

Start developing applications for the Windows
Phone platform quickly and easily



Beginning Windows Phone App Development

Henry Lee | Eugene Chuvyrov

Apress®

Covers
Windows Phone 7.5
Mango release

Beginning Windows Phone App Development



Henry Lee
Eugene Chuvyrov

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To Erica, my beautiful wife, for her love and support. Thank you for always being there for me.

—Henry Lee

To Marianna—my friend, my wife, my muse—and to my parents for their gift of unconditional love.

—Eugene Chuvyrov

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About the Authors

■ **Henry Lee** is the founder of ToeTapz (www.toetapz.com) and New Age Solution (<http://newagesolution.net>), and is passionate about technology. He works with various Fortune 500 companies delivering mobile applications and rich Internet applications (RIAs). He is focusing his energy on delivering mobile applications on Windows Phone 7, Android, and iPhone. In his spare time, he helps his communities by delivering sessions at technology events. He enjoys discussing current trends in technology with other technologists and sharing business insights with fellow colleagues. You will often find Henry at a local cigar bar, enjoying a cigar and a drink while trying to come up with the next big mobile application.

■ **Eugene Chuvyrov** is an independent .NET consultant in beautiful Jacksonville, Florida. He was lucky enough to start working with Microsoft technologies when he graduated from college in 1998 and has been consistently delivering a positive return on investment to the clients that engage him. His most recent venture is an online event marketing startup, Packed House Events (<http://packedhouseevents.com>), which extends event creation, marketing, and electronic payments to anybody with Internet access. Eugene also facilitates the meetings of the Jacksonville Software Architecture Group, where he enjoys networking and learning from smart people.

As soon as Eugene heard the news that a new mobile platform (Windows Phone 7) was being released by Microsoft, he was intrigued. It was hard to resist the temptation of wide-open possibilities to create smartphone applications using his favorite IDE and all the latest cloud- and functional programming-based technologies. This passion, discussed over a cigar with Henry at a local cigar bar, resulted in the book you now hold in your hands. He sincerely hopes you find it useful!

About the Technical Reviewer

■ **Rob Garrett** has worked with SharePoint since the early beta version of Microsoft Office SharePoint Server 2007 and has leveraged his talents for SharePoint architecture and design with Portal Solutions—a SharePoint consultant company in Rockville, Maryland. Rob has extensive background in .NET technologies and has developed software for Microsoft frameworks since the early days of C++ and MFC. In pursuit of his career dreams, Rob left his birthplace in England for a journey to the United States on Thanksgiving Day, 1999, and enjoyed his first American meal from a gas station.

Acknowledgments

We would like to express our love and gratitude to our wives for encouraging us to finish this book. We are also grateful to Apress for giving us the opportunity to write this book on Windows Phone development. The staff at Apress made this book possible by spending many days and nights reviewing and editing the book to meet the tight deadline. Jon Hassell provided us with this unique opportunity to share our knowledge. Thank you, Jon, for believing in us. Also, we would like to show our appreciation to the coordinating editor, Tracy Brown, and our extremely diligent reviewers, Gary Schwartz and Rob Garrett. When the first and second edition were published, we also realized that there were many Apress staff members in the marketing department promoting the book; we would like to thank Lisa Lau and the marketing department, and Simon Yu for helping us get in contact with user groups for speaking engagements.

We would also like to thank those who sent us e-mail with comments and those who blogged about our books on the Web with kind remarks. Many community members helped us improve upon our first and second editions by offering valuable feedback. We used that feedback to make this edition better and included a lot of information about new features of the latest release of the Windows Phone OS.

Introduction

This is the third edition of this book. We wanted to improve upon the first two editions and update the book with new features of the Windows Phone OS, as well as provide hands-on knowledge on how to program the plethora of features offered by Windows Phone devices.

While the second edition was being written, Microsoft and Nokia formally announced their partnership and signed an agreement to seal their commitment. While we were writing the third edition, Nokia phones were being released to the European markets, and they should be coming to the United States in days. We hope that this book will provide developers with the practical knowledge that we gained by developing real-world applications; we also hope it will inspire developers to create many cool applications for the Windows Phone platform.

Who This Book Is For

This book assumes that you have basic C# and .NET knowledge. This book will provide you with basic fundamentals and skills that you need to be successful in developing Windows Phone applications. You don't need previous experience developing mobile applications—the only thing you need is a desire to learn new technology.

What You Need to Use This Book

In order to write Windows Phone applications and test out the examples in this book, you'll need to download the tools listed here. All of these are available at no charge from Microsoft. You'll find additional information on how to install and use these tools in Part 1 of this book.

- *Windows Phone Developer Tools RTW:*
http://download.microsoft.com/download/1/7/7/177D6AF8-17FA-40E7-AB53-00B7CED31729/vm_web.exe
- *Zune software:* www.zune.net/en-us/products/software/download/
- *User Experience Design Guidelines for Windows Phone:*
<http://go.microsoft.com/fwlink/?LinkID=183218>
- *Windows Phone 7 Marketplace Certification Requirements:*

<http://go.microsoft.com/?linkid=9730558>

- *Microsoft SQL Server 2008 R2 Express:*
www.microsoft.com/express/Database/
- *Azure Tools for Visual Studio 1.2 June 2010:*
<http://download.microsoft.com/DOWNLOAD/1/F/9/1F96D60F-EBE9-44CB-BD58-88C2EC14929E/VSCLLOUDSERVICE.EXE>
- *Azure SDK (June 2010):* <http://www.microsoft.com/windowsazure/sdk/>
- *Windows Azure Platform Training Kit:*
<http://www.microsoft.com/downloads/en/details.aspx?familyid=413e88f8-5966-4a83-b309-53b7b77edf78>

How This Book Is Organized

This book contains 19 chapters, broken into 2 major parts. In Part 1, we will walk you through the development life cycle of the application. You will go from coding the simplest possible Hello World–style Windows Phone 7 application to building a full-blown, modern n-tier application that uses both the Windows Phone development platform and the unique cloud services that support it. The section concludes with step-by-step instructions on how to gain certification from Microsoft and offer an application to the public through the Windows Phone Marketplace.

In Part 2, you will learn how to use specific features of Windows Phone devices in your applications, including the accelerometer, location services, the Application Bar, reactive extensions, application hub integration, application life cycle events, Isolated Storage, Silverlight, XAML, skinning controls, web browser controls, media elements, photos, push notifications, internationalization, and security. While each of its chapters is a tutorial, you can also use Part 2 as a reference. Each chapter focuses on a single phone feature and provides step-by-step instructions on how to incorporate it into your application.

Where to Find Sources for the Examples

The source code of all of the examples is available at www.apress.com/ or <http://wp7apress.codeplex.com>.

Send Us Your Comments

We value your input. We'd like to know what you like about the book and what you don't like about it. When providing feedback, please make sure you include the title of the book in your note to us.

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