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        "# House Price Predictor with Gradio UI"
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        "from google.colab import files\n",
        "uploaded = files.upload()\n",
        "\n",
        "import pandas as pd\n",
        "import seaborn as sns\n",
        "import matplotlib.pyplot as plt\n",
        "from sklearn.model_selection import train_test_split\n",
        "from sklearn.linear_model import LinearRegression\n",
        "from sklearn.preprocessing import StandardScaler\n",
        "from sklearn.metrics import mean_squared_error, r2_score\n",
        "\n",
        "# Load dataset (replace 'house.csv' with your filename)\n",
        "df = pd.read_csv('house.csv')\n",
        "\n",
        "# Encode and scale\n",
        "df_encoded = pd.get_dummies(df, drop_first=True)\n",
        "X = df_encoded.drop('price', axis=1)\n",
        "y = df_encoded['price']\n",
        "scaler = StandardScaler()\n",
        "X_scaled = scaler.fit_transform(X)\n",
        "\n",
        "# Train-test split\n",
        "X_train, X_test, y_train, y_test = train_test_split(X_scaled, y, test_size=0.2,\nrandom_state=42)\n",
        "model = LinearRegression()\n",
        "model.fit(X_train, y_train)"
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        "!pip install gradio\n"
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    "import gradio as gr\n",
    "\n",
    "def predict_price(bedrooms, bathrooms, sqft_living, sqft_lot, floors, waterfront):\n",
    "    input_data = {\n",
    "        'bedrooms': bedrooms,\n",
    "        'bathrooms': bathrooms,\n",
    "        'sqft_living': sqft_living,\n",
    "        'sqft_lot': sqft_lot,\n",
    "        'floors': floors,\n",
    "        'waterfront': waterfront\n",
    "    }\n",
    "\n",
    "    input_df = pd.DataFrame([input_data])\n",
    "    input_df_encoded = pd.get_dummies(input_df)\n",
    "    input_df_encoded = input_df_encoded.reindex(columns=X.columns, fill_value=0)\n",
    "    input_scaled = scaler.transform(input_df_encoded)\n",
    "    prediction = model.predict(input_scaled)\n",
    "    return round(prediction[0], 2)\n",
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        "inputs = [\n",
        "    gr.Number(label='Bedrooms'),\n",
        "    gr.Number(label='Bathrooms'),\n",
        "    gr.Number(label='Sqft Living'),\n",
        "    gr.Number(label='Sqft Lot'),\n",
        "    gr.Number(label='Floors'),\n",
        "    gr.Number(label='Waterfront (0 or 1)'),\n",
        "]\n",
        "\n",
        "output = gr.Number(label='Predicted House Price')\n",
        "\n",
        "gr.Interface(fn=predict_price, inputs=inputs, outputs=output, \n",
        "             title='House Price Predictor', \n",
        "             description='Enter the house features to predict the price.').launch()\n",
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