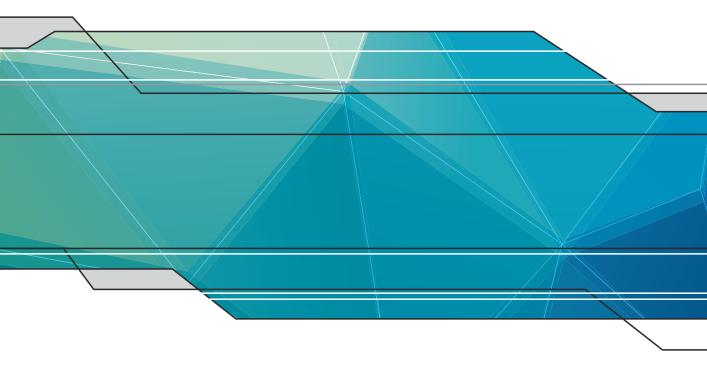
Fundamentals

of Game Design Third Edition



Ernest Adams
Founder of the IGDA





FUNDAMENTALS of Game Design

THIRD EDITION

Ernest Adams



Fundamentals of Game Design

Table of Contents

C	\sim	n	tم	n	tc
١,			! ←:		1.

Bonus Files

Introduction

Whom Is This Book For?

How Is This Book Organized?

A Note on the Downloadable Files

1 Games and Video Games

What Is a Game?

Conventional Games Versus Video Games

Games for Entertainment

Serious Games

Summary

2 Designing and Developing Games

An Approach to the Task

Key Components of Video Games

The Structure of a Video Game

Stages of the Design Process

Game Design Team Roles

Game Design Documents

The Anatomy of a Game Designer

Summary

3 The Major Genres



What Is a Genre?

The Classic Game Genres

Summary

4 Understanding Your Player

VandenBerghes Five Domains of Play

Demographic Categories

Gamer Dedication

The Dangers of Binary Thinking

Summary

5 Understanding Your Machine

Home Game Consoles

Personal Computers

Portable Devices

Other Devices

Summary

6 Making Money from Your Game

Direct Payment Models

Indirect Payment Models

World Markets

Summary

7 Game Concepts

Getting an Idea

From Idea to Game Concept

Summary

8 Game Worlds

What Is a Game World?



The Purposes of a Game World

The Dimensions of a Game World

Realism

Summary

9 Creative and Expressive Play

Self-Defining Play

Creative Play

Other Forms of Expression

Game Modifications

Summary

10 Character Development

The Goals of Character Design

The Relationship Between Player and Avatar

Visual Appearances

Character Depth

Audio Design

Summary

11 Storytelling

Why Put Stories in Games?

Key Concepts

The Storytelling Engine

Linear Stories

Nonlinear Stories

Granularity

Mechanisms for Advancing the Plot

Emotional Limits of Interactive Stories



Scripted Conversations and Dialogue Trees

When to Write the Story

Other Considerations

Summary

12 Creating the User Experience

What Is the User Interface?

Player-Centric Interface Design

The Design Process

Managing Complexity

Interaction Models

Camera Models

Visual Elements

Audio Elements

Input Devices

Navigation Mechanisms

Accessibility Issues

Allowing for Customization

Summary

13 Gameplay

Making Games Fun

The Hierarchy of Challenges

Skill, Stress, and Absolute Difficulty

Commonly Used Challenges

Actions

Saving the Game

Summary



14 Core Mechanics

What Are the Core Mechanics?

Key Concepts

The Internal Economy

Progression Mechanics

Tactical Maneuvering Mechanics

Social Interaction Mechanics

Core Mechanics and Gameplay

Core Mechanics Design

Random Numbers and the Bell-Shaped Curve

Summary

15 Game Balancing

What Is a Balanced Game?

Avoiding Dominant Strategies

Incorporating the Element of Chance

Making PvP Games Fair

Making PvE Games Fair

Managing Difficulty

Understanding Positive Feedback

Other Balance Considerations

Design to Make Tuning Easy

Summary

16 General Principles of Level Design

What Is Level Design?

Key Design Principles

Layouts



Expanding on the Principles of Level Design The Level Design Process Pitfalls of Level Design Summary 17 Design Issues for Online Gaming What Are Online Games? Advantages of Online Games Disadvantages of Online Games **Design Issues Technical Security** Persistent Worlds Social Problems Summary Glossary Α В С D Ε F G Н Μ



Ν

0

Ρ

Q

R

S

Т

U

٧

W

References

Index