Introduction to Game Design (Prototyping & Playtesting)

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Why Playtest?

"It's easy to get **too close** to your own work and **lose perspective**"[1]

[1]Tracy Fullerton in Game Design Workshop (3rd Ed.), 2014.

Why Playtest?

Allows to observe the experience through the eyes of a player

[1]Tracy Fullerton in Game Design Workshop (3rd Ed.), 2014.

Reminder

Games are **not** a form of **one-way communication**

Playtesting & Prototyping

A game designer's most important tools!

The Playcentric Design Process

Philosophy

- Keeping the **player experience** in mind

- **Testing the gameplay** with target players **through every phase of development**.

The Playcentric Design Process

Setting Player Experience Goals

- **Not Features**

- **Descriptions** of the **interesting** and **unique situations**, you hope **players will find themselves in**.

Example

Players **must cooperate** to win, but it is structured so **they can never trust each other**.

Players will **feel** a sense of **happiness** and **playfulness rather than competitiveness**.

The Playcentric Design Process

Setting Player Experience Goals

- **Features are brainstormed later**…
- …then **play-tested to see** if these **experiences are achieved**!

Playtesting

One of the **key components** of *Playcentric Design* is to **Prototype** and **Playtest *early***!
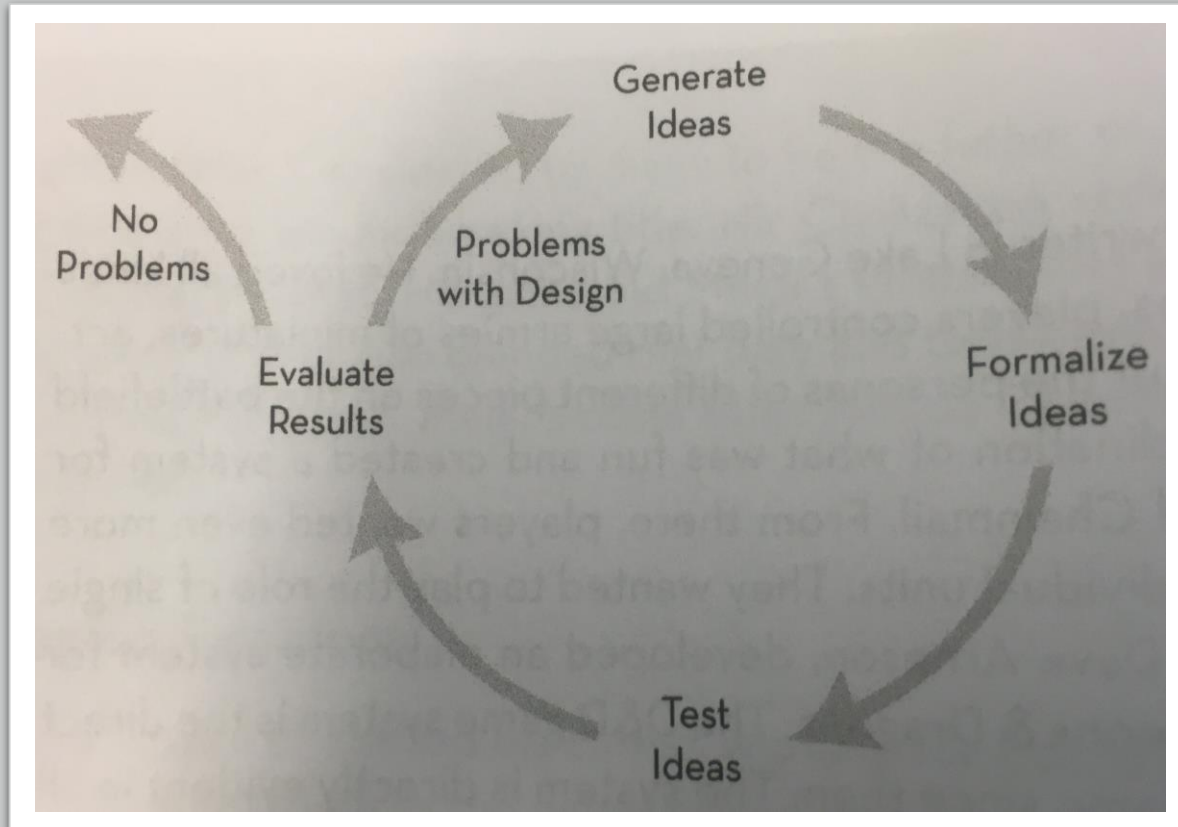
Immediately after Brainstorming!

Playtesting - Reason

The **more far along you are** in the project the **harder it becomes to change** inherent game design flaws!

Programmers and Artists can spend **months/years** on design decisions!

The Iterative Design Process

1. Player Experience Goals are Set
2. System Idea Conceived (i.e. Brainstorm)
3. System is Formalized (i.e. Prototype)
4. Idea or System is Tested against Player Experience Goals (i.e. Playtesting)
5. Evaluate:
   1. If Negative: Flawed Idea – Try Again;
   2. If Improvement: Modify, Refine and Playtest
   3. If Positive: System is Successful – Finish

Conceptualization

Coming up with ideas for games

Observe your surroundings!

Everyday Life has millions of objectives which can be considered "playful"

RELATIONSHIPS HISTORY SCIENCE LITERATURE POLITICS

Brainstorming!

The best ideas tend to come during brainstorming sessions, where you are free to say whatever you want!

Brainstorm - Objective

The Experience Brainstorm

Setting Player Experience Goals

The Systems/Mechanics Brainstorm

Coming Up with Systems capable of achieving the Player Experience

Brainstorming!

During these sessions everyone should be **free to talk without judgement**!

The **fantastical** or the **absurd** can lead to great ideas!

Guess the Game?

We should make a game with ...
- A Combat Gorilla in a Jetpack
- A Cyborg Ninja
- Futuristic Cowboy
- Mechs!
- Psychotic Bomber
- Duel-Wielding Grim Reaper

Overwatch – Class based First Person Shooter

Narrow it Down

- Limit brainstorm sessions (10 or 20 minutes);
- Narrow the three "best ideas"
- Write up one-page descriptions of these ideas (e.g. concept document)
- Test the ideas!

Breaking a Concept

It varies between individuals and the design philosophy of companies

- Design mechanics around a theme is one way

- *Design the mechanics first, and then apply a theme around it*

Suggestions

Try and not change a proven mechanic to fit a specific aesthetic choice, because it usually does not work

Games are not based on "realism" you can make up whatever you want!

Prototyping

Creating a rough approximation of your idea allowing you to test its feasibility.
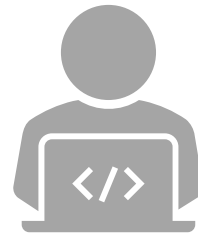
Remember…

You are not creating the final design

You **are formalizing your ideas** or **isolate issues** before the final design

Good Practices: Divide and Conquer

Construct several each focusing on a **specific aspect** of a system.

If a system **works really well** – **Keep it**!

Building "on top" of **successful prototypes** often leads to **success**!

Prototyping

As a game designer your task will be to **build prototypes**, **playtest them**, and **refine them**

Paper prototype

- Such as "Wizard of Oz" methods, usually early in development

Digital prototype

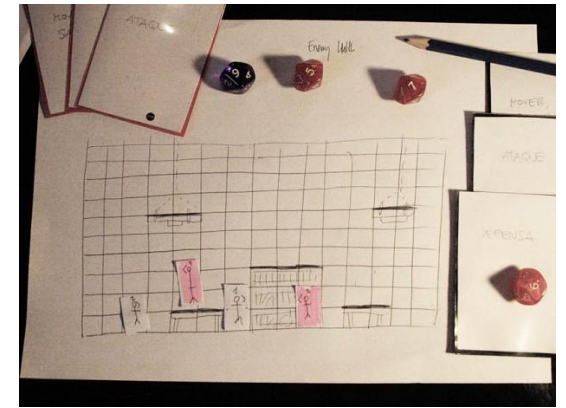- Once an early game foundation is ready (i.e. game engine and basic interaction systems)

Paper Prototyping

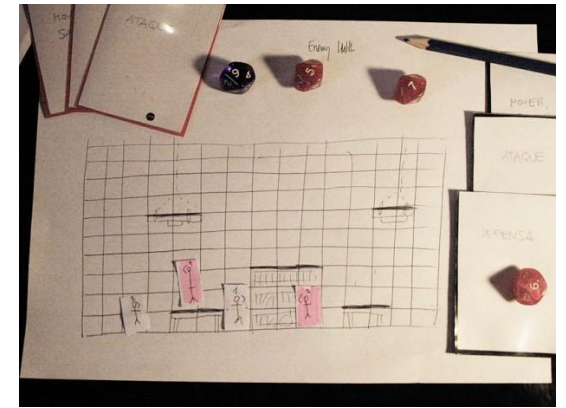Take out your dice, cardboard and wood pieces

Pros

- Cheap!
- Fast!
- Can change things on the fly!
- Play alone, refine ideas and perfect!

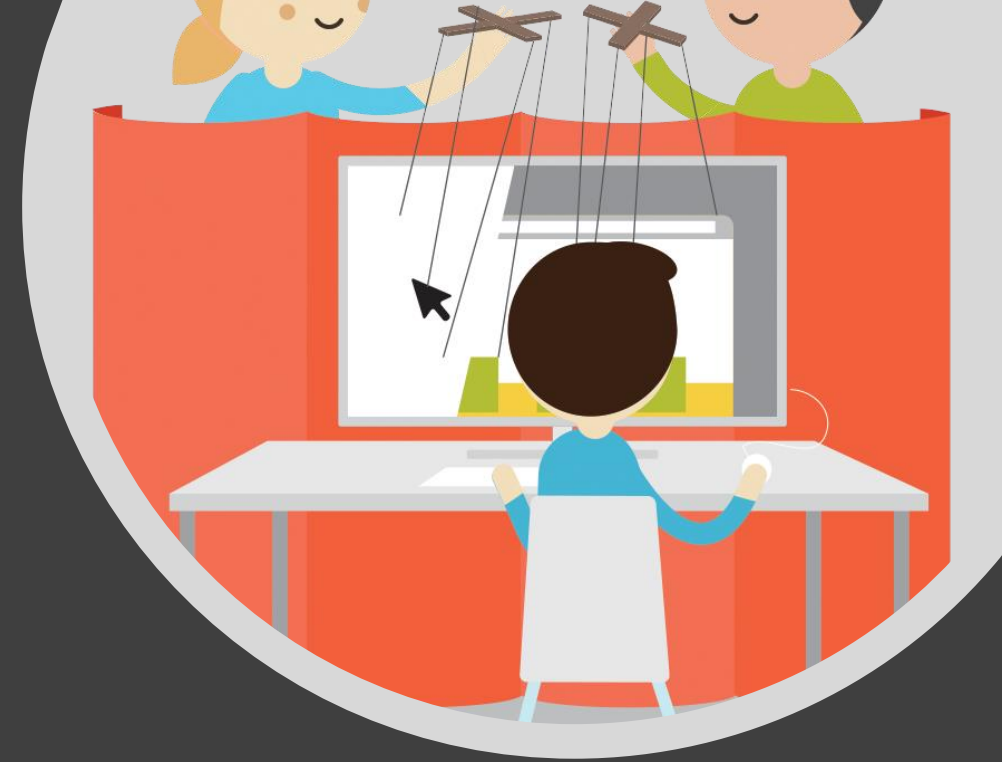# Paper Prototyping

Cons

- Some gameplay concepts may be difficult to effectively build

- Once translated into digital form, it may not be as effective as it was in the digital prototype

Wizard of Oz (Prototype)

Simulate the autonomous components of a game, which are directly controlled by the experimenter

Useful to test potential player interactions with the game, characters or other interactive factor

Paper Prototyping (Why?)

Design Aid

- ***Put your ideas into practice*** – test its viability in conveying the experience you want to offer
- Allows you to ***concentrate on mechanics***, and to a certain extent get an initial perception on its balance

Communication Aid

- ***Games are often built with a team*** – paper prototypes allows you to communicate your ideas more efficiently!
- Consequently, allows the ***team to offer their own feedback***, which refines your design
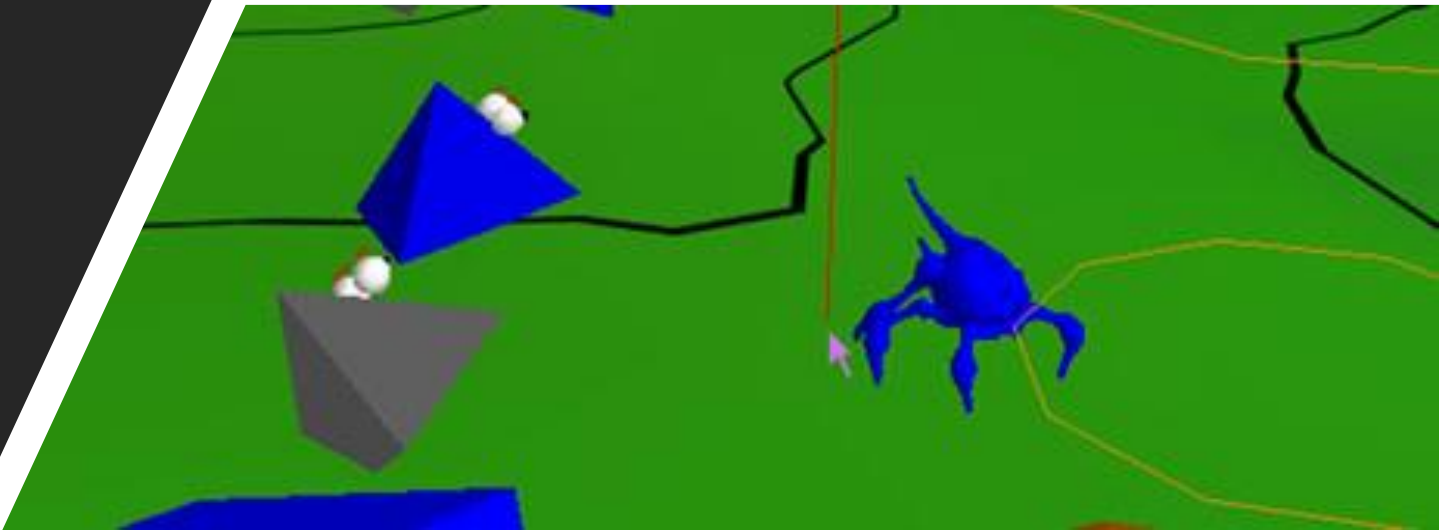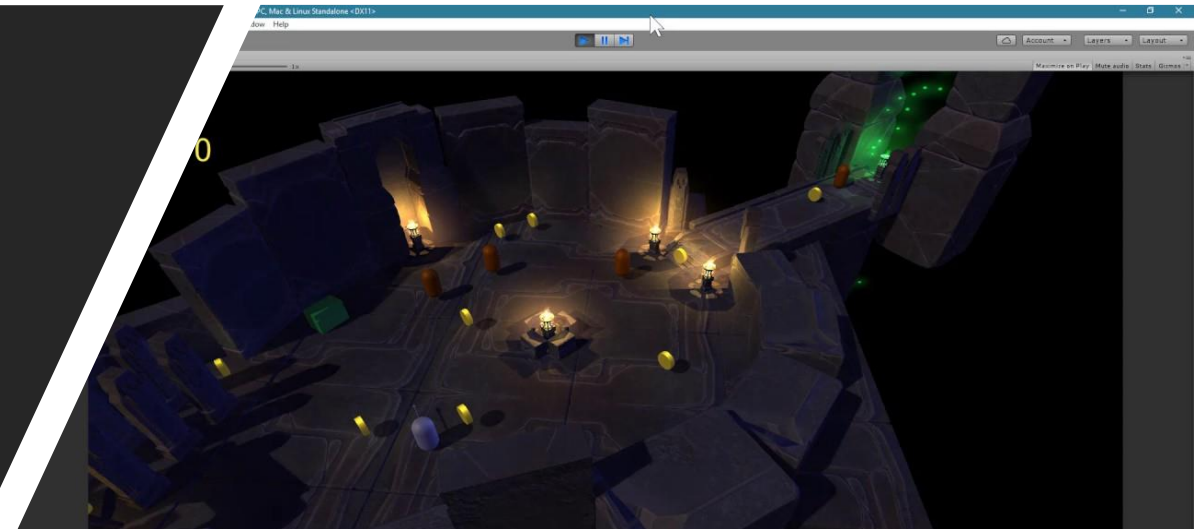
Digital Prototyping

Answer Questions Regarding:

- Game Logic
- Physics
- Environments
- Levels
- …

Envision the Gameplay

- Input -> Output

Did you know?

Shigeru Miyamoto, creator of Super Mario, and his team took at least 1 year and a half just to perfect:

- Mario's Movement in a 3D world

- Manipulating the Camera System

Did you know?

"… so he was 100% Mario 64, he was always there. Sitting down with a machine and playing with the various demos. One of the things he loved doing was just playing down with experiments."

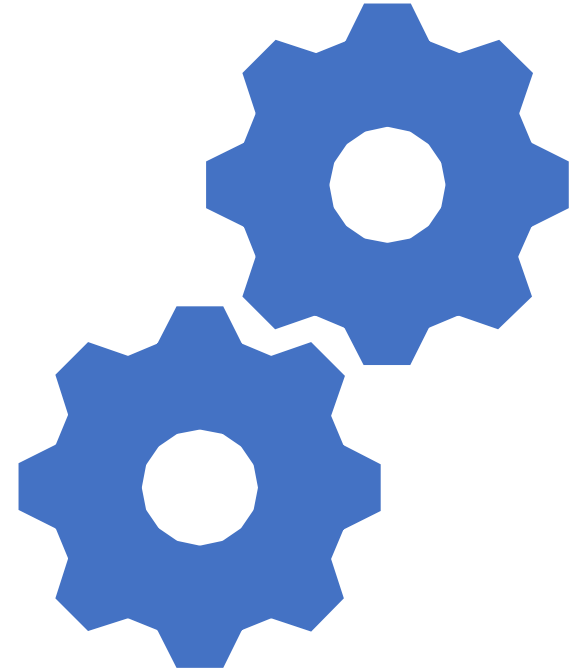-- Giles Goddard (Programmer at Nintendo)

Types of Digital Prototypes

Prototyping Game Mechanics

Prototyping Aesthetics

Prototyping Kinesthetics

Prototyping Technology

Prototyping Game Mechanics

Answer questions about the *logic* of the game

Using Paper Prototypes can really help here!

Examples:

- How long does it take to complete a scenario?
- Is Combat Tedious?
- Is the Combat System Engaging?
- Does the Player have an unfair advantage or disadvantage?

Prototyping Aesthetics

Sometimes it is necessary to question how aesthetics can influence gameplay.

Digital Games are, after all, multimedia experiences!

Examples:

- Animation Timing and Length
- Impact of Audio as a Gameplay Feedback Mechanism

Important – A balance is necessary. It's still a Prototype!

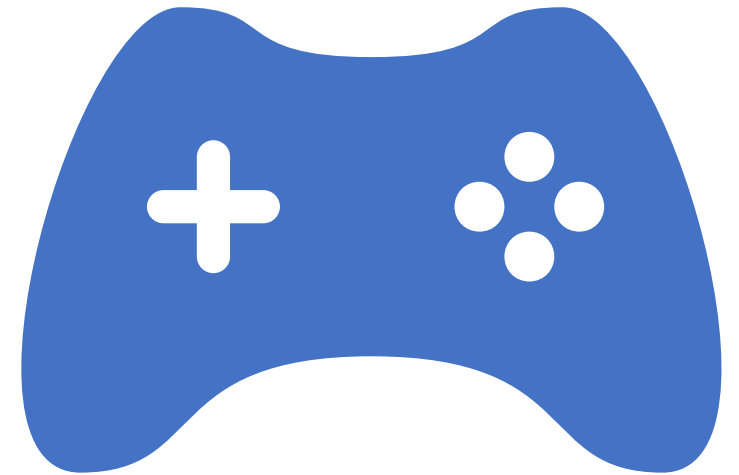Adding just enough is key to testing aesthetics.

Prototyping Kinesthetics

Getting the right "feel" of the game – How controls feel / responsiveness.

Can only be prototyped digitally

Example:

- Getting the "Jump" to feel natural in Super Mario
- Make Player Actions feel meaningful in Dark Souls
- Making combat flow naturally in Street Fighter

Prototyping Technology

How to make the game work technically.
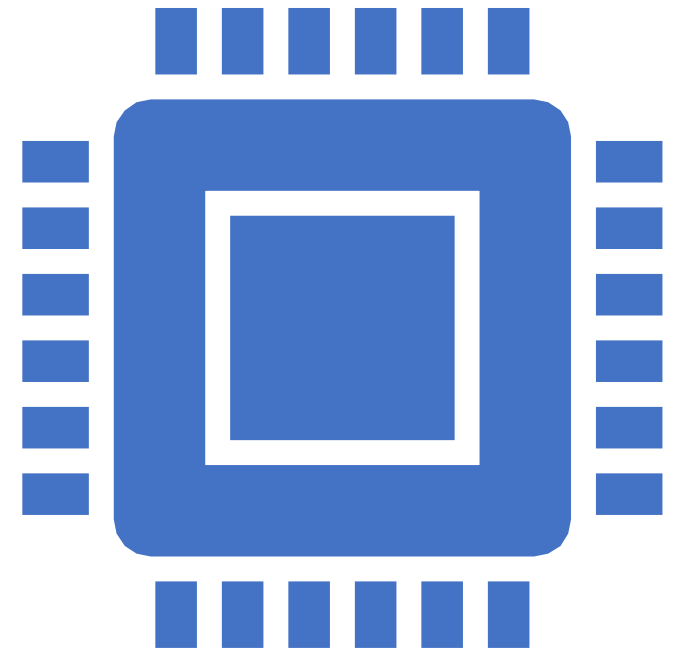
A good opportunity to test ideas quick and dirty.

Examples:

- Prototyping the Graphic Capabilities
- NPC Behavior Systems
- The Physics Engine

Important:

- This is **not** the actual game code!
- Its dirty and fast – only test ideas!
- Once effective, start a clean slate and implement it "efficiently"

Playtesting

Listen, Observe, Annotate and Change

Playtesting

What it is:

An activity which is performed **throughout the entire design process** to gain insight into **how the players experience the game**.
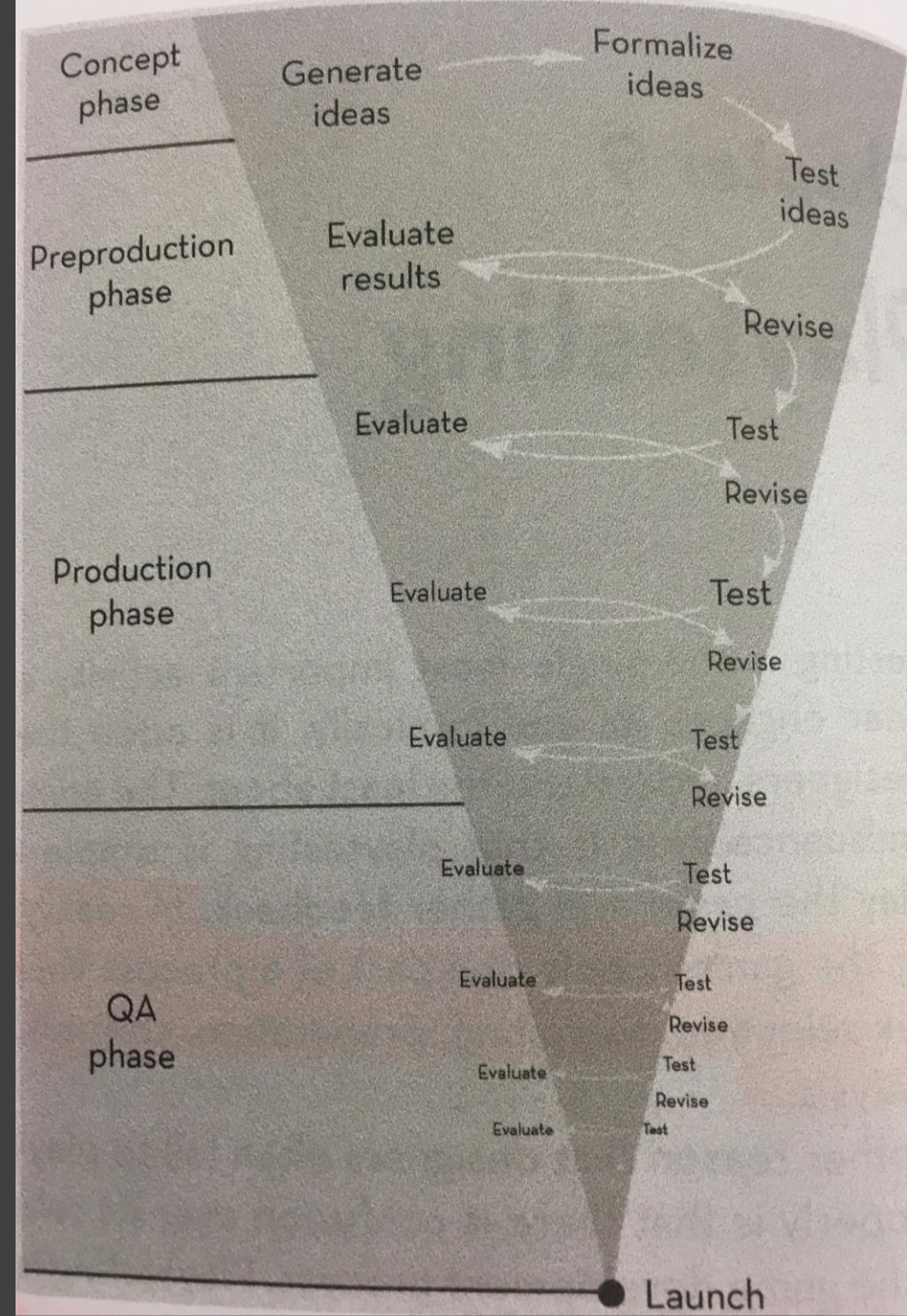
What it is not:

- The team plays the game and discusses it's features (i.e. Internal Design Review)

- Finding bugs and flaws in the code (i.e. Quality Assurance or QA)

- Analyze mouse movements, eye movements, navigation patterns, etc. (i.e. Usability Testing)

Playtesting

Conducted **throughout the entire design process**

Playtesting
What it Consists of..

Recruiting Individuals to Test your Game

Running Playtesting sessions with said individuals

Observe the players interacting with the game

Discuss with the players and obtain valuable feedback

Important

What you need to do as a designer

Willing to **receive criticism** or **praise** from your designs

You need to *listen* and **pick apart** their comments

You need to **compromise** and **allow changes to happen**

Observe the players playing your game!
> What are they feeling?
> What are their choices?

Playtester Type – Self Testing

Running playtests for **yourself** (or the group of designers) to *pin-point the current playing experience*.

Goals

Experimenting with concepts that are still not entirely defined.

Fixing glaring problems within the play experience.

Make the Game work and provide a rough approximation of the final product.

When

During the foundation and early stages of the game design process.

Can happen throughout the project but its **reliability will diminish significantly** as the project evolves – from this point forward it is *crucial to rely on outsiders*

Playtester Type – Confidants

Running playtests for **friends, family or co-workers outside of the design group**.

Goals

Bring fresh eyes to the design and provide initial feedback you may have not considered.

Bring the game to a state where **you do not need to be present for it to be playable**.

When

During the early stages of the game design process.

Up until the game becomes playable on its own merits (without you being present).

Relying heavily on confidants will not provide objective and balanced feedback.

Playtester Type – Outsiders

Running playtests for **total strangers** with fresh perspectives and nothing to lose.

Goals

Observe play from fresh perspective and obtain objective and constructive criticism

Untainted by any knowledge of the game and personal ties.

When

Over the course of the game design process.

Up until the game experience is satisfied – which may take several iterations.

Recruiting Playtesters

_____

Find Individuals

Advertise Online, Local Communities – Try **as many sources as possible** in order to **obtain a large candidate pool**!

Screening Individuals

Filter individuals – Recruit people that are able to articulate their opinions effectively.

Reach your Target Audience – Wealth of information about their likes and dislikes.

**Target Audience is Diverse** – Expand your demographics and to reach a wider audiences.

Re-recruit Good Testers – At latter stages re-invite the best testers and get feedback on the current progress.

Don't Get Paranoid

If you are afraid of someone stealing your idea have them sign a NDA (Non-Disclosure Agreement)

Most of the time people will **not even know what to do** with those ideas anyway!

Prototyping stage	Playtest on your own	Playtest with confidants	Playtest with target audi...
(1) Foundations	●		
(2) Structure	●	●	
(3) Formal details			●
(4) Refinement			●
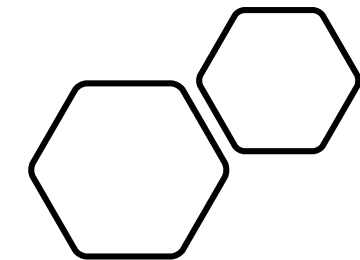
Playtesters appropriate for each stage of prototyping

Running a Playtest Session

You talk about your game, how it works, your plans for the future, etc.

Running a Playtest Session

~~You talk about your game, how it works, your plans for the future, etc.~~ **DO NOT DO THIS**

You want players to have a **fresh** perspective on your game – **a first impression**.

Remember:

   You do not come with the game - **The game should be self-sufficient!**

Allow players to **make mistakes** and **figure out how it works** – maybe your rules are confusing.

When communicating **stick to a script** and **avoid the impulse to explain it**!

During the playtest **you are an Observer.**

Running a Playtest Session - Structure

Introduction (2-3 Minutes)

Explain the playtesting process.

Explain how their feedback is invaluable for this process

If recording **ask their permission for it** (in writing) and explain who will have access to it and how it will be used.

Do not talk about your game.

Warm-Up Discussion (5 Minutes)

Develop questions to find out what games they are interested in, what they like about them and their favorites.

Do not talk about your game.

Running a Playtest Session - Structure

Play Session (15 – 20 Minutes)

Explain that the purpose is to test **a game that is still in development**.

Make them aware that you are **testing the player experience**, **not their skill**.

Two Styles:

Leave the room and record the Playtester, while looking at the video feed.

Stand behind the Playtester and quietly watch as they play.

Use the **Thinking Aloud** methodology:

Tell your testers to say out loud what they are thinking and why they are doing something.

If a Playtester is having a really hard time to progress, it is okay to give them a "small nudge" forward.

If this does happen be sure to make a note of it!

Running a Playtest Session - Structure

Discussion of Game Experience (15 – 20 Minutes)

Develop a series of questions that will **help you answer your own game design questions**.

At first, probe aspects such as the overall appeal, interest, challenge and which features work or did not work.

As **the design process evolves** further **it is normal for these questions to be more focused** to specific aspects of your design.

Wrap-Up

Thank the testers and make sure you keep contact with them.

Offer them a token of your appreciation such as chocolates or candy (If you are not paying them).

Running a Playtest Session

Be Kind to your Playtesters

Provide Snacks or Beverages

It is important that **they feel as comfortable as possible** during the playtest!

Concluding

The only way to see if your ideas work is to:
- Constantly test and refine them…
- Until it reaches the experience you want to offer…

Don't be afraid to present your ideas to new people!
- Let your game be played, criticized and commented on
- Get all the feedback you can!

Sometimes the ***best ideas comes from your play testers!***

Concluding

Keep in mind

A Game Design is not *"set in stone".*

Creativity is all about **breaking boundaries** and **challenging ideas**!

The End

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