**Document Scanner Documentation**

Welcome to the documentation for the Python-based Document Scanner! This document scanner is accessible via a website and uses various Python packages, including cv2, imutils, matplotlib, and skimage. Please note that this document scanner is based on a tutorial from another website, and it is essential to give appropriate credit to the original source. This documentation will guide you through the features, setup, and usage of the document scanner.

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**1. Introduction**

The Python-based Document Scanner is designed to extract, enhance, and save documents from images. It is built using computer vision techniques and relies on the OpenCV (cv2), Imutils (imutils), Matplotlib (matplotlib), and Scikit-image (skimage) libraries.

**2. Requirements**

To use the document scanner, you will need the following:

* Python (version 3.6 or higher)
* Flask (Python web framework)
* OpenCV (cv2)
* Imutils (imutils)
* Matplotlib (matplotlib)
* Scikit-image (skimage)

**3. Installation**

Follow the steps below to set up the document scanner:

1. Install Python: If you don't have Python installed, download and install it from the official website ([https://www.python.org/](https://www.python.org/" \t "_new)).
2. Clone the repository: Clone the repository containing the document scanner source code from my github repository.
3. Install required packages: Open a terminal or command prompt and navigate to the project's root directory. Use the following command to install the necessary packages:

pip install Flask opencv-python imutils matplotlib scikit-image

**4. Usage**

To use the document scanner, follow these steps:

1. Run the Flask app: In the terminal or command prompt, navigate to the project's root directory and execute the following command:

python app.py

1. Access the website: Open your web browser and go to the following address: http://localhost:80. The document scanner web interface will be displayed.
2. Upload an image: Click on the "Choose File" button to select an image containing the document you want to scan.
3. Scan the document: After uploading the image, click on the "Download" button. The document scanner will return a pdf of your picture for you to download.

**5. Functionality**

The document scanner offers the following main functionalities:

* **Image Upload**: Users can upload an image file (e.g., PNG, JPEG) containing the document they want to scan.
* **Document Scanning**: The uploaded image is processed using computer vision techniques to detect the edges of the document.
* **Save Scanned Document**: The scanned document can be saved as a pdf file for further use.

**6. Acknowledgments**

The Python-based Document Scanner was created based on a tutorial from https://pyimagesearch.com/2014/09/01/build-kick-ass-mobile-document-scanner-just-5-minutes/. We express our gratitude and acknowledgment to the original author(s) of the tutorial for providing valuable insights and knowledge.

**7. Conclusion**

Congratulations! You have successfully set up and used the Python-based Document Scanner accessible through a website. You can now scan documents from images and save the scanned documents for your specific needs. If you have any questions or need further assistance, please refer to the original tutorial or contact the project maintainers.

Happy scanning!