Game Mechanics
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Homework 1 recap

- Make groups of 5 people
- Each person:
  - Tells his/her elevator pitch (60 sec)
  - General discussion (60 sec)
Core gameplay loop

What is the most important thing you are doing...

...again and again and again!
Core gameplay loop

What is this game?

Start
Move
Kick ball
Score
Core gameplay loop

What is this game?
Core gameplay loop

What is this game?

Start
Drive car
Kick ball
Score
Core gameplay loop

What is this game?
Core gameplay loop

What is this game?

Explore
Click on creature
Kill creature
Get loot
Core gameplay loop

What is this game?
Core gameplay loop

What is this game?

Explore
Shoot enemy
Kill enemy
Get loot
Core gameplay loop

What is this game?
Core gameplay loop

What is the game loop?
Core gameplay loop

What is the game loop?
MDA framework

Mechanics, Dynamics and Aesthetics (MDA)

Second order problem: game designer only creates Mechanics directly
Mechanics -> Dynamics

Spawn points

Mechanic? Dynamics? Aesthetics?
Spawn game mechanics

How to fix spawn camping?
Feedback loops

● **Positive feedback loop** - when something happens that causes the same thing happen again
● **Negative feedback loop** - when something happens that makes it harder to happen again

<table>
<thead>
<tr>
<th>Positive feedback loop</th>
<th>Negative feedback loop</th>
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</thead>
<tbody>
<tr>
<td>Tend to destabilize the game</td>
<td>Tend to stabilize the game</td>
</tr>
<tr>
<td>Cause the game to end faster</td>
<td>Cause the game to take longer</td>
</tr>
<tr>
<td>Put the emphasis on early game</td>
<td>Put the emphasis on late game</td>
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Both are useful!
Emergent gameplay

**Emergent gameplay** - game with simple mechanics but complex dynamics. Eg. Chess.

**Design principle** - instead of designing rules, design some sort of “meta” rules that will be building blocks for players to design their own rules.
Mechanic 1: Functional space

Game space:

- Discrete or continuous
- Number of dimensions
- Bounded areas connected or disconnected
- Boundaries of the space
- Are there subspaces?
Mechanic 1: Functional space
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Mechanic 1: Functional space
Mechanic 2: Objects, Attributes, States

- **Objects** - characters, props, tokens, scoreboards
- **Attributes** - information about an object
- **State** - current state of an attribute
Mechanics 3: Actions

- **Operative actions** - direct actions the player can perform
- **Resultant actions** - high level actions, important in the bigger picture
Mechanic 4: Rules

Most important rule - the goal of your game

- Good game goals:
  - Concrete
  - Achievable
  - Rewarding

- What is the goal in Chess?

Games should not push players to memorize all the rules
Mechanic 5: Skills

- **Physical skills** - manipulating a game controller
- **Mental skills** - memory, observation, puzzle solving
- **Social skills** - reading an opponent, fooling an opponent, coordinating with teammates
Mechanic 6: Chance

- Probability
- Combinatorics
- Booleans
- Normal Distribution
- Randomness
Group task

We need up to 8 groups.
Group 1
Group 2
Group 3
Group 4
Group 5
Group 6
Group 7
Group 8
Group task

Design a **one mechanic** spin-off using **one touch** mechanic.

Make a drawing describing this gameplay!
Homework 2 (deadline 17. Sept 16:15)

Watch the presentation: [How to Make an Original F2P Game](#)

1. Describe your game loop.
2. Create a mockup drawing containing following things:
   - Functional space of your game
   - Most important objects in your game (4-7 objects)
   - Operative actions of your game (3-7 actions)
3. Describe each element on your drawing.
4. Make a state diagram about one object (4-7 states).

Submit your homework in a PDF document.
You can use any tool you like eg. Google Drawing or pen and paper.
Next week

**Lecture:** Player Types and Market Research
(Quest lecturer)

**After lecture:** (18.00 - 23.00) APT GG Season starts

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