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PROJECT NAME : MACHINE LEARNING MODEL DEPLOYMENT WITH IBM

WATSON STUDIO

PROBLEM SOLUTION:

1.NETWORK ISSUE- there might be network restrictions preventing our model from communicating with external services

SOLUTION- ensure that the necessary network configuration are in place, such as firewalls and VPN settings

2.INCORRECT MODEL FORMAT-The model we are trying to deploy might not be in a supported format

SOLUTION-check if the model is saved in a compatible format like tensor flow, pytorch, onnx etc. if not, you might need to retrain and save it in supported form.

- **3. ENVIRONMENT CAPABILITY-** Ensuring that the deployment environment in Watson Studio is compatible with your model and its dependencies can be challenging.
- **SOLUTION-** Thoroughly document the dependencies and versions used during model development. Create a custom runtime environment or Docker container with the required dependencies if necessary.
- **4.RESOURCE CONSTRAINTS-** Limited computational resources or restrictions on CPU/GPU usage can affect the performance of your deployed model.
- **SOLUTION -** Monitor resource usage, optimize your model for efficiency, and consider scaling up resources if needed. IBM Cloud provides options for scaling resources.
- **5.DATA DRIFT AND MODEL DECAY** -Over time, data used for training and the real-world data distribution may change, leading to a decrease in model performance.
- **SOLUTION-** Implement regular model retraining and monitoring. Set up automated pipelines to retrain the model with new data and evaluate its performance.

METHODOLOGY:



