

eFlipbook

Case Study

CS1209 July 2009

Convert PDF documents into online interactive and stylish eBooks with a simple upload process

Project Summary:

The eFlipbook application, created using FLEX, PHP and MySQL creates a useful online flipbook from a standard PDF file. By including options to print, download and search the eBook, the user has more options and a wider degree of usability. The eFlipbooks can be accessed from any web browser and can be linked from web pages, emails or blogs.

Client:

Projecta

<http://www.projecta.com.au/books>

A popular brand within the Australian Automotive Aftermarket over the last 15 years, Projecta has strengthened itself considerably in recent years. Now a category leader in battery chargers and battery related accessories, Projecta's strength can be attributed to its worldwide network of manufacturers and superior distribution network.

NARVA

http://www.narva.com.au/Narva_Catalogue.html

The first NARVA catalogue was produced in 1984. It extended to 10 pages in glorious black and white, detailing a total of 58 part numbers. This is a far cry from today's 2008-10 NARVA catalogue with its 376 pages, featuring over 4,000 part numbers in 12 colour coded product sections. This entire catalogue can be accessed from the NARVA website and its content clearly illustrates the enormous growth of the NARVA program over the last 24 years.

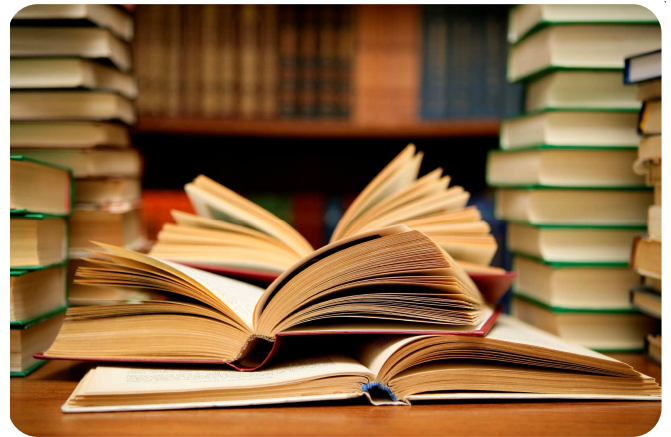
Shavershop

<http://www.shavershop.com.au/catalogue>

Shaver Shop was established in 1986 and today has 46 Stores across Victoria, New South Wales, Queensland, South Australia, Western Australia and the ACT. Shaver Shop is Australia's LEADING retailer specialising in all aspects of Personal Grooming, well being and lifestyle products.

Project Challenge:

Projecta wished to put their paper-based catalogue to use in an online format, while working in the familiar area of the Internet Vision Technologies SB4 environment. The client wanted the flipbook to be searchable and to have segmentation functionality, allowing users to jump to a particular section with a single click.



Actions:

Development of a web application with the following functionality:

- PDF to image conversion
- Search text on PDF pages
- Ability to add tabs to pages – creating chapters or indexing
- Link to similar flipbooks
- Content to be printable and downloadable
- Administration interface
- Ability to add, edit or remove pages

Outcomes:

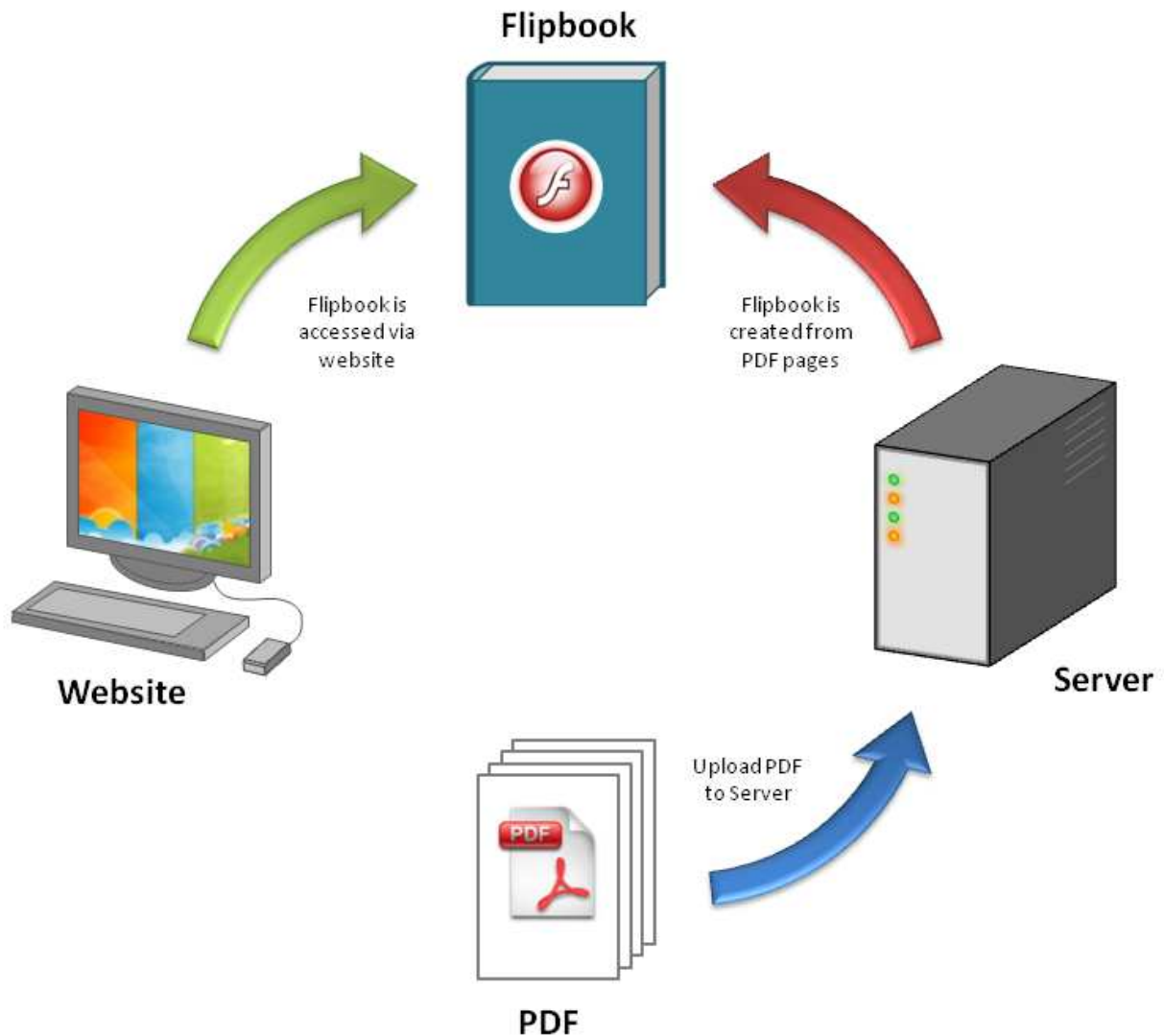
The Flipbook application is a simple and professional solution to including any paper based resource in a user friendly, and graphically superior, online environment.

eFlipbook Technology:

The PDF is converted into a series of individual page images during the upload process. These pages can then be re-ordered or removed as needed. More pages from subsequent PDFs can also be added allowing you to customise the content in a simple thumbnail list.

Once the application is running, each page is collected from the server in a low resolution format which is upgraded once the page is being viewed, keeping load and browse times to a minimum.

The Flipbooks can be accessed from any web browser and can be linked from web pages, emails or blogs.



The Search function checks through any text content on each page of the flipbook and directs the user to the relevant pages. This means there is no need to enter meta tags or keywords during the upload process.

Flipbooks can be printed or downloaded in PDF format. These settings can be removed if the document is intended to be read-only.

Page tabs, once set, appear automatically allowing reader quick access to chapters or sections of interest.

Flipbooks are linkable to other flipbooks existing within the same category (for example, other catalogues).

Technology Used:

The Flipbook application was created using Adobe Flex, PDFtk, ImageMagik, PHP and MySQL.

Adobe Flex:

Adobe Flex is a software development kit released by Adobe Systems for the development and deployment of cross-platform rich Internet applications based on the Adobe Flash platform. Rich Internet applications (RIAs) are web applications that have some of the characteristics of desktop applications.

Flex is a highly productive, free open-source framework for building and maintaining expressive web applications that deploy consistently on all major browsers, desktops, and operating systems.

The advantage of Flex is that it doesn't rely on page reloads, can have animations, interactive graphs and handles large datasets.

PDFtk:

PDFtk or the pdf toolkit is an open source cross-platform tool for manipulating PDF documents. PDFtk is basically a front end to the iText library, capable of splitting, merging, encrypting, decrypting, uncompressing, recompressing, and repairing PDFs. It can also be used to manipulate watermarks, metadata, and forms.

ImageMagik:

ImageMagik is an open source software suite for displaying, converting, and editing raster image files.

PHP:

PHP is a widely-used general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

MySQL:

MySQL is a relational database management system (RDBMS). The program runs as a server providing multi-user access to a number of databases.

Extension and Application:

The Flipbook application is useful for any organisation, wanting to provide catalogues or other documents in an interactive online setting.

Screenshots:

