Overview

Wednesday, May 1, 2024 8:06 AM

1. AWS SageMaker

- *Data Preprocessing*
- *Model Training*
- *Hyperparameter Tuning*
- *Model Evaluation*

2. Create Web Application using Streamlit

3. Deploy Web Application over Streamlit Cloud

Steps

Wednesday, May 1, 2024 8:09 AM

1. **Upload Datasets within NB instance**
    - *Train*
    - *Validation*
    - *Test*
2. **Import Required Libraries**
3. **Configure the Display Settings**
4. **Read the Datasets**
5. **Write Preprocessing Operations**
6. **Create an S3 bucket**
7. **Preprocess Data and Upload to S3 bucket**
    - Fit the preprocessor on training subset
    - Split subset into X & y
    - Preprocess the X subset
    - Bring data into appropriate format and export
    - Upload to S3 bucket
8. **Set-up the Model and Hyperparameter Tuner**
9. **Set-up the Data Channels**

10. Fit the Hyperparameter Tuner object

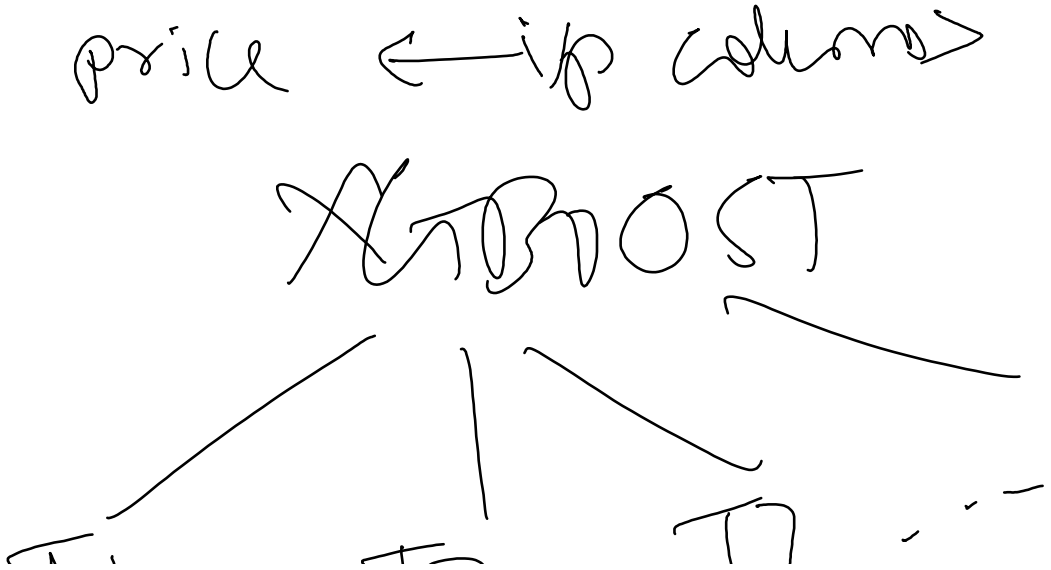
- Takes the data channels as input
- This will tune the hyperparameters
- Store the best model in specified '*output_path*' in S3 bucket

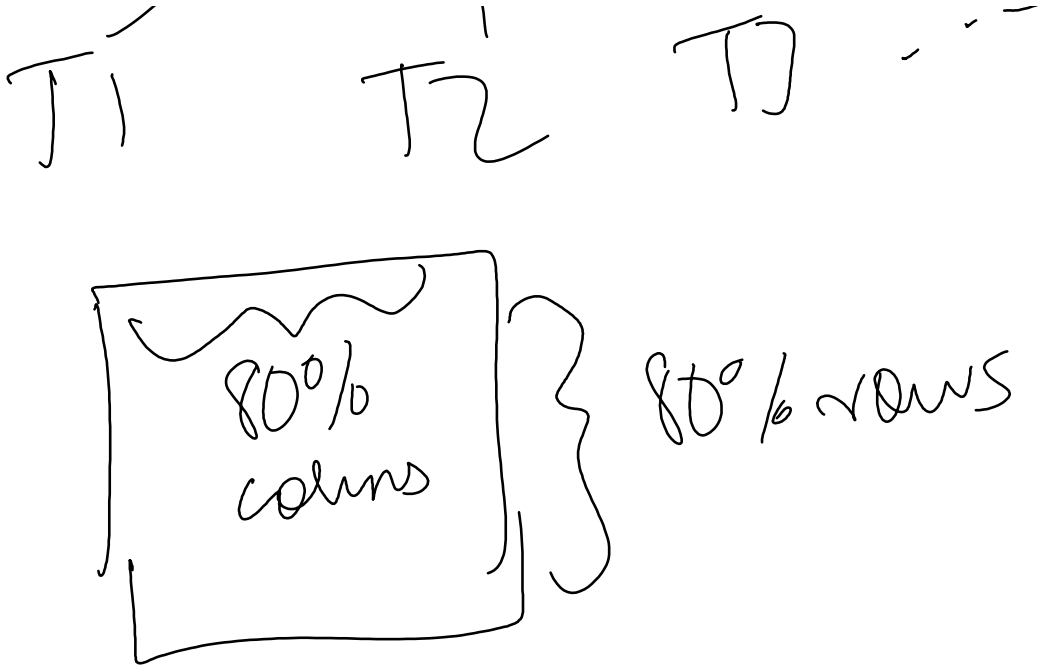
11. Evaluate the Model

- Download best model from S3 bucket
- Implement evaluation function

12. Create Web Application using Streamlit

13. Deploy the Web Application using Streamlit Cloud

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