

Beginning Game Programming Sams Teach Yourself

Find out how to use the Unity Game Engine to its fullest for both 3D and 2D game development—from the basics to the hottest new tricks in virtual reality. With this unique cookbook, you'll get started in two ways: First, you'll learn about the Unity game engine by following very brief exercises that teach specific features of the software. Second, this tutorial-oriented guide provides a collection of snippets that solve common gameplay problems, like determining if a player has completed a lap in a race. Using our cookbook format, we pinpoint the problem, set out the solution, and discuss how to solve your problem in the best and most straightforward way possible so you can move onto the next step in the project. Unity Game Development Cookbook is ideal for beginning to intermediate Unity developers. Beginners will get a broad immersion into the Unity development environment, while intermediate developers will learn how to apply the foundational Unity skills they have to solve real game development problems.

Computer programming with Java is easier than it looks. In just 24 lessons of one hour or less, you can learn to write computer programs in Java. Using a straightforward, step-by-step approach, popular author Rogers Cadenhead helps you master the skills and technology you need to create desktop and web programs, web services, an Android app, and even Minecraft mods in Java. Each lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Full-color figures and clear step-by-step instructions visually show you how to program with Java. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes, Tips, and Cautions provide related information, advice, and warnings. Learn how to...

- Set up your Java programming environment
- Write your first working program in just minutes
- Control program decisions and behavior
- Store and work with information
- Build straightforward user interfaces
- Create interactive web programs
- Use threading to build more responsive programs
- Read and write files and XML data
- Master best practices for object-oriented programming
- Use Java 9's new HTTP client
- Use Java to create an Android app
- Expand your skills with closures
- Create Minecraft mods with Java

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Sams Teach Yourself Game Programming with Visual Basic in 21 Days teaches the reader the art of game programming from the ground up. The reader is assumed to have basic programming knowledge that he wishes to apply to the creation of basic games. Upon completion of the book readers will have learned to build eight games including card games, puzzles, and strategy games, each focusing on a specific task and building the reader's knowledge and skill level. The final week is a culmination of the skills learned in the first two weeks where the reader

builds a complete game incorporating sound, animation, etc.

In just 24 sessions of one hour or less, this guide will help you create great 2D and 3D games for any platform with the 100% free Godot 3.0 game engine. Its straightforward, step-by-step approach guides you from basic scenes, graphics, and game flow through advanced shaders, environments, particle rendering, and networked games. Godot's co-creator and main contributor walk you through building three complete games, offering advanced techniques you won't find anywhere else. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Step-by-step instructions carefully walk you through the most common Godot engine programming tasks and techniques Practical, hands-on examples show you how to apply what you learn Quizzes and exercises help you test your knowledge and stretch your skills Notes and tips point out shortcuts, solutions, and problems to avoid Learn how to... · Install Godot, create projects, and use the visual editor · Master the scene system, and organize games with Scene Trees · Create 2D graphics, 3D graphics, and animations · Use basic and advanced scripting to perform many game tasks · Process player input from any source · Control game flow, configurations, and resources · Maximize realism with Godot's physics and particle systems · Make the most of 3D shaders, materials, lighting, and shadows · Control effects and post-processing · Build richer, more sophisticated game universes with viewports · Develop networked games, from concepts to communication and input · Export games to the devices you've targeted · Integrate native code, third-party APIs, and engine extensions (bonus chapter)

Python Programming for Raspberry Pi® In just 24 sessions of one hour or less, Sams Teach Yourself Python Programming for Raspberry Pi in 24 Hours teaches you Python programming on Raspberry Pi, so you can start creating awesome projects for home automation, home theater, gaming, and more. Using this book's straight-forward, step-by-step approach, you'll move from the absolute basics all the way through network and web connections, multimedia, and even connecting with electronic circuits for sensing and robotics. Every lesson and case study application builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Raspberry Pi Python programming tasks. Quizzes at the end of each chapter help you test your knowledge. By the Way notes present interesting information related to the discussion. Did You Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Richard Blum has administered systems and networks for more than 25 years. He has published numerous Linux and open source books, and is an online instructor for web programming and Linux courses used by colleges across the United States. His books include Ubuntu Linux Secrets; Linux for Dummies, Ninth Edition; PostgreSQL 8 for Windows; and Professional Linux Programming. Christine Bresnahan began working as a systems administrator more than 25 years ago. Now an Adjunct Professor at Ivy Tech Community College, she teaches Python programming, Linux administration and computer security. She is coauthor of The Linux Bible, Eighth Edition. With Blum, she also coauthored Linux Command Line & Shell Scripting Bible, Second Edition. Get your Raspberry Pi and choose the right low-cost peripherals Set up Raspian Linux and the Python programming environment Learn Python basics, including arithmetic and structured commands Master Python 3 lists, tuples, diction-aries, sets, strings, files, and modules Reuse the same Python code in multiple locations with functions Manipulate string data efficiently with regular expressions Practice simple object-oriented programming techniques Use exception handling to make your code more reliable Program modern graphical user interfaces with Raspberry Pi and OpenGL Create Raspberry Pi games with the PyGame library Learn network, web, and database techniques you can also use in business software Write Python scripts that send email Interact with other devices through Raspberry Pi's GPIO interface Walk through example Raspberry Pi projects that inspire you to do even

more On the Web: Register your book at informit.com/title/9780672337642 for access to all code examples from the book, as well as updates and corrections as they become available.

In just 24 lessons of one hour or less, Sams Teach Yourself Unity Game Development in 24 Hours will help you master the Unity 5 game engine at the heart of Hearthstone: Heroes of Warcraft, Kerbal Space Program, and many other sizzling-hot games! This book's straightforward, step-by-step approach teaches you everything from the absolute basics through sophisticated game physics, animation, and mobile device deployment techniques. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Step-by-step instructions carefully walk you through the most common Unity game development tasks. Practical, hands-on examples show you how to apply what you learn. Quizzes and exercises help you test your knowledge and stretch your skills. Notes and tips point out shortcuts and solutions.

In just 24 sessions of one hour or less, Sams Teach Yourself Unity Game Development in 24 Hours will help you master the Unity game engine at the heart of Hearthstone: Heroes of Warcraft, Kerbal Space Program and many other sizzling-hot games! You'll learn everything from the absolute basics through sophisticated game physics, animation, and mobile device deployment techniques. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Unity 5 game development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes present interesting information related to the discussion. Tips offer advice or show you easier ways to perform tasks. Cautions alert you to possible problems and give you advice on how to avoid them. Learn how to... Create and work with game objects, Unity's fundamental building blocks Work efficiently with Unity's graphical asset pipeline Apply shaders and textures to any 3D object Sculpt stunning game worlds with Unity's terrain and environmental toolsets Script tasks ranging from capturing input to building complex behaviors Quickly create repeatable, reusable game objects with prefabs Implement easy, intuitive game user interfaces Create amazing effects with Unity's particle system Leverage the full power of Unity's Mecanim animation system Integrate ambient 2D/3D audio into your games Use mobile device accelerometers and multi-touch displays Modify a desktop game for mobile platforms Apply the "finishing touches" and deploy your game This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. In just one hour a day, you'll have all the skills you need to begin programming in C++. With this complete tutorial, you'll quickly master the basics, and then move on to more advanced features and concepts. Completely updated for the C++14 standard, with a preview of C++17, this book presents the language from a practical point of view, helping you learn how to use C++ to create faster, simpler, and more efficient C++ applications. Master the fundamentals of C++ and object-oriented programming Understand how C++ features help you write compact and efficient code using concepts such as lambda expressions, move constructors, and assignment operators Learn best practices and avoid pitfalls via useful Do's and Don'ts Learn the Standard Template Library, including containers and algorithms used in most real-world C++ applications Test your knowledge and expertise with exercises at the end of every lesson Learn on your own time, at your own pace: No previous programming experience required Write fast and powerful C++ programs, compile the source code, and create executable files Learn object-oriented programming concepts such as encapsulation, abstraction, inheritance, and polymorphism Use the Standard Template Library's algorithms and containers to write feature-rich yet stable C++ applications Learn how automatic type deduction helps simplify C++ code Develop sophisticated programming techniques using lambda expressions, smart pointers, and move constructors Master the features of C++ by learning from programming experts Learn C++ features that allow you to program

compact and high-performance C++ applications Preview what's new in C++17

Learn the fundamentals of C++ programming with a fun-filled, practical guide and create your own games using Unreal Engine 4. Key Features Gain foundational knowledge of C++ language and syntax while creating games with UE4 Build 2D and 3D games having compelling user interfaces, game physics, and artificial intelligence Discover the latest trends in game development such as Virtual Reality, Augmented Reality, and AI Book Description Learning to program in C++ requires some serious motivation. Unreal Engine 4 (UE4) is a powerful C++ engine with a full range of features used to create top-notch, exciting games by AAA studios, making it the fun way to dive into learning C++17. This book starts by installing a code editor so you can begin to write C++17 code. You will then get acquainted with important C++ aspects, such as variables and memory, if, else, and switch, looping, functions and macros, objects, classes, inheritance, and dynamic memory allocation. As we dig into more advanced C++17 concepts, you will also start to explore the functionality the UE4 engine has to offer. You will use the UE4 editor to create your own world, and then program in some seriously fun gameplay. We delve further to discuss building game features, pathfinding, behavior trees, and more, and introduce you to the basics of machine learning and neural networks. We go on to talk about improving UI feedback with UMG and audio. In this edition of the book, we add the latest VR and AR features along with procedural programming. By the end of this book, you should have a good grasp of how to program in C++17. What you will learn Learn the basics of C++ and also basic UE4 editing Learn your way around the UE4 editor and the basics of using C++ and Blueprints within the engine Learn how to use basic C++ containers and data structures to store your game data Create players, NPCs, and monsters Give information to users using the UE4 UMG UI system Gain a basic understanding of how to use procedural programming to give your game more replay value Learn how UE4 can help you build projects using the hottest new technologies, such as VR and AR Who this book is for If you are really passionate about games and have always wanted to write your own, this book is perfect for you. It will help you get started with programming in C++ and explore the immense functionalities of UE4.

Want to make games for Windows, Mac, iPad, Android, the web, game consoles, or all of them? Don't know where to begin? Download Unreal Engine 4 for free, and get this book! In just 24 lessons of one hour or less, Sams Teach Yourself Unreal Engine 4 Game Development in 24 Hours will help you master every step of the game development process, and bring everything together in real projects that create real games. Each short, easy lesson builds on all that's come before, guiding you smoothly to mastery. The authors cover all this, and much more: How games and game projects are organized What Unreal Engine 4 does, and how it works Essential Unreal Engine 4 terminology and techniques Creating levels Editing materials, landscape, and foliage Integrating audio into your games Creating amazing effects with the Cascade Editor and Unreal's particle system Visually scripting your games, including level blueprints and FPS encounters Implementing game physics Recognizing and reacting to user inputs Building your executable Working with motion graphics, interfaces, and HUDs Scripting arcade shooters Developing for mobile devices And much more All the project files and assets you'll need are available for download, including "before-and-after" files

demonstrating initial setup and proper completion for every exercise. Throughout, step-by-step instructions walk you through common questions, issues, and tasks; Q-and-As, Quizzes, and Exercises build and test your knowledge; "Did You Know?" tips offer insider advice and shortcuts; and "Watch Out!" alerts help you avoid problems. By the time you're finished, you'll have all the skills and code you'll need to build great games with Unreal Engine 4 - no matter what kind of game you want to create, or where you want to deliver it.

Covers UML syntax and diagrams, object-oriented design, links, associations, inheritance, the development process, and modeling systems

In just 21 days, you can acquire the knowledge and skills necessary to develop applications on your computer, web servers, and mobile devices. With this complete tutorial you'll quickly master the basics and then move on to more advanced features and concepts. Completely updated for Java 11 and 12, this book teaches you about the Java language and how to use it to create applications for any computing environment. By the time you have finished the book, you'll have well-rounded knowledge of Java and the Java class libraries. No previous programming experience required. By following the 21 carefully organized lessons in this book, anyone can learn the basics of Java programming. Learn at your own pace. You can work through each chapter sequentially to make sure you thoroughly understand all the concepts and methodologies, or you can focus on specific lessons to learn the techniques that interest you most. Test your knowledge. Each chapter ends with a Workshop section filled with questions, answers, and exercises for further study. There are even certification practice questions. Completely revised, updated, and expanded to cover the latest features of Java 11 and 12 Learn to develop Java applications using NetBeans—an excellent programming platform Easy-to-understand, practical examples clearly illustrate the fundamentals of Java programming Discover how to quickly develop programs with a graphical user interface Find out about JDBC programming with the Derby database Learn how to use Inner Classes and Lambda Expressions Learn rapid application development with Apache NetBeans Create a game using Java

Sams Teach Yourself HTML, CSS and JavaScript All in One The all-in-one HTML, CSS and JavaScript beginner's guide: covering the three most important languages for web development. Covers everything beginners need to know about the HTML and CSS standards and today's JavaScript and Ajax libraries - all in one book, for the first time Integrated, well-organized coverage expertly shows how to use all these key technologies together Short, simple lessons teach hands-on skills readers can apply immediately By best-selling author Julie Meloni Mastering HTML, CSS, and JavaScript is vital for any beginning web developer - and the importance of these technologies is growing as web development moves away from proprietary alternatives such as Flash. Sams Teach Yourself HTML, CSS, and JavaScript All in One brings together everything beginners need to build powerful web applications with the HTML and CSS standards and the latest JavaScript and Ajax libraries. With this book, beginners can get all the modern web development knowledge you need from one expert source. Bestselling author Julie Meloni (Sams Teach Yourself PHP, MySQL and Apache All in One) teaches simply and clearly, through brief, hands-on lessons focused on knowledge you can

apply immediately. Meloni covers all the building blocks of practical web design and development, integrating new techniques and features into every chapter. Each lesson builds on what's come before, showing you exactly how to use HTML, CSS, and JavaScript together to create great web sites.

Teaches fundamental C and C++ programming and provides information for programming games in Windows, exploring topics including game theory, double-buffered graphics, sprite animation, and digitized sound effects.

In just 24 sessions of one hour or less, you'll learn how to build high performance games for Windows Phone 7 with Microsoft's free XNA 4.0 toolset. Using this book's straightforward, step-by-step approach, you'll master all the skills you need to design, develop, test, and publish highly playable games for any WP7 device. You'll learn how to integrate game logic, touch screen user input, bitmaps, animations, audio, physics effects, GPS location services, and more. Each lesson builds on what you've already learned, culminating in the construction of a complete game--and giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Windows Phone 7 game development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. By the Way notes present interesting information related to the discussion. Did You Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Learn how to... Develop fast, playable Windows Phone 7 games with XNA 4.0 Get and manage user touch screen input Draw 2D bitmapped images, and bring them to life as sprites Transform sprites using rotation, scaling, and velocity calculations Detect and handle collisions between game objects Create surprisingly realistic animation effects Master sophisticated finite state programming techniques Integrate GPS Location Services into your game Make the most of Windows Phone audio Read, write, and save game files Create your game's Graphical User Interface (GUI) Implement realistic physics effects, including gravity and acceleration Tweak gameplay to make your games more fun

In just 24 lessons of one hour or less, Sams Teach Yourself Unity Game Development in 24 Hours will help you master the Unity 2018 game engine at the heart of Ori and the Blind Forest, Firewatch, Monument Valley, and many other sizzling-hot games! This book's straightforward, step-by-step approach teaches you everything from the absolute basics through sophisticated game physics, animation, and mobile device deployment techniques. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Step-by-step instructions carefully walk you through the most common Unity game development tasks. Practical, hands-on examples show you how to apply what you learn. Quizzes and exercises help you test your knowledge and stretch your skills. Notes and Tips point out shortcuts and solutions Learn how to... Get up and running fast with the Unity 2018 game engine and editor Work efficiently with Unity's graphical asset pipeline Make the most of lights and cameras Sculpt stunning worlds with Unity's terrain and environmental tools Script tasks ranging from capturing input to building complex behaviors Quickly create repeatable, reusable game objects with prefabs Implement easy, intuitive game user interfaces Control players through built-in and custom character controllers Build realistic physical and trigger collisions Leverage the full power of Unity's Animation and new Timeline systems Integrate complex audio into your games Use mobile device

accelerometers and multi-touch displays Build engaging 2D games with Unity's 2D tools and Tilemap Apply the "finishing touches" and deploy your games

Sams Teach Yourself Beginning Programming in 24 Hours, Second Edition explains the basics of programming in the successful 24-Hours format. The book begins with the absolute basics of programming: Why program? What tools to use? How does a program tell the computer what to do? It teaches readers how to program the computer and then moves on by exploring the some most popular programming languages in use. The author starts by introducing the reader to the Basic language and finishes with basic programming techniques for Java, C++, and others.

Teaches how to write games using Direct3D, discussing such topics as how to create and manage Direct3D objects, how to program animation sequences, how to add sound effects, and how to program a role-playing game.

Starter Kit Includes C++ compiler and IDE for Windows, Mac & Linux In just 24 lessons of one hour or less, you can learn the basics of programming with C++—one of the most popular and powerful programming languages ever created. Using a straightforward, step-by-step approach, this fast and friendly tutorial teaches you everything you need to know, from installing and using a compiler, to debugging the programs you've created, to what's coming in C++0x, the next version of C++. Each lesson builds on what you've already learned, giving you a solid understanding of the basics of C++ programming concepts and techniques. Step-by-step instructions carefully walk you through the most common C++ programming tasks Quizzes and Exercises at the end of each chapter help you test yourself to make sure you're ready to go on Starter Kit software provides everything you need to create and compile C++ programs on any platform—Windows, Mac or Linux Learn how to... Install and use a C++ compiler for Windows, Mac OS X or Linux Build object-oriented programs in C++ Master core C++ concepts such as functions, classes, arrays, and pointers Add rich functionality with linked lists and templates Debug your programs for flawless code Learn exception and error-handling techniques Discover what's new in C++0x, the next version of C++ Jesse Liberty is the author of numerous books on software development, including best selling titles on C++ and .NET. He is the president of Liberty Associates, Inc. where he provides custom programming, consulting, and training. Rogers Cadenhead is a web application developer who has written many books on Internet-related topics, including Teach Yourself Java in 24 Hours. He maintains this book's official website at <http://cplusplus.cadenhead.org>. CD-ROM Includes C++ compiler Visual development environment for Windows, Mac and Linux Source code for the book's examples Register your book at informit.com/register for convenient access to updates and corrections as they become available.

In just 24 lessons of one hour or less, learn how to start using Unreal Engine 4 to build amazing games for Windows, Mac, PS4, Xbox One, iOS, Android, the web, Linux-or all of them! Sams Teach Yourself Unreal Engine 4 Game

Development in 24 Hours' straightforward, step-by-step approach shows you how to work with Unreal Engine 4's interface, its workflows, and its most powerful editors and tools. In just hours you'll be creating effects, scripting warfare, implementing physics-even developing for mobile devices and HUDs. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Organize new projects and work with the Gameplay Framework Master Unreal's units and control systems Import 3D models and work with the Static Mesh Editor Create new landscapes and use Unreal's foliage system Bring characters and creatures to life with the Persona Editor Apply materials and build lighting Integrate and modify audio with the Unreal Sound Cue Editor Craft particle effects and simulate physics Set up and react to player inputs Build levels and entirely new worlds Get started with powerful Blueprint visual scripting system Script an arcade game from start to finish Create events that respond to player actions Spawn Actors during gameplay Design and create action-based encounters Optimize games for mobile devices and touch-based inputs Build menus with Unreal's UMG UI Designer Prepare your game for deployment Step-by-step instructions carefully walk you through the most common Unreal Engine 4 game development tasks. Practical, hands-on examples show you how to apply what you learn. Quizzes and Exercises help you test your knowledge and stretch your skills. Notes and tips point out shortcuts and solutions. All the project files and assets you'll need are available for download, including "before-and-after" files demonstrating initial setup and proper completion for every exercise.

Offers software developers step-by-step instructions on how to create and distribute their first marketable, professional Android application.

Get to grips with programming techniques and game development using C++ libraries and Visual Studio 2019 Key Features Learn game development and C++ with a fun, example-driven approach Build clones of popular games such as Timberman, Zombie Survival Shooter, a co-op puzzle platformer, and Space Invaders Discover tips to expand your finished games by thinking critically, technically, and creatively Book Description The second edition of Beginning C++ Game Programming is updated and improved to include the latest features of Visual Studio 2019, SFML, and modern C++ programming techniques. With this book, you'll get a fun introduction to game programming by building five fully playable games of increasing complexity. You'll learn to build clones of popular games such as Timberman, Pong, a Zombie survival shooter, a coop puzzle platformer and Space Invaders. The book starts by covering the basics of programming. You'll study key C++ topics, such as object-oriented programming (OOP) and C++ pointers, and get acquainted with the Standard Template Library (STL). The book helps you learn about collision detection techniques and game physics by building a Pong game. As you build games, you'll also learn exciting game programming concepts such as particle effects, directional sound (spatialization), OpenGL programmable shaders, spawning objects, and much

more. Finally, you'll explore game design patterns to enhance your C++ game programming skills. By the end of the book, you'll have gained the knowledge you need to build your own games with exciting features from scratch. What you will learn: Set up your game development project in Visual Studio 2019 and explore C++ libraries such as SFML. Explore C++ OOP by building a Pong game. Understand core game concepts such as game animation, game physics, collision detection, scorekeeping, and game sound. Use classes, inheritance, and references to spawn and control thousands of enemies and shoot rapid-fire machine guns. Add advanced features to your game using pointers, references, and the STL. Scale and reuse your game code by learning modern game programming design patterns. Who this book is for: This book is perfect for you if you have no C++ programming knowledge, you need a beginner-level refresher course, or you want to learn how to build games or just use games as an engaging way to learn C++. Whether you aspire to publish a game (perhaps on Steam) or just want to impress friends with your creations, you'll find this book useful.

Intended for programmers producing games for the Internet, this manual details the development of four full Internet games. Assuming some working knowledge of Java, the text focuses on the advanced features of game development and includes a CD-Rom that offers sample applications and demo software.

Build several fully functional games as well as a game engine to use for programming cell phone and mobile games with *Beginning Mobile Phone Game Programming!* The included CD provides the tool, code and graphics necessary to complete all exercises covered in the chapters. *Beginning Cell Phone Game Programming* demystifies wireless game programming by providing clear, practical lessons using the J2ME Game API. You will learn how to use the most popular mobile programming language, Java, to build compact games that can run on any Java-enabled device, including mobile phones, pagers and handheld computers. You will also learn to add a splash screen, create a demo mode, keep track of high scores, and test, debug, and deploy your games. Topics covered include: How to construct a game engine to drive mobile games. How to use Java 2 Micro Edition (J2ME) and the Java Game API to get the most performance out of your mobile games. How to implement sprite animation and control interactions among moving sprites. How to play sound effects and music in mobile games. How to take advantage of wireless networks to build mobile multiplayer games. How to design and develop a variety of different games spanning several video games genres.

Provides information on how to build a successful iPhone game and includes instructions for creating a 2D tile map game.

Sams Teach Yourself Beginning Programming in 24 Hours explains the basics of programming in the successful 24 Hours format. The book's examples are easily readable and understandable by even those with no previous exposure to programming. This book covers the absolute basics of programming: Why program? What tools to use? How does a

program tell the computer what to do? Readers will learn how to program the computer and will explore some of the most popular programming languages in use. This book will introduce the reader to common programming fundamentals using Python and will provide an overview of other common programming languages and their uses.

A complete beginner's guide to game development with the powerful Unity game engine. CS Instructor and game designer, Mike Geig, offers a do-it-yourself approach to game development - with all of the main essentials covered. In just 24 hours, learn how to get started developing games with Unity with a hands-on and modular approach. Each chapter covers an essential component of the game development process, illustrated with sample projects, and including full source code, all 3rd party art assets (textures, fonts, models), and all 3rd party sound assets.

Learn C++ from scratch and get started building your very own games About This Book This book offers a fun way to learn modern C++ programming while building exciting 2D games This beginner-friendly guide offers a fast-paced but engaging approach to game development Dive headfirst into building a wide variety of desktop games that gradually increase in complexity It is packed with many suggestions to expand your finished games that will make you think critically, technically, and creatively Who This Book Is For This book is perfect for you if any of the following describes you: You have no C++ programming knowledge whatsoever or need a beginner level refresher course, if you want to learn to build games or just use games as an engaging way to learn C++, if you have aspirations to publish a game one day, perhaps on Steam, or if you just want to have loads of fun and impress friends with your creations. What You Will Learn Get to know C++ from scratch while simultaneously learning game building Learn the basics of C++, such as variables, loops, and functions to animate game objects, respond to collisions, keep score, play sound effects, and build your first playable game. Use more advanced C++ topics such as classes, inheritance, and references to spawn and control thousands of enemies, shoot with a rapid fire machine gun, and realize random scrolling game-worlds Stretch your C++ knowledge beyond the beginner level and use concepts such as pointers, references, and the Standard Template Library to add features like split-screen coop, immersive directional sound, and custom levels loaded from level-design files Get ready to go and build your own unique games! In Detail This book is all about offering you a fun introduction to the world of game programming, C++, and the OpenGL-powered SFML using three fun, fully-playable games. These games are an addictive frantic two-button tapper, a multi-level zombie survival shooter, and a split-screen multiplayer puzzle-platformer. We will start with the very basics of programming, such as variables, loops, and conditions and you will become more skillful with each game as you move through the key C++ topics, such as OOP (Object-Orientated Programming), C++ pointers, and an introduction to the Standard Template Library. While building these games, you will also learn exciting game programming concepts like particle effects, directional sound (spatialization),

OpenGL programmable Shaders, spawning thousands of objects, and more. Style and approach This book offers a fun, example-driven approach to learning game development and C++. In addition to explaining game development techniques in an engaging style, the games are built in a way that introduces the key C++ topics in a practical and not theory-based way, with multiple runnable/playable stages in each chapter.

In just 24 sessions of one hour or less, Sams Teach Yourself Android Game Programming in 24 Hours will help you master mobile game development for Android 4. Using a straightforward, step-by-step approach, you'll gain hands-on expertise with the entire process: from getting access to the hardware via the Android SDK to finishing a complete example game. You'll learn to use the Android SDK and open source software to design and build fast, highly playable games for the newest Android smartphones and tablets. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Android game programming tasks. Quizzes and exercises at the end of each chapter help you test your knowledge. By the Way notes present interesting information related to the discussion. Did You Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Jonathan Harbour is a writer and instructor whose love for computers and video games dates back to the Commodore PET and Atari 2600 era. He has a Master's in Information Systems Management. His portfolio site at <http://www.jharbour.com> includes a discussion forum. He also authored Sams Teach Yourself Windows Phone 7 Game Programming in 24 Hours. His love of science fiction led to the remake of a beloved classic video game with some friends, resulting in Starflight—The Lost Colony (<http://www.starflightgame.com>). Learn how to... Install and configure the free development tools, including the Android 4 SDK, Java Development Kit, and Eclipse (or NetBeans) Use the Android graphics system to bring your game characters to life Load and manage bitmaps, and use double buffering for better performance Incorporate timing and animation with threaded game loops Tap into the touch screen for user input Learn to use Android sensors such as the accelerometer, gyroscope, compass, light detector, and thermometer Integrate audio into your games using the media player Build your own game engine library to simplify gameplay code in your projects Animate games with sprites using atlas images and fast matrix transforms Employ object-oriented programming techniques using inheritance and data hiding Create an advanced animation system to add interesting behaviors to game objects Detect collisions and simulate realistic movement with trigonometry Experiment with an evolving engine coding technique that more naturally reflects how games are written

In just 24 sessions of one hour or less, you'll learn how to build high performance games for Windows Phone 7 with Microsoft's free XNA 4.0 toolset. Using this book's straightforward, step-by-step approach, you'll master all the skills

you need to design, develop, test, and publish highly playable games for any WP7 device. You'll learn how to integrate game logic, touch screen user input, bitmaps, animations, audio, physics effects, GPS location services, and more. Each lesson builds on what you've already learned, culminating in the construction of a complete game—and giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Windows Phone 7 game development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. By the Way notes present interesting information related to the discussion. Did You Know? tips offer advice or show you easier ways to perform tasks. Watch Out! cautions alert you to possible problems and give you advice on how to avoid them. Learn how to...

- Develop fast, playable Windows Phone 7 games with XNA 4.0
- Get and manage user touch screen input
- Draw 2D bitmapped images, and bring them to life as sprites
- Transform sprites using rotation, scaling, and velocity calculations
- Detect and handle collisions between game objects
- Create surprisingly realistic animation effects
- Master sophisticated finite state programming techniques
- Integrate GPS Location Services into your game
- Make the most of Windows Phone audio
- Read, write, and save game files
- Create your game's Graphical User Interface (GUI)
- Implement realistic physics effects, including gravity and acceleration
- Tweak gameplay to make your games more fun

Design and code your own 2D and 3D games efficiently using OpenGL and C++

About This Book Create 2D and 3D games completely, through a series of end-to-end game projects

Learn to render high performance 2D and 3D graphics using OpenGL

Implement a rudimentary game engine using step-by-step code

Who This Book Is For If you are a prospective game developer with some experience using C++, then this book is for you. Both prospective and experienced game programmers will find nuggets of wisdom and practical advice as they learn to code two full games using OpenGL, C++, and a host of related tools.

What You Will Learn

- Set up your development environment in Visual Studio using OpenGL
- Use 2D and 3D coordinate systems
- Implement an input system to handle the mouse and the keyboard
- Create a state machine to handle complex changes in the game
- Load, display, and manipulate both 2D and 3D graphics
- Implement collision detection and basic physics
- Discover the key components needed to complete a polished game
- Handle audio files and implement sound effects and music

In Detail OpenGL is one of the most popular rendering SDKs used to develop games. OpenGL has been used to create everything from 3D masterpieces running on desktop computers to 2D puzzles running on mobile devices. You will learn to apply both 2D and 3D technologies to bring your game idea to life. There is a lot more to making a game than just drawing pictures and that is where this book is unique! It provides a complete tutorial on designing and coding games from the setup of the development environment to final credits screen, through the creation of a 2D and 3D game. The book starts off by showing you how to set up a development environment using Visual Studio, and create a code framework for your game. It then walks you through

creation of two games—a 2D platform game called Roboracer 2D and a 3D first-person space shooter game—using OpenGL to render both 2D and 3D graphics using a 2D coordinate system. You'll create sprite classes, render sprites and animation, and navigate and control the characters. You will also learn how to implement input, use audio, and code basic collision and physics systems. From setting up the development environment to creating the final credits screen, the book will take you through the complete journey of creating a game engine that you can extend to create your own games. Style and approach An easy-to-follow guide full of code examples to illustrate every concept and help you build a 2D and 3D game from scratch, while learning the key tools that surround a typical OpenGL project.

Sams Teach Yourself Game Programming in 24 Hours Sams Publishing

In just 24 sessions of one hour or less, Sams Teach Yourself Python in 24 Hours will help you get started fast, master all the core concepts of programming, and build anything from websites to games. Using this book's straightforward, step-by-step approach, you'll move from the absolute basics through functions, objects, classes, modules, database integration, and more. Every lesson and case study application builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Python development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes present interesting information related to the discussion. Tips offer advice or show you easier ways to perform tasks. Warnings alert you to possible problems and give you advice on how to avoid them. Learn how to... Install and run the right version of Python for your operating system Store, manipulate, reformat, combine, and organize information Create logic to control how programs run and what they do Interact with users or other programs, wherever they are Save time and improve reliability by creating reusable functions Master Python data types: numbers, text, lists, and dictionaries Write object-oriented programs that work better and are easier to improve Expand Python classes to make them even more powerful Use third-party modules to perform complex tasks without writing new code Split programs to make them more maintainable and reusable Clearly document your code so others can work with it Store data in SQLite databases, write queries, and share data via JSON Simplify Python web development with the Flask framework Quickly program Python games with PyGame Avoid, troubleshoot, and fix problems with your code

Offers an updated tutorial for beginners explaining how to use Java to incorporate games, animation, and special effects into Web pages. Shows how to create backgrounds, structured displays, characters, and animation, and discusses input handling and performance considerations

Tricks of the Windows Game Programmin Gurus, 2E takes the reader through Win32 programming, covering all the major components of DirectX including DirectDraw, DirectSound, DirectInput (including Force Feedback), and DirectMusic. Andre teaches the reader 2D graphics and rasterization techniques. Finally, Andre provides the most intense coverage of game algorithms, multithreaded programming, artificial intelligence (including fuzzy logic, neural nets, and genetic algorithms), and physics modeling you have ever seen in a game book.

Traditional building blocks of a robust architecture, such as design patterns, cannot be applied in Unity without being adapted to the engine's unique way of doing things. The book reviews design patterns that are currently used by professional game programmers in indie, mobile, and AAA studios, along with examining notorious anti-patterns.

For the beginning developer or those looking to bring their games to the Roblox platform, look no further than Roblox Game Development in 24 Hours: The Official Roblox Guide. In just 24 lessons of one hour or less, you'll deepen your understanding of virtually every facet of Roblox game development. Each short and easy lesson builds upon everything that's come before, helping you take full advantage of this remarkable platform. By the time you're finished, you'll be a true Roblox game development expert. Step-by-step instructions walk you through common questions, issues, and tasks Q&As, Quizzes, and Exercises build and test your knowledge "Did You Know?" tips offer insider advice and shortcuts "Watch Out!" alerts help you avoid pitfalls Roblox Game Development in 24 Hours covers all this and much more: The Roblox engine, Studio dev tools, Lua programming language, and development lifecycle Physics, rendering, terrain, lighting, atmosphere, effects, and sound Importing assets, models, meshparts, and textures Structuring your game Coding game mechanics, animations, camera movement, and GUIs Networking and mobile development Monetization: consumables, one-time purchases, premium versions, attracting players, and advertising

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