

PDF creation module for Windows Embedded

iWave systems Pvt Ltd, have developed a software component which allows you to generate Portable Document Format (PDF) files on Windows Embedded platforms. This component can be plugged into a complete integrated software system and thus enables to generate PDF document based on real time information. The applications of this module can be varied ranging from storing Patient information into a PDF document for further analysis by a physician to an Image capture and store application.

The module is written in VC++ with OOPS design concept with flexible design which allows easy plug-in with other VC++ based applications.

The main advantage of this component is that, it hides most of the complexity of internal PDF specification and thus provides an easy yet rich set of features in the generation of PDF documents which can include Fonts, graphs, Images and even hyperlinks.

The component provides following features.

- Generating PDF files with lines, text, images.
- Interface to draw graphs/waveforms.
- Interface to add text annotation and link annotation.
- Compressing the document to reduce the file size.
- Embedding JPEG/PNG/Image Bitmaps.

Demo Application on Windows CE 6.0 based Medical Device:

The PDF component was used in a Patient Monitoring system device based on Windows CE 6.0 platform. The device captures real time patient parameters such as Electro-Cardio Graph (ECG), further processes and stores it in a patient record file. Based on physician inputs from a custom designed GUI, a PDF file is generated which displays the patient information on a graph sheet. The information displayed can be waveforms and system events in the form of annotation symbols.

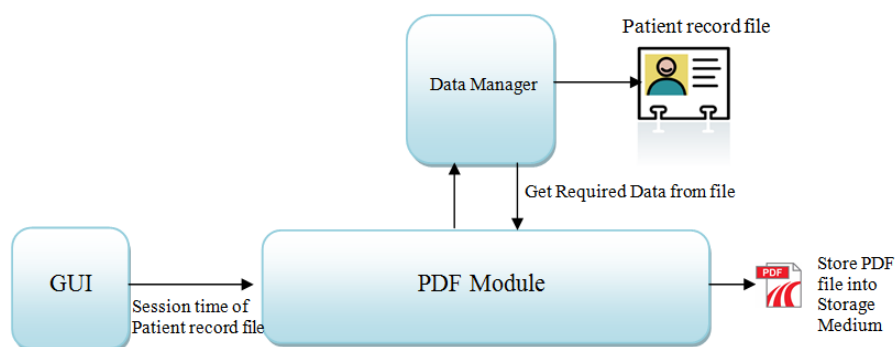


Figure 1: Typical Use case for PDF component

This allows the storage of patient information in a format which can be easily viewed and distributed across multiple computer systems.

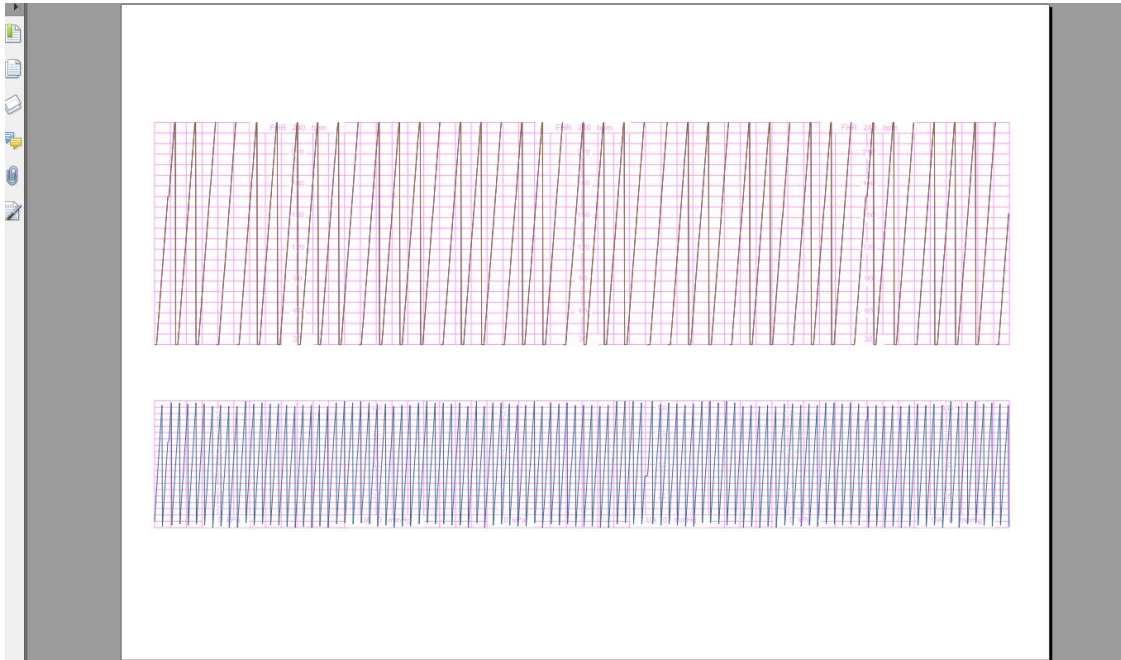


Figure 2: Sample PDF Patient Info file

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