

Game Design Basics

GAME: *A game is a type of play(pretend) activity, in which the participant(s) try to achieve at least one predetermined goal by following a set of rules.*



Basic Components of a Game

The Goal

This is the objective that all of the players are striving to achieve. It's not as simple as, "the goal of the game is to win," but rather, the goal of a game is **HOW** a player wins.

The Rules

Rules are definitions and instructions that the players agree to accept for the duration of the game. Every game has rules, even if these rules are unwritten or taken for granted.

Rules serve several functions.

1. They establish the goal of the game and the meanings of the different activities and events that take place throughout the game.
2. They also create a framework that enables the players to know which activities are permitted and to evaluate which course of action will best help them achieve the goal.

The Gameplay (Challenges & Actions)

A challenge is any task set for the player that is necessary to overcome in order to achieve the goal of the game. Overcoming a challenge must require either mental or physical effort. Challenges can be as simple as getting a ball through a hoop or as complex as defeating an opponent's army. Challenges can be unique, recurring, or continuing.

In action video games, players frequently face a recurring challenge to defeat a number of identical enemies, and then having done so, they must overcome a unique challenge to defeat a particular boss enemy. In a combat flight simulator, shooting down enemy planes is a recurring challenge, whereas avoiding being hit by them is a continuing challenge. The players must do both at once to be successful.

The rules specify what **actions** the players may take to overcome the challenges and achieve the goal of the game. The rules define not only what actions are allowed but also which ones are prohibited and which ones are required and under what circumstances. Think of actions as the “moves you can make during the course of the game.”

Games also permit optional actions that are not required to surmount a challenge but add to the player’s enjoyment in other ways. For example, in the Grand Theft Auto games, you can listen to the radio in the car. Many conventional games allow any action that is not prohibited by the rules. For example, in paintball, you may run, jump, crouch, crawl, climb, or make any other movement that you can think of to take enemy ground. Because video games are implemented by computer software, however, they can allow only actions that are built into the game. A video game offers a player a fixed suite of actions to choose from, which limits the number of ways in which a player can attack a challenge.



Element of Chance

Chance can be defined as some random element outside of the player's total control. This could be as simple as choosing heads or tails, or it might involve rolling dice, picking a card, or spinning a wheel.

Chance can make games more fun, because it adds elements of uncertainty to it. Uncertainty equals surprises for players, and surprises equal excitement for those playing.



Strategy

Strategy is a very complex subject, but very simply stated, "Strategy is a contest among players of decision-making." This means that players who take the smartest and most efficient actions during the game will most likely win.

Strategy games can be difficult to design, but extremely rewarding to play when they are completed. Strategy games require players to "think about the big picture," try to predict opponent's moves and think about the implications of their own actions and how they will impact the course of the game.

Fairness

Generally speaking, players expect that the rules will guarantee that the game is fair. Different societies, and indeed individual players, have varying notions of what is and is not fair. People are more inclined to continue to play a game when they know that it is fair for every participant.

In fact, players sometimes spontaneously decide to change the rules of a game during play if they perceive that the rules are unfair or that the rules are permitting unfair behavior. For all the players to enjoy a game, they must all be in general agreement about what constitutes fair play.



One widely accepted definition of fairness is that all the players in a multiplayer game must have an equal chance of winning at the beginning of the game. After all, where is the fun in playing a game that you know you're going to lose no matter what actions you take while you play!

Research the historical context of a well-known game or sport.

Name of Game: _____

Where the game originated (geographically):

How did the game develop? In a paragraph or two, describe how the game originated:

Design Practice EXERCISES

1. Create a competitive game for two players and a ball that does not involve throwing it or kicking it. Prove that it is a game by showing how it contains all the essential elements.
2. Using a chessboard and the types of pieces and moves available in chess, devise a cooperative game of some kind for two people, in which they must work together to achieve a victory condition. (You do not need to use the starting conditions of chess, nor all the pieces.) Document the rules and the victory condition.
3. Define a competitive game with a single winner, for an unlimited number of players, in which only creative actions are available. Be sure to document the termination and victory conditions.
4. Describe the elements of the gameplay in each of the following games: backgammon, poker, bowling, and Botticelli. (Use the Internet to look up the rules if you do not know them.)
5. List examples not already mentioned in this book of video games designed for single-player, multiplayer local, and multiplayer distributed play. Explain how the games' design supports these different modes.

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Design Practice QUESTIONS

1. As a potential designer, do you see yourself as an artist, an engineer, a craftsman, or something else? Why do you see yourself that way?
2. Do you agree or disagree with the definition of a game? If you disagree, what would you add, remove, or change?
3. We have defined gameplay strictly in terms of challenges and actions, leaving out the game world or the story. Do you feel that this is appropriate? Why or why not?
4. Why is it fair if one athlete trains to become better but not fair if he takes drugs to become better? What does this say about our notions of fairness?
5. What possible benefits do computers bring to gaming?
6. How do video games entertain people differently than board games or card games? What benefits do card/board games have over video games?

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