

printing on paper, to add digital signatures to a document, to split or concatenate different documents, and so forth.

In the first edition of *iText in Action*, readers learned why things work the way they do in iText, complemented with simple examples. This second edition takes you further with more real-life examples, skipping a bit on the whys, but presenting comprehensive code samples that you can use to solve everyday problems.

In this chapter, I'll give you a quick overview of the things you can do with PDF—you'll compile and execute a first "Hello World" example—and you'll learn the basics of creating PDFs with iText.

1.1 Things you can do with PDF

Let's start with six quick facts about PDF:

- PDF is the Portable Document Format.
- It's an open file format (ISO-32000-1), originally created by Adobe.
- It's used for documents that are independent of system software and hardware.
- PDF documents are an essential part of the web.
- Adobe Reader is the most widely used PDF viewer.
- There are a lot of free and proprietary, open and closed source, desktop and web-based software products for creating, viewing, and manipulating PDF documents.

Figure 1.1 offers an overview of the things you can do with PDF. There are tools to *create* PDF documents, there are applications to *consume* PDF documents, and there are utilities to *manipulate* existing PDF documents.

If you look at PDF creation, you'll find that graphical designers use desktop applications such as Adobe Acrobat or Adobe InDesign to create a document in a manual or semimanual process. In another context, PDF documents are created programmatically, using an API to produce PDFs directly from software applications, without—or with minimal—human intervention. Sometimes the document is created in an intermediary format first, then converted to PDF. These different approaches demand different software products. The same goes for PDF manipulation. You can update a PDF manually in Adobe Acrobat, but there are also tools that allow forms to be filled out automatically based on information from a database.

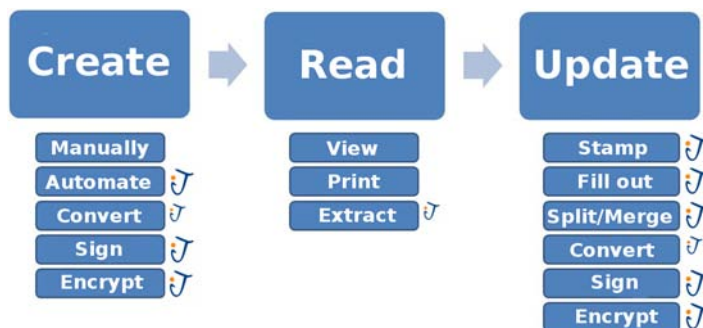


Figure 1.1 Overview of PDF-related functionality. The functionality covered by iText is marked with the iText logo.