PON.9
Playlab fOr inNovation in Games

UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI INFORMATICA

OGD Lesson 007: GD role & Playcentric approach

Laura Anna Ripamonti – ay 2021-22

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O07. Summary

- The role of the game designer
- Playcentric approach
- References:
  - Chapter 1 “Game Design Workshop” by T. Fullerton
  - Chapter 2 “Fundamentals of Game Design – 2ed.” by E. Adams
- Suggested (recommanded!) readings:
  - *The design evolution of Magic: the Gathering*, pp. 191 – 203 “Game Design Workshop” by T. Fullerton
  - «Challenges for game designers» by Brathwaite & Schreiber (2009)

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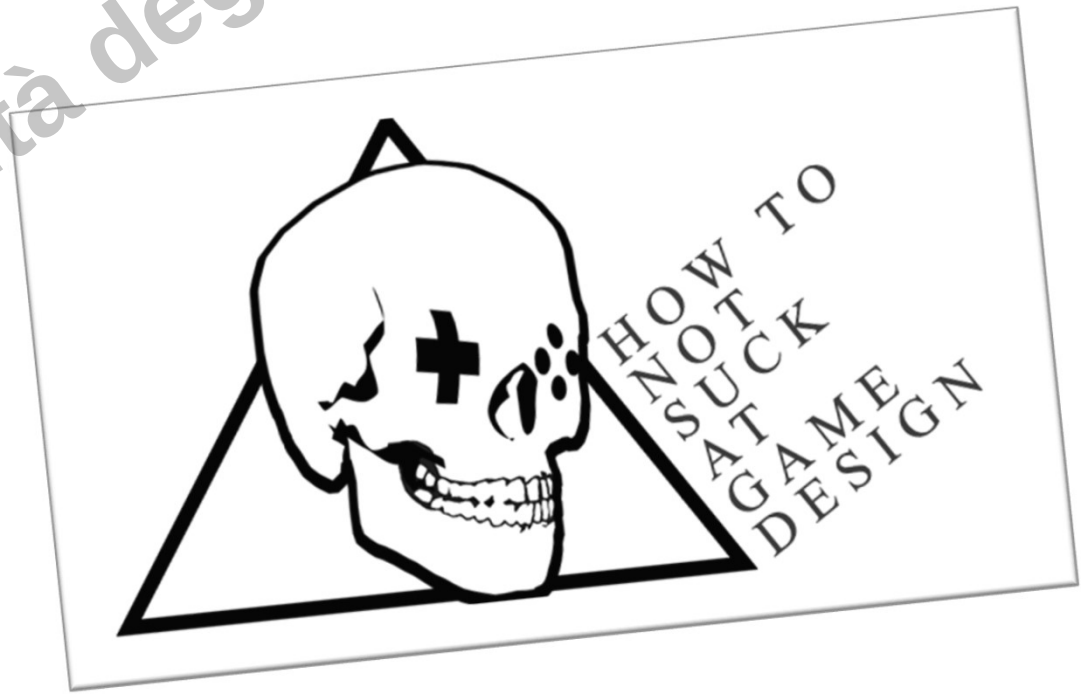
Premise

About game design



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Since there have been games …

- … there have been game designers!
- the history of games dates back to the beginning of human culture
- We play to aquire skills (and videogames are no exception)

- What make games intriguing is NOT related to technology/medium, but to the **EXPERIENCE** of the players!

1° step to become game designer is to ask yourself **WHY** u play a certain game …

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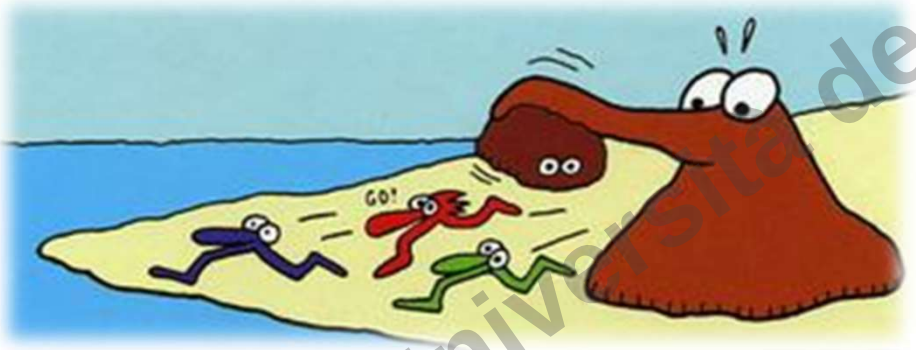
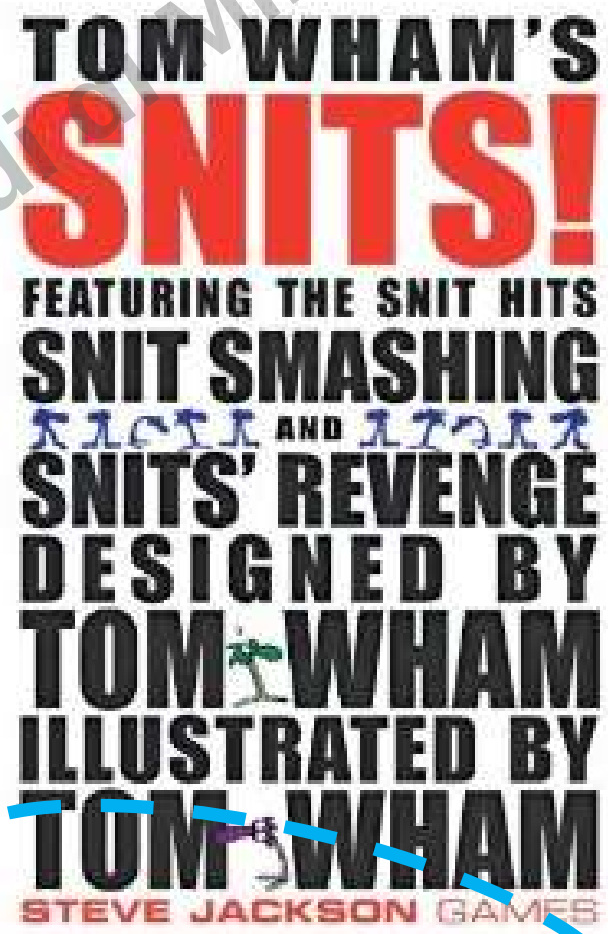
Ex.: Snits!

- A “simple” game … but a funny (silly?) story …





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Game design as …

- Art ?
  - GD is NOT purely an art, ‘cause it is NOT primarly a means of aesthetic expression
- Engineering ?
  - GD is NOT purely an act of engineering, since it is not bound by rigorous standards/formal methods

- Goal of GD: entertain through play => designing games requires both **creativity** and **careful planning** !!!

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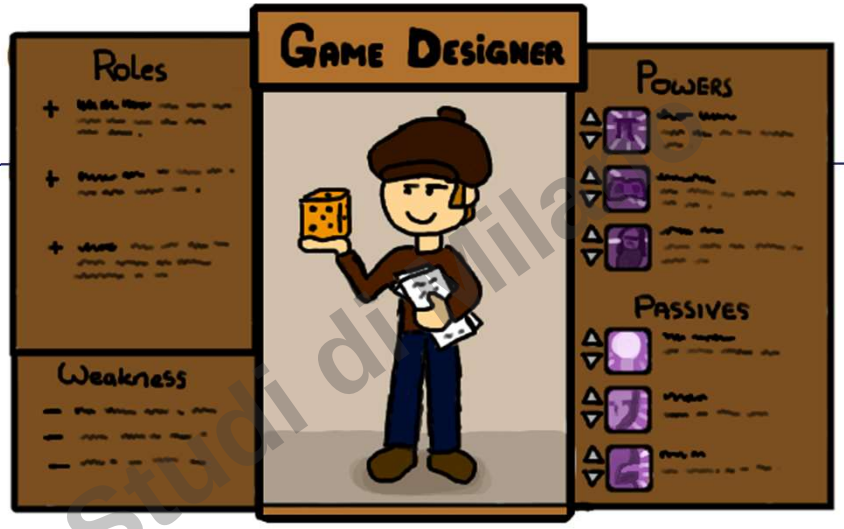
Game design is …



… the process of:

1. **Imagining** a game
2. Defining the **way it works**
3. **Describing the elements** that make up the game (conceptual, formal, dramatic, artistic, etc.)
4. **Trasmitting info** about the game to the team who will build it

The game designer's job includes ALL of these tasks !!!

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Do NOT design by committee

- The design work is **NOT** a **democratic process** !

- ONE person **must have the authority** to make final decisions, and the other **team members must acknowledge** his/her authority

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GAME DESIGN

If you don't make mistakes, you're doing it wrong.
If you don't correct those mistakes, you're doing it really wrong.
If you can't accept that you're mistaken, you're not doing it all.

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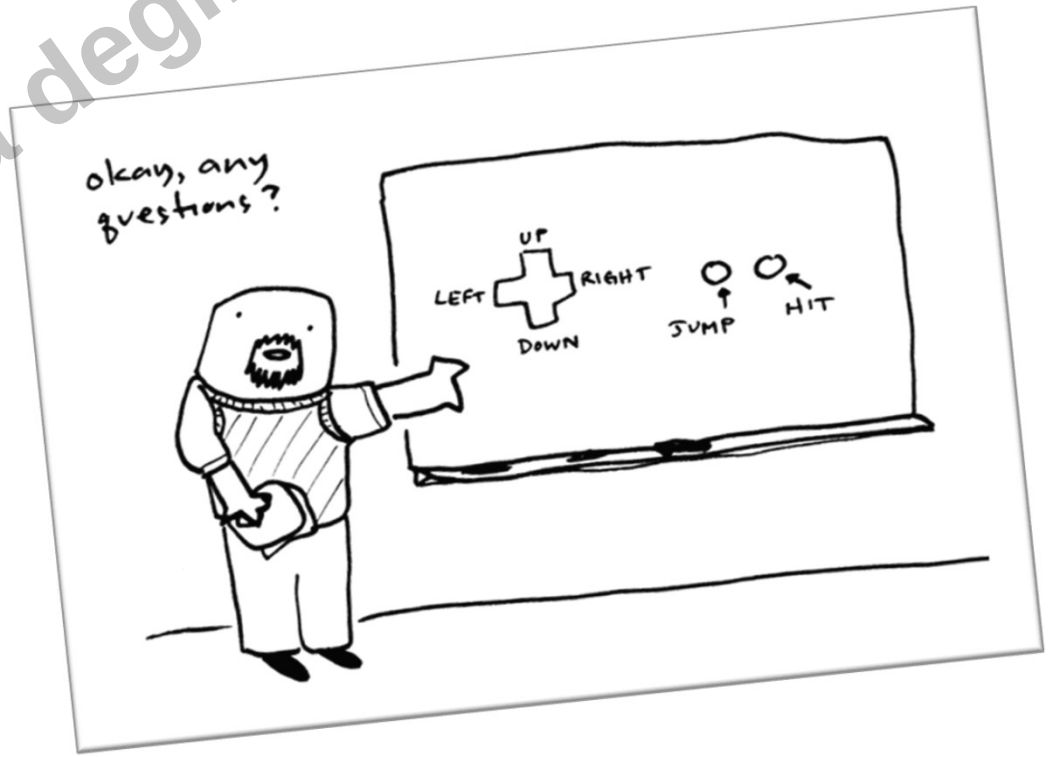
Game designer’s role



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The role of the game designer

- **Game designer** = an advocate for the players (must look at the game through their eyes)
  - This is too often underestimated, but it is the key to success!
- GD envisions how a game will work when played
- GD is responsible for planning everything necessary to create the game experience
- GD plans the structural elements

Main task: make sure that when the game is delivered, it provides **superior gameplay**!

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Requirements & skills for a good GD …

Great GD ⇔ has a passion for creating playful situations!

AND

- is able to keep alive this passion (also in the team)
- Has several skills useful for:
  1. Communication
  2. Teamwork
  3. Process
  4. Inspiration
  5. Becoming a better player
  6. Creativity
  7. …

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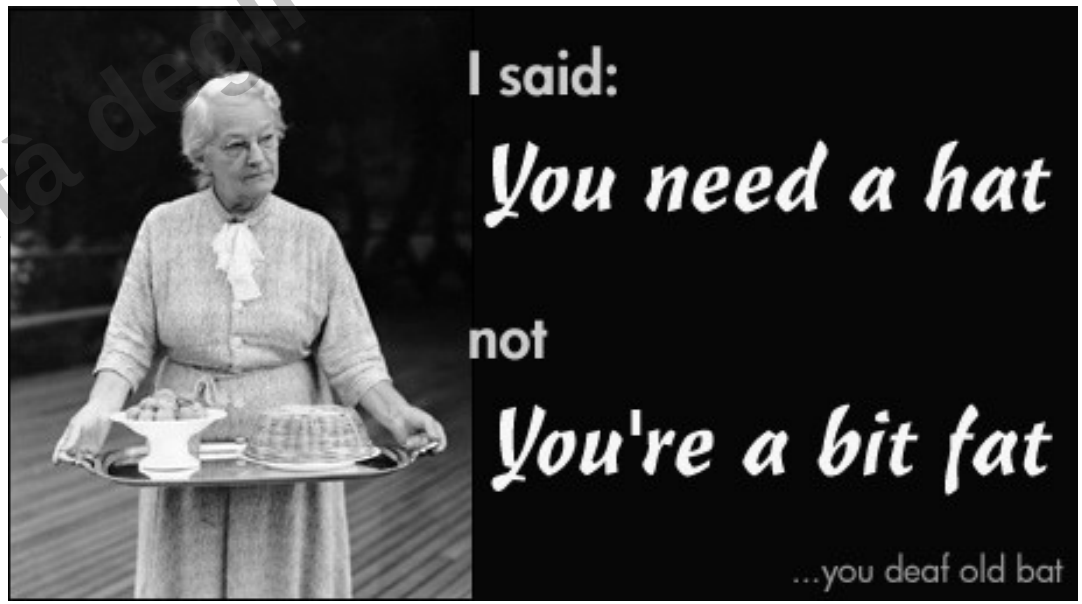
GD'a skills: 1. Communication

- Ability to **communicate clearly and effectively** with other people in your team/involved in the game (be able to "sell" your game)
  - Good language skills
  - Crystal-clear vision
  - Well-conceived presentation



- And also become:
  - a good listener
  - an excellent compromiser

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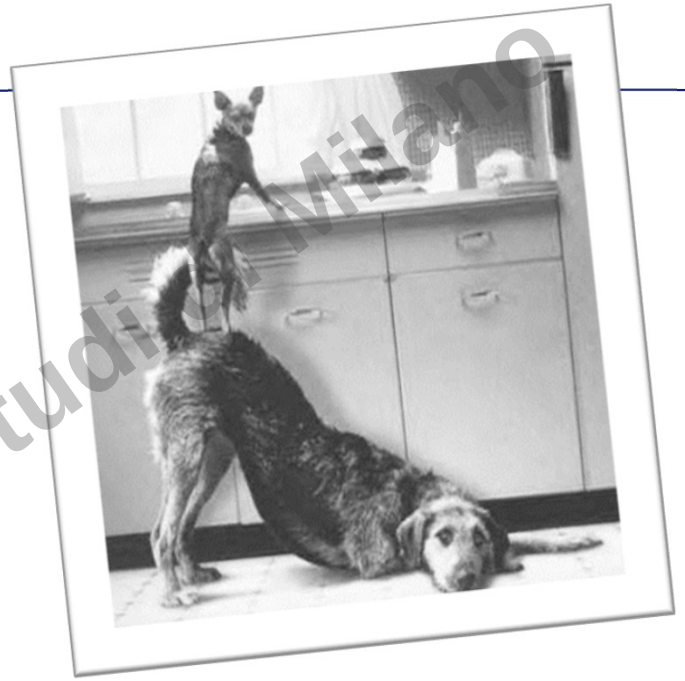
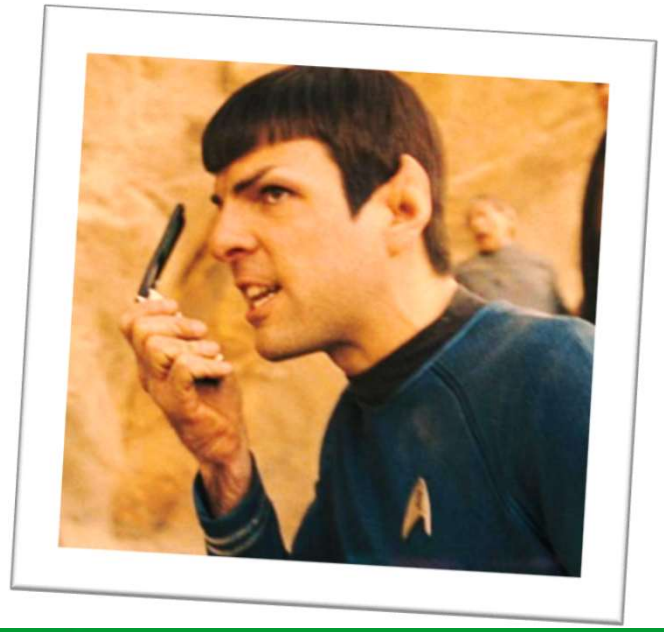
GD'a skills: 2. Teamwork

- Video Game production is an extremely intensive multidisciplinary collaboration process:
  - Computer scientists (!!)
  - Illustrators & animators
  - Executive & business managers
  - Etc.





- All **different languages**, and the GD is the universal translator … :-O

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GD’a skills: 3. Process

- Production is a messy business, that may have disruptive effects on game (a system in which each element is linked to the others…!)
- To avoid risks (e.g. DOA) establish a **GOOD PROCESS** form the beginning to avoid pitfalls of an unstructured approach!

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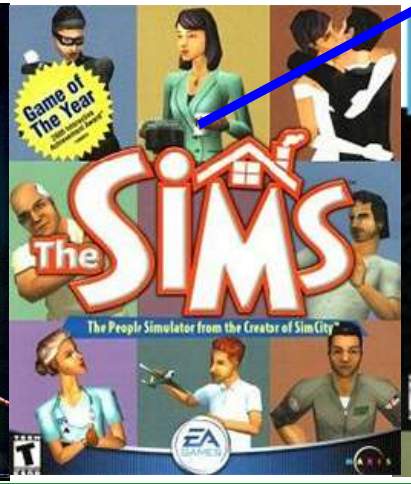
GD'a skills: 4. Inspiration

- A GD has a different way to look at the world: is able **to see & analyze the underlying relationships and rules** of complex systems and to find inspiration in common things
  - Look at the world in terms of underlying systems (rules, etc.)
  - **Don't** fall back on existing games for new ideas
  - Examine a system, break it down and try to understand how it works

Ant colony



Maslow's hyerarchy

Gaia hypothesis

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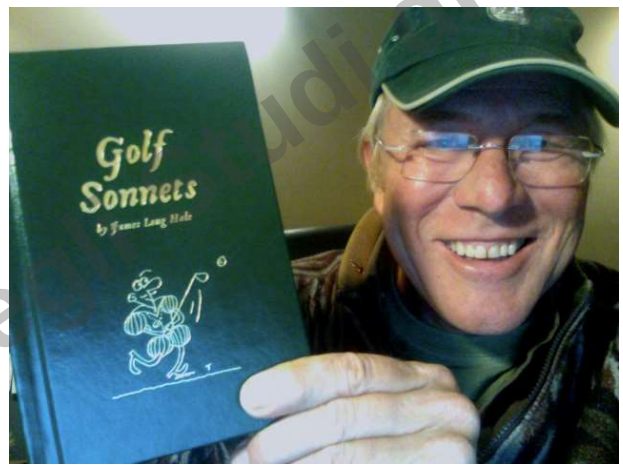
GD'a skills: 5. Becoming a *better player* means …

NOT "get better skills" BUT "become a **game LITERATE**"!



- Music -> study music, develop an ear for music, learn to play an instrument, etc.
- Drawing/painting -> practice with light and textures, develop an eye for visual composition, etc.
- Writing -> learn to read critically, etc.
- Game design -> learn to play with a critical attitude toward the underlying system and use this knowledge to create new games

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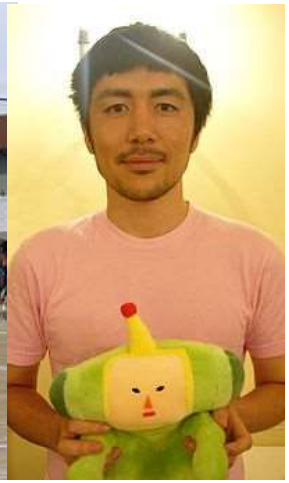
GD'a skills: 6. Creativity

- BEWARE: everyone is creative in her own way:
  - Shigeru Myamoto -> look to childhood and hobbies (Mario)
  - Will Wright -> tap into dreams (the Sims)
  - Keita Takahashi -> mix up things (Katamari)
  - … etc.



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According to Warren Spector …

- Education of a GD should be **as broad as possible**, and should include **at least**:
  - Communication written/verbal
  - Programming (at least basics)
  - Behavioural psychology
  - Architecture
  - Economics
  - History
  - Art
  - Graphics
  - Having played A LOT of **different** games (also in mods groups)
  - Having made games …

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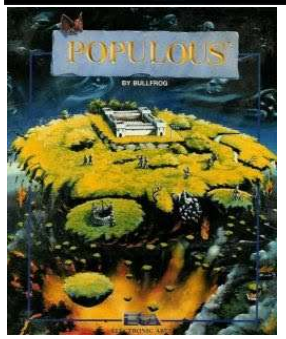
Several (video) game designers u should know …

- Shigeru Myamoto
- Will Wright
- Sid Meyer
- Warren Spector
- Richard Garfield
- Peter Molyneux
- Gary Gygax
- Richard Garriot



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Game design team roles

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The game design team roles (1 of 2)

1. **Lead designer**
   - The «**keeper of the vision**», oversees the overall design and development process and evangelizes team members

2. **Game designer(s)**
   - Defines and documents how the game works
   - May conduct background research & data collection
   - Reports to lead designer

3. **Level designer/world builder**
   - Take components provided by game designers (UIs, core mechanics, etc.) and build levels/world

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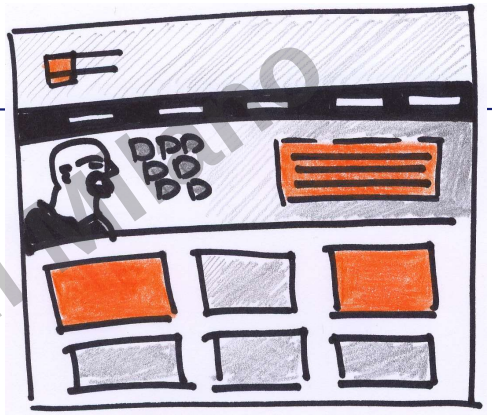
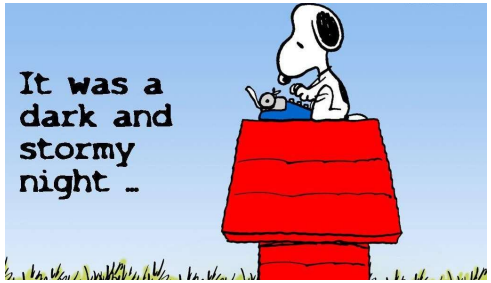
The game design team roles (2 of 2)



4. User interface designer

- Often are usability experts (and expert on specific devices)



5. Writer

- Create instructional and fictional contents (introduction, backstory, dialog, cut-scenes, etc.)

6. Art director/lead artist

- Manages production of all visual assets
- Creates the visual style of the game

7. Audio director

- The same of the art director for music/sounds

Usually do not report directly to the lead designer, but interact a lot with him/her

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Game design steps

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BTW: Game *ideas* vs design *decisions*

- Game **idea**:
  - «dragons should protect their eggs»
- Design **decision**:
  - «Whenever they have eggs in their nests, female dragons do not move beyond visual range from the nest.
  - If an enemy approaches within 50 mts of the nest, the dragon abandons any other activity immediately and returns to the nest to defend the eggs.
  - She does not leave the nest until no enemy has been within the 50 mts radius for at least 30 sec.
  - She defends the eggs to her death»

… that's what writing a GDD is about … ☺

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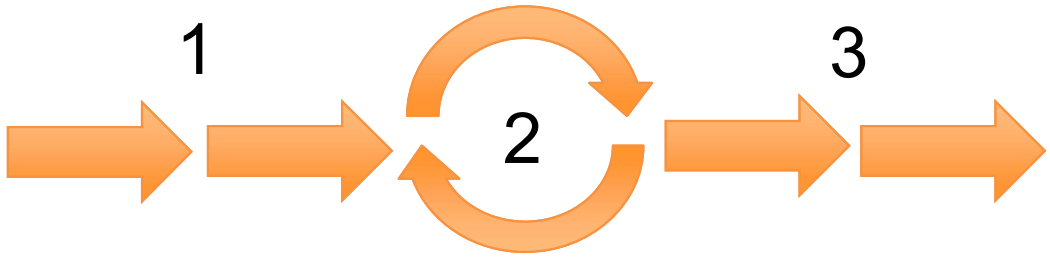
The stages of the game design process

- Unless a project is (really very) small, it's impossible to create a complete design and code it up afterward!

- The design process can be split into three major phases/steps:
  1. Concept stage
  2. Elaboration stage
  3. Tuning stage



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Game design: 1. Concept stage

- Its results **DO NOT** change during the whole project life !

- Stuff decided here is so fundamental that **any change later would wreak havoc on the development process** (if you are building an hotel, you cannot change your mind and build a stadium …)

CONCEPT ELEMENTS ARE PERMANENT

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1. Concept: Where do ideas come from?

preparation
- Becoming immersed into a topic

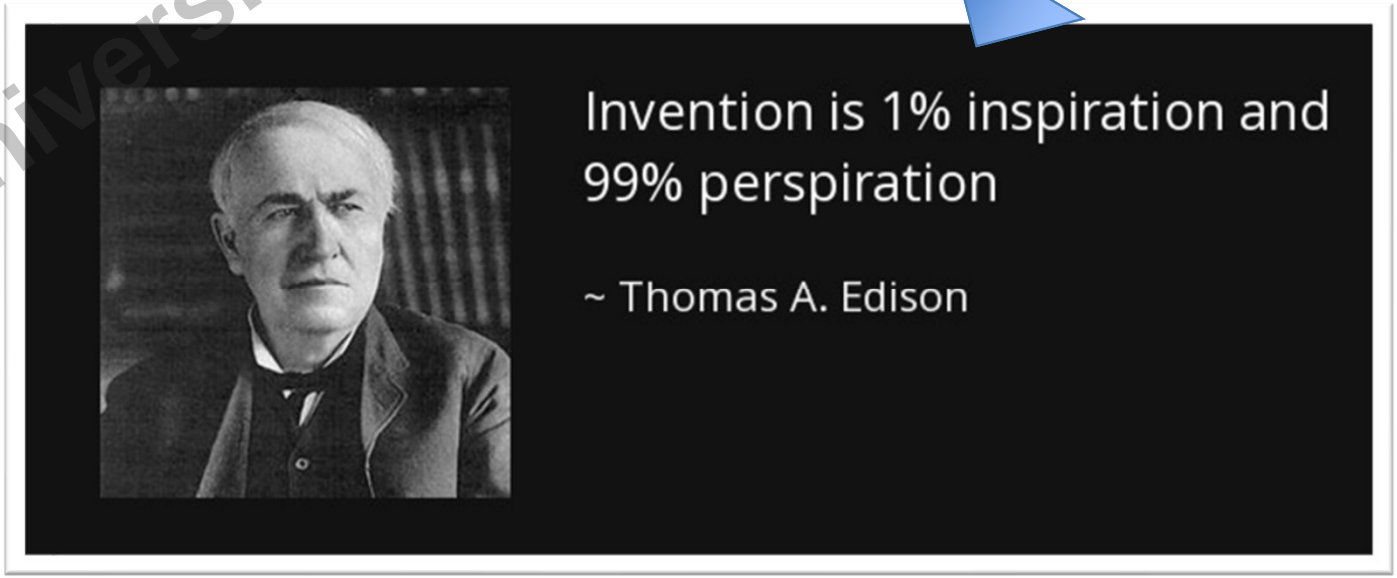
incubation
- Ideas below the threshold of consciousness

insight
- AHA! moment

evaluation
- Is the idea worth pursuing?

elaboration
- Longest part
- Hardest part

The creative process according to Mihaly Csikszentmihalyi (yes, HIM, again...)



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1. Concept: Where do ideas come from?

- Living a full life **plenty of interests**
- **Looking below the surface** of your daily life
- Keeping a **game journal**:
  - VERY different from magazines articles on games: do NOT focus on top-features, but dig deeply into formal, dramatic and dynamic elements

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1. Concept: Brainstorming techniques

Best practices	Possible methods/techniques
a. State a challenge b. No criticism c. Vary the method d. Playful environment e. Put it on the wall f. Go for lots of ideas g. Don’t go too long	• List creation • Idea cards • Mind maps • Stream of consciousness • shout it out • Cut it up

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1. Concept: Brainstorming a. state a challenge

- Set **a challenge** for the brainstorming session.
- Examples- design a game:
  - where players must make strong alliances and then they betray
  - With a special role for parents to play with their children
  - That makes interesting use of only 1 button for control
  - Etc.

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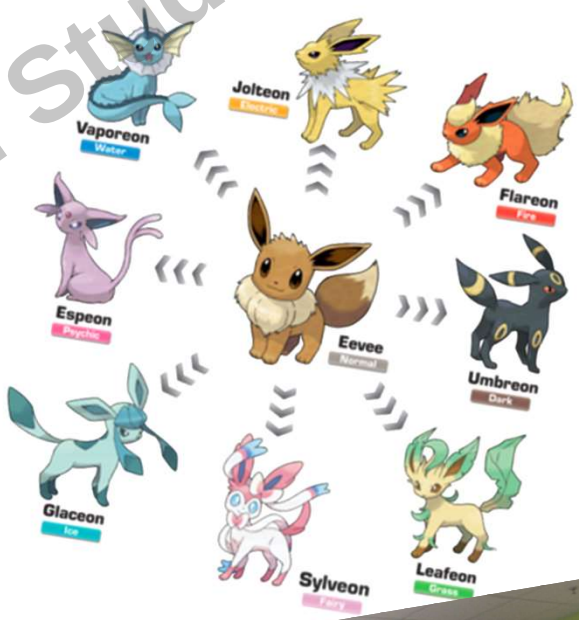
1. Concept: Brainstorming

b. No criticism:

- critics to (also stupid) ideas block the creative process and may scare some people



c. Vary the method:

- Different methods may be more suitable with different groups/problems

d. Playful environment:

- avoid «too serious» environment (desk + PC), they may block creativity

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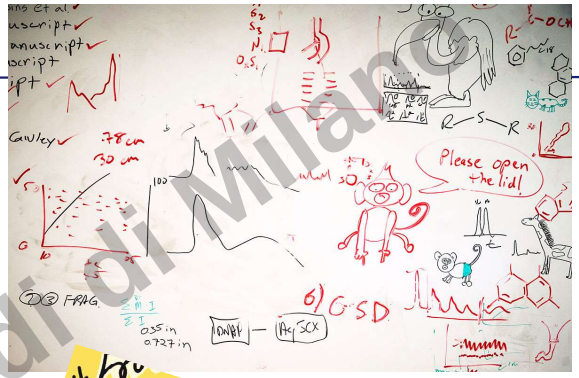
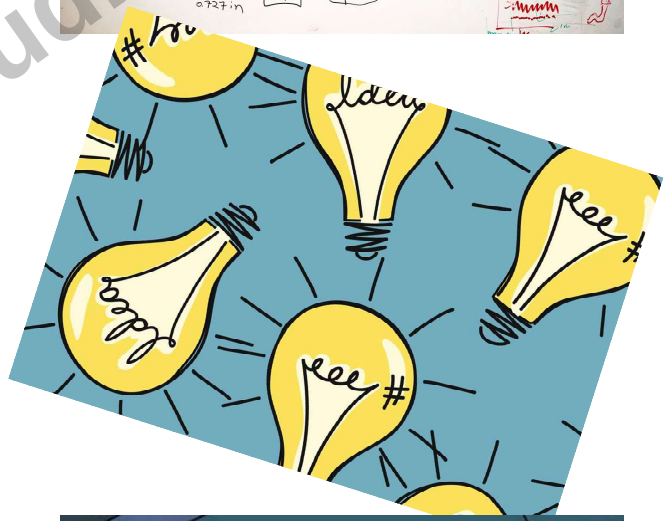
1. Concept: Brainstorming

e. Put it **on the wall**:
   - Get visual with ideas (e.g. a whiteboard)



f. Go for **lots of ideas**:
   - Create A LOT of ideas (100 in 1h), even weird. Number them for reference



g. Don't go **too long:**
   - After 60' you need a break (brainstorming is energy-consuming). Go on the next day

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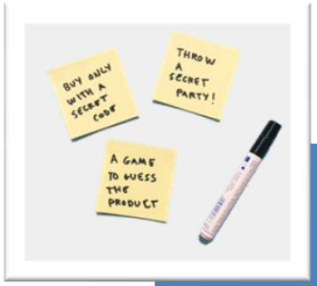
1. Concept: Brainstorming methods

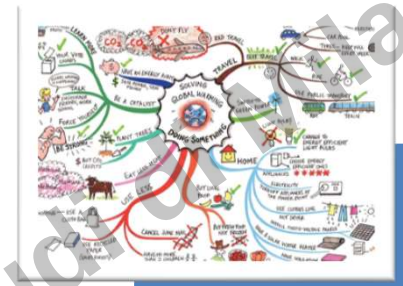
List creation

- List out **<u>everything you can think</u>** of on a topic
- Then list variations on the topic



Idea cards

- Write ideas on **<u>cards</u>**
- Mix then
- Draw couples (or more) of cards



Mind map

- **<u>Core idea in the centre</u>**
- Related ideas around
- Helps non-linear reasoning

NEW GAME IDEAS

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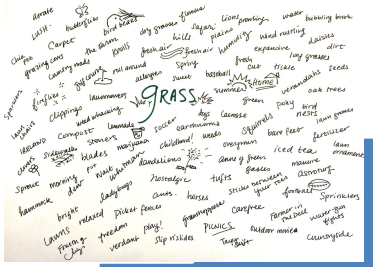
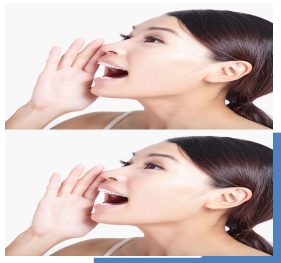
1. Concept: Brainstorming methods



Stream of consciousness

- **Write everything** that comes to your mind thinking of your game for 10 minutes
- Stop and think it over



Shout it out

- The same, but **shouting in a recorder**

Cut it up

- **Cut random words and images from magazines** (or web pages, or the dictionary, …)
- Mix them and try to come up with a concept

NEW GAME IDEAS

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Game design: 1. Concept stage

1. Get a concept
   - General idea of the game and why this would be a compelling **experience**
2. Define an audience
   - Who would enjoy the experience (see GD duty #2: empatize!)
3. Determine the player's role
   - Important for influencing both publisher and buyers …!
4. Fulfill the dream
   - Define the **essence of the experience** you are designing (e.g. challenges, actions, etc.)

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Game design: 2. Elaboration stage (1 of 2)

1. **Primary gameplay mode**
   - The mode in which the player spends the majority of her time
   - Includes: perspective (view), interaction model, challenges, actions available to overcome challenges
2. Design the **protagonist** (if any)
   - Goal: the player identifies with it => «fun» to watch
3. Define **game world**
   - Real vs imaginary
   - Look & feel
   - Dimensions: physics, time, environment, emotions, ethic

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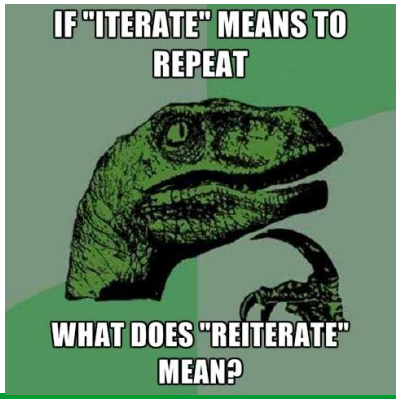
Game design: 2. Elaboration stage (2 of 2)

4. Design **core mechanics**
   - challenges are in place => start thinking which core mechs you need to implement
5. Create **additional (gameplay) modes**
   - Be careful: they require to rethink gameplay & mechs, creating a lot of stuff (assets & c.), a lot more playtesting, etc.
6. Design **levels**
   - Most important milestone: 1° playable level => playtesting!
7. Write the **story**
   - Must be integrated with the gameplay
8. **Build, test & iterate** … and build, test & iterate
   - Build, test and iterate !!



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Game design: 3. Tuning stage

- Once elaboration stage has finished
  => **feature lock**
  (nothing more should be added to the game)

- Now u have to polish your game till it's perfect
  - NB it's a **SUBTRACTIVE** process …. !!

- Often this stage makes the difference between a good game and a really GREAT one!

PS SCRUM management process could be adopted

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Game designer's duties …

A player-centric design process

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A player-centric design process

- Is a (generally succesfull) phylosophy of design in which **the designer envisions a representative player** of the game he is creating. Hence he has 2 **duties**:

  1. The duty to **entertain**
  2. The duty to **empathize**

- While avoiding **misconceptions**:

  1. I am my own typical player
  2. The player is my opponent

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1. The duty to entertain

- The player spends t & € on your game => your 1° concern MUST be to be sure she enjoys herself

- **Entertaining players has a higher priority than expressing your creativity … !**
  - If an aspect of the game is not compatible with player's enjoyment … than modify/eliminate it (yes, even if YOU like it a lot!!) !!

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2. The duty to empathize

- Put yourself in the shoes of your representative target player (a 6 years girl, a 75 grandpa, etc.) and imagine what it is like to play your game

- For EVERY design decision you MUST ask yourself how it meets the player's desires and preferences

- You need to think **how the player will react to EVERYTHING** (artwork, interface, gameplay, etc.)

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Misconception 1: I'm my own typical player

- You CANNOT assume that players like what *you* like

- **You MUST learn to design what THEY like** !
  - With EVERY decision ask yourself «*What if the player is a kid/a granny/a girl/asian/etc.?*»

Professionalism is just as important as passion!

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Misconception 2: The player is my opponent

- **Avoid the arcade games clichè**: the designer job is NOT to create hard obstacles preventing the player to win the game

- Model ok ONLY for games making money from players putting coins into a machine
- Does not take into account players' motivations and/or interests
- Ignores creativity (games that may not include obstacles, etc.)

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Other stuff influencing game design

1. **Market-driven** games
   - u can't make a brilliant game just by putting in all the most popular gameplays

2. **designer-driven** games
   - U can't ignore playtesting (e.g. Daikatana …)
3. **License-driven** games
   - Constraints creativity, but the resulting game must be as good as if it didn't have a license !
4. **Technology-driven** games
   - Beware of not spending your time on the technology, instead of on making sure the game is enjoyable (Crysis & Crytek engine)

5. **Art-driven** games
   - Rare. Show-off of artwork & C. (Myst, Journey)

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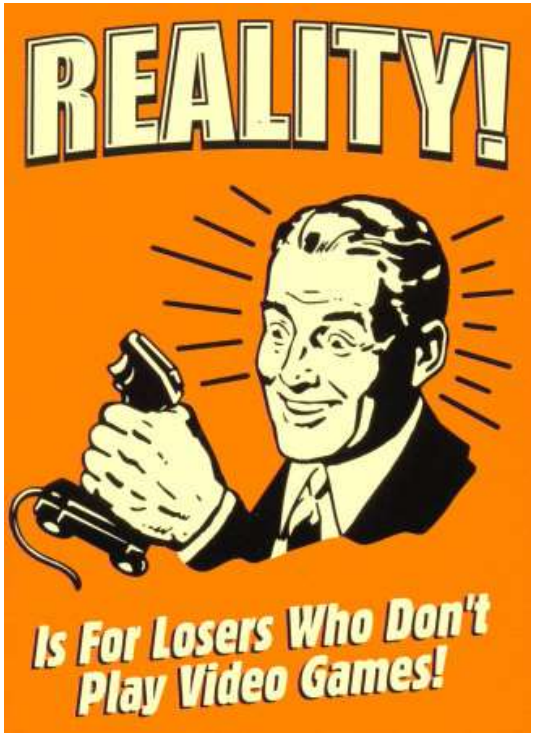
A player-centric design process

- Having a solid process for developing is a CSF:

PLAYCENTRIC DESIGN PROCESS

Key features

1. Setting player experience goals
2. Prototyping & playtesting
3. Iteration
4. (Prototype & playtesting in the industry)



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1. Setting player experience goals

- **Goals for the type of experience** that players will have => do not describe "the game", only the **experience**… :
  - "players will have to cooperate to win, but they should never trust each other"
  - "players can choose to pursue the goal in whichever order"
  - Etc.

- It's the first thing to have clear in mind:
  - Ok for involving players in development from the very beginning
  - helps focusing creative process
  - Helps getting inside the head of players

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2. Prototyping & playtesting

- Ideas should be prototyped and playtested <u>early</u>:
  - Build asap a playable version and/or a physical prototype of the core game dynamics to get instant feedback!
- Usability aspects more and more relevant, especially for new, unexperienced players: VR, etc. …

- To avoid costly mistakes: do <u>NOT</u> start production BEFORE having understood player experience and core game mechanics

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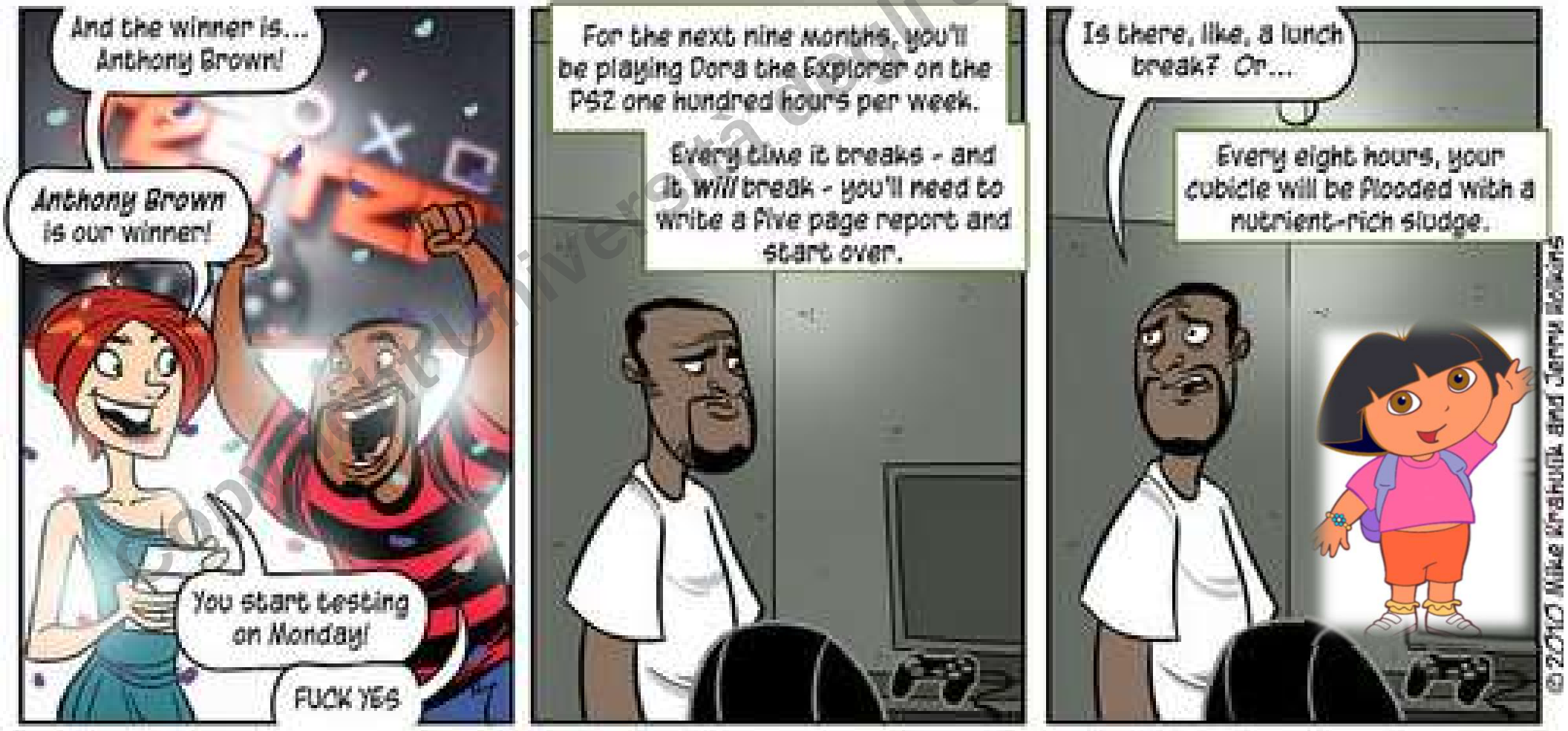
Playtesters

- Playtesters: play your game and give feedback on the experience. By watching other people playing your game, you can learn quite a lot!



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Playtesters

- Pay attention to:
  - What they are focused on, where they click/move the cursor when bored, what they tell you. …
- Underestimating playtest can be dangerous (cost, time loss, etc.), since games are not one-way communication: you must build an "**experience**":
- U are the "host of a party": the interactive experience is fully realized only when the guests arrive!

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Playtesters

- Playtest is the **heart** of the design process

- Games are living systems => **EVOLVE** during the development cycle

- Repeated testing and careful observations are extremely important

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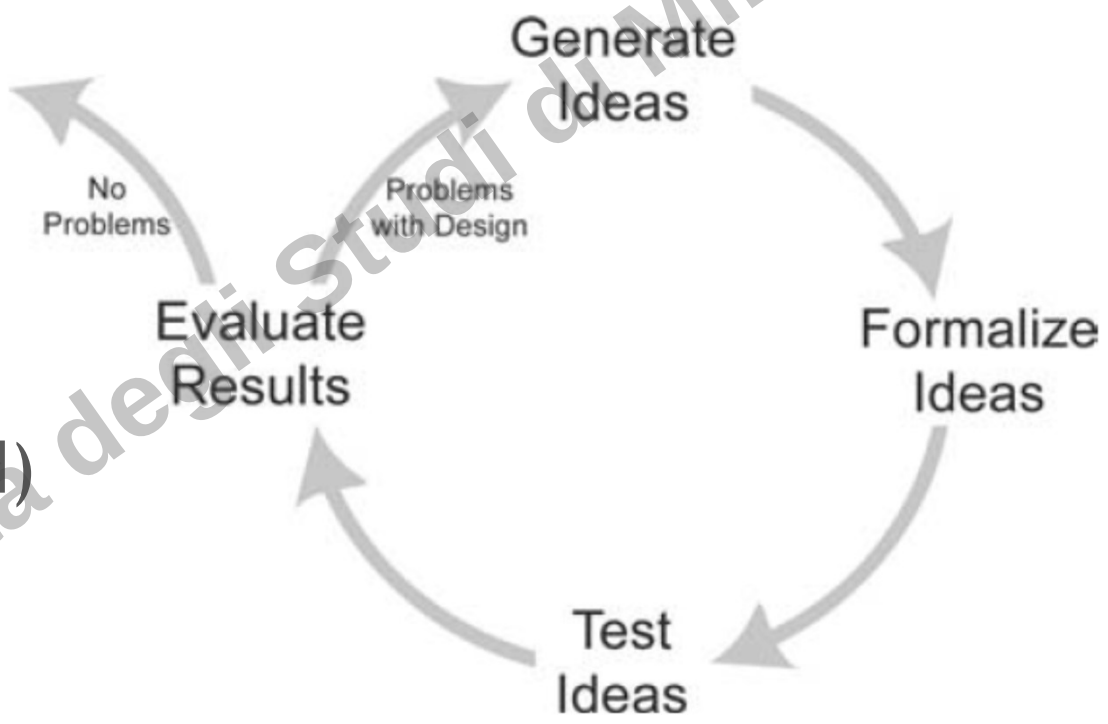
3. Iteration

GD process (example):

1. Experience goals set
2. Idea/system conceived
3. Idea/system formalized (written down/prototyped)
4. Idea/system tested against experience goals
5. Results evaluated:
   - <0: go back to step 1
   - So-so: improve and test again
   - >0: ok



Iterative process

(valid for the whole development process)

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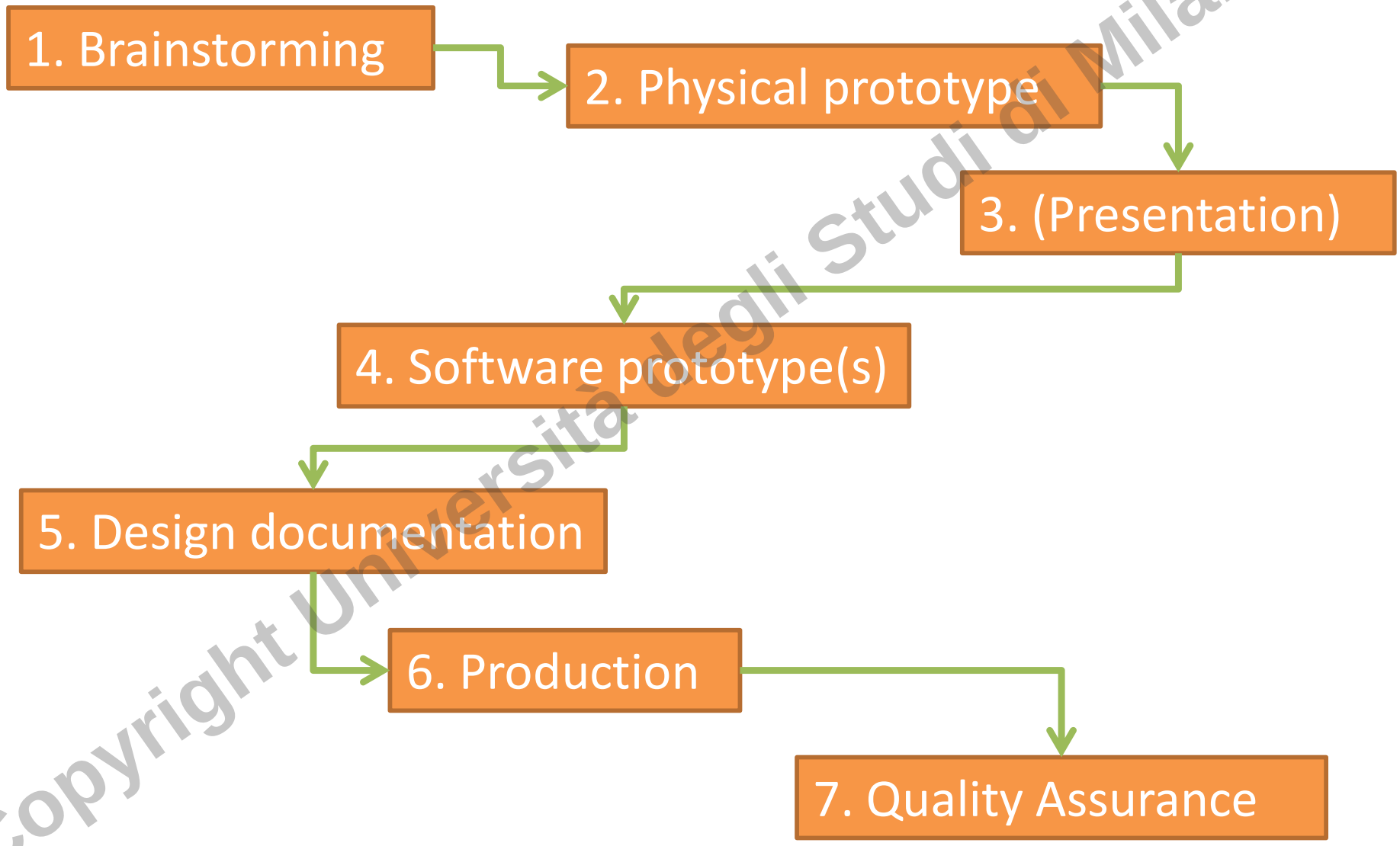
3. Iteration & development process



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3. Iteration

Development process (whole):

1. **Brainstorming**:
   - Set experience goals
   - Create related concepts/mechanics
   - Choose the top three
   - 1 page description (Concept doc)
   - Test concepts with players
2. **Physical prototype**:
   - Create playable prototype
   - Playtest
   - When ok, 3-6 pags about how the game functions
3. (**Presentation**):
   - Useful for funding: artwork + gameplay

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3. Iteration

4. Software prototype(s):
   - Rough model of core gameplay (several prototypes about different aspects)

5. Design documentation:
   - Collect info while prototyping and start writing a draft doc of every aspect of the game (design document)
     (Note: it can be a Design-Wiki, etc.)

6. Production:
   - Verify with whole team that each aspect of the game is achievable and correctly described in the design doc
   - Create artwork & programming
   - Test, test, test …

7. Quality assurance:
   - Verify aspects like accessibility and playtest again

Sw prototype what u need to understand, NOT what u already know/can prototype via cheaper tools!

NB: if playtest & proto well done => only tiny problems to deal with !

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4. Prototype & playtesting in the industry

1. Brainstorming
2. ~~Physical prototype~~
3. ~~Presentation~~
4. ~~Software prototype(s)~~
5. Design documentation
6. Production
7. Quality assurance

- This happens often, but:
  - Ok with derivative games
  - poses risks (costs, etc.)
  - Inappropriate for reaching new gaming audience (Wii, etc.)

Constraints innovation!

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Innovation & games

- To reach new types of player you need breakthroughs in player experience
- GDs next generation HAS TO BE INNOVATIVE
  - Unique mechanics, beyond exisitg games
  - Appeal to new players (new tastes!)
  - Integrate story & gameplay
  - Create deep empathy for characters
  - Create emotionally rich gameplay
  - Investigate relation between game and learning
  - … ? ? ?

LEAP MOTION

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