

# MODULAR

Donna Angelina . 2021

## WHAT IS MODULAR?

- A design approach that creates things out of independent parts with standart interfaces. This allowed design to be customized, upgraded, repaired, and for parts of be reused.
- Is a design theory and practice that subdivides a system into smaller parts called *modules*, which can be independently created, modified, replaced or exchanged between different systems.

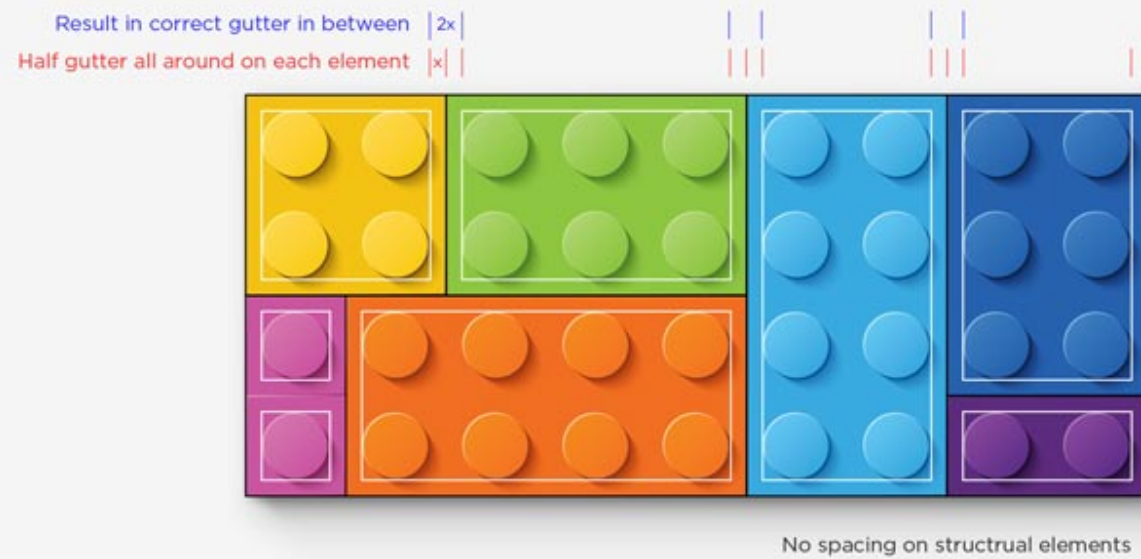
## MODULAR EXAMPLE

“These are DIY closet units that you can mix and match to custom fit any space for a fraction of the price of other professional closets. They give you the ability to customize your closet according to your space, your wardrobe, and your needs. Modular closets are designed so that anyone can install them. The unit-based modular system makes it simple and easy to assemble, and install. Modular closets are made from top-grade and high-density wood. With the closet units being modular, each unit can also stand by itself, which makes it the strongest and most sturdy closet system available.”



System: Closet. Modules: Shelves.

- Modular integrated systems by LEGO.

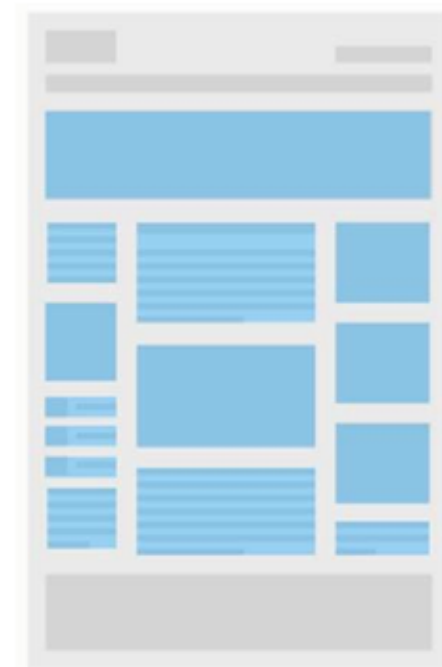


- Modular in web design.
- "We used modular design as a tool to enable a more agile website development process. Knowing that there were a large number of pages to build which would require input from various subject matter experts for content, copywriters, designers and developers to all contribute to the creation of a single page - we knew we needed a system to simplify and expedite the process." \_ *MELISSA CALES, SENIOR MARKETING MANAGER, DIGITAL PROPERTIES, PEDOWITZ GROUP*



System: Website. Modules: Section Layouts.

- Modular in Layout for Content display.
- “Our design studio, Studio Simpatico, embraces modular design in the way we plan, design, and build WordPress editorial and marketing sites for our clients. By designing modules (as opposed to static pages), we give our clients a flexible tool kit to craft content and tell stories, as opposed to boxing them into static templates.” \_TAMARA OLSON, OWNER OF STUDIO SIMPATICO



System: Blog. Modules: Content.

- A Multi combo game tables which include foosball, table tennis, pool, and more.



System: Gaming Table. Modules: Game Boards.



System: Society. Modules: Communities. System: Communities. Modules: Homes. System: Homes. Modules: Construction Elements.

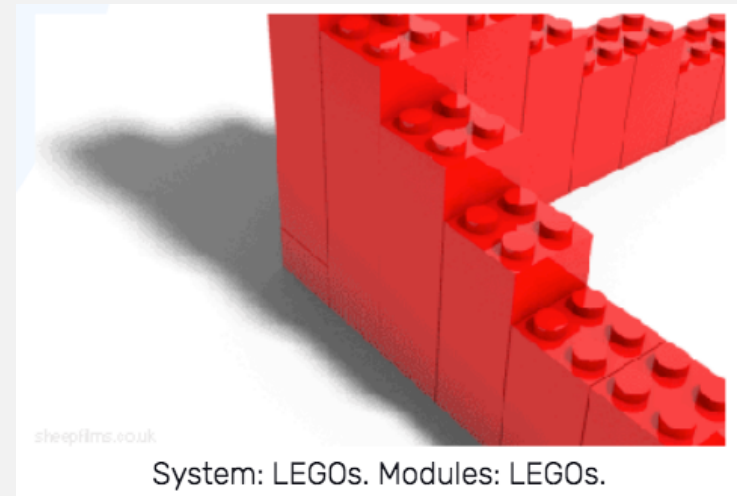


## TYPES OF MODULAR DESIGN

	Universal Modules	Unique Modules
Universal Interface	Fractal Modularity LEGOs	Bus Modularity Storyboards
Unique Interface	Slot Modularity Borderlands Guns	Sectional Modularity Multivariate Ads

## FRACTAL MODULARITY

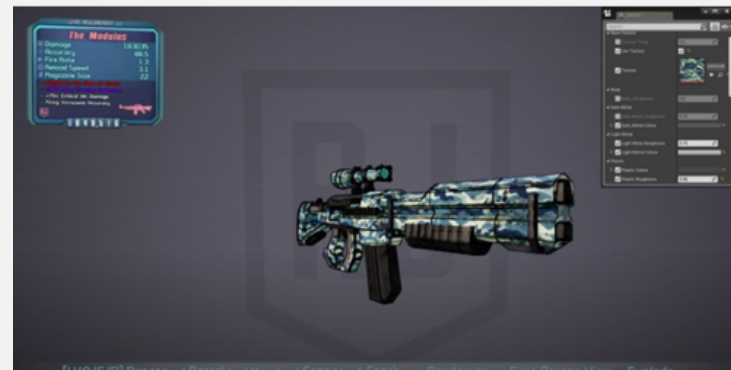
- LEGOs have quintessential modularity. New pieces can be (and frequently are) made for unique sets (e.g. Star Wars or Harry Potter) that can fit into any other set that exists. Every lego piece is a module, every set a system.
- To get more granular, consider the smallest system: two rectangular pieces, one red, one blue, stuck together. Either of those pieces can exchange for, say, a yellow piece or even a humanoid lego. Interestingly, that two piece system is a module too, capable of becoming part of another larger system, which in itself is a module, and so on. In that sense, LEGOs, and many other forms of modular creations, are fractals.



System: LEGOs. Modules: LEGOs.

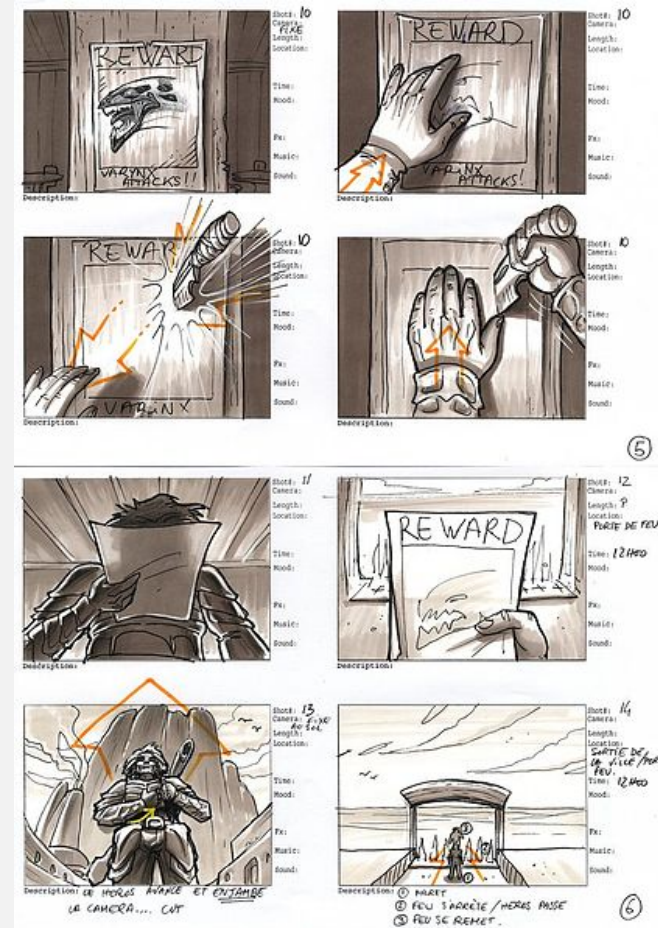
## SLOT MODULARITY

- Slot modularity is a little different to fractal modularity in that pieces can not be universally exchanged, but there is a common base holding everything together. For example, weapons in Gearbox Software's video game Borderlands have slot modularity. Each gun has the same core pieces, but each module can only be exchanged for a module of the same type e.g. stock for another stock, barrel for another barrel, scope for another scope, etc.
- Example: <https://www.youtube.com/watch?v=BHJGq6q09K8&feature=youtu.be>
- Borderlands weapons, and anything else with slot modularity, have universal modules but unique interfaces.



# BUS MODULARITY

- Similar to slot modularity, but the interfaces are all identical and therefore interchangeable. Storyboards (and stories for that matter) are great examples of bus modularity. In a storyboard (and a story), there are blank spots on a page (or on a timeline) where events that drive the narrative are placed.
- Whether a story is linear or non-linear, it's got bus modularity: a universal interface and unique modules.



System: Story. Modules:  
Events.

## SECTIONAL MODULARITY

- If you add our examples of slot modularity and bus modularity together, you get a sectionally modular storytelling video game. There's only one such game in the world, a game built by Media Molecule: Dreams. Dreams is a host of video games within a video game— a meta-video game, a modular video game. It's Inception. And while it's not exactly a fractal, it does allow for infinite flexibility.



System: Game Builder. Modules: Game Objects

MODULAR PRODUCT

*MODULAR FURNITURE*



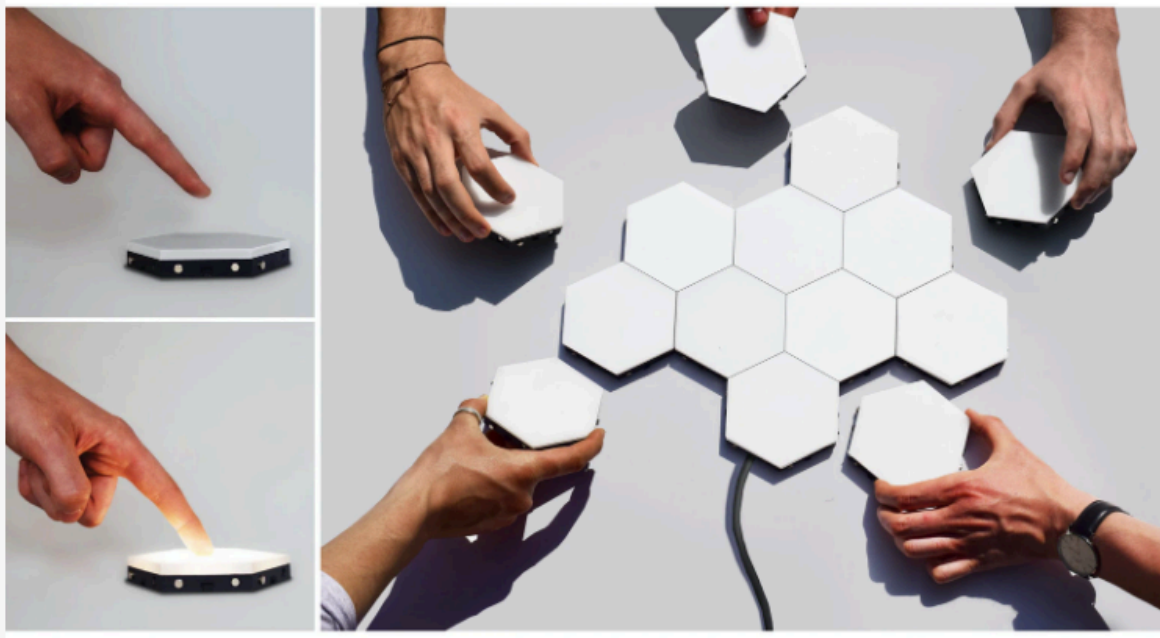
Peter Guenzel



Dune

## HELIOS TOUCH MODULAR LIGHTING SYSTEM

Helios is a modular touch  
screen wall light that turns  
walls into a canvas for  
illumination, using your hand  
as the brush.



By  
*Dyena*



## REFERENCE

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