Foundations of Popfly

Rapid Mashup Development

Eric Griffin

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Foundations of Popfly: Rapid Mashup Development

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The book is dedicated to my wife, Susan, who is my source of unending support, love, and understanding.

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About the Author

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Introduction

When I heard that Microsoft was developing a mashup creation tool, I knew two things: one, that I wanted to get access to it as soon as possible, and two, that I wanted to write a book about it.

Mashups are all the rage. The explosion of public APIs by the who's who in the Web 2.0 world (Google, Yahoo, Microsoft, and so on) has caused a revolution in the way software is developed—mashups are the precursor to the way software will be developed in the future. Software as a service has long been on the horizon, and Web Services, in its many technological forms, is the enabler of cross-platform, cross-service integration that is at the heart of mashups.

But even as mashups emerged, the tools used to create them were familiar only to Web-savvy programmers and enthusiasts. For the larger, nontechnical audience, the tools were unapproachable and difficult to use.

Then Microsoft introduced Popfly—a tool for the nonprogrammer enthusiast who wants to quickly create new software.

Who This Book Is For

This book is for the nonprogrammer or enthusiast who wants to create new software fast. The tool enables users to take advantage of the heavy lifting already done by other programmers and the functionality supplied by public APIs in the form of Web Services from service providers like Microsoft, Yahoo, Google, and more.

How This Book Is Structured

This book consists of ten chapters. The first six chapters show you how to use the Popfly environment to create mashups, and the last four teach you to create components, called blocks, that can be used to create mashups within Popfly.

Chapter 1

Because mashups use technologies that are familiar to Web-savvy programmers in new and exciting ways, they are popping up everywhere—inspiring seasoned programmers and amateurs like. In this chapter, I introduce you to mashups and the rich world of creativity

and freedom they offer. Mashups allow you to mix and match competing vendor APIs to create new, fun, and sometimes strange products and services.

Chapter 2

In this chapter, you see how Popfly hides the complex technologies needed to create mashups through the use of its simple tools, which require no coding. It also has an online community that fosters sharing, copying, and feedback.

Chapter 3

In Chapter 3, you create your first Popfly mashup. The mashup retrieves an RSS feed from a blog and displays it in a News Reader using blocks that you configure and connect in Popfly's block designer. You also add HTML to your mashup page.

Chapter 4

In this chapter, you create two more mashups: one using the Flickr photo service and PhotoSphere blocks and another using the Upcoming service (a Yahoo web site that provides dates of entertainment events) and Virtual Earth. You learn how to generate and manage API keys and how add custom code to modify a block. You also learn to retrieve information from the user and pass it on to blocks with the User Input block.

Chapter 5

In this chapter, you create your own web page using Popfly's Page Editor. You learn how to customize page styles and layouts and how to insert shared mashups onto web pages for the world to see.

Chapter 6

This chapter explains the four ways that Popfly supplies for you to share your mashups with external users: web pages, Windows Vista gadgets, Windows Live Spaces, and Facebook. You also learn how to e-mail your mashup.

Chapter 7

This chapter teaches you how blocks are defined (with XML) and executed (with JavaScript). You examine the RSS and News Reader blocks from previous examples to see how the block definitions and code are used together. You will learn about the Popfly Runtime Environment (PRE) and some of the helper functions it provides to make retrieving data from external sources easier.

Chapter 8

In this chapter, you examine the Popfly Block SDK. We'll look at the Popfly SDK test harness, which was created with .NET technology, and how to run it in a free tool from Microsoft called Visual Web Developer.

Chapter 9

In this chapter, you learn to use the rich functionality within Microsoft's Visual Web Developer to create blocks using the Popfly Block SDK. I'll explain how to amend a block's JavaScript file and block definition files in its editor. You also learn about Visual Web Developer's debugging capabilities and how to use the Block SDK schema files to help write and validate block definition files.

Chapter 10

This chapter teaches you to use Popfly's Block Creator to create or add your block to the Popfly environment for use in mashups. The Block Creator is not as rich as an integrated development environment like Visual Web Developer, but it has some basic code completion functionality to help you write your block code. You will also learn how to copy, or rip, code from other blocks to help you learn how it works or to give you a head start on your own blocks.

Prerequisites

Some knowledge of JavaScript and the technologies surrounding it, like AJAX and JSON, would be very helpful, as would knowledge of XML. No experience with Popfly is needed, and experience with software development kits (SDKs) and integrated development environments (IDEs) is not required but will be helpful.

Downloading the Code

You can find the Popfly Technorati Block created as a sample in this block from `www.apress.com` in the Downloads section of this book's home page. Please feel free to visit the Apress web site and download all the code there. You can also check for errata and find related titles from Apress.

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