

# Framework Definition: Visualizing Solutions

- "Rule book" for the design
  - Sketching tools, design software, anything!
  - Today: Chapters 15 & 16, and Chapters 17 & 18
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## *Assignment*

- IxDG and IxDS, read/study in detail:
  - Chapter 15 (principles & patterns)
  - Chapter 16 (process)
- IxDG and IxDS, learn:
  - Chapters 17 & 18
- VisD and ID, read/study in detail:
  - Chapter 17 (principles & patterns)
  - Chapter 18 (process)
- VisD and ID, learn:
  - Chapters 15 & 16

Team Leads: learn chapters 15, 16, 17, and 18

# CHAPTER 15:

## Principles and Patterns for Framework Design

Covers principles (ground rules) for defining a good Interaction Framework and patterns (examples) of typical frameworks

- Principles...
  - has value (ethical; purposeful; pragmatic; elegant)
  - minimizes work (cognitive; visual; memory; physical)
- Patterns...
  - command line
  - organizer/workspace
  - hub-and-spoke or hierarchical
  - parallel
  - multiple document interface
  - first-person environment
  - third-person environment

# Interaction Design Principles

## Values

- **Ethical**: not cause harm while pursuing the goal(s)
- **Purposeful**: be focused on goal(s)
- **Practical**: actually be able to accomplish the goal(s); related to "quality"
- **Elegant**: able to accomplish the goal(s) efficiently/nicely; related to "expectations"

## Minimizes Work

- **Cognitive** perspective - helping users not have to figure things out
- **Visual** perspective - making it easy for users to make choices
- **Memory** perspective - helping users remember or find things
- **Physical** perspective - helping users accomplish things in the real world

# Framework Patterns

*What type(s) of interaction pattern(s) are you considering?*

- command line
- organizer/workspace
- hub-and-spoke or hierarchical
- parallel
- multiple document interface
- first-person environment
- third-person environment
- other?

# CHAPTER 16:

## Designing Form Factor & Interaction Framework

This is where the details of the solution start to get fleshed-out

- IxDG and IxDS focus on objects and data (from research); use charts to define: relationships; states; actions; and attributes
- Whole team: list functional needs and create functional elements for each (create things users will see and interact with)
- Team: Create (sketch) the platform
- ID: refine the form factor
- IxDG and IxDS: Define the interaction framework; sketch/diagram key path scenarios

# CHAPTER 17:

## Principles and Patterns in Design Language

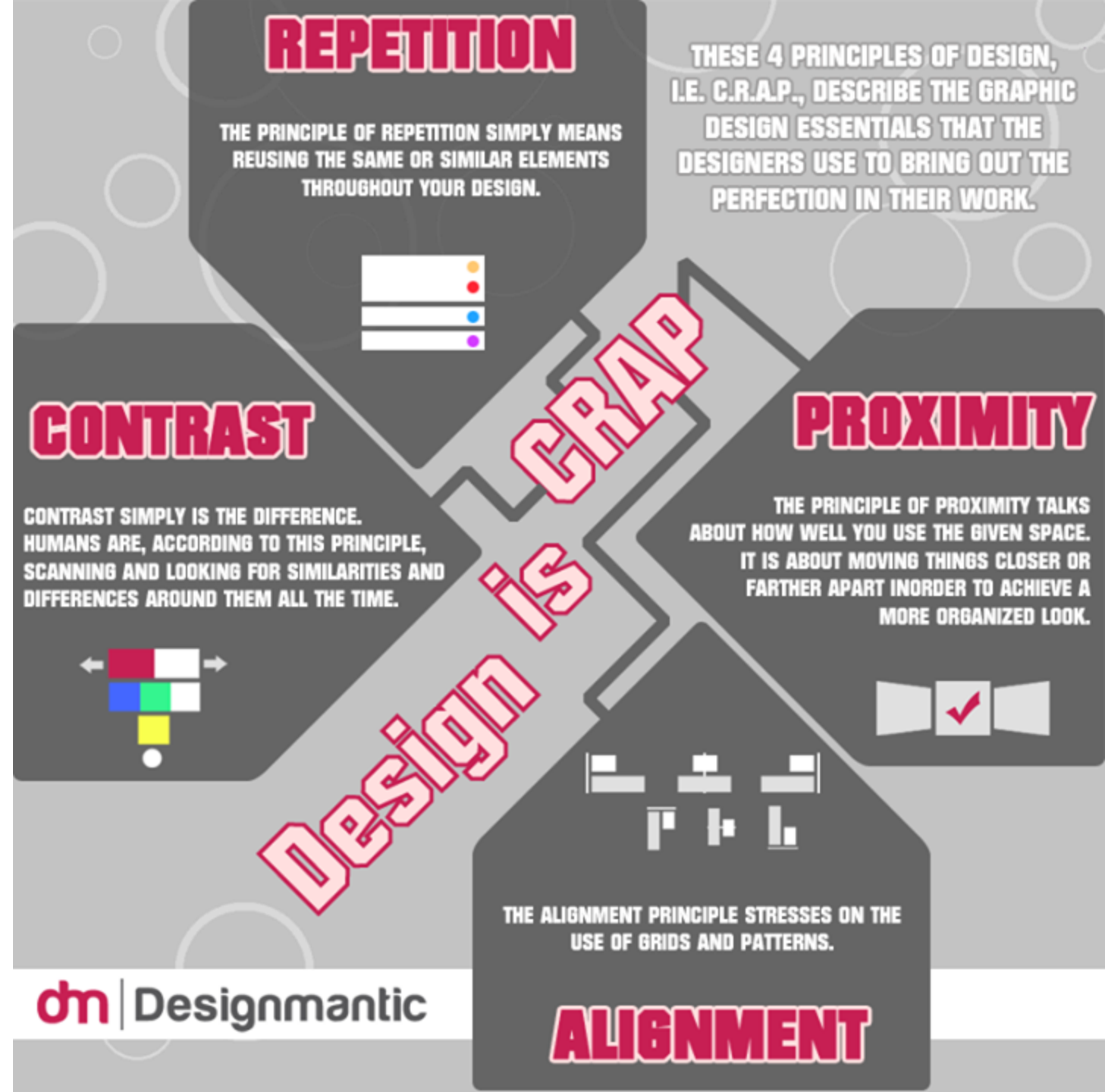
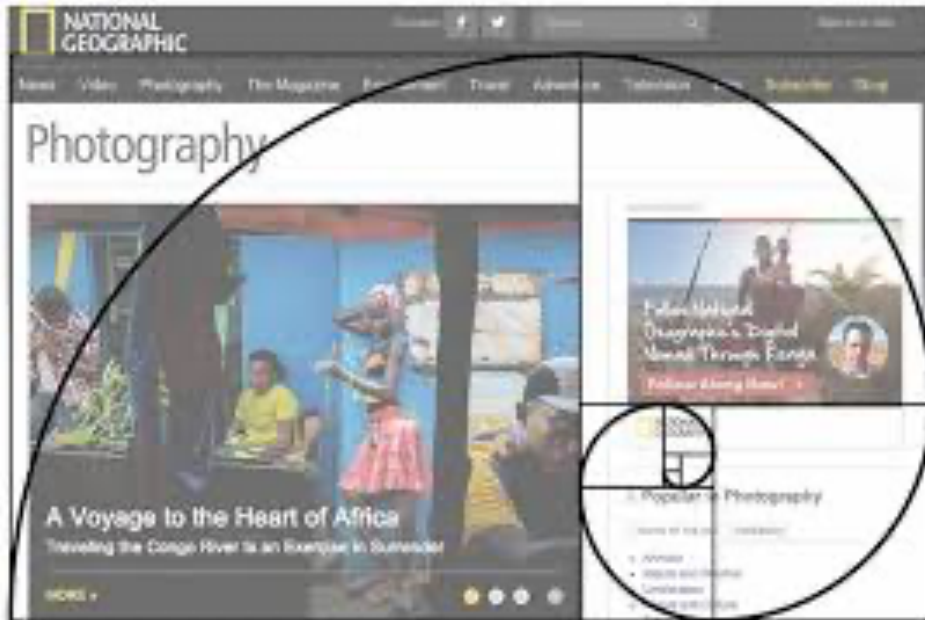
- Covers principles (ground rules) for defining a good design language and patterns (examples) of typical design languages
- Principles...
  - meaning from context and information
  - affordance
  - purpose
  - unity
  - "smallest effective difference"
- Patterns...
  - color; size; shape
  - line weight and style
  - type; texture
  - images; materials



# Design

## Industry Techniques

- The "C.R.A.P." principles
- Also, "the golden ratio" (1:1.6) and "rule of thirds"





# CHAPTER 18:

## Developing the Design Language

This is where the details of the solution's look & feel get fleshed-out

- Goal: tie experience attributes to design choices for each element that gets designed
- VisD and ID decide general direction(s) and elements to design
- VisD and ID decide how to represent primary attributes and secondary attributes

# Design Language

- **Experience attributes** to be incorporated
- **Contexts** from context scenarios
- **Constraints** (from contexts):
  - color; size; shape
  - line weight and style
  - type; texture
  - images; materials
  - power
- **Inspiration** from existing products

# CHAPTER 19: Communicating the Framework and Design Language

How to create a summary of the framework and design language into a document and presentation:

- Framework
- Design Language
- Include past information and decisions RE personas, scenarios, requirements; tie framework and design language decisions to earlier findings