In this book you will develop a 2D game engine that will give you the experience and core understanding

of the foundational concepts for building a complex and flexible 2D game engine. Your engine can then be used to create 2D games that are played

across the Internet via popular web browsers. The book is organized such that the

chapters follow the logical steps of building a game engine from scratch while integrateing the core components of most game engines. Build Your Own 2D Game Engine and Create Great Web Games isolates and presents

relevant concepts from software engineering, computer graphics, mathematics, physics,

game development and game design in the context of building a 2D game engine from

scratch. In this edition, all the code is based on updated versions of JavaScript with

HTML5 and WebGL2: you will analyze the source code needed to create a game engine

that is suitable for implementing typical casual 2D video games. You will also learn about

physics and illumination systems. By the end of the book, you will understand the core concepts and implementation

details of a typical 2D game engine, learn insights into how these concepts affect

game design and gameplay, and have access to a versatile 2D game engine that you

can expand upon or utilize to build your own 2D games from scratch using HTML5,

JavaScript, and WebGL2.

You will:

• Understand essential concepts for building 2D games

• Grasp the basic architecture of 2D game engines

• Understand illumination models in 2D games

• Learn basic physics used in 2D games

• Find out how these core concepts affect game design and gameplay

• Learn to design and develop 2D interactive games