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Titolo	SFML game development [[electronic resource] ] : learn how to use SFML 2.0 to develop your own feature-packed game // Jan Haller, Henrik Vogelius Hansson, Artur Moreira ; [foreword by Laurent Gomila]
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Descrizione fisica	1 online resource (vi, 276 pages) : color illustrations
Collana	Community experience distilled
Altri autori (Persone)	HanssonHenrik Vogelius MoreiraArtur
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Nota di contenuto	Cover; Copyright; Credits; Foreword; About the Authors; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Making a Game Tick; Introducing SFML; Downloading and installation; A minimal example; A few notes on C++; Developing the first game; The Game class; Game loops and frames; Input over several frames; Vector algebra; Frame-independent movement; Fixed time steps; Other techniques related to frame rates; Displaying sprites on the screen; File paths and working directories; Real-time rendering; Adapting the code; Summary Chapter 2: Keeping Track of Your Textures - Resource ManagementDefining resources; Resources in SFML; Textures; Images; Fonts; Shaders; Sound buffers; Music; A typical use case; Graphics; Audio; Acquiring, releasing, and accessing resources; An automated approach; Finding an appropriate container; Loading from files; Accessing the textures; Error handling; Boolean return values; Throwing exceptions; Assertions; Generalizing the approach; Compatibility with sf::Music; A special case - sf::Shader; Summary; Chapter 3: Forge of the Gods - Shaping Our World; Entities; Aircraft Alternative entity designsRendering the scene; Relative coordinates; SFML and transforms; Scene graphs; Scene nodes; Node insertion and removal; Making scene nodes drawable; Drawing entities; Connecting

entities with resources; Aligning the origin; Scene layers; Updating the scene; One step back - absolute transforms; The view; Viewport; View optimizations; Resolution and aspect ratio; View scrolling; Zoom and rotation; Landscape rendering; SpriteNode; Landscape texture; Texture repeating; Composing our world; World initialization; Loading the textures; Building the scene; Update and draw  
Integrating the Game classThe run method; Summary; Chapter 4: Command and Control - Input Handling; Polling events; Window events; Joystick events; Keyboard events; Mouse events; Getting the input state in real time; Events and real-time input - when to use which; Delta movement from the mouse; Playing nice with your application neighborhood; A command-based communication system; Introducing commands; Receiver categories; Command execution; Command queues; Handling player input; Commands in a nutshell; Implementing the game logic; A general-purpose communication mechanism  
Customizing key bindingsWhy a player is not an entity; Summary; Chapter 5: Diverting the Game Flow - State Stack; Defining a state; The state stack; Adding states to StateStack; Handling updates, input, and drawing; Input; Update; Draw; Delayed pop/push operations; The state context; Integrating the stack in the Application class; Navigating between states; Creating the game state; The title screen; Main menu; Pausing the game; The loading screen - sample; Progress bar; ParallelTask; Thread; Concurrency; Task implementation; Summary; Chapter 6: Waiting and Maintenance Area - Menus  
The GUI hierarchy, the Java way

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## Sommario/riassunto

SFML Game Development is a fast-paced, step-by-step guide, providing you with all the knowledge and tools you need to create your first game using SFML 2.0.SFML Game Development addresses ambitious C++ programmers who want to develop their own game. If you have plenty of ideas for an awesome and unique game, but don't know how to start implementing them, then this book is for you. The book assumes no knowledge about SFML or game development, but a solid understanding of C++ is required.

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