

Project: Machine Learning Model Deployment with IBM Cloud Watson Studio

Phase_4: Development Part 2

Problem Statement: Sign Language Translation

Introduction:

In a world characterized by diverse languages, cultures, and communication styles, the ability to understand and be understood is paramount. Gesture translation technology is a remarkable innovation that addresses this challenge by enabling effective communication between individuals who use non-verbal gestures, such as sign language, and those who may not be familiar with these forms of expression.

Integration techniques provided by the IBM Cloud Watson Studio:

Website: To integrate your gesture translator in your website you should follow the below steps.

❖ Set Up an IBM Watson Studio Service:

- If you don't already have an IBM Cloud account, sign up using the steps provided in the previous phases.
- Create an instance of IBM Watson Assistant in your IBM Cloud account.

This step is explained in phase 3.

❖ Build and Train Your Studio:

- Define your gesture translator skills, and responses within the Watson Studio tool.

This step is explained in phase 3.

❖ Obtain API Credentials:

- Get the API credentials (API key and URL) for your Watson Studio instance from the IBM Cloud dashboard.

❖ Integrate into Your Website:

- You can integrate Watson Studio into your website using the provided APIs. You have one option:
 - API Integration: You can use the Watson Studio API to build a custom gesture translator for your website.

❖ Test and Deploy:

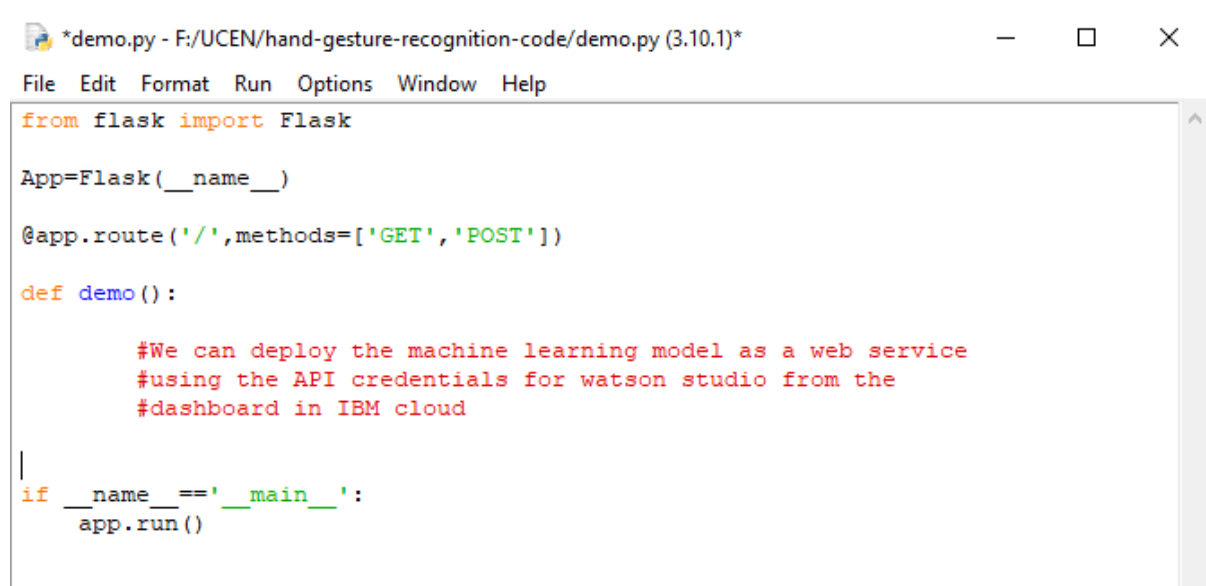
- Test the gesture translator to ensure it works as expected on your website.
- Deploy it to your live website.

❖ Continuous Improvement:

- Monitor the performance of your gesture translator and collect user feedback to make improvements over time.

IBM Watson Studio provides documentation and resources to help you with the integration process.

Deploying as web service:



```
*demo.py - F:/UCEN/hand-gesture-recognition-code/demo.py (3.10.1)*
File Edit Format Run Options Window Help
from flask import Flask

App=Flask(__name__)

@app.route('/',methods=['GET','POST'])

def demo():

    #We can deploy the machine learning model as a web service
    #using the API credentials for watson studio from the
    #dashboard in IBM cloud

|
if __name__ == '__main__':
    app.run()
```

Output:

