

# Game Design & Development

## - Game Design Processes

Dr. Johanna Pirker

# Contact

\*\* Twitter: #tugamedev

\*\* Course Details: <https://gamelabgraz.com/>

+ TeachCenter

Newsgroup: tu-graz.lv.gamedev

Discord

## Consulation Hours

- After the lectures on Discord
- Appointment by email



# Game Recap

... Who has played Minesweeper...?

Chat: [I]



# Game Recap

... what is the main goal of the game...?

Chat: ....



# Game Recap

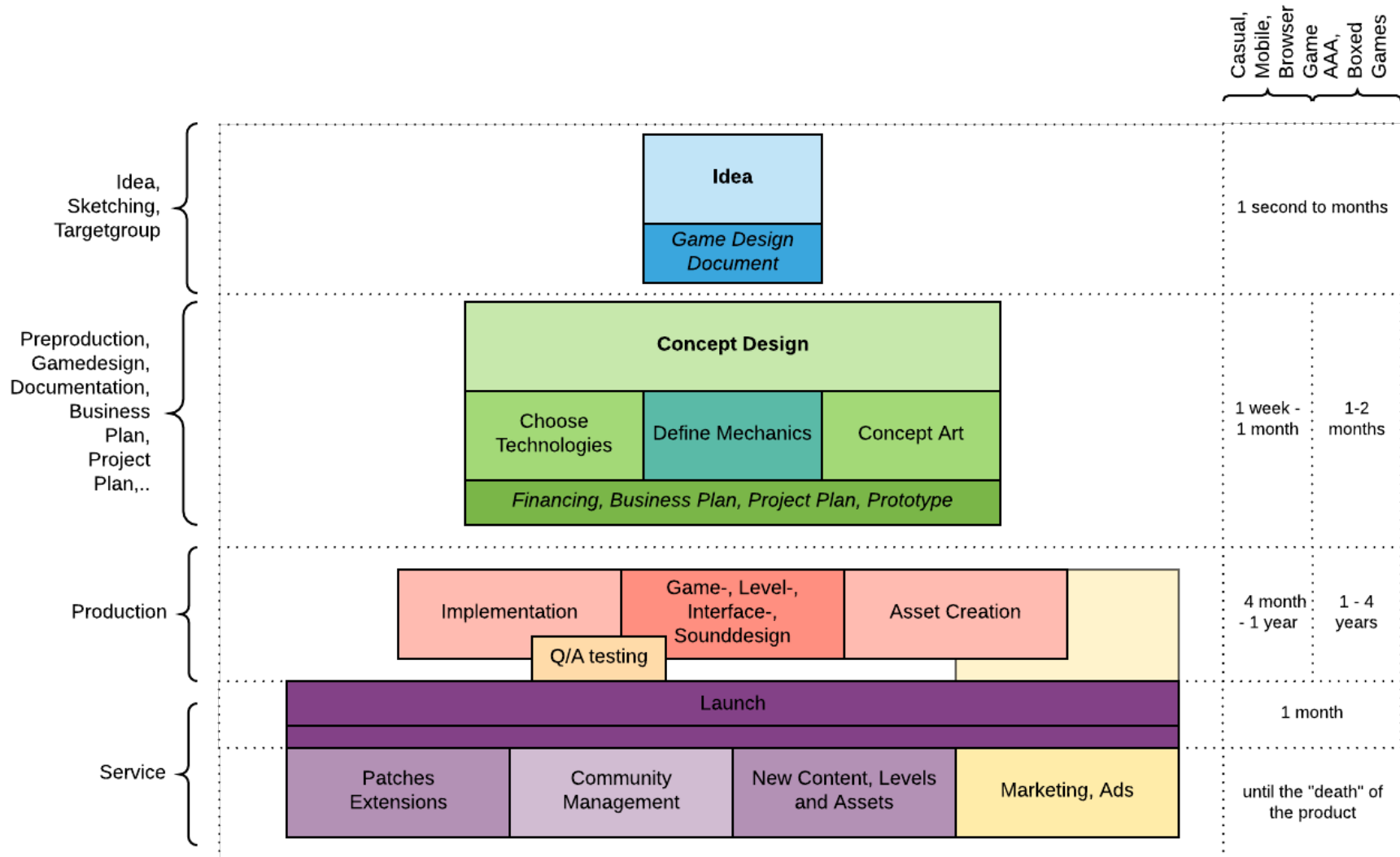
... what are the main game design elements...?

Chat: ....



# References and suggested Readings

- ++ Jesse Schell, The Art of Game Design
- ++ Raph Koster, A Theory of Fun for Game Design
- ++ Jane McGonigal, Reality is Broken: Why Games Make Us Better and How They Change the World
- + Donald A. Norman, The Design of Everyday Things
- Katie Salen, Eric Zimmerman, Rules of Play, Game Design Fundamentals



# Game Design Process





# What should you learn to become a game designer...?



# What should you learn to become a game designer...?

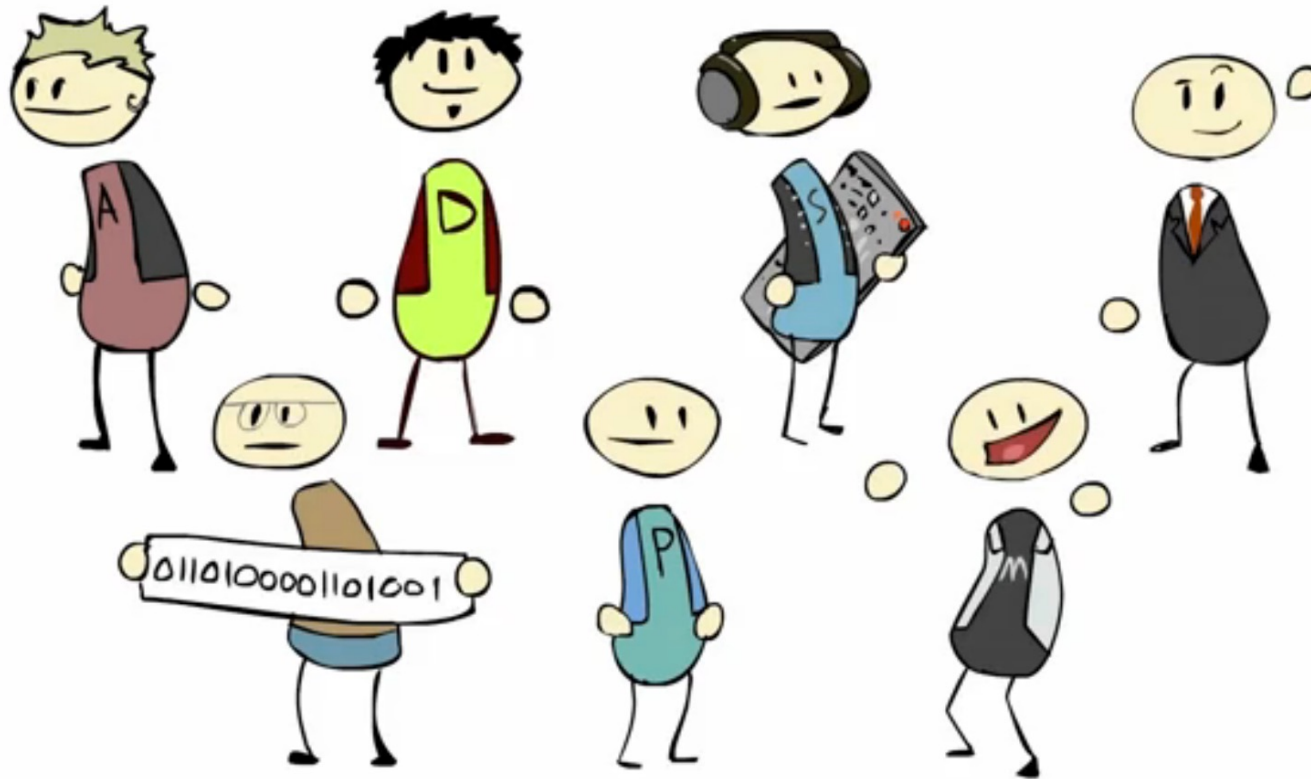
Everything.



A word cloud featuring various fields and disciplines. The words are arranged in a dense, overlapping manner. The colors used are primarily blue, orange, and yellow. The sizes of the words vary, with some being significantly larger than others. The background is solid black.

Business  
Mathematics Visual-Arts  
Music Management Communication  
Engineering Anthropology Cinematography  
Sound-Design Project-Management  
Creative-Writing Technical-Writing  
Public-Speaking History Brainstorming  
Psychology Architecture  
Economics

# What should you learn to become a game designer...?



<http://extra-credits.net/episodes/so-you-want-to-be-a-game-designer/>



# How to become a game designer?



# How to become a game designer?

**“Design games. Start now! Don’t wait! Don’t even finish this conversation! Just start designing! Go! Now!”**

**–Jesse Schell**



# What is a game?



# What is a game?

Movie?





# What is a game?

Movie?

no interactions, outcome fixed.



# What is a game?

Toy?



# What is a game?

Toy?

no goals, still fun, players can develop own goals

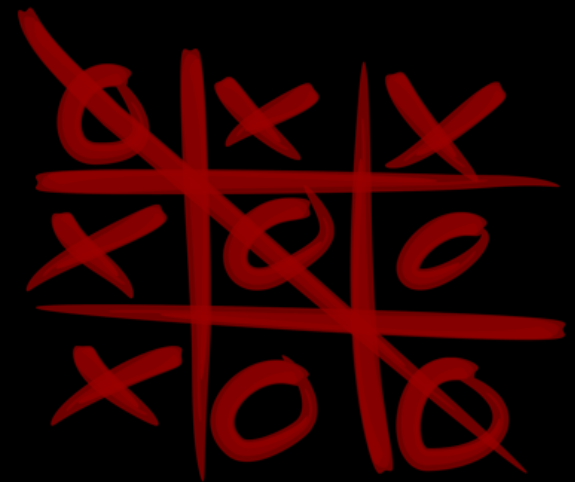


# What is a game?

Rules + Mechanics + Systems + Features



## Elements of Tic Tac Toe??



# ELEMENTS OF TIC TAC TOE

- The Board
- Tokens (X or O)
- Two players
- Competitive
- Turns
- Win & Draw
- No progression or scoring



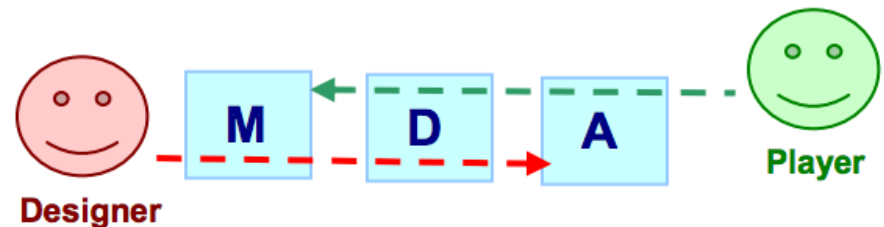
# Game Elements



# 1. MDA Framework (Hunicke, LeBlanc, Zubek)



- **Mechanics** - particular components of the game, at the level of data representation and algorithms
- **Dynamics** - run-time behaviour of the mechanics acting on player inputs and each others' output over time
- **Aesthetics** - desirable emotional responses evoked in the player, when interacting with the game system





# 1. MDA Framework (Hunicke, LeBlanc, Zubek)



- **Shooter:**
  - Mechanics: Spawn Points, Ammo, Weapons
  - Dynamics: Camping, Sniping
  - Aesthetics: Challenge, Tension (Sensation)



# LET'S PLAY!

## Twenty Questions

- Break up into groups of about five.
- Pick a judge. The judge picks a noun: a person, a place, or a thing. It cannot be a proper noun.
- The rest of the players try to figure out the object by asking the judge yes/no questions.
  - The judge can return a question to the players if s/he feels it can't be answered or isn't relevant.
- The judge keeps track of questions asked.
- A guess is a question, phrased "Is it a....?" If the judge answers this question with a yes, the players win.
- The players have **10** questions to guess the noun successfully.
- They have infinite time to make their guess.

# LET'S PLAY!

## Twenty Questions

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60

# 1. MDA Framework (Hunicke, LeBlanc, Zubek)



## 8 kinds of “fun”

- 1. Sensation - Game as sense-pleasure
- 2. Fantasy - Game as make-believe
- 3. Narrative - Game as drama
- 4. Challenge - Game as obstacle course
- 5. Fellowship - Game as social framework
- 6. Discovery - Game as uncharted territory
- 7. Expression - Game as self-discovery
- 8. Submission - Game as pastime



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**Charades:** Fellowship, Expression, Challenge.

**Quake:** Challenge, Sensation, Competition, Fantasy.

**The Sims:** Discovery, Fantasy, Expression, Narrative.

**Final Fantasy:** Fantasy, Narrative, Expression, Discovery, Challenge, Submission.



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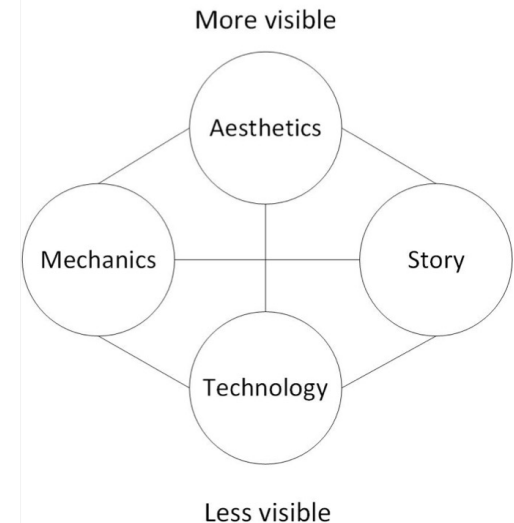
**How to add Challenge to The Sims?**



## 2. Game Elements (Schell)



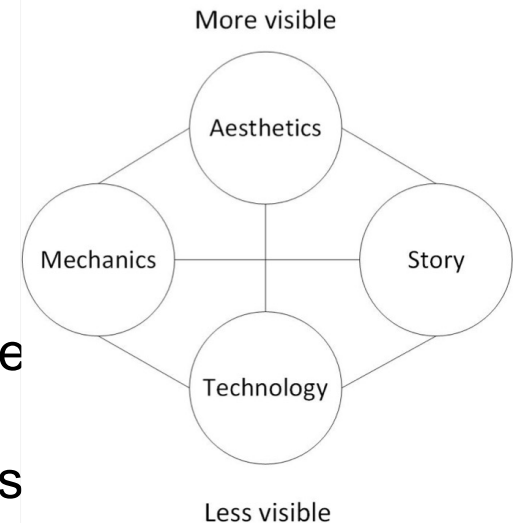
- **Mechanics** - Procedures and rules
- **Story** - Sequence of events
- **Aesthetics** - How the game looks, sounds, smells, tastes, and feels
- **Technology** - Technological foundation (digital or mechanical) of the game



## 2. Game Elements (Schell)



- **Mechanics** - (Space, Objects, Attributes, States, Actions, Rules, Skill, Chance)
- **Mechanics must be in Balance!**
  - (Fairness, Meaningful Choices, Challenge vs. Success, Skill vs Chance Competition vs Cooperation, Short vs Long, Rewards, Punishment, Simple vs Complex)
- **Mechanics support Puzzles**





# Game Design Document



# Game Design Document

- Introduction
- Background (optional)
- Description
- Key features
- Genre
- Platform(s)
- Concept art (optional)



# Game Design Document

- <http://irrationalgames.com/insider/from-the-vault-may/#>
- [http://www.gamasutra.com/view/feature/3224/creating\\_a\\_great\\_design\\_document.php](http://www.gamasutra.com/view/feature/3224/creating_a_great_design_document.php)
- [http://blog.baconandgames.com/wp-content/uploads/original.gta\\_.game\\_.doc.pdf](http://blog.baconandgames.com/wp-content/uploads/original.gta_.game_.doc.pdf)
- <http://www.sloperama.com/advice/specs.html>

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# New Game Discussion HW

[L] Line Rider



# Suggested Readings

See you next week.

