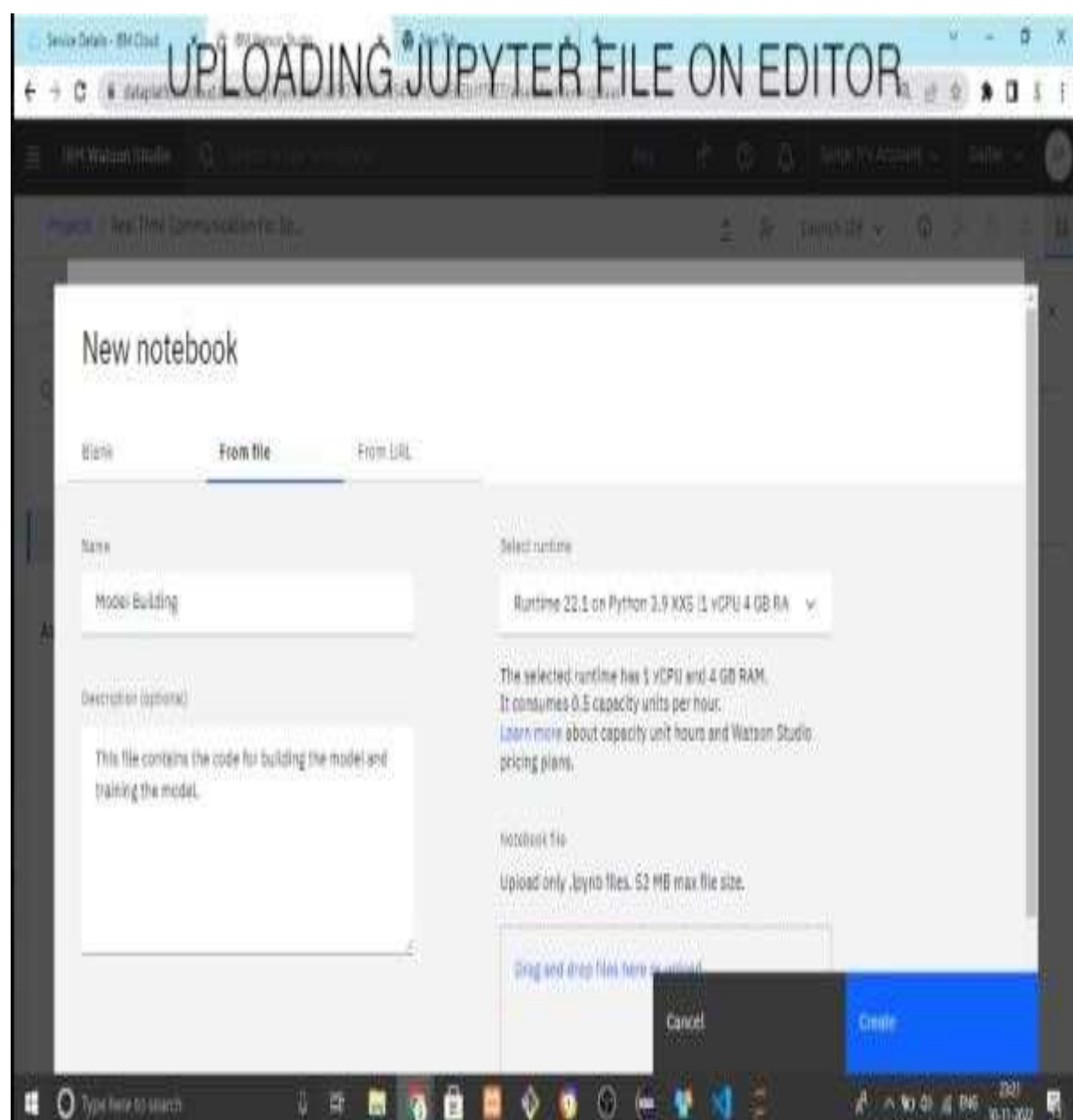
Type here to search

11-11-2022

The screenshot shows the Azure portal interface for adding assets to a project. The main heading is "ADD ASSETS TO PROJECT". Below the heading, there are three tabs: "Assets", "Jobs", and "Manage". The "Assets" tab is currently selected. The "Assets" section displays a list of assets with columns for "Name", "Location", and "Status". The "Resource usage" section shows a bar chart for CPU usage. The "Project history" section shows a list of projects.








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

dataplatform.cloud.ibm.com/analytics/model-builder/.../wh25ST-70b-4355-b0b-d034952a2870/projectId=3462932-b0b-4a54-911e-4f602b1f7528=main...

IBM Watson Studio Search in your workspace Buy ⓘ ⓘ ⓘ Sanjay P's Account Dallas 8P

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

# UPLOADING STARTED



16%

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

25/11 9:41 2022

Service Desk - IBM Cloud x Model Building - IBM Watson Studio x New Tab x +

dataplatform.cloud.ibm.com/analytics/machinelearning/v2/workspaces/1108-4335-600-6d49f52a598/project/3d4x932-600-4a54-911-48b2b117527/learned...

IBM Watson Studio Search in your workspace Buy + ⓘ ⓘ Sanjeev P's Account v Dailies v 9P

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

The screenshot shows the IBM Watson Studio interface. At the top, there's a browser window with the URL 'dataplatform.cloud.ibm.com'. Below that, the IBM Watson Studio header is visible. The main workspace shows a Jupyter Notebook titled 'ADDING STREAMING BODY'. The notebook code is as follows:

```

import os, types
import pandas as pd
from boto3.client import Config
import boto3

def __Itar__(self): return #

#@title 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 = boto3.client(service_name='s3',
    iam_api_key_id='apikeyw8b0c0d0e0f0g0h0i0j0k0l0m0n0o0p0q0r0s0t0u0v0w0x0y0z0',
    iam_auth_endpoint='https://iam.cloud.ibm.com/oid/token',
    config=Config(signature_version='v4'),
    endpoint_url='https://s3.private-us.cloud-object-storage.appdomain.cloud')

bucket = 'realtimecommunicationforspecially-disabled-people-rfpdusagch0fs'
object_key = 'Dataset.zip'

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

# Your data file was loaded into a boto3.response.StreamingBody object.
# Please read the documentation of boto3 and pandas to learn more about the possibilities to load the data.
# boto3 documentation: https://boto3.amazonaws.com/v1/documentation/api/latest/guide/quickstart.html#python
# pandas documentation: https://pandas.pydata.org/

```

On the right side of the notebook, there's a sidebar with 'Data' and 'Files' tabs. The 'Files' tab is active, showing a list of files with columns for 'File' and 'Connections'. The files listed are 'Dataset.zip' and 'Itar.zip'. Below the list, there's a section for 'Upload one file at a time. All file types accepted. 5 GB max file size.' and a button to 'Drag and drop files here or upload.'.



# CLIENT SOFTWARE

The screenshot displays the IBM Watson Studio web interface. At the top, there's a navigation bar with the IBM Watson Studio logo and a search bar. Below this, the breadcrumb navigation shows 'Projects / Real Time Communication for sp... / Model Building'. The main workspace is divided into three panes: a left sidebar with icons for File, Edit, View, Insert, Cell, Kernel, and Help; a central code editor; and a right sidebar with tabs for Data, Files, and Connections.

The code editor contains a Python script titled 'CLIENT'. The script defines a function `get_space_name` that interacts with the `space-client` API to get details of a space. It then uses `space_client` to get the default space, list software specifications, and get the software space ID. Finally, it uses `model_details-client` to store a model in the repository.

```
CLIENT

In [ ]: def get_space_name(client, animal_deploy):
        space = client.spaces.get_details()
        return(next(item for item in space['resources'] if item['entity']['name'] == animal_deploy))['metadata']['id'])

In [ ]: space_id = get_space_name(client, 'animal_deploy')
        print("Space ID: " + space_id)

In [ ]: client.set_default_space(space_id)

In [ ]: client.software_specifications.list()

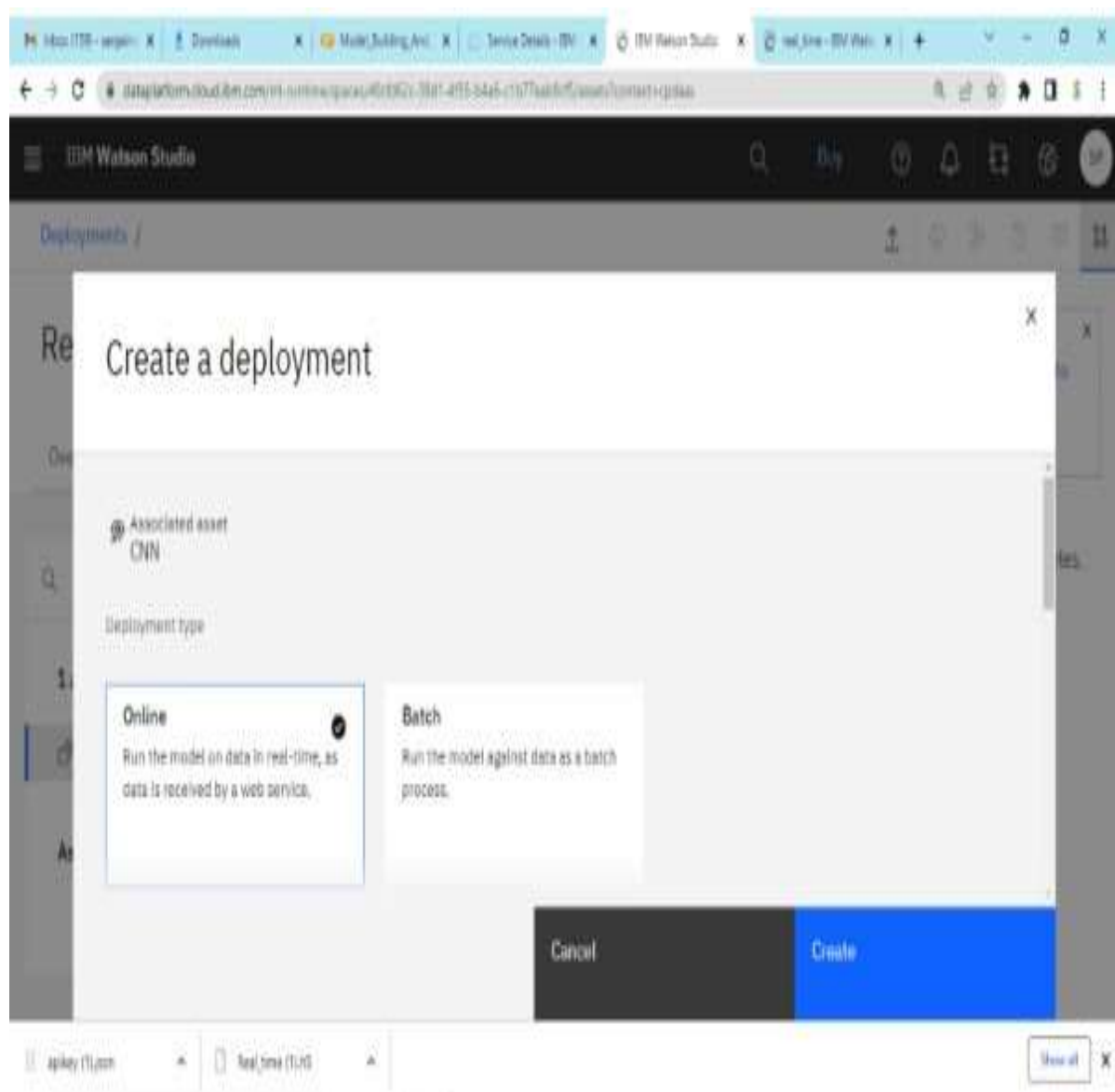
In [ ]: software_space_id = client.software_specifications.get_id_by_name('tensorflow_rt2.1-pyl.0')

In [ ]: software_space_id

In [ ]: model_details = client.repository.store_model(model='animal-classification-model.tgz', meta_props={
        client.repository.ModelMetadata.NAME: 'VIN Model Building',
        client.repository.ModelMetadata.TVRN: 'tensorflow_1.7',
        client.repository.ModelMetadata.SOFTWARE_SPEC_ID: software_space_id
    })
```

The right sidebar shows the 'Files' tab with a message: 'Upload one file at a time. All file types accepted. 5 GB max file size.' Below this, there are two file upload sections. The first section is for a file named '1.png' and the second for 'Dataset.zip'. Each section has an 'Insert to code' button.

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 10:41 on 11-11-2022.







IBM Watson Studio

Deployments /

## Real\_Time


Overview Assets **Deployments** Jobs

Search

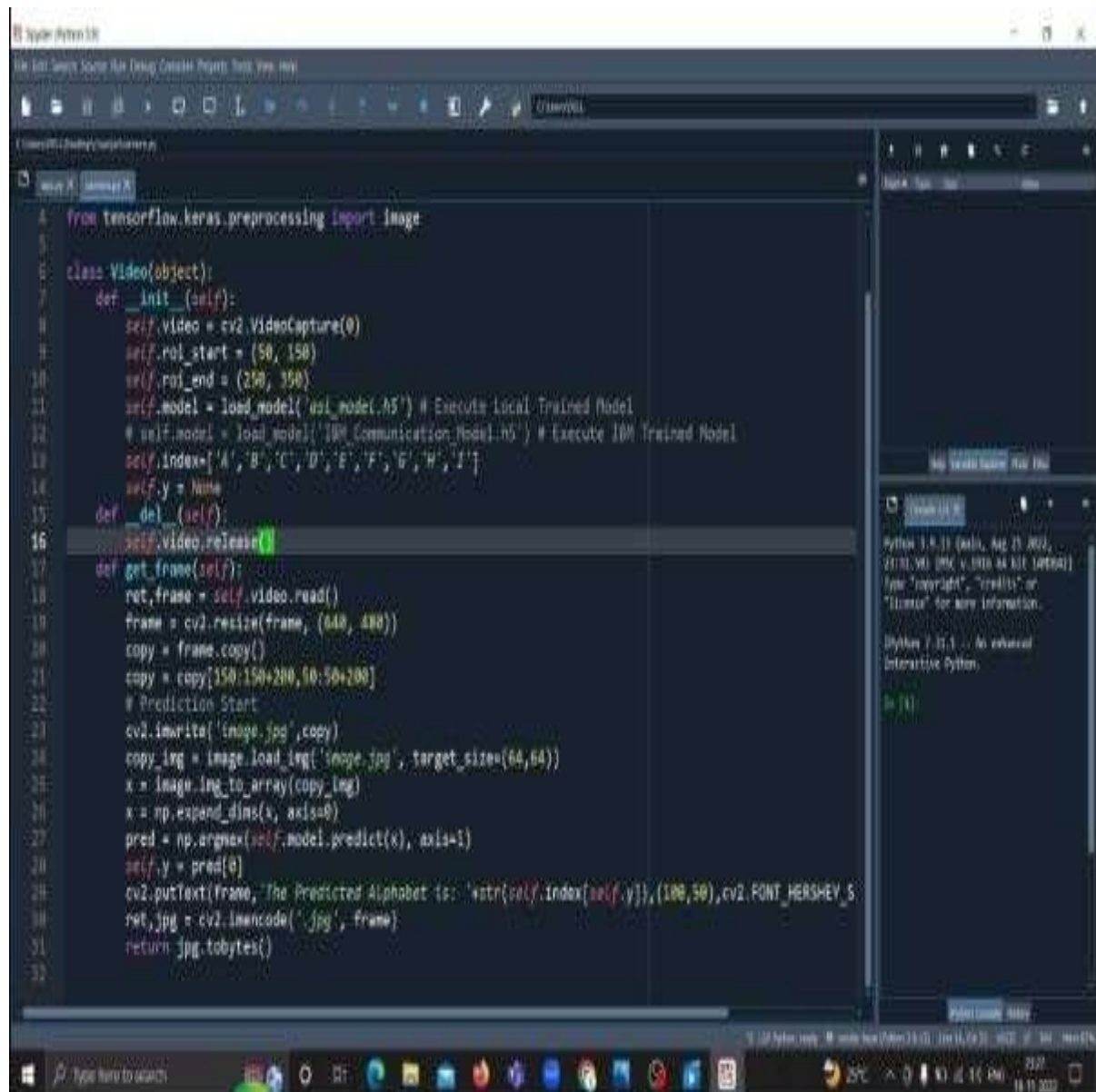
Name	Type	Status	Asset	Last modified	
 Real Time Communication For Specially Abled People	Online	 Deployed	CNN	25 seconds ago sanjay P (You)	1

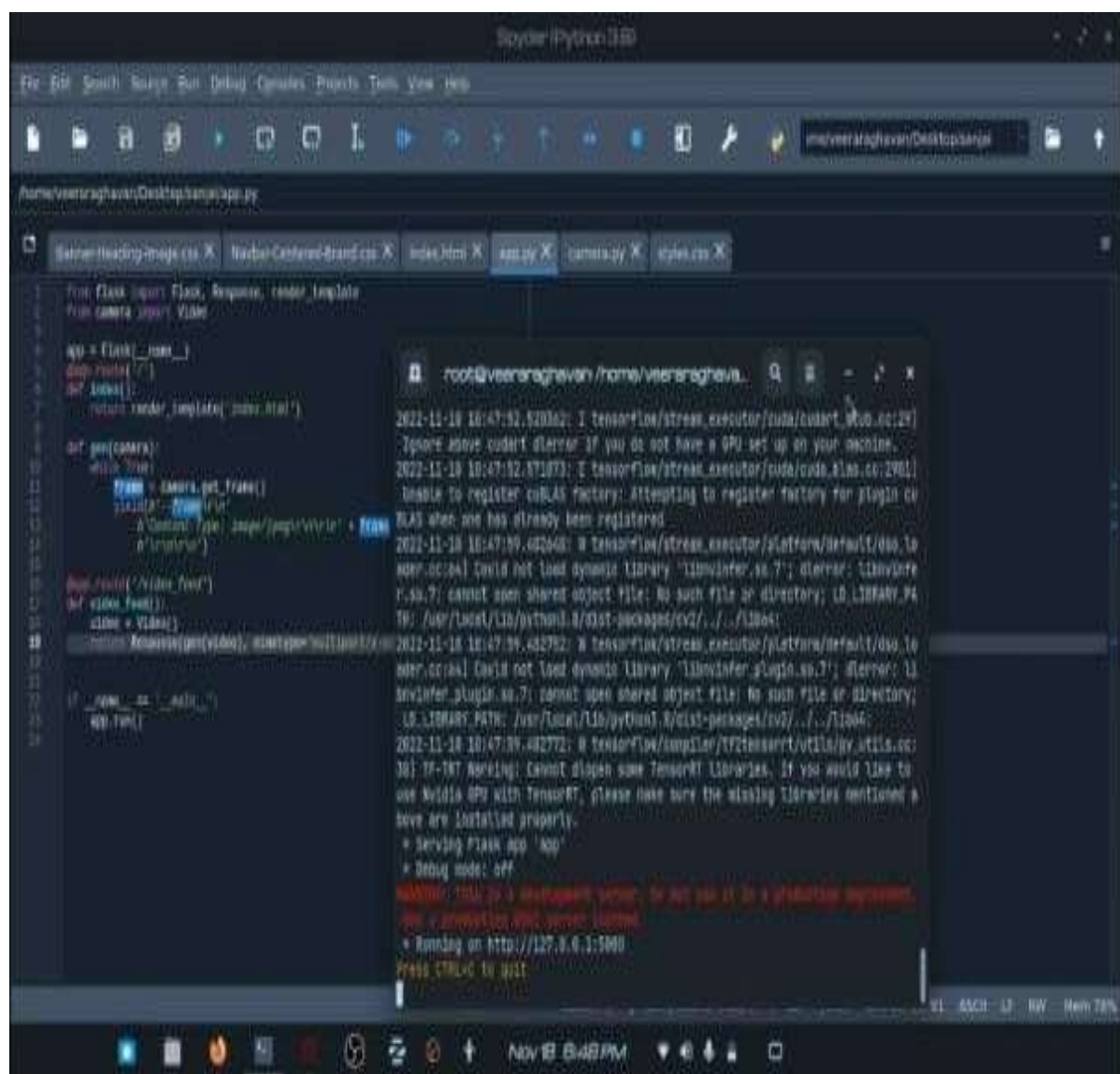
Items per page: 20 1-1 of 1 items 1 of 1 pages

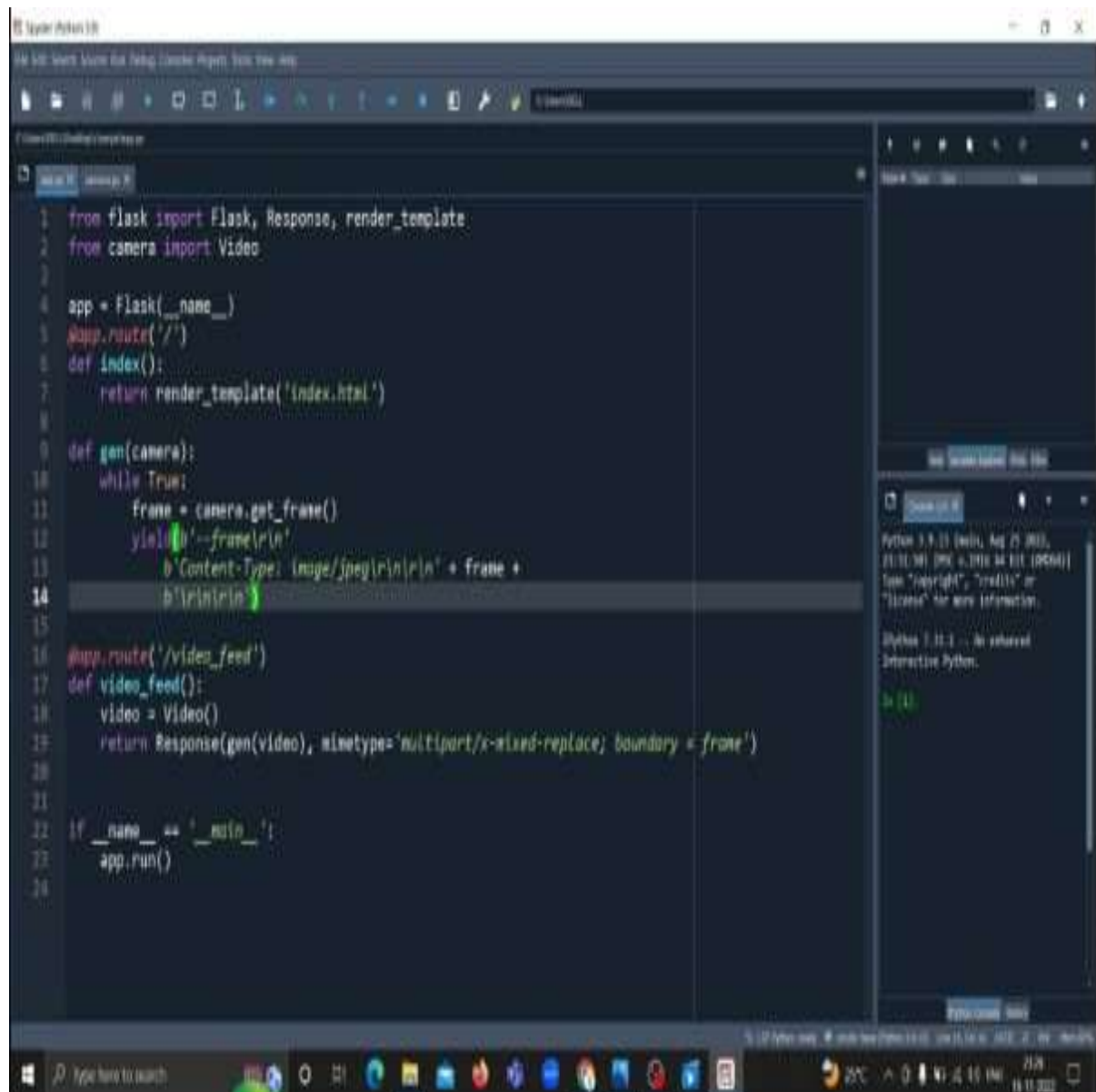
**Notifications**

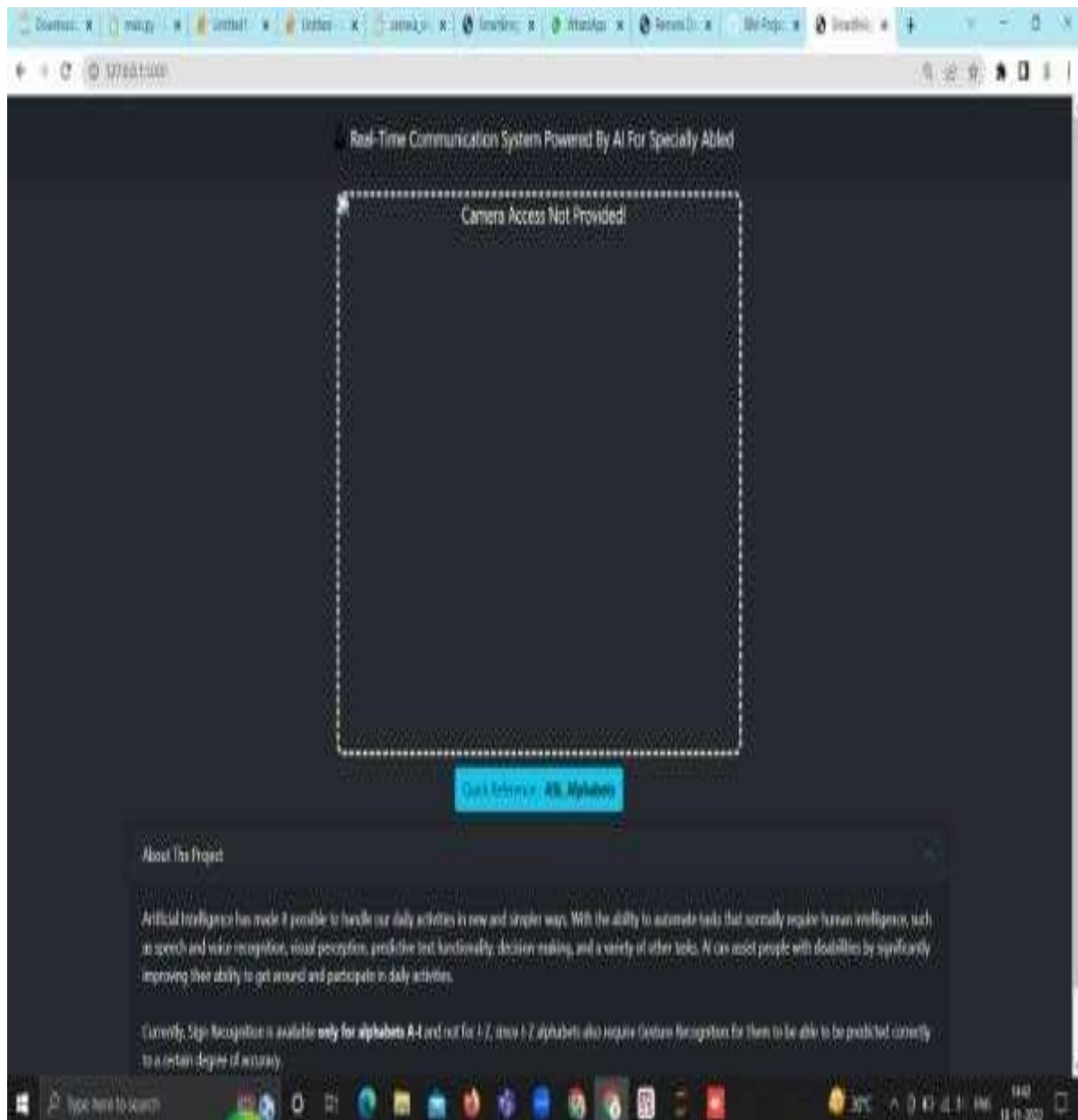
-  **Online deployment ready**  
The online deployment Real Time Communication For Specially Abled People in space Real\_Time is ready to accept traffic.  
Today 12:55 AM

[View all](#)













[Click Reference - AB, Alphabets](#)

#### About the Project

Artificial intelligence has made it possible to handle our daily activities in new and simpler ways. With the ability to automate tasks that normally require human intelligence, such as speech and voice recognition, visual perception, predictive text functionality, decision-making, and a variety of other tasks, AI can assist people with disabilities by significantly improving their ability to get around and participate in daily activities.

Currently, Sign recognition is available **only for alphabets A-Z** and not for 1-0, since 1-0 alphabets also require Gesture recognition for them to be able to be predicted correctly to a certain degree of accuracy.

Developed by