

Deploying the App on HuggingFace Spaces

Prerequisites

1. **Hugging Face Account:** Ensure I have a free account on Hugging Face.
2. **Access Token:** Generate a Hugging Face access token with write access. This token will be used to authenticate and push your code to Hugging Face Spaces.

Steps for Deployment

1. Clone the Hugging Face Space Repository

Start by git cloning my Hugging Face Space repository to your local machine. I needed to use my Hugging Face access token for authentication.

2. Set Up the Remote URL

After cloning the repository, set the remote URL to include the access token. This step ensures I have the correct permissions to push changes to the repository.

3. Prepare Application Files

Created necessary application files (e.g., `app.py` and `requirements.txt`) and copied them into the cloned repository directory. These files include my Streamlit app code and a list of required dependencies.

4. Commit and Push Your Changes

Add the application files to the Git repository, commit the changes with a descriptive message, and push the changes to the Hugging Face Space repository. This step deploys my Streamlit app to Hugging Face Spaces.

Hugging Face Space Configuration

Ensure the Hugging Face Space is correctly configured with a `README.md` file containing the following details:

- **Title:** The title of the project.
- **Emoji:** An emoji representing the project.
- **ColorFrom and ColorTo:** The gradient colors for the space.
- **SDK:** The SDK used for the project (Streamlit).
- **SDK Version:** The version of the Streamlit SDK.
- **App File:** The entry point for my application (`app.py`).
- **Pinned:** Whether my space is pinned.

```
title: Final Project
emoji: 📈
colorFrom: blue
colorTo: green
sdk: streamlit
sdk_version: 1.36.0
app_file: app.py
pinned: false
```

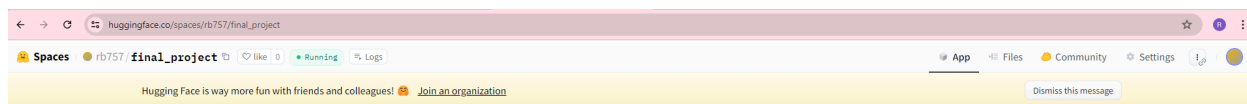
Verify Deployment

After pushing the changes, navigate to the Hugging Face Space URL to verify that my Streamlit app is running correctly. The deployed app should be accessible at:

https://huggingface.co/spaces/rb757/final_project

View Result:

- BERT model



Sentiment Analysis App

Enter text to analyze

你好，世界！

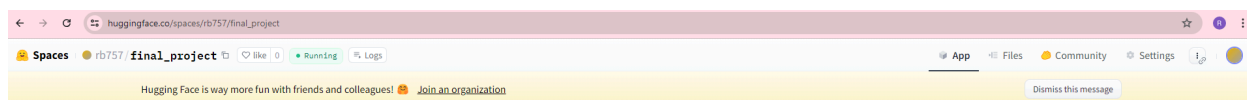
Select a pretrained model

nlptown/bert-base-multilingual-uncased-sentiment

Analyze

```
{
  0 : {
    "label": "5 stars"
    "score": 0.6571965217590332
  }
}
```

- Negative Sentiment



Sentiment Analysis App

Enter text to analyze

I don't like guava

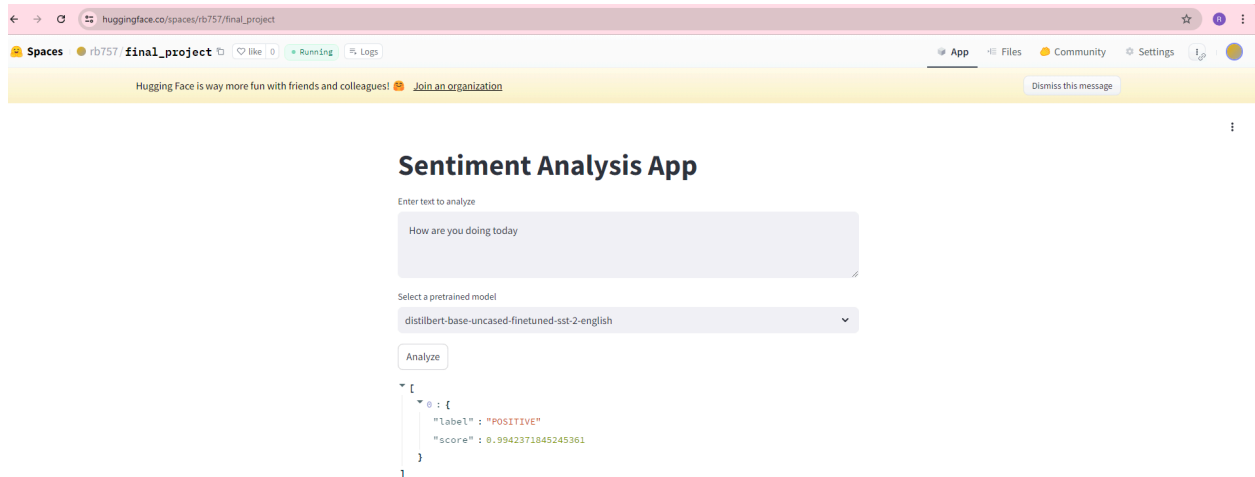
Select a pretrained model

distilbert-base-uncased-finetuned-sst-2-english

Analyze

```
{
  0 : {
    "label": "NEGATIVE"
    "score": 0.9922870397567749
  }
}
```

- Positive Sentiment



Conclusion

Deploying a sentiment analysis app on Hugging Face Spaces exemplifies the power of modern machine learning and cloud deployment tools. By leveraging Streamlit for app development and Hugging Face's robust platform for deployment, we can create accessible, user-friendly applications that deliver real-time sentiment analysis using state-of-the-art models. This deployment process not only showcases the technical capabilities of integrating various tools but also highlights the ease with which complex machine learning models can be made available to a broader audience. The successful deployment on Hugging Face Spaces ensures that users can easily interact with the app, enter text, select models, and receive insightful sentiment analysis results, all within a seamless and efficient environment.