

FUNCTIONAL DIAGRAM

- **Second: Segmentation**

In this process, the characters or words will be isolated. The words will be segmented into isolated characters that are recognized separately. Most of OCR algorithms segment words into isolated characters which are recognized individually. Usually, segmentation is done by isolating every connected component.

- **Third: Feature Extraction**

This process will capture the significant features of symbols and it has two types of algorithms which are pattern recognition and feature extraction/detection.

- **Fourth: Classification**

OCR systems use the techniques of pattern recognition that assigns an unknown sample into a predefined class. One of the ways to help in character classifying is using English dictionary.

- **Fifth: post processing**

This process includes grouping and error detection & correction. In grouping, the symbols relate to strings. The result of plain symbol recognition in the text is a group of individual symbols.

