Unity Game Development Scripting

Kyle D'Aoust
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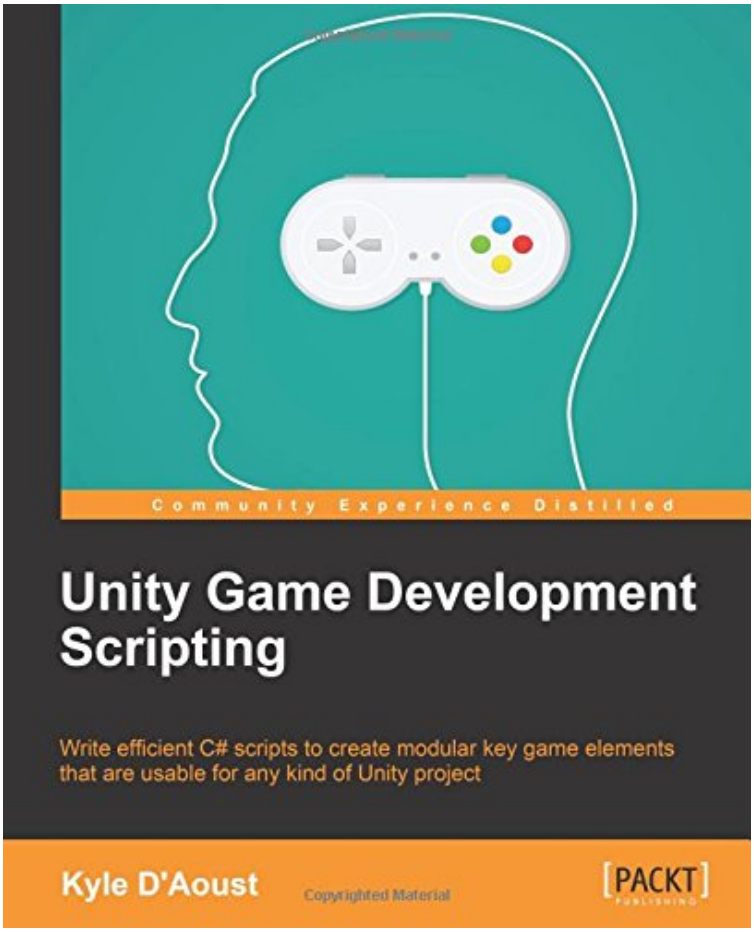

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Kyle D'Aoust : Unity Game Development Scripting before purchasing it in order to gage whether or not it would be worth my time, and all praised Unity Game Development Scripting:

5 of 5 people found the following review helpful. Useful guide for specific techniques, not complete gamesBy Robert L. DixonI read a lot of books about Unity and C# since I'm always trying to up my game, so to speak. This book has some good sections but overall doesn't cohere as well as it could. But it could be useful for people with some Unity experience who are looking for specific techniques.It jumps right into scripting individual subsystems without talking about what kind of game is going to be built and how everything will fit together. Later on you learn the example game is an RPG-style game with characters, weapons and objects. It would have been nice to know this ahead of time, because some of the chapters are only relevant to this type of game.Overall this is more like a "cookbook" of various recipes, as opposed to a step-by-step guide to building a real game. If you already have some experience coding C# in Unity, and you are interested in some of the chapter topics, you should find the book useful.Here's a brief rundown on some specific chapters:* The first chapter on Interactive Input present a nice technique for switching among input

control schemes. However there's an emphasis on supporting the XBox 360 controller which might not be relevant to a lot of developers.* The GUI chapter relies a little too heavily on the old, mostly obsolete Unity GUI approach, so it is not too useful in the post-Unity-4.6 world.* The Expandable Item Classes chapter presents a nice starting point for structuring in-game items that affect player characters and objects.* The chapter on AI covers two different AI topics: simple enemy decision-making (switching an enemy object among Idle, Guard, Combat, Flee states), and pathfinding. The pathfinding section gives a good introduction to Unity's NavMesh system, which is not covered in many other books. The example for this chapter uses the AI scripts to animate some freely-available skeleton models (from the Asset Store) around an environment.* The chapter about Keeping Score on the other hand presents some real brute-force coding with hard-coded achievement thresholds and such. There are better and simpler ways to code this, so I would give this chapter a pass.* The same could be said for the next chapter, which covers Saving and Loading Data. It uses XML, which is generally heavier and harder to work with than JSON, and again shows some brute-force coding that might not hold up well over time.* Chapter 8 deals with audio and offers some simple, reusable classes for managing and playing sounds.* The final chapter, "Putting It All Together," builds a simple game by assembling all the subsystems from previous chapters. It's very nice to see all the parts working together at the end. This chapter could have been fleshed out a bit more. It would have been nice to have an overview, like a diagram, of how all the subsystems fit together, rather than a step-by-step "now add this, now add this" sequence. In fact this kind of overview would have been really useful prior to Chapter 1, so the reader can go into the rest of the book knowing what to expect.Overall there are a lot of things to learn from this book. In addition there is a nice emphasis on play-testing at the end of each chapter, with suggestions of ways to enhance the examples in your own games. But it's not a complete guide to building your own games in Unity.2 of 2 people found the following review helpful. All in all, if you are not the programming faint of heart, this is worth the read.By Michael MidKnightI recently have had the opportunity to review the book Unity Game Development Scripting by Kyle DAoust, being a follower of the Unity platform and technology for over the past decade, I was very much needless to say excited to be able to review another book that delves into the programming aspects of the Unity Game Engine.One thing I would definitely like to point out is that although it is mentioned in the introductory pages of the book, I strongly recommend anybody with a very solid programming background or individuals who are very comfortable programming within Unity to be able to make the most out of this intermediate to advanced level programming book.Being of a design and art minded background myself, I did have some trouble reproducing the desired textbook results, but then again I did go into this book with an open mind without much of a programming background in regards to Unity. Although most of the examples are rather detailed in the scripting aspects of Unity itself, I felt many places in the book in which the author could have left notes as a heads up for anybody delving into the examples for potential complications. Right off the bat at Chapter 1, it has you dealing with input preferences for a game project, something I have always been very curious with as to how Unity handles and organizes multiple input options.This particular example, although it does give you a rather knowledgeable approach to utilizing a Xbox 360 controller and appropriating it into a game project, I felt more detail could have been given about OS specifics (used by the author) / potential driver issues (if any) / etc. soas to be mindful of any major programming headaches to watch out for in the pipeline, ID proper controller inputs when using multiple controllers and the like. (Reviewers Note: This does go a bit off topic, but I do not fault the author for not delving into details about the problematic input as it is a known Unity issue that is on the list to be fixed or could have already been addressed with Unity 5. This review was done with Unity V4.3.4f1 (e444f76e01cd))Although the book really breaks down programming with Unity to be much less intimidating then referencing the Unity programming reference manual , it leaves little room for digesting this newfound information. Very point by point, "This is what this string of code can do, now apply it here." type approach.What it does do well however is introduce you into a variety of important topics and programming skills quickly soas that almost all of them will be utilized in some aspect of your developmental pipeline when putting together your next Unity project or prototype.All in all, if you are not the programming faint of heart and definitely are comfortable with using this book more as a reference rather than a step by step detailed tutorial resource, it is definitely a read I would recommend regardless of previous Unity scripting experience. The scripting samples that it does layout are for the most part incredibly helpful and poignant about the topic(s) being reviewed, from inputs to Item Class definitions, Behavioral Trees or GUI approaches, it will definitely get your projects or at the very least your thought process in the right direction for your next successful pitch, prototype, or blockbuster.2 of 2 people found the following review helpful. Cookbook for intermediate to advanced level programming topics - but still with the old OnGUI systemBy Thomas FeuchtI recently have had the opportunity to review the book Unity Game Development Scripting by Kyle DAoust, which was released in December 2014. In my opinion this intermediate to advanced level programming book requires you to have a basic understanding of C# and Unity 4.x in general. In my review I will take you through all 10 chapters of the book which contains 181 pages in total:1. Interactive InputThis chapter gives an in-depth look at how to create controls for both the Xbox 360 Controller and mouse/keyboard inputs. You will also learn how to create customizable control profiles that the player can edit.2. GUI TimeThe second chapter will help you to create health bars, player data, hovering 3D health bars, 3D damage reports, enemy names, and so on. This sounds interesting, but unfortunately the whole book still uses Unity's old

OnGUI system, so I think this was the biggest disappointment and I doubt that the UI aspects are helpful in creating real games with current Unity.3. Expandable Item ClassesThis chapter covers how to create in-game item classes for self, melee, projectile items and a classification system for these items. In my opinion this chapter shows you how to implement a generic item system which can be used in many games, especially RPGs.4. InventoryIn this chapter's inventory system, there'll be common inventory elements created such as adding items, removing items, and creating quick-select items. Finally, you'll also create a way to show the inventory on the GUI. But once again, Kyle uses Unity's old OnGUI system and the chapter's result looks more applicable for a prototype than for a releasable game.5. Enemy and friendly AIsThis chapter demonstrates how to create a dynamic AI including finite state machines and behavior trees. This AI system will handle behaviors, actions, animations, pathfinding,and also a waypoint system. This chapter is about 25 pages strong, so it's one of the more detailed chapters of the book. But AI is also one of the most complex topics in game development, so I see this chapter as a general introduction for AI with Unity.6. Keeping ScoreThe 6th chapter covers how to create, track, and save stats for the player in a class named StatsTracker. This tracker is using PlayerPrefs to persist the player's stats. You'll also create a system for achievements for those stats as well. This chapter is very detailed because it contains a lot of code for the StatsTracker and the achievement system for every achievement.7. Creating Save and Load SystemsIf you need to implement a checkpoint-based save system and an anywhere/anytime saving system, this chapter is for you. But advanced topics like protection against manipulation of those save files are missing.8. Aural IntegrationThis chapter covers the creation of systems that will handle background music, atmospheric sounds, and sound effects. These systems are a playlist system, a randomized system, and an event-driven system. I think this chapter is helpful for nearly every game because sound and music is a very general topic.9. Game SettingsChapter 9 covers how to create customizable configurations for audio (like speaker settings) and video (like shadows on/off or v-sync on/off) settings. You'll create the ability to save and load these settings by using PlayerPrefs. This chapter contains a very basic implementation which can be used in many games regardless of their genre. It's easy to follow and to implement in your own game.10. Putting It All TogetherThe last chapter assembles everything together. This chapter looks like the author was in a real hurry to finish the book. In only 9 pages you put everything together for an RPG-style game with characters, weapons and objects. Sadly there's no way to download the whole unity project with everything put together. The book's source is only containing cs-files for each chapter separately.Summary 3/5 starsOverall this is more like a "cookbook" of various recipes, which are assembled in the last chapter in only 9 pages for an RPG-style game with characters, weapons and objects. It would have been nice to know this earlier in the book, because some of the chapters are only relevant to this type of game. I really liked the usage of C# instead of JavaScript for Unity Scripting, because I prefer C# over JavaScript. If you are looking for any of the "cookbook" aspects of this book, you will get an introductory description and a concreate implementation of how you solve those problems. But it's really a pity that the old OnGUI system is still being used instead of Unity 4.6's new UI system. I think this is definitely a no-go for a book published in December 2014 and should be updated as soon as possible from the author. I also think 181 pages are a bit insufficient for the price tag of this book.

Write efficient C# scripts to create modular key game elements that are usable for any kind of Unity projectAbout This BookWrite customizable scripts that are easy to adjust to suit the needs of different projectsCombine your knowledge of modular scripting elements to build a complete gameBuild key game features, from player inventories to friendly and enemy artificial intelligenceWho This Book Is ForIf you are new to Unity scripting and want to learn simple and modular code and advance your knowledge to the next level, this is the book for you.What You Will Learn Include controls for both keyboard/mouse and the gamepad Create three different types of expandable items Implement an inventory that includes a hot key system Optimize your game's video and audio options Integrate a GUI HUD with buttons, health bars, and damage reports Make a complex AI system Save game data in multiple styles Track player statistics and scores In DetailThe intuitive and powerful Unity game engine is one of the most widely used and best loved packages for game development. Unity scripting is an essential but challenging skill to master in order to create custom game elements. Learning modular scripting allows you to rewrite as little code as possible as you deploy your scripts to multiple projects and work easier, quicker, and more efficiently than before.In each chapter of this book, you'll learn how to script new game elements. Beginning with making custom controls for the keyboard and mouse, as well as the Xbox 360 Controller, you'll then get to grips with more complex systems such as inventory, data saving, and artificial intelligence. As you create these elements, you'll also learn how to make your scripts simpler and easy to use. This will allow drag-and-drop deployment, which is to be used by designers and nonprogrammers. Finally, you'll combine all of your newfound skills to create your own complete game project.

About the AuthorKyle D'Aoust Kyle D'Aoust has been programming for about 10 years. In 2004, at the age of 14, he taught himself the C++ language. By the end of high school, he had learned Visual Basic and JavaScript as well. In college, he majored in game production and specialized in the Unity engine using C#. After graduating from college, Kyle started his career with gamifying software. He is currently working as a Serious Games Developer at Quicken

Loans, creating games used as training material.