

Video Game Design

Chapter 1 Introduction to Video Games

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Introduction

- Nowadays, computer and video games are growing fast and are becoming more and more sophisticated in terms of the quality of graphics and Artificial Intelligence (AI), both of which increase the level of immersion, believability, and enjoyment.
- Video games also offer the novel interactive ways to the players that deliver the new experience of gameplay.
- We will learn the concepts and keys of video game to understand more about this field (art and technology).



Definitions

- Game is an amusement, diversion, pastime, etc. a form of contest played according to rules and decided by skill, strength, or luck [1]
- “Games, activities or contests are governed by sets of rules. People engage in games for recreation and to develop mental or physical skills” [2]
 - Computer game
 - Video game

[1] "Game," in *The Canadian Oxford Dictionary*, K. Barber, Ed.: Oxford University Press, 2004.

[2] R. W. Schmittberger, "Game," in *Microsoft® Encarta® 2006 [DVD]* Redmond, WA: Microsoft Corporation, 2005.

Computer Game

- very first of electronic entertainment
- Games are played on personal computer.
- Wide spread, tons of titles
- Huge market (most family has one or more computers)
- Easy to develop
- Lot of development tools

Video Game

- Design specific for home-video game system
- Video game consoles, handheld devices, and coin-operated machine (Arcade games)
- Complex to development
- Limited development tools
- Tides to business model (publisher's rules)

Game Taxonomy

- Action games
- Adventure games
- Role-playing games
- Strategy games
- Simulation games
- Puzzle games

Actions game

- 2D platform
- First-person shooter
- Third person perspective
 - Donkey Kong, Super Mario Bros
 - Wolfenstein 3D, Halo, Quake
 - Devil May Cry, Tomb Rider

Adventure game

- Plot rather than action
- Focus on story
- Problem or puzzle solving
- Interacting with non-player characters (NPCs)
 - Secret of Monkey Island, Myst

Roles-playing game

- Roles-playing via avatar
- Play and interact with the game world
- Character development (skills, experiences, appearance)
 - Never winter night, Ultima, Final fantasy, MMORPGs

Strategy game

- Turn-based strategy games
 - Risks, Romance of three kingdoms
- real-time strategy games
 - Warcraft, StarCraft, Empire: Total War

Simulation game

- Sports, flying, driving
 - team sports or individual sports
- simulation of environments and machines
 - Dynamic of towns, cities, or tactical battle simulators

Puzzle game

- Traditional board games
- Puzzle games
- Emphasize on games' rules
 - chess, crossword, jigsaw puzzles, Tetris
- Plays alone or with opponents

Game Elements

- Player(s)
- Game's rules
- Gameplay
- Interaction
- Stories
- Rewards