Documented Design

My problem requires a solution that lies well within the realms of Artificial Intelligence and Image Processing. As I would like the program to operate as a mobile document scanner, it would be beneficial for me to build my program into an app. To do this, I’ve decided to focus on using Python with OpenCV as the main processing aspect, with this being the backend, mainly because of Pythons ability to perform extremely well with image recognition and mathematical models. My image recognition and text ripping Python programs will be paired with a frontend built with Swift, to allow the program to run locally on an iOS device as an app.

Another advantage of using Python as a backend is that I will only require one version of a program to be updated whenever the program is modified. This also means I could run a version on a server which could then be accessed through a website for desktop users, as well as creating a version that android users could use as a native app.

Hardware Choice for a server isn’t important as of now, however in the circumstances that I was building a host to run a website with my Python backend on, I would use a raspberry pi 3.

Data stored in files will all normally be completely text based, and so will be written as a .txt file.