



GAME DESIGN FUNDAMENTALS

BY DMITRY SERGEEV & CATHERINE CHUDINOVA



LET'S MEET



Dmitry Sergeev

Narrative Designer

10+ years in Game Development,
making PC, Mobile & Board Games
that bring joy millions players
worldwide.

Pissourians



Catherine Chudinova

Game Producer

Games we've made:

BLITZKRIEG 3



TRAINING GOAL

Create a board game that will help:

- build new connections between people
- bring together people from different cultures, backgrounds, and interests
- include people with disabilities through accessible and inclusive design
- have fun! :)



WHY GAMIFICATION IN EDUCATION OFTEN FAILS?

About **80%** gamification projects in Business or Educations fails.



*Gartner Agency Report, 2012

Because **80%** of gamification projects looks like that:



WHY GAMIFICATION IN EDUCATION OFTEN FAILS?

Many gamified systems fail because they add points, badges, and leaderboards without real gameplay.

Common problems:

- Rewards replace intrinsic motivation
- Activities stay boring but get points
- Competition discourages weaker students
- No meaningful player choices
- Learning is not connected to the mechanics

Result:

Students see it as “school with points”, not a game.



WHY GAMIFICATION IN EDUCATION OFTEN FAILS?

Good games create motivation through **player experience and motivation**, not rewards.

Fun cannot be forced or imitated.



GAMECHANGE: COURSE STRUCTURE

Day 1	BECOME A GAME DEVELOPER	✓ Learn Game Design theory basics ✓ Turn a real social problem into a clear “game mission” checklist ✓ Create a concept of the future board game
Day 2	BUILD A PROTOTYPE	✓ Build your first playable prototype ✓ Create narrative conception of the future game ✓ Test your game inside the team
Day 3	PLAYTEST IS THE KING	✓ Let other students play your game (and watch what REALLY happens 🐱) ✓ Collect the honest feedback ✓ Upgrade your game: filter, transform feedback in a game improvements
Day 4	POLISH & PITCH	✓ Polish your final version so it looks clean and professional ✓ Improve the gameplay so it feels fair and exciting ✓ Prepare a short pitch: explain your game in 30 seconds like a creator
Day 5	FINAL GAME	✓ Present your game to everyone + show how it fights the social problem ✓ Let others play your final version (demo mode!) ✓ Celebrate your finished project 🎉

WHO IS A GAME DEVELOPER?

Them: So what do you do for a living?

Me: I make video games.

Them:



WHO IS A GAME DEVELOPER?

MYTH #4

To create Game
I have to be a
programmer



> 130

Gamedev
Professions

Game Design & Story

Art & Animation

Music & VFX

Economy & Math

Marketing & Business

GAMING PROFESSIONS 2025

GAME PROGRAMMING

• AI • Build & Release
• Developer Relations • Direction
• Engine • Gameplay • Graphics
• Multiplayer • Network • Physics
• Rendering • Tools • UI

ART

• 2D • 3D • Character • Concept
• Direction • Environment • Level
• Lighting • Marketing • Material
• Model • Outsourcing • Prop
• Shader • Storyboarding • Technical
• Texture • Tools & Pipeline • UI
• Vehicle • VFX • Weapon

SOFTWARE ENGINEERING

• Ads • AI • Backend
• Accessibility • Analysis
• Build & Release • Cloud
• Data Analytics • DevOps • Direction
• Engineer Relations • Frontend
• Full Stack • Manufacturing • Mobile
• Network • Product Design
• Project Management • Prompt
• Reliability • Security • Technical
• Technical Writing

TALENT

• Agency • Casting • Content Creation
• Hosting • Interviewing
• Management • Playing
• Screen Acting • Streaming
• Voice Acting

CONTENT & MEDIA

• Cinematography • Copy Editing
• Game Capture • Graphics Design
• Journalism • Moderation
• Motion Design • Photography
• Scriptwriting • Translation
• Trust & Safety • Video Editing
• Videography

HUMAN RESOURCES

• Analysis • Compensation & Benefits
• Culture • Diversity & Inclusion
• Employee Relations
• Employee Training • Engagement
• Health & Safety • Mobility
• People Management • Recruitment
• Talent Acquisition
• Training & Development • Wellness

IT

• Cyber Security • Network Admins
• System Admin • Technical Support

RESEARCH

• Academic • Consumer • Data Entry
• Market • Operations

GAME DESIGN

• Accessibility • AI • Combat
• Content • Direction • Economy
• Encounter • Interaction • Level
• Mission • Monetization
• Multiplayer • Narrative • Prototyping
• Puzzle • Quest • Scripting • Social
• Systems • Technical • UI
• World Building • Writing

ANIMATION

• 2D • 3D • Cinematic • Gameplay
• Motion Capture • Particle
• Programming • Rigging • Scanning
• Technical • VFX

QUALITY ASSURANCE

• Accessibility • Design • Engineering
• Information Architecture • Research
• Strategy • Usability • Writing

BROADCAST

• Camera Ops • Floor Management
• Game Observation • Graphics
• Lighting • Production • Replay Ops
• Scriptwriting • Sound Engineering
• Stream Engineering
• Studio Management

COMPETITIVE

• Analysis • Coaching • Fitness
• Nutrition • Physiotherapy • Playing
• Psychology • Refereeing • Roasting
• Team Management

FINANCE & LEGAL

• Accounting • Analysis • Auditing
• Bookkeeping • Compliance • Control
• Counsel • Fraud • Licensing
• Mergers & Acquisitions • Payroll
• Privacy • Reporting
• Risk Management • Tax

ADMINISTRATIVE

• Data Entry
• Executive & Personal Assistance
• Facilities Support
• Office Management • Reception

EDUCATION

• Academic Research
• Curriculum Design • Lecturing
• Program Development
• Program Management
• Self-publishing • Teaching

GAME PRODUCTION

• Accessibility • Archiving
• Creative Direction • Feature
• Game Direction
• Knowledge Management • Live Ops
• Operations • Production
• Project Management • Publishing
• Release Management
• Studio Management

AUDIO

• Composition • Engineering
• Production • Programming
• Sound Design • Technical Design
• Vocal Direction • Voice Design

LOCALIZATION

• Editing • Engineering
• Inclusive Language • Technical
• Testing • Translation

UX

• Accessibility • Design • Engineering
• Information Architecture • Research
• Strategy • Usability • Writing

EVENTS

• Audio/Visual • Catering
• Customer Service
• Emergency Services
• Event Management
• Facilities Management
• Game Observation • Hospitality
• Logistics • Security

MARKETING

• App Store • Brand
• Campaign Management
• Community Management
• Copywriting • Creator • Digital
• Email • Influencer • Lifestyle
• Product • Public Relations
• Social Media • Storefront
• User Acquisition • Visual

COMMERCIAL

• Account Management
• Advertising Ops
• Business Development
• Communications
• Consumer Research
• Customer Support • Distribution
• E-commerce • Manufacturing
• Market Research • Media Buying
• Merchandising • Monetization
• Packaging • Partnerships
• Procurement • Product Management
• Retail • Sales • Sponsorships
• Supply Chain • Talenting

HYMARKER IS THE HOME OF GAMING JOBS
FIND YOUR DREAM CAREER • HIRE TOP TALENT • MAKE YOUR MARK



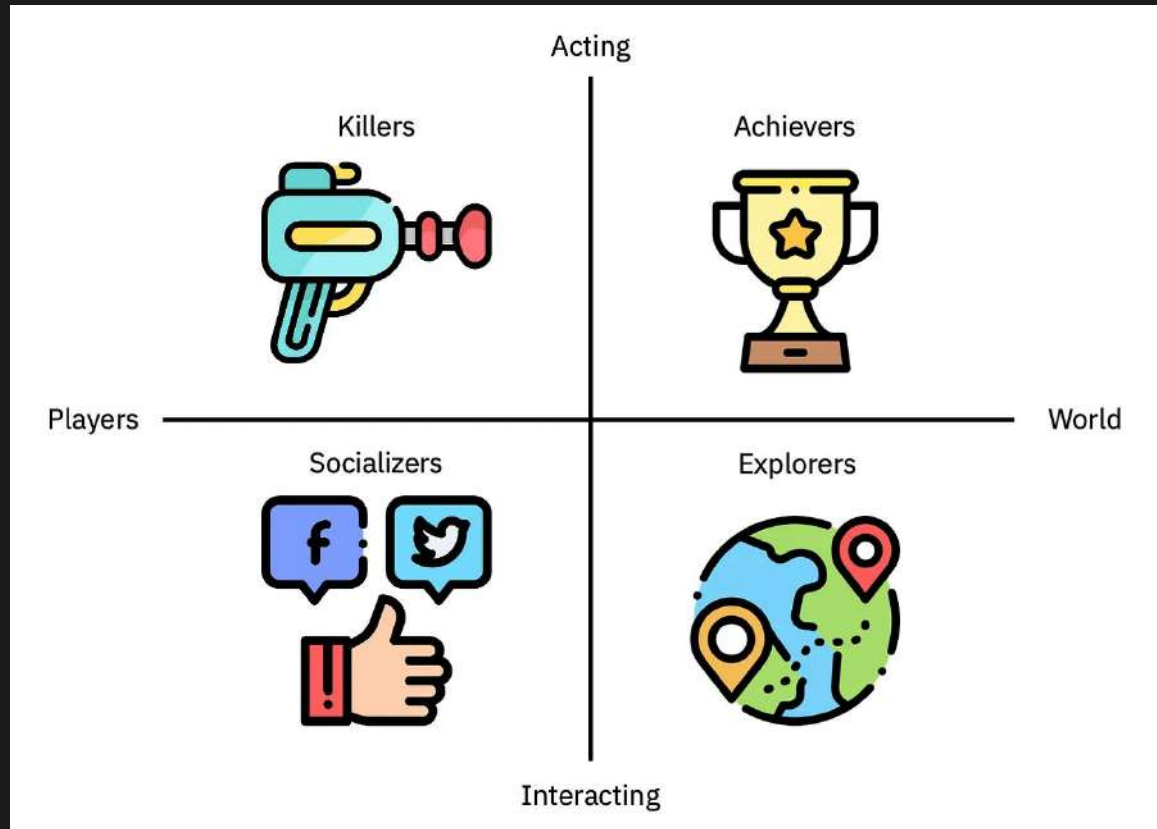
WHO IS A *GAME DEVELOPER*?

A game developer is anyone who helps create the player experience.

With a next 5 days you will learn to be game developers
and will create your own game



WHO IS A **PLAYER**?



WHAT IS A *GAME*?

A game is a **set of rules** designed to create a specific **player experience**.



WHAT IS A *GAME DESIGN*?

A discipline that studies methods for creating interactive player experiences.

It explores how rules, systems, and mechanics shape behavior, decisions, and emotions.



ELEMENTS OF GAME DESIGN



GAME DEVELOPMENT STAGES

Day 1



Concept

Day 2



Prototype

Day 3



Playtest

Day 4



Polishing

Day 5



Marketing

You have an idea how to change
the world
Let's turn it into a game concept!

TODAY'S TASK: *WRITE A CONCEPT*

- ✓ Learn Game Design theory basics
- ✓ Turn a real social problem into a clear “game mission” checklist
- ✓ Create a concept of the future board game

Now, let's learn some game design fundamentals to start!

BOARD GAME: *KEY CONCEPT ELEMENTS*



#1 Core Loop

What actions players repeat again and again?



#2 Goal & Victory

What is the player trying to achieve?
Who wins?



#3 Theme Setting

What is the game about?
(story, world, idea)



#4 Player Interaction

Cooperative / Competitive
Euro or American style



#5 Turn Structure

What can a player do on their turn?



#8 Rules & Playtime

Key rules and limitations (keep it short)
Approximate playtime

If one element is
missing or unclear,
the game **collapses**!

#1 CORE LOOP?

The core loop is the **repeatable cycle** at the heart of every game.

Action

Player makes a meaningful decision and takes an action

Feedback / Reward

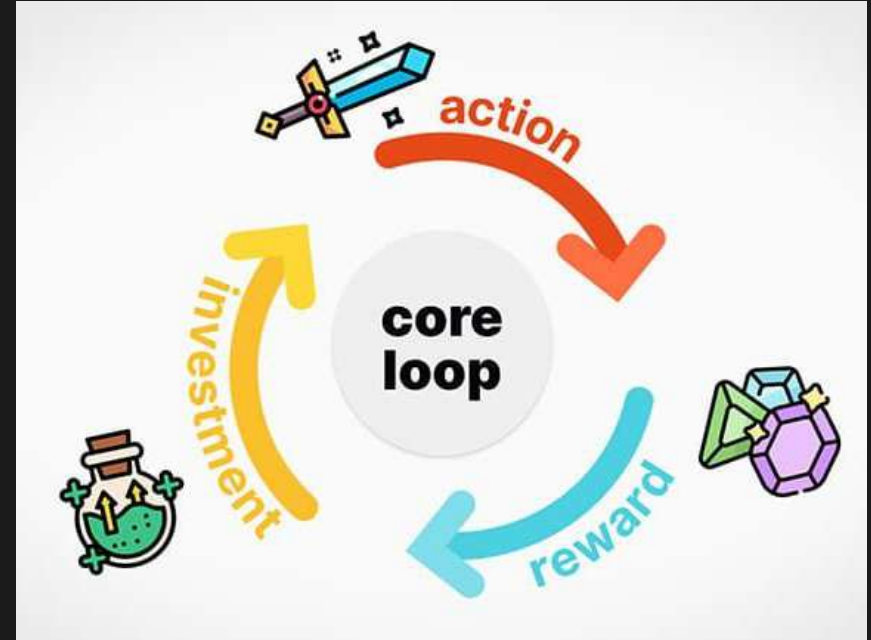
The game provides immediate feedback and rewards the action

Investment

The reward is invested into abilities, resources, or options

Repeat

The new game state leads naturally into the next loop



#2 GOAL & VICTORY

Why am I playing?
How to win this game?

Goal — What players are trying to achieve.

Victory — The condition that determines who wins.

If the goal is unclear, players feel lost.

If victory is unclear, players feel frustrated.



How to Design It Well

- ✓ Make the goal clear and specific
- ✓ Make victory measurable
- ✓ Ensure victory supports the goal
- ✓ Connect both to the social problem

Common Mistakes

- ✗ Goal and victory unrelated
- ✗ Vague objective ("do well")
- ✗ Winning by something players barely interact with

#3 *THEME / SETTING*

What is this game about?

The world, story, and context of the game.

- Creates emotional engagement
- Makes the game memorable
- Helps players understand the social issue
- Gives meaning to mechanics

Theme turns mechanics into experience.



How to Design It Well

- ✓ Choose a theme that supports the social problem
- ✓ Keep it consistent across rules and mechanics
- ✓ Make player actions meaningful within the world
- ✓ Avoid unnecessary complexity

Common Mistakes

- ✗ Theme disconnected from gameplay
- ✗ Theme only in visuals, not in mechanics

#4 *PLAYER INTERACTION*

Is this game better with small or large groups?
Does the social problem require discussion?
Should players collaborate or compete?

The way players interact with each other.
It defines the social structure of the game.

- Shapes player emotions
- Influences learning outcomes
- Affects tension and engagement
- Must support the social issue

Example:

A game about climate change may work better as cooperative.

A game about market competition may benefit from competitive mode.



How to Design It Well

- ✓ Match the mode to the social problem
- ✓ Decide what emotions you want to create
- ✓ Keep interaction consistent with your message

Common Mistakes

- ✗ Ignoring downtime with many players
- ✗ Interaction contradicts the theme
- ✗ Players barely affect each other

MAIN TYPES OF INTERACTION

Cooperative

Players work together toward a shared goal.



Competitive

Players compete to outperform each other.



Indirect Interaction

Players influence each other through shared resources or space.



Direct Conflict

Players can block, attack, or eliminate others.



EURO VS AMERICAN STYLE BOARD GAMES

Euro Style

- Players not eliminated until the end
- Low randomness
- Indirect interaction



American Style (“Ameritrash”)

- Players can be eliminated anytime in the game
- More randomness
- High Conflict



#5 *TURN STRUCTURE*

What can I do when it's my turn?

What it is?

The order and format of actions a player takes on their turn.
A clear turn structure makes the game feel smooth.

How to Design It Well

- ✓ Keep turns short and clear
- ✓ Limit the number of actions
- ✓ Make choices meaningful
- ✓ Minimize waiting time



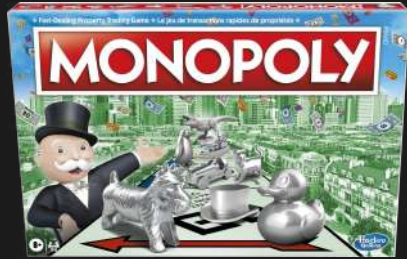
Common Mistakes

- ✗ Too many actions per turn
- ✗ Unclear order of actions
- ✗ Long downtime for other players
- ✗ Turn structure unrelated to the core loop

COMMON TURN STRUCTURE TYPES

Fixed Actions Per Turn

Move → Take Action → End Turn



Action Points System

Players spend a limited number of action points each turn.



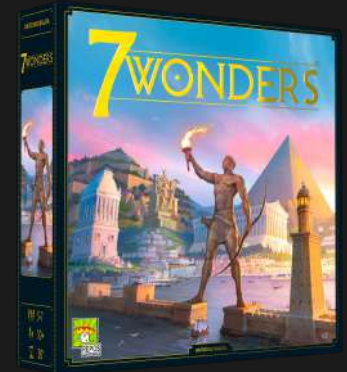
Phase-Based Rounds

All players complete Phase 1
→ then Phase 2 → etc.



Simultaneous Turns

Players act at the same time.



#6 RULES & PLAYTIME

What I can and cannot do in this game?
How long will it take?

What it is?

Rules define what players can and cannot do.
Constraints create challenge.
Playtime defines how long the experience lasts.

Together they shape the structure and pacing of the game.



How to Design It Well

- ✓ Keep rules simple and purposeful
- ✓ Remove unnecessary restrictions
- ✓ Decide target playtime early
- ✓ Match complexity to duration
- ✓ End the game before it becomes repetitive

Common Mistakes

- ✗ Adding rules instead of improving the core loop
- ✗ Underestimating real playtime
- ✗ Artificially extending the ending

WHAT IS A *GAME*?

A game is a **set of rules** designed to create a specific **player experience**.



GOOD RULES **NOT GUARANTEED** A GOOD GAME

You Can Have:

- good rules
- balanced systems

...and still a **bad player experience**

EXAMPLE 1: MONOPOLY

Why it looks good on paper

- Clear rules
- Balanced starting conditions
- Simple goal: make others bankrupt

Why the experience is often bad

- Players get eliminated early
- Long waiting times
- Very little meaningful decision-making late game

👉 Good rules ≠ good experience



EXAMPLE 2: TIC-TAC-TOE

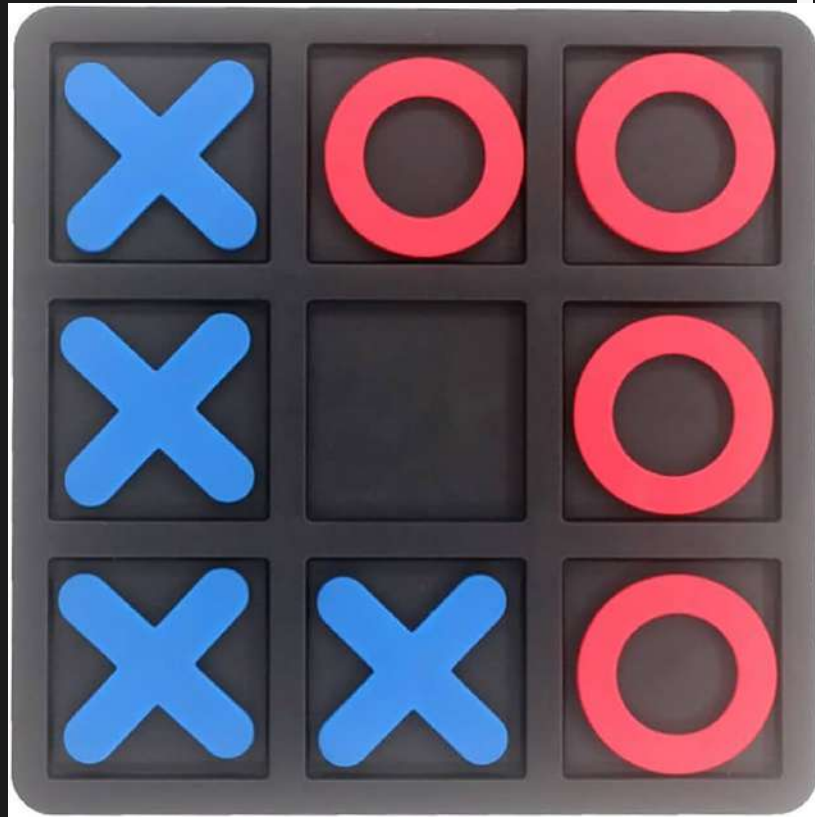
Why it looks good on paper

- Extremely clear rules
- Fully balanced system
- No randomness

Why it's not fun

- Optimal play always leads to a draw
- No tension after players learn the system
- No meaningful choices for experienced players

👉 Good rules ≠ good experience



GOLDEN RULE OF GAME DESIGN #1

If players are confused, bored, or disengaged —
the problem is in the design, not in the players.

MINIMAL GAME DESIGNER TOOLKIT



Player Experience

Player

Who is making decisions?

Core Loop

What actions repeat again and again?

Goal

What are they trying to achieve?

Rules

What is allowed and restricted?

Choice & Feedback

What player choose and how game responds?

Resources

What is limited and valuable?

Conflict

What creates tension?



GAME LIKE A MODEL OF REALITY

Pandemic is not really about a virus —
it's about cooperation and resource shortage.



BOARD GAME DESIGN CHECKLIST

- ✓ How many player will you board game have?
- ✓ Will it be cooperative or PvP ?
- ✓ Will it be euro or american-style design?
- ✓ What will be the average playtime?
- ✓ What interaction level will be?
- ✓ Rules explanation time?
- ✓ Will it have text-heavy rules?
- ✓ How your game will be adopted for color-blind people?
- ✓ Can you explain your game in one sentence?