Loan Risk Prediction Application

Deployment Instructions

Follow these steps to deploy the Loan Risk Prediction Application locally and access it via a web interface using Gradio.

1. **Set Up Your Python Environment**
   Make sure you have Python installed on your machine. It's recommended to use a virtual environment to manage dependencies. If you are using `conda`, follow these steps:
   - Open your terminal and create a new environment:
     ```
     conda create --name myenv python=3.9
     ```
   - Activate the environment:
     ```
     conda activate myenv
     ```
2. **Install Required Packages**
   Install the necessary dependencies, including `Gradio`, `pandas`, `numpy`, `scikit-learn`, and `joblib`, by running the following command:
   ```
   pip install gradio pandas numpy scikit-learn joblib
   ```
3. **Ensure Your Model File is Ready**
   Make sure that the trained model (`logistic_model.pkl`) is saved in the same directory as `app.py`.
4. **Run the Application**
   - Navigate to the directory where `app.py` is located:
     ```
     cd path/to/your/project
     ```
   - Run the application using Python:
     ```
     python app.py
     ```
5. **Access the Application**
   Once you run the script, you will see a local URL like:
   ```
   Running on local URL: http://127.0.0.1:7860
   ```

   Open your web browser and navigate to this URL to access the loan risk prediction interface.

   Additionally, if you want to share the app publicly for temporary testing or sharing, Gradio will provide a public URL like:
   ```
   Running on public URL: https://<random-hash>.gradio.live
   ```

   You can access the app using the public URL from any device.