■ House Price Prediction App

This project is a Streamlit web app that predicts house prices using a Linear Regression model trained on the Kaggle House Prices dataset.

■ Features

- ■ Automatic Kaggle dataset download (no manual CSV upload needed)
- ■■ Feature selection — choose one or more predictors (GrLivArea, GarageCars, OverallQual, YearBuilt)
- ■ Data exploration — view sample data, histogram of sale prices, and scatter plots
- ■ Linear Regression model trained live in the app
- ■ R^2 score to show model performance
- ■ Interactive predictions with real-time input

■ Deployment

This app is deployed on Streamlit Cloud. To deploy your own:

1. Fork this repository
2. Connect it to Streamlit Cloud
3. Add your Kaggle API credentials under Secrets

■ Run Locally

1. Clone this repo: `git clone https://github.com/yourusername/House-Prices-Prediction.git`
2. Navigate to folder: `cd House-Prices-Prediction`
3. Install dependencies: `pip install -r requirements.txt`
4. Add Kaggle API credentials to `.streamlit/secrets.toml`: KAGGLE_USERNAME = "your-username" KAGGLE_KEY = "your-key"
5. Run the app: `streamlit run app.py`

■ Requirements

- streamlit
- pandas
- scikit-learn
- kaggle
- matplotlib
- seaborn

■ Repository Structure

- House-Prices-Prediction/
- ■■■ app.py # Streamlit app
- ■■■ requirements.txt # Dependencies
- ■■■ README.md # Project documentation

■ Acknowledgements

• Dataset: Kaggle - House Prices: Advanced Regression Techniques
• Built with Streamlit