

MST Raster Imaging SDK

Overview

MST Raster Imaging SDK is an imaging framework that allows document rendering, page manipulation and reordering, file format conversion to PDF & TIFF, scanning, and lots more. The framework can be used to build a document viewing application.

It is imaging toolkit/libraries, for the targeted audience. It allows developers to develop application on the system software (by and by fostering the ecosystem of developers). The user can process, print, and annotate documents with ease.

The application complies with barcode reading and writing, OCR, OMR, MICR, Document recognition, annotations for image, color detection and saving the document. Its noteworthy features include,

1. The advance functionalities are constantly upgraded and available in .Net, Java, and C++.
2. It is quick in action and comes with ECM Integration.
3. The application is constantly upgraded to meet the emerging challenges.
4. It is highly flexible and comes with API libraries that are easy to use.
5. It offers MODCA support – by and by user can edit and create CM8 and FileNet P8 annotations.

Image Viewing and Manipulations

There is a presence of specialized features like anti-aliasing (to give optimal display of image and documents), aspect ratio correction, 3D volume rendering, annotations, noise detection, color conversion, edge detection, etc. The user can use URL to upload text document or image and apply various properties (like horizontal and vertical flip; zoom text or rotate image).

The programming languages, used to design applications are JavaScript and HTML5. And, the various properties that user can apply on uploaded document are:

- **Image Rendering** – The user can easily generate 2D and 3D model. It includes both photorealistic images as well as non-photorealistic images.
- **Page Re-Ordering** – The user can change the order of scanned pages (PDF, TIFF, etc.) and save it accordingly.
- **Format Conversion** – The file format are ‘Raster Image Formats’, ‘Vector Formats’, and ‘Document Formats’. And, for example, user can easily carry out an image conversion, as various image formats are supported like TIFF, PDF, BMP, JPEG, GIF, SVG, CAD, DICOM, etc.
- **Page Rotate** – The user can rotate single page, more than one page or all the pages present in the document with ease.
- **Increase and Decrease of Resolution** – The change in resolution will bring the corresponding change in the size. The increase in resolution means, adding more pixels – resulting into the smaller size of icons on the screen.

- **Split & Merge Documents** – The user can split and merge their PDF and PDF/A files at ease. The user can apply functionality to the large PDF files and also to the PDF files that are password protected.

File Formats Support

The support for file formats accelerates the process of industrial development. The application is created and converted to many of the set industrial standards. There is a comprehensive support to vivid file formats (like document file format, vector format, raster format, etc.).

The list of file formats supported by the application is as follows:

- TIFF
- PNG
- PDF
- Office Formats (*.doc, *.docx, *.xls, *.xlsx, *.ppt, *.pptx)
- ASCII Files
- RTF
- BMP
- JPEG
- PCX
- DCX
- GIF
- MOD:CA / IOCA
- DICOM
- DWG/DXF

Compression

The feature of compression inculcates with vast range of technologies like .Net, C#, XAML, Java, VB, C/C++, etc. Here, the desired quality is set and the metadata is removed. The user can use URL to upload document, zoom text, rotate image – or apply horizontal or vertical flip. The various advance compression techniques that are used in practice are as follows:

- CCITT - G3
- CCITT – G4
- LZW Huffman
- JPEG
- JPEG 2000
- RLE
- JBIG
- JBIG 2
- IBM MMR

Image Processing & Clean-Up

The function (Image Processing & Clean-up) processes images for OCR, barcode, OMR, MICR, forms recognition, and ICR. There are dithering functions – including 32 and 64 bit binaries for image processing. The cleanup feature improves the performance of compression and also makes it easier for user to read, the uploaded document and image. The noteworthy features of the application are as follows:

- Enhance / Noise Reduction
- Blank Page Detection
- Hole Punch Removal
- Auto Crop
- Brightness & Contrast
- Invert

Conversion

The application allows the desired conversion from any raster image or document format. It includes Adobe Acrobat PDF, Microsoft Office DOC/DOCX, CAD Formats, TIFF, BMP, PNG, JPEG, HTML, Plain Text, IBM, PTOCA, IOCA, MO: DCA, SVG and many more.

Further to add, the versatile SVG (Scalable Vector Graphics) format provides robust document writing, document viewing, and document conversion capabilities. The user can also customize conversions to meet their unique applications need. The supported formats can be converted to:

- PDF
- TIFF
- MODCA
- IOCA
- BMP

Annotations

The robust and powerful 'MST Raster Imaging SDK' provides API's to save and load annotations. There are vivid annotation options that user can add to their provided document, color image and gray scale – in order to enhance security and productivity.

The user can make separate file to save annotation – and it can also be independently rotated, moved and resized from one file format to another. The vivid file types supported by the application includes: PDF, JPG, TIFF, PNG, SVG, CAD, Microsoft Office (including Word, PowerPoint, Excel) etc.

Redaction

The user can redact documents (including vector documents) by giving coordinates or using text or phrase. The user can insert bitmaps – by and by application also supports redaction using macros (i.e. Date, Email Address, Social Security Number, Phone Number, etc.).

OCR

There is a precise, highly accurate, and multifaceted OCR (Optical Character Recognition) technology – helping user to scan and convert document into the text searchable PDF.

- OCR provides scalable, robust and enhanced performance in document recognition and processing.
- It extracts the written text from the available scanned document and also converts an image into the text searchable formats like – DOCX, DOC, PDF, PDF/A, XPS, and XML.
- The application is seamlessly integrated to meet the demanding client needs pertaining to OCR for scanning, OCR for image processing, OCR for printing, OCR for document image cleanup, OCR for indexing, OCR for file compression - and further, OCR to Word and OCR to PDF.

TWAIN Scanning

The multithread supported TWAIN driver in application, assists user in availing the maximum performance. This, easy to use TWAIN Scanning is integrated with customizable framework for the desired imaging solutions on web. There is a 'duplex scanning' - to scan front and back side of pages at the same time.

Further to add, user can scan documents to PDF or TIFF format – along with the following noteworthy features:

- Single page scan
- ADF Scan
- Remove blank pages
- Rotate
- Hole Punch Removal
- Auto Crop

Printing

The user will find high resolution printing feature and easily save the document into the multiple formats.

Technology (.NET & Java)

The application is available in the both JAVA and .Net technologies. There is a full-fledged browser support, including web browsers (like Chrome, Firefox, Internet Explorer 11, Safari, Edge) and Mobile Browsers (like Safari (iOS) and Google (Android)).