

[Get Print Book](#)

Procedural Content Generation for C++ Game Development

By Dale Green

[Download](#)[Read Online](#)

Procedural Content Generation for C++ Game Development By Dale Green

Get to know techniques and approaches to procedurally generate game content in C++ using Simple and Fast Multimedia Library

About This Book

- This book contains a bespoke Simple and Fast Multimedia Library (SFML) game engine with complete online documentation
- Through this book, you'll create games that are non-predictable and dynamic and have a high replayability factor
- Get a breakdown of the key techniques and approaches applied to a real game.

Who This Book Is For

If you are a game developer who is familiar with C++ and is looking to create bigger and more dynamic games, then this book is for you. The book assumes some prior experience with C++, but any intermediate concepts are clarified in detail. No prior experience with SFML is required.

What You Will Learn

- Discover the systems and ideology that lie at the heart of procedural systems
- Use Random number generation (RNG) with C++ data types to create random but controlled results
- Build levels procedurally with randomly located items and events
- Create dynamic game objects at runtime
- Construct games using a component-based approach
- Assemble non-predictable game events and scenarios
- Operate procedural generation to create dynamic content fast and easily
- Generate game environments for endless replayability

In Detail

Procedural generation is a growing trend in game development. It allows developers to create games that are bigger and more dynamic, giving the games a higher level of replayability. Procedural generation isn't just one technique, it's a collection of techniques and approaches that are used together to create dynamic systems and objects. C++ is the industry-standard programming language to

write computer games. It's at the heart of most engines, and is incredibly powerful. SFML is an easy-to-use, cross-platform, and open-source multimedia library. Access to computer hardware is broken into succinct modules, making it a great choice if you want to develop cross-platform games with ease.

Using C++ and SFML technologies, this book will guide you through the techniques and approaches used to generate content procedurally within game development.

Throughout the course of this book, we'll look at examples of these technologies, starting with setting up a roguelike project using the C++ template. We'll then move on to using RNG with C++ data types and randomly scattering objects within a game map. We will create simple console examples to implement in a real game by creating unique and randomised game items, dynamic sprites, and effects, and procedurally generating game events. Then we will walk you through generating random game maps. At the end, we will have a retrospective look at the project.

By the end of the book, not only will you have a solid understanding of procedural generation, but you'll also have a working roguelike game that you will have extended using the examples provided.

Style and approach

This is an easy-to-follow guide where each topic is explained clearly and thoroughly through the use of a bespoke example, then implemented in a real game project.

 [Download Procedural Content Generation for C++ Game Develop ...pdf](#)

 [Read Online Procedural Content Generation for C++ Game Devel ...pdf](#)

Procedural Content Generation for C++ Game Development

By Dale Green

Procedural Content Generation for C++ Game Development By Dale Green

Get to know techniques and approaches to procedurally generate game content in C++ using Simple and Fast Multimedia Library

About This Book

- This book contains a bespoke Simple and Fast Multimedia Library (SFML) game engine with complete online documentation
- Through this book, you'll create games that are non-predictable and dynamic and have a high replayability factor
- Get a breakdown of the key techniques and approaches applied to a real game.

Who This Book Is For

If you are a game developer who is familiar with C++ and is looking to create bigger and more dynamic games, then this book is for you. The book assumes some prior experience with C++, but any intermediate concepts are clarified in detail. No prior experience with SFML is required.

What You Will Learn

- Discover the systems and ideology that lie at the heart of procedural systems
- Use Random number generation (RNG) with C++ data types to create random but controlled results
- Build levels procedurally with randomly located items and events
- Create dynamic game objects at runtime
- Construct games using a component-based approach
- Assemble non-predictable game events and scenarios
- Operate procedural generation to create dynamic content fast and easily
- Generate game environments for endless replayability

In Detail

Procedural generation is a growing trend in game development. It allows developers to create games that are bigger and more dynamic, giving the games a higher level of replayability. Procedural generation isn't just one technique, it's a collection of techniques and approaches that are used together to create dynamic systems and objects. C++ is the industry-standard programming language to write computer games. It's at the heart of most engines, and is incredibly powerful. SFML is an easy-to-use, cross-platform, and open-source multimedia library. Access to computer hardware is broken into succinct modules, making it a great choice if you want to develop cross-platform games with ease.

Using C++ and SFML technologies, this book will guide you through the techniques and approaches used to generate content procedurally within game development.

Throughout the course of this book, we'll look at examples of these technologies, starting with setting up a roguelike project using the C++ template. We'll then move on to using RNG with C++ data types and randomly scattering objects within a game map. We will create simple console examples to implement in a real game by creating unique and randomised game items, dynamic sprites, and effects, and procedurally generating game events. Then we will walk you through generating random game maps. At the end, we will have a retrospective look at the project.

By the end of the book, not only will you have a solid understanding of procedural generation, but you'll also have a working roguelike game that you will have extended using the examples provided.

Style and approach

This is an easy-to-follow guide where each topic is explained clearly and thoroughly through the use of a bespoke example, then implemented in a real game project.

Procedural Content Generation for C++ Game Development By Dale Green Bibliography

- Sales Rank: #328554 in eBooks
- Published on: 2016-01-30
- Released on: 2016-01-30
- Format: Kindle eBook

 [Download Procedural Content Generation for C++ Game Develop ...pdf](#)

 [Read Online Procedural Content Generation for C++ Game Devel ...pdf](#)

Download and Read Free Online Procedural Content Generation for C++ Game Development By Dale Green

Editorial Review

About the Author

Dale Green

Dale Green is a young software developer who started his professional programming career in VB.NET, writing bespoke solutions to automate business tasks. This included the writing and maintenance of an e-commerce site that sold products on big online marketplaces such as Amazon and Rakuten. Prior to this, he's been creating computer games since his early high school days. Through self-teaching, Dale has worked with a number of game development tools such as GameMaker, Unity, and Unreal before finding home in C++/DirectX/OpenGL after undertaking a degree in the subject. Currently studying computer games programming BSc (Hons) at the University of Huddersfield, he is on track to graduate with a first-class degree. Alongside his studies, he is a teaching assistant who helps deliver course content to fellow undergraduates. He undertook a year of self-employment to publish his first commercial title on Steam, Samphi, through his indie studio, Greeny Games Studio. As a hobby, Dale also operates the indie game news website named Indie Gamers UK and enjoys playing with new technologies and languages.

Users Review

From reader reviews:

Donna Jost:

The book Procedural Content Generation for C++ Game Development can give more knowledge and information about everything you want. Exactly why must we leave the good thing like a book Procedural Content Generation for C++ Game Development? Some of you have a different opinion about reserve. But one aim that will book can give many data for us. It is absolutely appropriate. Right now, try to closer with the book. Knowledge or info that you take for that, it is possible to give for each other; you may share all of these. Book Procedural Content Generation for C++ Game Development has simple shape but the truth is know: it has great and massive function for you. You can search the enormous world by available and read a guide. So it is very wonderful.

James Atkinson:

The guide untitled Procedural Content Generation for C++ Game Development is the e-book that recommended to you to study. You can see the quality of the book content that will be shown to anyone. The language that article author use to explained their way of doing something is easily to understand. The copy writer was did a lot of analysis when write the book, to ensure the information that they share to you personally is absolutely accurate. You also could get the e-book of Procedural Content Generation for C++ Game Development from the publisher to make you a lot more enjoy free time.

Beatrice Flanagan:

Often the book Procedural Content Generation for C++ Game Development has a lot info on it. So when you read this book you can get a lot of benefit. The book was compiled by the very famous author. Mcdougal makes some research before write this book. This specific book very easy to read you will get the point easily after reading this article book.

Nicholas Schindler:

The reason? Because this Procedural Content Generation for C++ Game Development is an unordinary book that the inside of the publication waiting for you to snap it but latter it will distress you with the secret this inside. Reading this book close to it was fantastic author who write the book in such amazing way makes the content on the inside easier to understand, entertaining method but still convey the meaning entirely. So , it is good for you because of not hesitating having this any more or you going to regret it. This phenomenal book will give you a lot of advantages than the other book include such as help improving your skill and your critical thinking approach. So , still want to hold up having that book? If I had been you I will go to the publication store hurriedly.

Download and Read Online Procedural Content Generation for C++ Game Development By Dale Green #M4XO95Y3QT8

Read Procedural Content Generation for C++ Game Development By Dale Green for online ebook

Procedural Content Generation for C++ Game Development By Dale Green Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Procedural Content Generation for C++ Game Development By Dale Green books to read online.

Online Procedural Content Generation for C++ Game Development By Dale Green ebook PDF download

Procedural Content Generation for C++ Game Development By Dale Green Doc

Procedural Content Generation for C++ Game Development By Dale Green Mobipocket

Procedural Content Generation for C++ Game Development By Dale Green EPub