Cat & Dog Classifier - README

🐾 Cat & Dog Classifier (Streamlit App)  
  
This is a simple and interactive web application built using Streamlit that can classify whether an uploaded image is of a Cat or a Dog 🐱🐶 using a pre-trained deep learning model.  
  
🔗 Live Demo:  
👉 https://cat-and-dog-kyycjb2yo4eijfc5js2vvg.streamlit.app/  
  
📸 How It Works:  
1. Upload an image (JPG, JPEG, or PNG).  
2. The app resizes and preprocesses the image.  
3. A deep learning model predicts whether it's a cat or a dog.  
4. The result and prediction confidence are shown.  
  
🧠 Model Info:  
- Trained using Keras/TensorFlow  
- Input image size: 150x150 pixels  
- Binary classification output (Cat = 0, Dog = 1)  
- Model file is hosted on Google Drive and automatically downloaded via gdown.  
  
🛠️ Installation:  
1. Clone the repository:  
 git clone https://github.com/yourusername/cat-dog-classifier.git  
 cd cat-dog-classifier  
  
2. Install dependencies:  
 pip install -r requirements.txt  
  
3. Run the Streamlit app:  
 streamlit run app.py  
  
🗂 Project Structure:  
├── app.py # Main Streamlit app  
├── requirements.txt # Python dependencies  
├── packages.txt # System dependencies for Streamlit Cloud  
├── README.md # Project documentation  
└── classifier\_model.pkl # (auto-downloaded from Google Drive)  
  
📦 Dependencies:  
- streamlit  
- pandas  
- numpy  
- tensorflow / keras  
- opencv-python-headless  
- Pillow  
- gdown  
  
🙌 Acknowledgements:  
- Streamlit  
- Google Drive for model hosting  
- TensorFlow/Keras for model training  
  
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Email: your.email@example.com  
Portfolio: https://your-portfolio-link.com  
  
⭐ Star this repo if you found it helpful!