

Unity 5 From Zero To Proficiency Advanced Create Multiplayer Games And Procedural Levels And Boost Game Performances A Step By Step Guide

Eventually, you will entirely discover a supplementary experience and talent by spending more cash. yet when? complete you give a positive response that you require to get those every needs next having significantly cash? Why dont you attempt to acquire something basic in the beginning? Thats something that will guide you to comprehend even more roughly the globe, experience, some places, in imitation of history, amusement, and a lot more?

It is your entirely own times to performance reviewing habit. along with guides you could enjoy now is **Unity 5 From Zero To Proficiency Advanced Create Multiplayer Games And Procedural Levels And Boost Game Performances A Step By Step Guide** below.

Learning C# by Developing Games with Unity 2021 - Harrison Ferrone 2021-10-29

Learn C# programming from scratch using Unity as a fun and accessible entry point with this updated edition of the bestselling series. Includes invitation to join the online Unity Game Development community to read the book alongside peers, Unity developers/C# programmers and Harrison Ferrone. Purchase of the print or Kindle book includes a free eBook in the PDF format. Key Features Learn C# programming basics, terminology, and coding best practices Become confident with Unity fundamentals and features in line with Unity 2021 Apply your C# knowledge in practice and build a working first-person shooter game prototype in Unity Book Description The Learning C# by Developing Games with Unity series has established itself as a popular choice for getting up to speed with C#, a powerful and versatile programming language with a wide array of applications in various domains. This bestselling franchise presents a clear path for learning C# programming from the ground up through the world of Unity game development. This sixth edition has been updated to introduce modern C# features with Unity 2021. A new chapter has also been added that covers reading and writing binary data from files, which will help you become proficient in handling errors and asynchronous operations. The book acquaints you with the core concepts of programming in C#, including variables, classes, and object-oriented programming. You will explore the fundamentals of Unity game development, including game design, lighting basics, player movement, camera controls, and collisions. You will write C# scripts for simple game mechanics, perform procedural programming, and add complexity to your games by introducing smart enemies and damage-causing projectiles. By the end of the book, you will have developed the skills to become proficient in C# programming and built a playable game prototype with the Unity game engine. What you will learn Follow simple steps and examples to create and implement C# scripts in Unity Develop a 3D mindset to build games that come to life Create basic game mechanics such as player controllers and shooting projectiles using C# Divide your code into pluggable building blocks using interfaces, abstract classes, and class extensions Become familiar with stacks, queues, exceptions, error handling, and other core C# concepts Learn how to handle text, XML, and JSON data to save and load your game data Explore the basics of AI for games and implement them to control enemy behavior Who this book is for If you're a developer, programmer, hobbyist, or anyone who wants to get started with Unity and C# programming in a fun and engaging manner, this book is for you. You'll still be able to follow along if you don't have programming experience, but knowing the basics will help you get the most out of this book.

Unity from Zero to Proficiency (Proficient) - Patrick Felicia 2020-09-29

First Edition, Published in September 2019 Content and structure of this book In this book, the fifth book in the series, you will become comfortable with creating your own RPG. If you were ever interested in creating systems for your game to speed-up your coding and create and maintain levels easily, then this book is for you. The book includes a list of the learning objectives at the start of each chapter, step-by-step activities, and quizzes to test your knowledge, and the content of each chapter is as follows: - Chapter 1 gives an introduction to the RPG genre. You will learn the design principles that will help you to speed-up your development process. - Chapter 2 helps you to create and animate your main 3D character, add a camera that will follow this character as well as a mini-map. You will also learn to use ProBuilder to create a village. -

Chapter 3 explains how to create a dialogue system from an XML file, and how to integrate it seamlessly into your game. - Chapter 4 explains how you can create a simple inventory system and use it to collect, store, and use items that you will find in your quest. - Chapter 5 shows you how to create a shop where the player can buy items that will then be added to the inventory. - Chapter 6 explains how you can create different types of animated and intelligent NPCs that will challenge the player. - Chapter 7 explains how you can create a quest system based on an XML file to manage the objectives for each of your levels. You will learn to read, and use this file for your game. - Chapter 8 explains how you can create an XP attribution system where the player can use the Xps gained in the previous level to increase his/her skills (e.g., accuracy, power, etc.) - Chapter 9 shows you how you can create a maze randomly using a procedural method so that the maze is different every time the game is played. - Chapter 10 combines the skills that you have learned so far to create a final level where the player needs to eliminate guards, collect gold, and also defeat the boss. After reading this book you will become a better game programmer, improve your knowledge of coding and unity, understand how to make a more complex product, learn some techniques to make an RPG game more modular, especially the quest system, use reusable code/assets that you can employ in your own game, create an inventory for your characters and much more... If you want to get started with your first RPG in Unity and learn reusable systems for your other games, using a tried-and-tested method: buy this book now!

Head First C# - Andrew Stellman 2020-12-04

What will you learn from this book? Dive into C# and create apps, user interfaces, games, and more using this fun and highly visual introduction to C#, .NET Core, and Visual Studio. With this completely updated guide, which covers C# 8.0 and Visual Studio 2019, beginning programmers like you will build a fully functional game in the opening chapter. Then you'll learn how to use classes and object-oriented programming, create 3D games in Unity, and query data with LINQ. And you'll do it all by solving puzzles, doing hands-on exercises, and building real-world applications. By the time you're done, you'll be a solid C# programmer--and you'll have a great time along the way! What's so special about this book? Based on the latest research in cognitive science and learning theory, *Head First C#* uses a visually rich format to engage your mind rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts? This multisensory learning experience is designed for the way your brain really works.

Democracy and Education - John Dewey 1916

In this book, Dewey tries to criticize and expand on the educational philosophies of Rousseau and Plato. Dewey's ideas were seldom adopted in America's public schools, although a number of his prescriptions have been continually advocated by those who have had to teach in them. [Unity from Zero to Proficiency \(Foundations\)](#) - Patrick Felicia 2019-02-04 Get Started with Game Programming Fast Getting started with Unity can be tedious if the resource that you are using doesn't have an approach tailored to your needs. In the past, I have seen how a simple yet detailed approach to teaching Unity can make a real difference to a student's ability to create games confidently and successfully and I have made sure that everything has been included in this book to make your journey enjoyable and to guarantee your success in the creation of video games with Unity. How this book is different With this book, you will not only learn about Unity but you will also enjoy the journey without the frustration. This book includes six chapters that painlessly guide you through the necessary skills to master Unity's interface, use its core features, and create and navigate through realistic 2D and 3D

environments. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. All the information is introduced progressively. This book is for parents or teachers who would like to introduce their children or students to game development; it is also for hobbyist just getting started with Unity, or aspiring indie game developers. What this book offers This book includes all the features that will guarantee your success as an aspiring game developer: > A book truly designed for beginners This book also assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. In addition, if you are more of a visual learner, you will gain access to a FREE video training that covers all the topics and features introduced in the book so that you can see how it is done. > You will be kept motivated throughout the book This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. > You will never feel lost or overwhelmed You will have the opportunity to learn and use Unity at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained. Every step is explained in great details so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. > You will learn by doing With this book, you will build your own 2D and 3D environments and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that you can use straight-away. What you will learn After completing this book, you will be able to: Feel comfortable with Unity's core features. Apply transformations (e.g., rotate, or scale). Create a 3D Maze with lights, walls, and textures. Create an island with trees, sandy beaches, mountains, and water. Use cameras and vehicles. Create a 2D platform game (with no scripting). Export your games to the web. Still not sure? Scroll to the top of this page and click on the book's cover to "look inside" this book to see the topics covered, learn more about Patrick's background and determine if reading "Unity from Zero to Proficiency (Foundations)" will be a worthwhile investment. If you want to get started with Unity today, then buy this book now

Unity from Zero to Proficiency (Advanced) - Patrick Felicia
2019-10-07

Third Edition updated for Unity 2019, Published in October 2019 In this book, the fourth book in the series, you will learn to create a simple network game, generate levels procedurally, and optimize the performance of your game. This book can be read as a standalone (you don't need to have read the previous books in the series, although it may help) and focuses on four aspects: procedural level creation, database access, multi-player networked games, and code and project optimization (i.e., memory and speed). The main idea behind this book is to save you some headaches when you need to maintain your code or expand your game, and to help you to find the time to actually code your game, by explaining simple and effective ways and best coding and organizational practices that you can use easily to create more code (and games) in less time with less stress and more fun. The content of each chapter is as follows: Chapter 1 explains how you can create procedural levels, using arrays, text files, XML files, or images, and avoid spending a lot of time creating your scene manually. You will also learn how to generate a random maze procedurally as well as an outdoor environment in the same style as Minecraft Chapter 2 explains how you can read and write data from/to a database through Unity to save and update user preferences. Chapter 3 explains how to create a simple (but fun) network tank game that can be played by two remote players. Chapter 4 shows you how to create a 2D game where the player has to memorize and to play an increasing sequence of colors and sounds, in a similar way as the Simon game that was popular in the 80s. Chapter 5 explains advanced techniques to boost the performance of your game, and to make your code and project easily maintainable. Chapter 6 provides answers to frequently asked questions.

Unity from Proficiency to Mastery (C# Programming) - Patrick Felicia
2020-09-30

Whether you are new to C# or a seasoned developer just starting with Unity, you may find it difficult to use C# in Unity because: - You are new to C#. - You already have some coding experience in C# but you may find that many concepts in Unity (e.g., components) are different from working in straight C# code. - You have started coding in C# but you

would like more examples specific to C# with Unity, including advanced features. The thing is, regardless of the game that you want to create with Unity, if you want to harness the power of this game engine you will need to understand C#. Use this in-depth Resource to Truly Master C# and Unity You may be able to "slap" some code together to get the job done, but you may wish you could understand the code in more depth and be able to come-up with your own code that scales-up painlessly; and this makes sense because if you truly want to create code that is efficient, scalable, and that leverages all the features available in Unity, you will probably need to learn C# in more depth, but also to understand how it can be combined to Unity's built-in libraries properly. There are plenty of resources out there; however very few explain C# in the context of Unity; and although they may provide code solutions, they may not give in-depth explanations on the C# concepts and the design ideas behind the code, or explain how the code can be optimized, so that you can avoid issues linked to memory or maintainability down the line. This is the reason why I have created this book. The idea behind its design is to provide a resource for different types of readers (i.e., beginner, intermediate or advanced programmers), to explain C# concepts in-depth, in the context of Unity, and to provide practical information and step-by-step instructions. This book was created to answer frequently-asked questions about C# programming for Unity. It includes over 300 pages of step-by-step instructions to help you become more proficient in C# for Unity. After reading this book, you should be able to (1) Understand C# and Object-Oriented Programming in-depth, (2) apply these concepts in Unity and implement common game mechanics through the built-in classes available in Unity, and (3) optimize your code so that it is easy to maintain. Find the Solution to your Problems in this 300-page Guide After using this book you will be able to solve your C# headaches. Each chapter can be read independently so that you can find and apply the solutions to a specific problem immediately. - Chapter 1 explains C# concepts in depth so that you can become proficient in C# programming and Object-Oriented concepts (e.g., inheritance, constructors, polymorphism, overloading, overriding, etc.) - Chapter 2 shows you how to code and debug C# scripts along with some best practices that will keep your code clean and bug-free. - Chapter 3 explains key concepts in linear algebra so that you can understand and use vectors in Unity (e.g., dot products for vision). - Chapter 4 acts as a cook book where you will find sections that explain how key (and frequently used) methods and C# classes can be employed to improve your gameplay, and you can go directly to the section that you need for your game (e.g., audio, detection, user-inputs, reading files, etc) and find both explanations and code examples that you can use immediately. - Chapter 5 shows you how to optimize your code and to structure it so that it is easier to maintain using component-based programming, design patterns and useful structures such as delegates or coroutines. - Chapter 6 answers Frequently Asked Questions (FAQs) related to C#. If you want to solve your C# programming headaches and to really understand how C# and Unity work together effectively, download this book now.

Getting Started with 3D Animation in Unity - Patrick Felicia
2018-12-03

Getting Started with 3D Animation in Unity can sometimes be tedious and difficult if you don't have an approach that is both simple and detailed.

Godot From Zero to Proficiency (Foundations) - Patrick Felicia
2021-03-11

Get started with Godot and game programming fast without the headaches Godot is a great software to create video games; however, it includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Godot the hard way. This book is the only one that will get you to learn Godot fast without wasting so much time. This book is the first book in the series "Godot from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Godot in no time. What you will learn After completing this book, you will be able to: - Know and master the features that you need to create 3D environments for your games. - Quickly create (and navigate through) realistic 3D indoors and outdoors environments. - Create a 3D Maze with lights, walls, and textures. - Create an island with sandy beaches, mountains, and water. - Include and control a car. - Export your games for Mac or PC. Who this book is for This book is for: - Hobbyists who need a book that gets them started with Godot and game development easily. - Parents looking for a book that introduces their children to game programming painlessly. - Teachers looking for a complete and clear resource on programming through the creation of games. - Aspiring indie

game developers. How this book is different This is the only book that you need to get started with Godot fast and to enjoy the journey without the frustration. This book includes six chapters that painlessly guide you through the necessary skills to master Godot's interface, use its core features, and create and navigate through realistic 3D environments. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. What this book offers This book includes all the features that you need to get started with Godot and game development: - Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. - Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. - Progress and feel confident in your skills: You will have the opportunity to learn and to use Godot at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. - Create your own games and feel awesome: With this book, you will build your 3D environments and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that you can use straight-away. If you want to get started with Godot today, then buy this book now

Pro Unity Game Development with C# - Alan Thorn 2014-05-29

In *Pro Unity Game Development with C#*, Alan Thorn, author of *Learn Unity for 2D Game Development* and experienced game developer, takes you through the complete C# workflow for developing a cross-platform first person shooter in Unity. C# is the most popular programming language for experienced Unity developers, helping them get the most out of what Unity offers. If you're already using C# with Unity and you want to take the next step in becoming an experienced, professional-level game developer, this is the book you need. Whether you are a student, an indie developer, or a season game dev professional, you'll find helpful C# examples of how to build intelligent enemies, create event systems and GUIs, develop save-game states, and lots more. You'll understand and apply powerful programming concepts such as singleton classes, component based design, resolution independence, delegates, and event driven programming. By the end of the book, you will have a complete first person shooter game up and running with Unity. Plus you'll be equipped with the know-how and techniques needed to deploy your own professional-grade C# games. If you already know a bit of C# and you want to improve your Unity skills, this is just the right book for you.

Developing 2D Games with Unity - Jared Halpern 2018-11-28

Follow a walkthrough of the Unity Engine and learn important 2D-centric lessons in scripting, working with image assets, animations, cameras, collision detection, and state management. In addition to the fundamentals, you'll learn best practices, helpful game-architectural patterns, and how to customize Unity to suit your needs, all in the context of building a working 2D game. While many books focus on 3D game creation with Unity, the easiest market for an independent developer to thrive in is 2D games. 2D games are generally cheaper to produce, more feasible for small teams, and more likely to be completed. If you live and breathe games and want to create them then 2D games are a great place to start. By focusing exclusively on 2D games and Unity's ever-expanding 2D workflow, this book gives aspiring independent game developers the tools they need to thrive. Various real-world examples of independent games are used to teach fundamental concepts of developing 2D games in Unity, using the very latest tools in Unity's updated 2D workflow. New all-digital channels for distribution, such as Nintendo eShop, Xbox Live Marketplace, the Playstation Store, the App Store, Google Play, itch.io, Steam, and GOG.com have made it easier than ever to discover, buy, and sell games. The golden age of independent gaming is upon us, and there has never been a better time to get creative, roll up your sleeves, and build that game you've always dreamed about. *Developing 2D Games with Unity* can show you the way. What You'll Learn Delve deeply into useful 2D topics, such as sprites, tile slicing, and the brand new Tilemap feature. Build a working 2D RPG-style game as you learn. Construct a flexible and extensible game architecture using Unity-specific tools like Scriptable Objects,

Cinemachine, and Prefabs. Take advantage of the streamlined 2D workflow provided by the Unity environment. Deploy games to desktop Who This Book Is For Hobbyists with some knowledge of programming, as well as seasoned programmers interested in learning to make games independent of a major studio.

C# Programming: From Problem Analysis to Program Design - Barbara Doyle 2013-05-02

Effectively balance today's most important programming principles and concepts with the latest insights into C# using Doyle's C# PROGRAMMING: FROM PROBLEM ANALYSIS TO PROGRAM DESIGN, 4E. This insightful introductory book highlights the latest Visual Studio 2012 and C# 4.0 software with a unique, principles-based approach to give readers a deep understanding of programming. Respected author Barbara Doyle admirably balances principles and concepts, offering just the right amount of detail to create a strong foundation for beginning students. A straightforward approach and understandable vocabulary make it easy for readers to grasp new programming concepts without distraction. The book introduces a variety of fundamental programming concepts, from data types and expressions to arrays and collections, all using the popular C# language. New programming exercises and new numbered examples throughout this edition reflect the latest updates in Visual Studio 2012, while learning objectives, case studies and Coding Standards summaries in each chapter ensure mastery. While this edition assumes no prior programming knowledge, coverage extends beyond traditional programming books to cover new advanced topics, such as portable class libraries to create applications for Windows Phone and other platforms. With entire chapters devoted to working with databases and Web-based applications, you'll find everything you need for a solid understanding of C# and programming fundamentals for ongoing success. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version. **Game Programming with Unity and C#** - Casey Hardman 2020-06-13 Designed for beginners with no knowledge or experience in game development or programming, this book teaches the essentials of the Unity game engine, the C# programming language, and the art of object-oriented programming. New concepts are not only explained, but thoroughly demonstrated. Starting with an introduction to Unity, you'll learn about scenes, GameObjects, prefabs, components, and how to use the various windows to interact with the engine. You'll then dive into the fundamentals of programming by reviewing syntax rules, formatting, methods, variables, objects and types, classes, and inheritance, all while getting your hands dirty writing and testing code yourself. Later, the book explains how to expose script data in the Inspector and the basics of Unity's serialization system. This carefully crafted work guides you through the planning and development of bare bones, simple game projects designed to exercise programming concepts while keeping less relevant interruptions out of the way, allowing you to focus on the implementation of game mechanics first and foremost. Through these example projects, the book teaches input handling, rigidbodies, colliders, cameras, prefab instantiation, scene loading, user interface design and coding, and more. By the end, you'll have built a solid foundation in programming that will pave your way forward in understanding core C# syntax and fundamentals of object-oriented programming—not just what to type but why it's typed and what it's really doing. *Game Programming with Unity and C#* will send you on your way to becoming comfortable with the Unity game engine and its documentation and how to independently seek further information on yet-untouched concepts and challenges. What You'll Learn Understand the fundamentals of object-oriented computer programming, including topics specifically relevant for games. Leverage beginner-to-intermediate-level skills of the C# programming language and its syntax. Review all major component types of the Unity game engine: colliders and rigidbodies, lights, cameras, scripts, etc. Use essential knowledge of the Unity game engine and its features to balance gameplay mechanics for making interesting experiences. Who This Book Is For Beginners who have no prior experience in programming or game development who would like to learn with a solid foundation that prepares them to further develop their skills.

Godot From Zero to Proficiency (Proficient) - Patrick Felicia 2022-02-15 First Edition, Published in February 2022 In this book, the fifth book in the series, you will become comfortable with creating your own RPG. If you were ever interested in creating systems for your game to speed up your coding and create and maintain levels easily, then this book is for you. The book includes a list of the learning objectives at the start of each chapter, step-by-step activities, and quizzes to test your knowledge,

and the content of each chapter is as follows: - Chapter 1 gives an introduction to the RPG genre. You will learn the design principles that will help you to speed up your development process. - Chapter 2 helps you to create and animate your main 3D character, add a camera that will follow this character as well as a mini-map. You will also learn to use Godot's built-in 3D editor to create a village. - Chapter 3 explains how to create a dialogue system from a JSON file and how to integrate it seamlessly into your game. - Chapter 4 explains how you can create a simple inventory system and use it to collect, store, and use items that you will find in your quest. - Chapter 5 shows you how to create a shop where the player can buy items that will then be added to the inventory. - Chapter 6 explains how you can add intelligent NPCs that will challenge the player. - Chapter 7 explains how you can create a quest system based on a JSON file to manage the objectives for each of your levels. You will learn to read and use this file for your game. - Chapter 8 explains how you can create an XP attribution system where the player can use the Xps gained in the previous level to increase his/her skills (e.g., accuracy, power, etc.) - Chapter 9 combines the skills that you have learned so far to create a final level where the player needs to eliminate guards, collect gold, and also defeat the boss. After reading this book you will become a better game programmer, improve your knowledge of coding and Godot, understand how to make a more complex game, learn some techniques to make an RPG game more modular, especially the quest system, use reusable code/assets that you can employ in your own game, create an inventory for your characters and much more... If you want to get started with your first RPG in Godot and learn reusable systems for your other games, using a tried-and-tested method: download this book now!

[Python Games from Zero to Proficiency \(Beginner\)](#) - Patrick Felicia
2022-08-15

Get started with Python programming and Python games development fast without the headaches Python is a great programming language; however, most people spend too long trying to learn how to code and create games with Python the hard way. This book is the only one that will get you to learn Python fast without wasting so much time. This book is the first book in the series "Python Games from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Python in no time. What you will learn After completing this book, you will be able to: Be comfortable with coding in Python. Use common structures to create programs in Python (e.g., loops, conditional statements, etc.). Know and master the features that you need to create 2D games (user interface, collision and keyboard detection). Read and extract data from files. Create popular 2D games such as hangman, tic-tac-toe or a coin collection game. Learn how to use the Pygame library. Who this book is for This book is for: Hobbyists who need a book that gets them started with Python and game development easily. Parents looking for a book that introduces their children to game programming painlessly. Teachers looking for a complete and clear resource on programming through the creation of games. Aspiring indie game developers. How this book is different This is the only book that you need to get started with Python and game programming fast and to enjoy the journey without frustration. This book includes seven chapters that painlessly guide you through the necessary skills to master Python and Python games development, use its core features, and create interesting 2D games. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. What this book offers This book includes all the features that you need to get started with Python and game development: Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. Progress and feel confident in your skills: You will have the opportunity to learn and to use Python at your own pace and become comfortable with its core features. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. Create your own games and feel awesome: With this book, you will build your own 2D games and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that

you can use straight away. If you want to get started with Python games today, then buy this book now

[Learning C# by Developing Games with Unity 5.x](#) - Greg Lukosek
2016-03-31

Develop your first interactive 2D platformer game by learning the fundamentals of C# About This Book Get to grips with the fundamentals of scripting in C# with Unity Create an awesome, 2D platformer game from scratch using the principles of object-oriented programming and coding in C# This is a step-by-step guide to learn the fundamentals of C# scripting to develop GameObjects and master the basics of the new UI system in Unity Who This Book Is For The book is targeted at beginner level Unity developers with no programming experience. If you are a Unity developer and you wish to learn how to write C# scripts and code by creating games, then this book is for you. What You Will Learn Understand the fundamentals of variables, methods, and code syntax in C# Get to know about techniques to turn your game idea into working project Use loops and collections efficiently in Unity to reduce the amount of code Develop a game using the object-oriented programming principles Generate infinite levels for your game Create and code a good-looking functional UI system for your game Publish and share your game with users In Detail Unity is a cross-platform game engine that is used to develop 2D and 3D video games. Unity 5 is the latest version, released in March 2015, and adds a real-time global illumination to the games, and its powerful new features help to improve a game's efficiency. This book will get you started with programming behaviors in C# so you can create 2D games in Unity. You will begin by installing Unity and learning about its features, followed by creating a C# script. We will then deal with topics such as unity scripting for you to understand how codes work so you can create and use C# variables and methods. Moving forward, you will find out how to create, store, and retrieve data from collection of objects. You will also develop an understanding of loops and their use, and you'll perform object-oriented programming. This will help you to turn your idea into a ready-to-code project and set up a Unity project for production. Finally, you will discover how to create the GameManager class to manage the game play loop, generate game levels, and develop a simple UI for the game. By the end of this book, you will have mastered the art of applying C# in Unity. Style and approach This is a step-by-step guide to developing a game from scratch by applying the fundamentals of C# and Unity scripting.

Advanced Teaching Methods for the Technology Classroom -
Petrina, Stephen 2006-09-30

"This book provides a comprehensive, critical approach to meeting the new challenges of technology in the classroom. It gathers together research on technology methods, principles, and content, acting as a reference source for proven and innovative methods. It presents an introduction to teaching educational technology, design, and engineering and contains strategies for innovation in technology education"--Provided by publisher.

Advanced Statistical Modeling, Forecasting, and Fault Detection in Renewable Energy Systems - Fouzi Harrou 2020-04-01

Fault detection, control, and forecasting have a vital role in renewable energy systems (Photovoltaics (PV) and wind turbines (WTs)) to improve their productivity, efficiency, and safety, and to avoid expensive maintenance. For instance, the main crucial and challenging issue in solar and wind energy production is the volatility of intermittent power generation due mainly to weather conditions. This fact usually limits the integration of PV systems and WTs into the power grid. Hence, accurately forecasting power generation in PV and WTs is of great importance for daily/hourly efficient management of power grid production, delivery, and storage, as well as for decision-making on the energy market. Also, accurate and prompt fault detection and diagnosis strategies are required to improve efficiencies of renewable energy systems, avoid the high cost of maintenance, and reduce risks of fire hazards, which could affect both personnel and installed equipment. This book intends to provide the reader with advanced statistical modeling, forecasting, and fault detection techniques in renewable energy systems.

Introduction to Game Design, Prototyping, and Development -
Jeremy Gibson 2015

This hands-on guide covers both game development and design, and both Unity and C#. This guide illuminates the basic tenets of game design and presents a detailed, project-based introduction to game prototyping and development, using both paper and the Unity game engine.

[Game Development with Unity](#) - Michelle Menard 2012

Provides information on using the Unity game engine to build games for any platform, including the Web, the Wii, and on smartphones.

Unity in Action - Joseph Hocking 2018-03-27

Summary Manning's bestselling and highly recommended Unity book has been fully revised! Unity in Action, Second Edition teaches you to write and deploy games with the Unity game development platform. You'll master the Unity toolset from the ground up, adding the skills you need to go from application coder to game developer. Foreword by Jesse Schell, author of The Art of Game Design Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Build your next game without sweating the low-level details. The Unity game development platform handles the heavy lifting, so you can focus on game play, graphics, and user experience. With support for C# programming, a huge ecosystem of production-quality prebuilt assets, and a strong dev community, Unity can get your next great game idea off the drawing board and onto the screen! About the Book Unity in Action, Second Edition teaches you to write and deploy games with Unity. As you explore the many interesting examples, you'll get hands-on practice with Unity's intuitive workflow tools and state-of-the-art rendering engine. This practical guide exposes every aspect of the game dev process, from the initial groundwork to creating custom AI scripts and building easy-to-read UIs. And because you asked for it, this totally revised Second Edition includes a new chapter on building 2D platformers with Unity's expanded 2D toolkit. What's Inside Revised for new best practices, updates, and more! 2D and 3D games Characters that run, jump, and bump into things Connect your games to the internet About the Reader You need to know C# or a similar language. No game development knowledge is assumed. About the Author Joe Hocking is a software engineer and Unity expert specializing in interactive media development. Table of Contents PART 1 - First steps Getting to know Unity Building a demo that puts you in 3D space Adding enemies and projectiles to the 3D game Developing graphics for your game PART 2 - Getting comfortable Building a Memory game using Unity's 2D functionality Creating a basic 2D Platformer Putting a GUI onto a game Creating a third-person 3D game: player movement and animation Adding interactive devices and items within the game PART 3 - Strong finish Connecting your game to the internet Playing audio: sound effects and music Putting the parts together into a complete game Deploying your game to players' devices

Unity 5 from Zero to Proficiency Foundations - Patrick Felicia 2016-02-25

Creating your own game can be very intimidating at the start, and quite often, regardless of your experience with games, it is sometimes difficult to find the time and motivation to get over the first barriers and get started. In this book you will become comfortable with Unity's interface and core features, by creating a project (with no coding involved) that includes both an indoor and an outdoor environment.

Advanced Modelling in Finance using Excel and VBA - Mary Jackson 2006-08-30

This new and unique book demonstrates that Excel and VBA can play an important role in the explanation and implementation of numerical methods across finance. Advanced Modelling in Finance provides a comprehensive look at equities, options on equities and options on bonds from the early 1950s to the late 1990s. The book adopts a step-by-step approach to understanding the more sophisticated aspects of Excel macros and VBA programming, showing how these programming techniques can be used to model and manipulate financial data, as applied to equities, bonds and options. The book is essential for financial practitioners who need to develop their financial modelling skill sets as there is an increase in the need to analyse and develop ever more complex 'what if' scenarios. Specifically applies Excel and VBA to the financial markets Packaged with a CD containing the software from the examples throughout the book Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

A Quick Guide to Card Games with Unity - Patrick Felicia 2020-10-02

Why this book can help you to get started fast with Card Games and Unity It can be intimidating to start with Unity, and while several books can provide comprehensive information, you may, like many other readers, just want to focus on a specific topic and get started fast. This book is part of a series entitled A Quick Guide To, and does just this. In this book series, you have the opportunity to get started on a specific topic in less than 60 minutes, delving right into the information that you really need. Of course, you can, after reading this book, move-on to more comprehensive books; however, quite often, you may have little time to complete a project or to get comfortable with a topic fast. In this book entitled A Quick Guide to Card Games with Unity, you will discover how to create most of the features found in card games by using simple

techniques, and you will learn and practice as you go. By following the techniques and suggestions described in this short book, I can promise you that you will get started very fast and create a simple card matching game. Along the way, you will also learn about C#, sprites, and events and combine these skills to create a card game. Content and structure of this book In this book, you will learn about card games with Unity, including: - Setting-up the interface. - Creating a game manager. - Adding multiple cards automatically. - Associating the correct image to each card. - Shuffling the cards. - Allowing the player to choose and move cards. - Checking for a match The main idea behind this book is to help you to get started quickly with card games. So, if you want to start creating challenging games with simple, yet effective techniques: download this book now!

Godot From Zero to Proficiency (Beginner) - Patrick Felicia 2021-04-20

Get started with Godot and game programming fast without the headaches Godot is a great software to create video games; however, it includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Godot and GDScript the hard way. This book is the only one that will get you to learn GDScript fast without wasting so much time. This book is the second book in the series "Godot from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Godot in no time. What you will learn After completing this book, you will be able to: - Code in GDScript. - Understand and apply GDScript concepts. - Create a 3D adventure game with the main character, a timer, and a mini-map. - Display and update a user interface with text and images. - Create and use variables and methods for your game. - Load new scenes from the code, based on events in your games. Who this book is for This book is for: - Hobbyists who need a book that gets them started with GDScript and game development easily. - Parents looking for a book that introduces their children to game programming painlessly. - Teachers looking for a complete and clear resource on programming through the creation of games. - Aspiring indie game developers. How this book is different This is the only book that you need to get started with Godot fast and to enjoy the journey without frustration. This book includes six chapters that painlessly guide you through the necessary skills to master GDScript, use Godot's core features, and create key game mechanics through GDScript (collisions, user interface, etc). It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. Content of the book - Chapter 1 introduces some core programming and GDScript principles. - Chapter 2 helps you to code your first script in GDScript. - Chapter 3 gets you to improve your scripting skills, enhance your game and add more interaction with a scoring system, collision detection, and access to new levels. - Chapter 4 shows you how to create and update the user interface of your game with text and images. - Chapter 5 shows you how to enhance your game with a splash-screen, a simple inventory system, and sound effects, as well as a mini-map. What this book offers - Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. - Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. - Progress and feel confident in your skills: You will have the opportunity to learn and to use Godot at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. If you want to get started with Godot today, then buy this book now

Unreal Engine from Zero to Proficiency (Foundations) - Patrick Felicia 2022-04-26

Get started with Unreal Engine and game programming fast without the headaches Unreal Engine is a great software to create video games; however, it includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Unreal Engine the hard way. This book is the only one that will get you to learn Unreal Engine fast without wasting so much time. This book is the first book in the series "Unreal Engine from Zero to Proficiency" where you will learn to code fast and be able to

create your own video games with Unreal Engine in no time. What you will learn After completing this book, you will be able to: - Know and master the features that you need to create 3D environments for your games. - Quickly create (and navigate through) realistic 3D indoors and outdoors environments. - Create a 3D Maze with lights, walls, and textures. - Use Unreal Engine's built-in editor to create a house. - Create an island with trees, sandy beaches, mountains, and water. - Include and control a car. - Export your games. Who this book is for This book is for: - Hobbyists who need a book that gets them started with Unreal Engine and game development easily. - Parents looking for a book that introduces their children to game programming painlessly. - Teachers looking for a complete and clear resource on programming through the creation of games. - Aspiring indie game developers. How this book is different This is the only book that you need to get started with Unreal Engine fast and enjoy the journey without frustration. This book includes six chapters that painlessly guide you through the necessary skills to master Unreal Engine's interface, use its core features, and create and navigate through realistic 3D environments. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. What this book offers - This book includes all the features that you need to get started with Unreal Engine and game development: - Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. - Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. - Progress and feel confident in your skills: You will have the opportunity to learn and use Unreal Engine at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. - Create your own games and feel awesome: With this book, you will build your own 3D environments and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that you can use straight away. If you want to get started with Unreal Engine today, then buy this book now.

Unity from Zero to Proficiency (Intermediate) - Patrick Felicia Newly Edited and Updated Version (Third Edition) for Unity 2020 Learn C# with Unity, and create a full FPS game without the headaches Without this book, most people spend too long trying to learn C# with Unity the hard way. This book is the only one that will get you to learn Unity fast without wasting so much time. It includes twelve chapters that painlessly teach you the necessary skills to create an FPS game and to learn intermediate C# and Unity techniques. What you will learn After completing this book, you will be able to: - Use Unity's built-in methods. - Use Rigidbody physics to propel airborne objects. - Use a Finite State Machine to create intelligent Non-Payer Characters(NPCs). - Manage 3D animations for the NPCs. - Create NPCs who can chase the player. - Create and manage weapons and ammunition for the player. - Include advanced Artificial Intelligence for NPCs including: vision, hearing, random paths, fleeing from or ambushing the player. - Create a 2D scrolling shooter. Content and structure of this book The content of the books is as follows: - In Chapter 1, you will create a simple 3D game where the user has to reach the end of the level by avoiding projectiles from intelligent robots. - In Chapter 2, you will create a gun and a grenade launcher that the player can use to defeat enemies. - In Chapter 3, you will start to use Mecanim and NavMesh navigation to control an animated character that detects, follows, or attacks the player. - In Chapter 4, you will combine the skills that you have acquired in the previous chapters to create a fully functional level where the player needs to escape a level full of armed NPCs. You will also learn how to generate a game level dynamically from your code. - In Chapter 5, you will add off mesh links and manage costs and areas so that NPCs can avoid sections. - In Chapter 6, you will make it possible for NPCs to follow fixed or random paths. - In Chapter 7, you will add vision and hearing to the NPCs. - In Chapter 8, you will create smarter NPCs that can flee from or ambush the player. - In Chapter 9, you will control an army of NPCs and create an AI-driven opposite team. - In Chapter 10, you will create a simple 2D scrolling shooter. - In Chapter 11, you will

improve your game by adding explosions and a scrolling background. - In Chapter 12, you will add intelligent spaceships that attack the player. - In Chapter 13, you will include a shield to the player's spaceship, along with other interesting features (e.g., sound FX, a scoring system, etc). If you want to create FPS games, Intelligent NPCs, and 2D Shooters with Unity using a tried-and-tested method: download this book now!

Learning C# by Developing Games with Unity 2020 - Harrison Ferrone 2020-08-21

This fifth edition of the popular C# guide helps you learn the building blocks of C# language, right from variables to classes and exception handling. After getting to grips with the basics of C# programming, it takes you through the world of Unity game development and how you can apply C# knowledge using game development examples.

Mastering Unity Scripting - Alan Thorn 2015-01-29

Mastering Unity Scripting is an advanced book intended for students, educators, and professionals familiar with the Unity basics as well as the basics of scripting. Whether you've been using Unity for a short time or are an experienced user, this book has something important and valuable to offer to help you improve your game development workflow.

Unity Game Development Cookbook - Paris Buttfield-Addison 2019-03-13

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.

Transforming the Workforce for Children Birth Through Age 8 - National Research Council 2015-07-23

Children are already learning at birth, and they develop and learn at a rapid pace in their early years. This provides a critical foundation for lifelong progress, and the adults who provide for the care and the education of young children bear a great responsibility for their health, development, and learning. Despite the fact that they share the same objective - to nurture young children and secure their future success - the various practitioners who contribute to the care and the education of children from birth through age 8 are not acknowledged as a workforce unified by the common knowledge and competencies needed to do their jobs well. Transforming the Workforce for Children Birth Through Age 8 explores the science of child development, particularly looking at implications for the professionals who work with children. This report examines the current capacities and practices of the workforce, the settings in which they work, the policies and infrastructure that set qualifications and provide professional learning, and the government agencies and other funders who support and oversee these systems. This book then makes recommendations to improve the quality of professional practice and the practice environment for care and education professionals. These detailed recommendations create a blueprint for action that builds on a unifying foundation of child development and early learning, shared knowledge and competencies for care and education professionals, and principles for effective professional learning. Young children thrive and learn best when they have secure, positive relationships with adults who are knowledgeable about how to support their development and learning and are responsive to their individual progress. Transforming the Workforce for Children Birth Through Age 8 offers guidance on system changes to improve the quality of professional practice, specific actions to improve professional learning systems and workforce development, and research to continue to build the knowledge base in ways that will directly advance and inform future actions. The recommendations of this book provide an opportunity to improve the quality of the care and the education that children receive, and ultimately improve outcomes for children.

Godot From Zero to Proficiency (Intermediate) - Patrick Felicia 2021-07-13

Get started with Godot and game programming fast without the headaches Godot is a great software to create video games; however, it

includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Godot and GDScript the hard way. This is the only book that will get you to learn GDScript fast without wasting so much time. It is the third book in the series "Godot from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Godot in no time. What you will learn After completing this book, you will be able to: Learn intermediate GDScript concepts including timers, ray-casting, templates, co-routines, match structures, functions, loops, classes, enums. Create intelligent robots that target and shoot at the player. Create a weapon management system where the player avails of and can switch between weapons. Create an FPS game where the player has to defeat intelligent enemies and escape a space station Create intelligent NPCs that can navigate, detect and follow the player, and use weapons. Import and control 3D-animated characters from your scripts. Who this book is for This book is for: Hobbyists who need a book that gets them to be proficient with GDScript and game development easily. Parents looking for a book that introduces their children to game programming painlessly. Teachers looking for a complete and clear resource on programming through the creation of games. Aspiring indie game developers. How this book is different This is the only book that you need to get started with Godot fast and to enjoy the journey without frustration. This book includes six chapters that painlessly guide you through the necessary skills to master GDScript, use Godot's core features, and create key game mechanics through GDScript. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. Content of the book Chapter 1 shows you how you can create robots that will target the player. Chapter 2 explains how you can create a weapon management system, collect ammunition, switch between weapons, and hit targets using ray-casting. Chapter 3 gets you to create NPCs that can detect, the player, chase the player, patrol around the level, and inflict damage to the player through punches or gunshots. Chapter 4 explains how you can improve the NPCs' intelligence so that they can follow a given path, and avoid obstacles along the way. Chapter 5 provides answers to Frequently Asked Questions (FAQs). What this book offers Learn without the headaches, Make your dream of creating your own games come true, progress and feel confident in your skills. This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. It ensures that you stay motivated by giving you the right amount of information and challenge in each chapter. You will have the opportunity to learn and to use Godot at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. If you want to get started with Godot today, then buy this book now

Getting Started with Unity 2018 - Third Edition - Dr Edward Lavieri
2018-03-21

The Unity game engine has revolutionized the gaming industry with its complete set of intuitive tools and rapid workflows which can be used to create interactive 3D content. With Unity you can scaffold your way from the basics and make a game without coding. This book will guide you through the entire process of creating a 3D VR game, from downloading the Unity game engine to publishing your game. It not only gives you a strong foundation, but puts you on the path to game development. Beginning with an overview of the Unity engine and its interface, you will walk through the process of creating a game environment and learn how to use built-in assets as well as assets created with third-party 3D modeling tools such as Blender. Moving on, you will create your very own animation clips from within Unity and learn scripting in Unity. You will master exciting concepts including mini-mapping, the game navigation system, sound effects, shadows, and light effects. Next, you'll learn how to create your first VR experience, right from setting up the project to image effects. You'll be familiarized with all the tools that Unity has to offer to create your own immersive VR experiences. Each section is a stepping-stone toward the completion of the final game. By the end of the book, you'll have learned advanced topics such as cross-platform considerations that enable your games to run on every platform.

Beginning 3D Game Development with Unity 4 - Sue Blackman
2013-08-27

Beginning 3D Game Development with Unity 4 is perfect for those who would like to come to grips with programming Unity. You may be an artist who has learned 3D tools such as 3ds Max, Maya, or Cinema 4D, or you may come from 2D tools such as Photoshop and Illustrator. On the

other hand, you may just want to familiarize yourself with programming games and the latest ideas in game production. This book introduces key game production concepts in an artist-friendly way, and rapidly teaches the basic scripting skills you'll need with Unity. It goes on to show how you, as an independent game artist, can create interactive games, ideal in scope for today's casual and mobile markets, while also giving you a firm foundation in game logic and design. The first part of the book explains the logic involved in game interaction, and soon has you creating game assets through simple examples that you can build upon and gradually expand. In the second part, you'll build the foundations of a point-and-click style first-person adventure game—including reusable state management scripts, dialogue trees for character interaction, load/save functionality, a robust inventory system, and a bonus feature: a dynamically configured maze and mini-map. With the help of the provided 2D and 3D content, you'll learn to evaluate and deal with challenges in bite-sized pieces as the project progresses, gaining valuable problem-solving skills in interactive design. By the end of the book, you will be able to actively use the Unity 3D game engine, having learned the necessary workflows to utilize your own assets. You will also have an assortment of reusable scripts and art assets with which to build future games. What you'll learn How to build interactive games that work on a variety of platforms Take the tour around Unity user interface fundamentals, scripting and more Create a test environment and gain control over functionality, cursor control, action objects, state management, object metadata, message text and more What is inventory logic and how to manage it How to handle 3D object visibility, effects and other special cases How to handle variety of menus and levels in your games development How to handle characters, scrollers, and more How to create or integrate a story/walkthrough How to use the new Mecanim animation Who this book is for Students or artists familiar with tools such as 3ds Max or Maya who want to create games for mobile platforms, computers, or consoles, but with little or no experience in scripting or the logic behind games development. Table of Contents 01. Introduction to Game Development 02. Unity UI basics 03. Introduction to Scripting 04. Terrain Generation and Environment 05. Exploring Navigation 06. Cursor Control and Interaction 07. Importing Assets 08. Action Objects 09. Managing State 10. Exploring Transitions 11. Physics and Special Effects 12. Message Text and HUD 13. Inventory Logic 14. Managing Inventory 15. Dialogue Trees 16. Mecanim 17. Game Environment 18. Setting up the Game 19. Menus and Levels

English as a Global Language - David Crystal 2012-03-29

Written in a detailed and fascinating manner, this book is ideal for general readers interested in the English language.

Unity 5 from Zero to Proficiency (Advanced) - Patrick Felicia
2016-10-14

In this book, the fourth book in the series, you will learn to create a simple network game, generate levels procedurally, and optimize the performance of your game. This book can be read as a standalone (you don't need to have read the previous books in the series, although it may help) and focuses on four aspects: procedural level creation, database access, multi-player networked games, and code and project optimization (i.e., memory and speed).The main idea behind this book is to save you some headaches when you need to maintain your code or expand your game, and to help you to find the time to actually code your game, by explaining simple and effective ways and best coding and organizational practices that you can use easily to create more code (and games) in less time with less stress and more fun.The content of each chapter is as follows: Chapter 1 explains how you can create procedural levels, using arrays, text files, XML files, or images, and avoid spending a lot of time creating your scene manually. Chapter 2 explains how you can read and write data from/to a database through Unity to save and update user preferences. Chapter 3 explains how to create a simple (but fun) network tank game that can be played by two remote players. Chapter 4 explains advanced techniques to boost the performance of your game, and to make your code and project easily maintainable. Chapter 5 provides answers to frequently-asked questions. The book includes: Step-by-step activities. Challenges at the end of each chapter. Quizzes. Code solutions for each chapter. Cheat-sheets (i.e., shortcuts, best practice, etc.) that you can download.

Unity from Zero to Proficiency (Advanced) - Patrick Felicia
2018-02-14

Newly Edited and Updated Version (Third Edition) for Unity 2019 Create multiplayer games and procedural levels and boost game performances without the headaches Without this book, most people spend too long trying to learn C# with Unity the hard way. This book is the only one that

will get you to learn Unity fast without wasting so much time. It includes six chapters that painlessly teach you the necessary skills to extract data from files, create procedural levels, connect to a database, create a network game and optimize your code for a faster and more engaging game. What you will learn After completing this book, you will be able to:

- Create levels procedurally with C#, save yourself time, and speed-up the level design process.
- Create levels randomly so that they are different every time the scene is loaded and add re-playability to your game.
- Read XML files using C# and use the data within to create levels.
- Create a space simulation using XML and C# and make your scene customizable.
- Connect to a database from Unity to save and retrieve the player's score.
- Create a simple network tank game with projectiles and explosions.
- Create a Simon game.
- Optimize your code and your project's structure

Content and structure of this book The content of the books is as follows:

- In Chapter 1, you will create indoors and outdoors levels from your code.
- In Chapter 2, you will set-up your own database and write data from/to the database through Unity to save and update the player's score.
- In Chapter 3, you will create a simple (but fun) network tank game.
- In Chapter 4, you will design and implement your version of the Simon game, whereby the player has to memorize an increasing sequence of colors and sounds.
- In Chapter 5, you will learn advanced techniques to boost the performance of your game, and to make your code and project easily maintainable.
- Chapter 6 provides answers to frequently asked questions. If you want to start creating multi-player games and procedural levels using a tried-and-tested method: download this book now!

Unity From Zero to Proficiency (Foundations) - Patrick Felicia 2017-11-01

Newly Edited and Updated Version (Fourth Edition) for Unity 2019. Get started with Unity and game programming fast without the headaches Unity is a great software to create video games; however, it includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Unity the hard way. This book is the only one that will get you to learn Unity fast without wasting so much time. This book is the first book in the series "Unity from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Unity in no time. What you will learn - After completing this book, you will be able to:

- Know and master the features that you need to create 2D and 3D environments for your games.
- Quickly create (and navigate through) realistic 3D indoors and outdoors environments.
- Create a 3D Maze with lights, walls, and textures.
- Use ProBuilder to create a house.
- Create an island with trees, sandy beaches, mountains, and water.
- Include and control a car and a plane.
- Create a 2D platform game (with no scripting needed).
- Export your games to the web.

Who this book is for This book is for:

- Hobbyists who need a book that gets them started with Unity and game development easily.
- Parents looking for a book that introduces their children to game programming painlessly.
- Teachers looking for a complete and clear resource on programming through the creation of games.
- Aspiring indie game developers.

How this book is different This is the only book that you need to get started with Unity fast and to enjoy the journey without the frustration. This book includes six chapters that painlessly guide you through the necessary skills to master Unity's interface, use its core features, and create and navigate through realistic 2D and 3D environments. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. What this book offers This book includes all the features that you need to get started with Unity and game development: Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. In addition, if you are more of a visual learner, you will gain access to a FREE video training that covers all the topics and features introduced in the book so that you can see how it is done. Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. Progress and feel confident in your skills: You will have the opportunity to learn and to use Unity at your own pace and to become comfortable with its interface. This is because every single new concept introduced

will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. Create your own games and feel awesome: With this book, you will build your own 2D and 3D environments and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that you can use straight-away. If you want to get started with Unity today, then buy this book now.

A Quick Guide to Artificial Intelligence with Unity - Patrick Felicia 2020-10-02

Why this book can help you to get started fast with Artificial Intelligence and Unity It can be intimidating to start with Unity, and while several books can provide comprehensive information, you may, like many other readers, just want to focus on a particular topic and get started fast. This book is part of a series entitled A Quick Guide To, and does just this. In this book series, you have the opportunity to get started on a particular topic in less than 60 minutes, delving right into the information that you really need. Of course, you can, after reading this book, move-on to more comprehensive books; however, quite often, you may have little time to complete a project or to get comfortable with a topic fast. In this book entitled A Quick Guide to Artificial Intelligence with Unity, you will discover how to create intelligent Non-Player Characters using simple techniques and built-in Assets and include common AI features found in 3D games, and learn and practice as you go. By following the techniques and suggestions described in this short book, I can promise you that you will get started very fast and create intelligent NPCs. Along the way, you will also learn about cameras, baking a scene, detecting collisions, and combine these to create challenging AI. Content and structure of this book In this book, you will learn about AI with Unity, including:

- Using built-in assets.
- Make it possible for NPCs to navigate to their destination.
- Make it possible for NPCs to Avoid obstacles.
- Define areas where NPCs should or should not go.

The main idea behind this book is to help you to get started quickly with Artificial Intelligence. So, if you want to start creating challenging games with simple, yet effective techniques : download this book now!

Unity Certified Programmer: Exam Guide - Philip Walker 2020-06-30

A practical guide to Unity game scripting using C#, backed with practice tests, exam tips, and easy-to-follow examples to help you better prepare for the exam and become a pro in Unity programming Key FeaturesDiscover the essentials of game scripting with Unity and C# to customize every aspect of your gameOvercome challenges in Unity game development using effective techniques and easy solutionsPass the Unity certification exam with the help of mock tests, exam tips, and self-assessment questionsBook Description Unity Certified Programmer is a global certification program by Unity for anyone looking to become a professional Unity developer. The official Unity programmer exam will not only validate your Unity knowledge and skills, but also enable you to be part of the Unity community. This study guide will start by building on your understanding of C# programming and take you through the process of downloading and installing Unity. You'll understand how Unity works and get to grips with the core objectives of the Unity exam. As you advance, you'll enhance your skills by creating an enjoyable side-scrolling shooter game that can be played within the Unity Editor or any recent Android mobile device. This Unity book will test your knowledge with self-assessment questions and help you take your skills to an advanced level by working with Unity tools such as the Animator, Particle Effects, Lighting, UI/UX, Scriptable Objects, and debugging. By the end of this book, you'll have developed a solid understanding of the different tools in Unity and understand how to create impressive Unity applications by making the most of its toolset. What you will learnDiscover techniques for writing modular, readable, and reusable scripts in UnityImplement and configure objects, physics, controls, and movements for your game projectsUnderstand 2D and 3D animation and write scripts that interact with Unity's Rendering APIExplore Unity APIs for adding lighting, materials, and texture to your appsWrite Unity scripts for building interfaces for menu systems, UI navigation, application settings, and much moreDelve into SOLID principles for writing clean and maintainable Unity applicationsWho this book is for The book is for game developers, software developers, mobile app developers, and Unity developers who want to advance in the game or related industry. Basic knowledge of C# programming and Unity engine is required.