Before You Begin

Please read the following topics before you begin the course.

Minimum Hardware and Software Requirements

This is a hands-on programming course! You will be installing the Java Development Kit (JDK) and Eclipse Integrated Development Environment (IDE) on your computer, which must meet the following minimum requirements:

Computer Hardware

Your computer must meet the following minimum specifications:

	Minimum
CPU	1.6GHz or faster processor
RAM	1024 MB
Display	1024 x 768 or higher resolution
Hard Disk Size	3GB available space
DVD Drive	DVD-ROM drive

Operating Systems

Your computer operating system must match one of the following:

Windows XP (x86) with Service Pack 3 or above (except Starter Edition)
Windows Vista (x86 and x64) with Service Pack 2 or above (except Starter Edition)
Windows 7 (x86 and x64)
Windows 8 or Windows 8 Pro (excluding Windows 8 RT)
Apple Mac OS X (10.6 or above)

Conventions Used in This Text

This course will use certain styles (fonts, borders, etc.) to highlight text of special interest.

```
Source code will be in 11-point Consolas font, in a single box like this.
```

Variable names will be in **12-point Consolas bold** text, similar to the way they will look in your development environment. For example: **myVariable**.

Function names, properties and keywords will be in **bold face** type, so that they are easily readable.

This picture highlights important concepts within a lesson.

Sidebars may contain additional information, tips, or background material.

This icon indicates a hands-on activity that you will complete on your computer.

What You Will Learn and Do In This Course

TeenCoder™: Java Programming will teach you the fundamentals of writing your own computer programs. You will be writing both console-based and graphical programs using the Java programming language. This course is geared for high-school students who have expressed an interest in computer programming or who are looking for college-preparatory material.

Starting with the second chapter, you will complete a hands-on programming project at the end of each chapter. These projects will increase in complexity as you learn more about the Java language.

What You Need to Know Before Starting

You are expected to already know the basics of computer use before beginning this course. You need to know how to use the keyboard and mouse to select and run programs, use application menu systems, and work with your Windows operating system or Apple Mac OS. You should understand how to store and load files on your hard disk and how to navigate your file system and directory structures with Windows Explorer or Mac OS Finder. You should also have some experience with text editors and using web browsers to find helpful information on the Internet.

Software Versions

You will be using the free *Java Development Kit (JDK)* and the free *Eclipse IDE for Java Developers* software to complete this course. You will download and install these free programs from the Internet. Your course contains links to download and install instructions in PDF format on our website, http://www.HomeschoolProgramming.com. 3rd party websites may from time to time change their download process or release newer versions of their software. Our website will contain updated versions of the instructions as needed.

Getting Help

All courses come with a Solution Guide PDF and fully coded solutions for all activities. Simply install the "Solution Files" from your course setup program and you will be able to refer to the solutions as needed from the "Solution Menu". If you are confused about any activity you can see how we solved the problem! You may also contact us through the "Support" area of our website for further assistance.

Course Errata

We welcome your feedback regarding any course details that are unclear or that may need correction. Please contact us using our online "Getting Help" form. You can find a list of course errata for this edition on our website, http://www.HomeschoolProgramming.com.

Support for Multiple Operating Systems

This course was developed for use both on Microsoft Windows and Apple Mac OS X operating systems. The Java platform is compatible with both environments (and others). We will point out in text or by screen shots any differences between the operating systems. Where necessary, we will provide dedicated sets of instructions for handling each operating system. Be sure to follow the instructions that are right for the operating system you are using!

Directory Naming Conventions

On Wthe directory pathsg systems, directory paths are traditionally represented with backslashes ("\") between folder names like this: "**TeenCoder\Java Programming**", but forward slashes ("/") work also. Mac OS directories use forward slashes as in "**TeenCoder/Java Programming**". In order to avoid cluttering the textbook with both representations, each time we specify a path, we will simply use one style. Be sure to change that style to match your operating system requirements if needed.