



# coding-bootcamps.com

Introduction to User Experience



# Coding Bootcamps

By Grayson Doub from [Coding Bootcamps](#)

# 5 Practical Guides for User Experience and User Interface

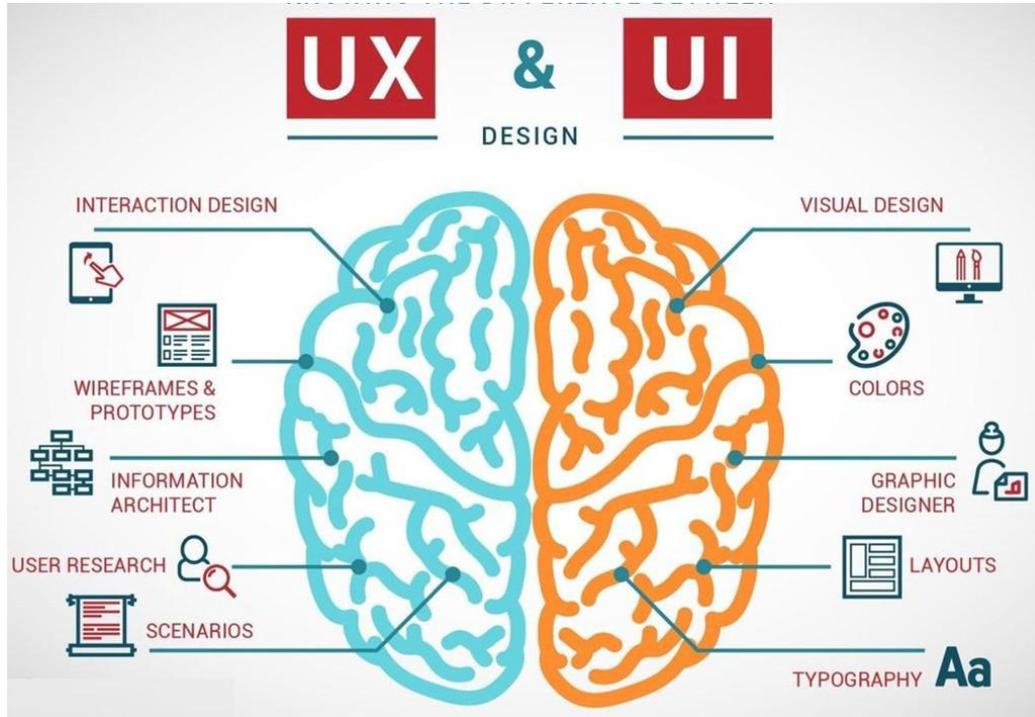
Session 2

# 5 UX Practical Guides

1. Master the basics of visual and web design
2. Understand the UX design process
3. Learn how to design user interfaces and sharpen your visual design skills
4. Work on fake/training projects
5. Learn UI/UX related tools



# UX VS UI



## UX

User research  
Usability testing  
Personas  
Information architecture  
Interaction design  
Workflows  
Copywriting  
Low-fidelity

Wireframing  
Prototyping  
Usability  
Accessibility

## UI

Visual design  
Interface design  
Colors  
Layout  
Branding  
Typography  
Graphics  
High-fidelity

1- Master the basics of visual and web design

**1. Color**

**2. Grid systems**

**3. Composition & Balance**

**4. Typography**

**5. Contrast**

# Color theory

## Color Theory For Designers

Depth  
Stability  
Trust  
Confidence  
Calm

Passion  
Energy  
Power  
Determination  
Immediacy

Growth  
Calm  
Nature  
Balance  
Safety

Joy  
Attention  
Fresh  
Energy  
Optimism

Enthusiasm  
Success  
Warmth  
Creativity  
Excitement

Sensitive  
Caring  
Emotional  
Love  
Sexuality

Royal  
Power  
Arrogant  
Luxury  
Wisdom

Pure  
Innocent  
Luxury  
Security  
Peaceful

Bold  
Power  
Mystery  
Elegance  
Stability

# Color Harmonies and Schemes

## COLOR HARMONIES *and* SCHEMES

Certain color combinations look very pleasing, while others are painful and abrasive to look at. Why is that? It's more objective than you think: it's based on the color wheel. Color harmonies (or color schemes) consist of two or more colors with a fixed relation on the wheel. We've included 6 of the most common color schemes below using the 12-point RYB color wheel.

### COMPLEMENTARY

*Colors*



Complementary colors are those which are directly opposite each other on the color wheel. Due to the powerful contrast of complementary colors, web designers can choose one dominant color (usually the background) and another to highlight the most important elements of the page (the content).

### ANALOGOUS

*Colors*



Analogous colors are those which lie on either side of any given color. Analogous color schemes are often found in nature and are harmonious and pleasing to the eye. They usually match well and create serene and comfortable designs.

### TRIADIC

*Colors*



The triadic color scheme uses the power of three colors which are situated at 120 degrees from each other (as determined by an equilateral triangle) on the color wheel. Triadic color harmony is considered by some to be the best color scheme. You could use one color for a background and the two remaining for content and the highlighted areas.

### SPLIT-COMPLEMENTARY

*Colors*



The split-complementary color scheme is a variation of the complementary color scheme. In addition to the base color, it uses the two colors adjacent to its complement. Split complementary colors have a high degree of contrast, but are not as extreme as complementary colors, which result in greater harmony.

### RECTANGULAR (TETRADIC)

*Colors*



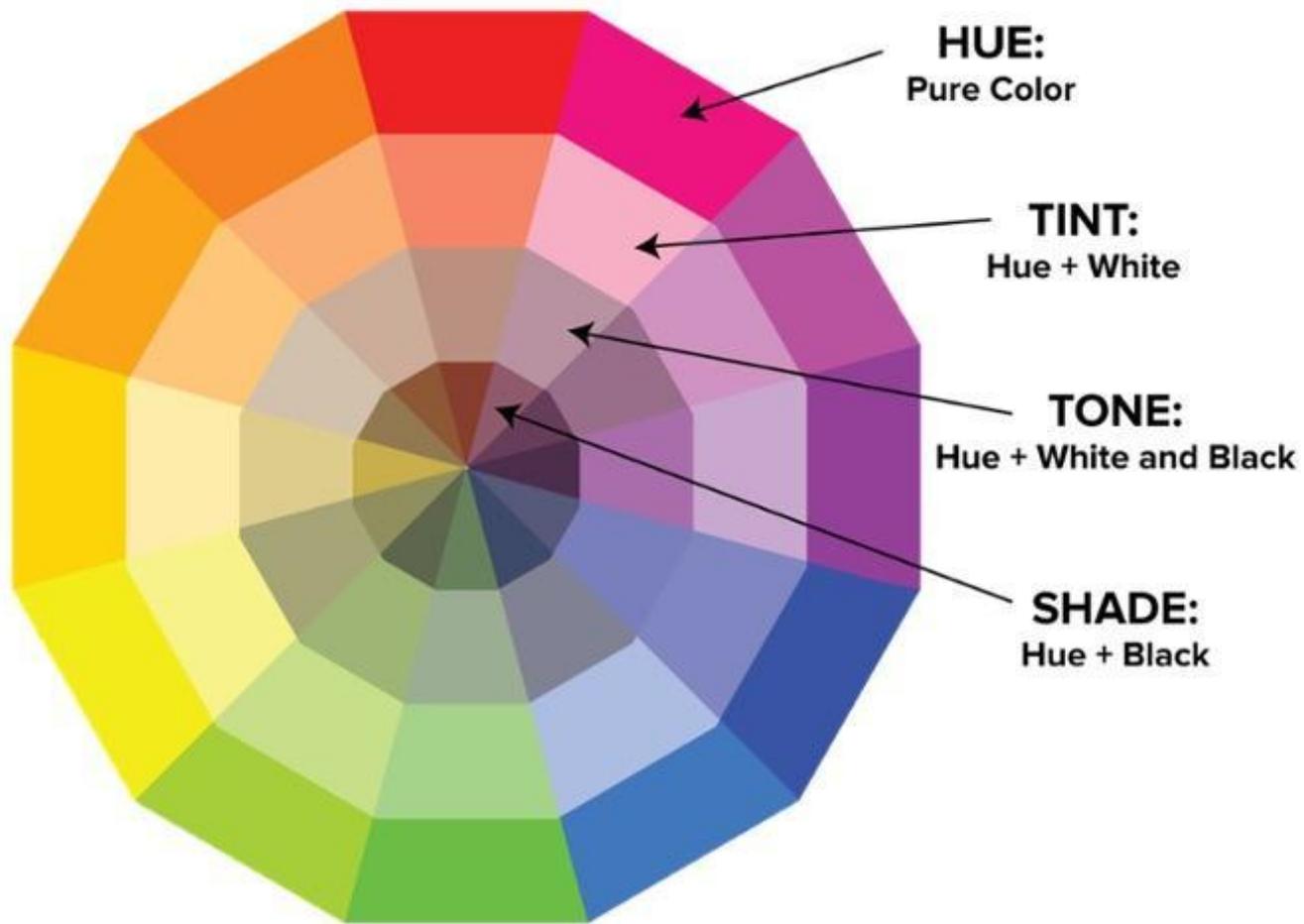
The rectangular (or tetradic) color scheme uses four colors arranged into two complementary pairs. This rich color scheme offers plenty of possibilities for variation. Tetradic color schemes works best if you let one color be dominant. Be sure to pay attention to the balance between warm and cool colors in your design.

### SQUARE

*Colors*



The square color scheme is similar to the rectangular scheme, but with all four colors spaced evenly around the color circle. This scheme offers the greatest number of possible color combinations—which can be a problem for good harmony. Be careful when using square color schemes.



# COLOR THEORY

## COLOR MIXING



### CMYK

Cyan, Magenta, Yellow, Black  
Print Process Model



### RGB

Red, Green, Blue  
Light Generated Model



### GREY SCALE

Black and white only



### HSB

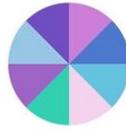
Hue (color), Saturation (how much color), Black (tint and shade)



## MEANINGS

-  LOVE, BLOOD, FIRE, ENERGY, STRONG, INTENSE.
-  POWER, WEALTH, AMBITION, NOBLE, ROYALTY.
-  SEA, TRUST, SKY, STABILITY, TRANQUIL, DEPTH.
-  FRESHNESS, NATURE, MONEY, GROWTH, SAFETY.
-  ENERGY, SUNSHINE, BRIGHT, CHEERFUL, JOY.
-  WARM, HAPPINESS, SUCCESS, AUTUMN, CREATIVE.

## COLOR PROPERTIES



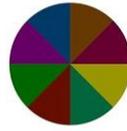
COOL



WARM



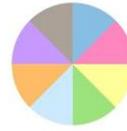
BRIGHT



DARK



SATURATED



DESATURATED

## COLOR RELATIONSHIPS



PRIMARY



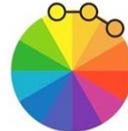
SQUARE



COMPLEMENTARY



TRIAD

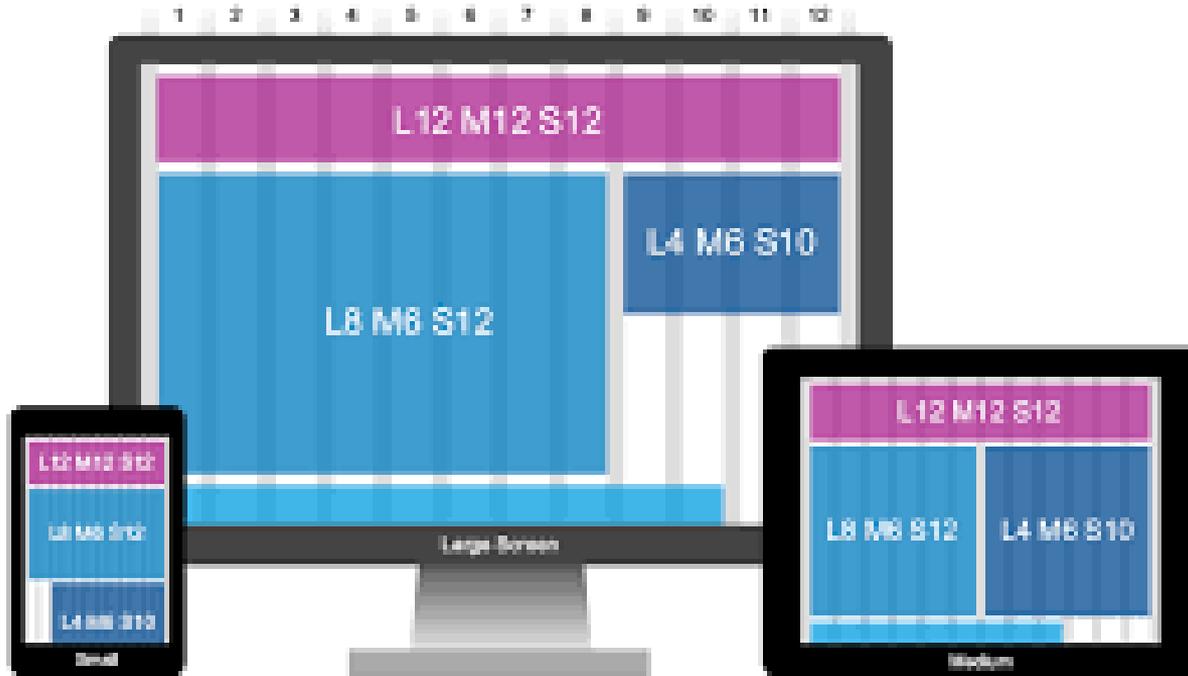


ANALOGOUS



TETRADIC

# Grid Systems



# 4 Main Grid Styles

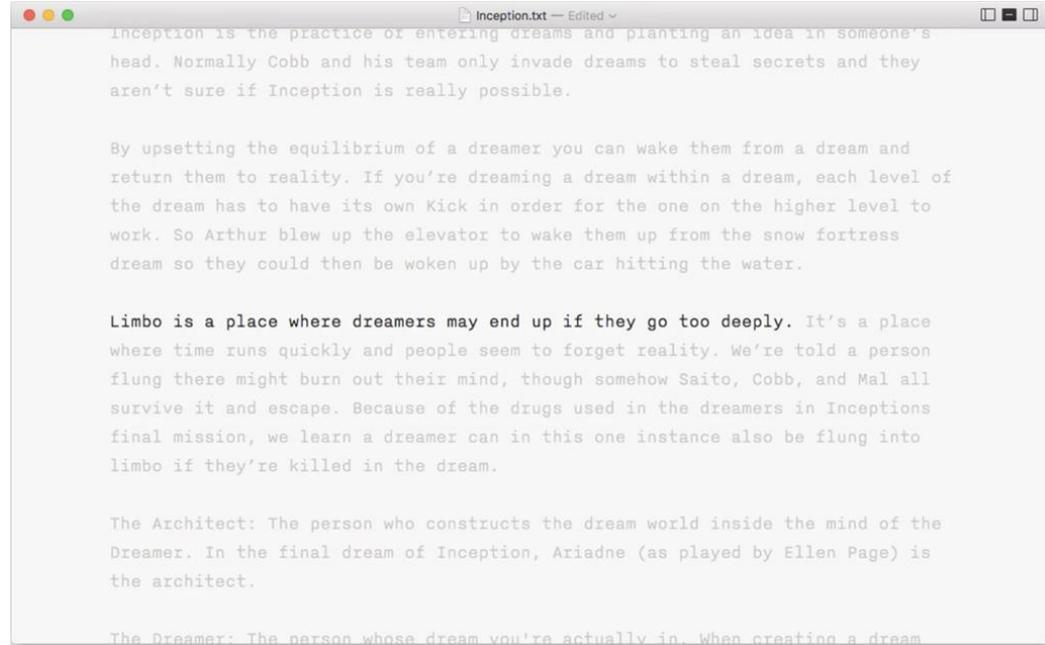
## Grid Styles

- Manuscript Grid
- Column Grid
- Modular Grid
- Baseline Grid

# Manuscript Grid

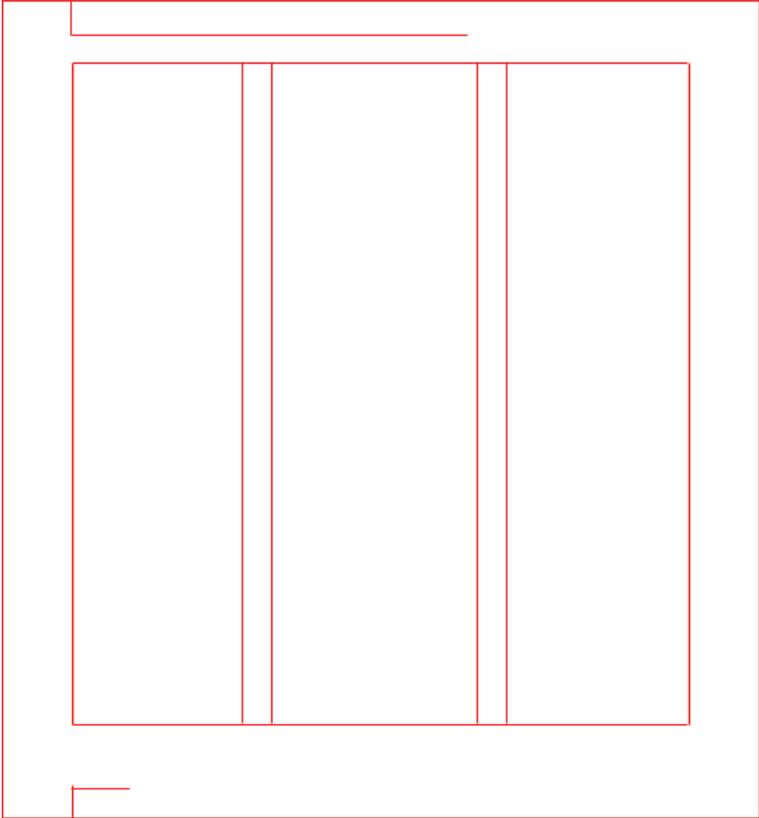
A manuscript grid (or a single-column grid)= simplest grid structure.

Manuscript grids are good for continuous blocks of text.



# Column Grid

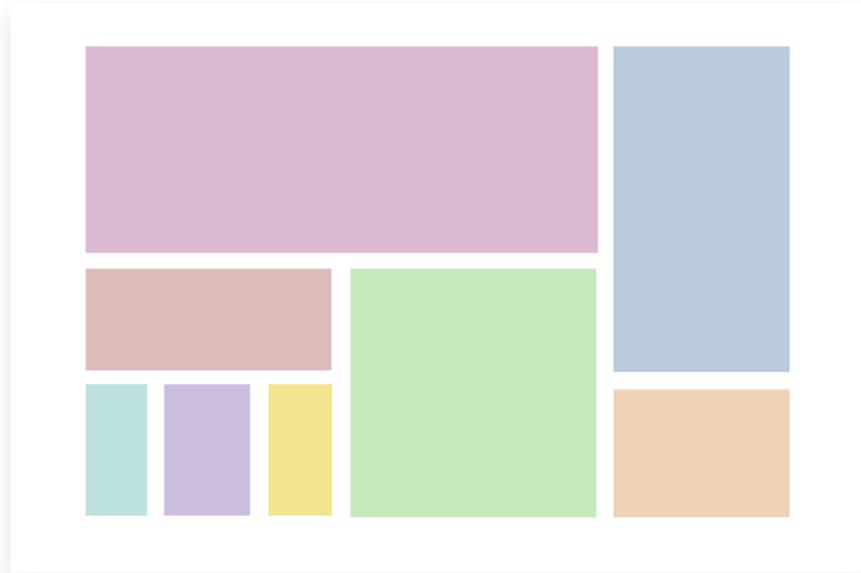
Column grids are useful for layouts that contain discontinuous information



# Modular Grid

all content elements (modules) are aligned not just by the eye estimate, but along the invisible straight lines — grids. The module itself is always a rectangle, and its borders are either visible (indicated by a background coloring, an image, a frame), or just assumed.

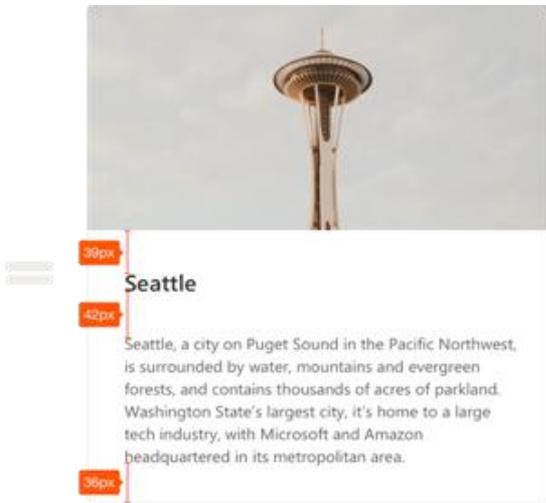
provides flexible formats for pages and allows you to create a complex hierarchy



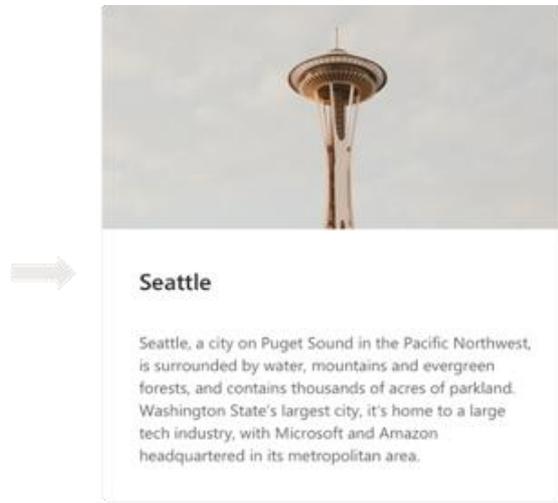
# Baseline Grid



Space here is measured using the bounding box (marked by the green background).



The orange redlines show the visual spacing of the bounding box approach. Visually all the vertical spacing is actually bigger than 32px and not being consistent.



Removing all the redlines, this is how it looks.

Ensures that the bottom of each line of text (its baseline) aligns with the vertical spacing

Great for typography and laying out elements

# Composition and Balance

## *Physical and Visual Balance:*

- Visual weight
- Visual Direction

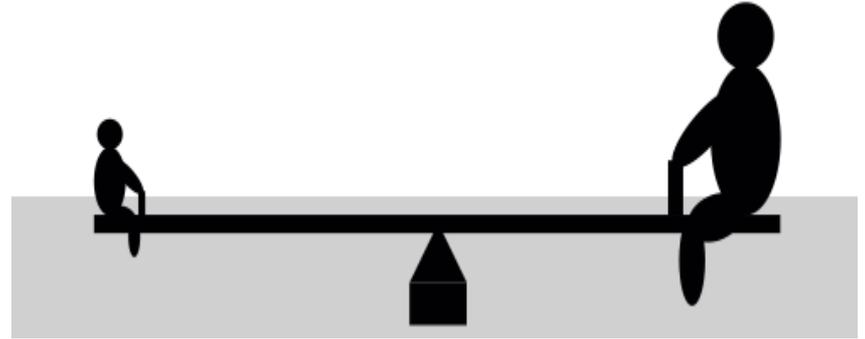
## *4 types of Balance:*

- Symmetrical
- Asymmetrical
- Radial
- Mosaic

## *3 types of Symmetry:*

- Reflection
- Rotational
- Translational

# Physical and Visual Balance

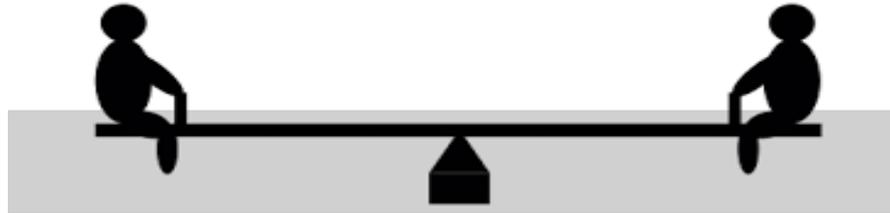


- *Visual weight*= perceived weight of a visual element. It's a measure of how much anything on the page attracts the eye of the viewer.
- *Visual direction*= perceived direction of a visual force. It's the direction in which we think an element should be moving if it were given a chance to move according to the forces acting on it.

# Symmetrical Balance

Occurs when equal weights are on equal sides of a composition

Evokes a feeling of formality and elegance,  
But can be seen as dry and boring

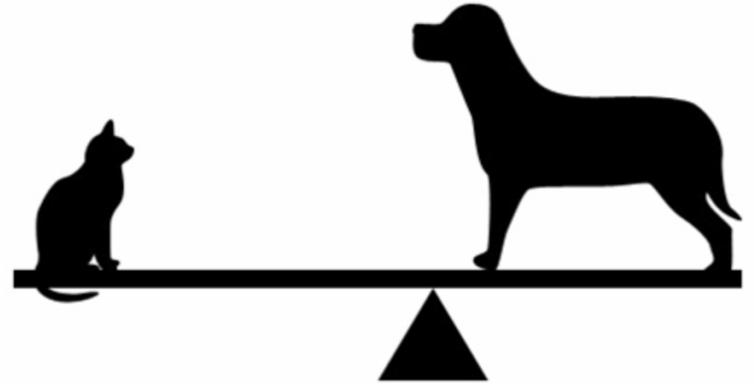


# Asymmetrical Balance

Results from unequal visual weight on each side of the composition.

It may contain one dominant element balanced by a few lesser focal points.

They are often seen as more engaging and more modern, but can be hard to attain.



# Radial Balance

Occurs when elements radiate from a common center. Rays of sunlight and ripples in a pond after a stone is tossed in a pond or even Kaleidoscopes are great examples

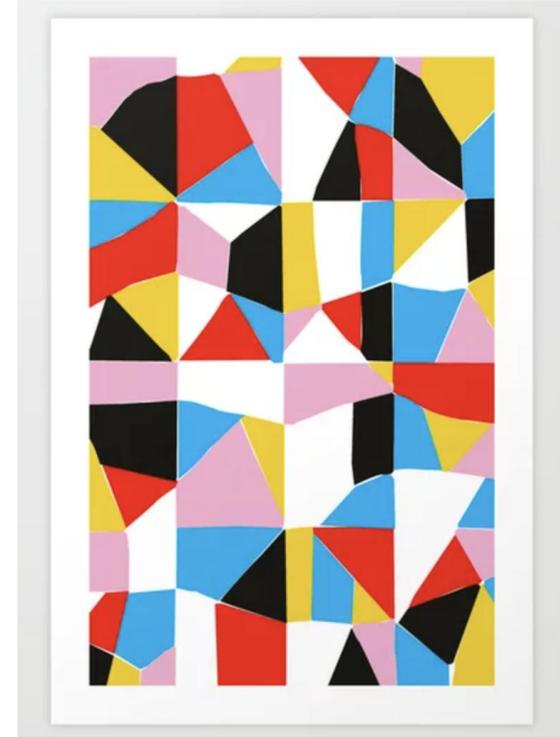


# Mosaic Balance

(or crystallographic balance) results from balanced chaos.

Ex: Jackson Pollock's art

It lacks a focal point, yet with a uniform emphasis it can work



# Reflection Symmetry

(or bilateral symmetry)  
occurs when everything  
is mirrored around a  
central axis. Ex.  
=snowflake, butterfly

Much of the time it won't  
be perfect and each  
side will have slight  
variations. This is near  
symmetry, and it's more  
common than pure  
symmetry.

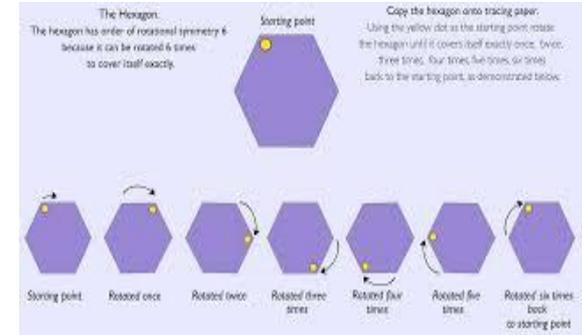
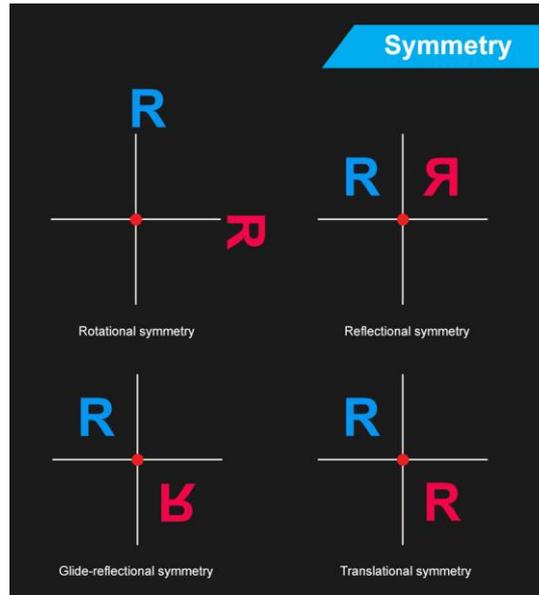


In geometry, reflection  
symmetry will pretty accurate,  
but in real life, there will be a  
slight difference.

# Rotational Symmetry

(or radial symmetry) occurs when everything rotates around a common center.

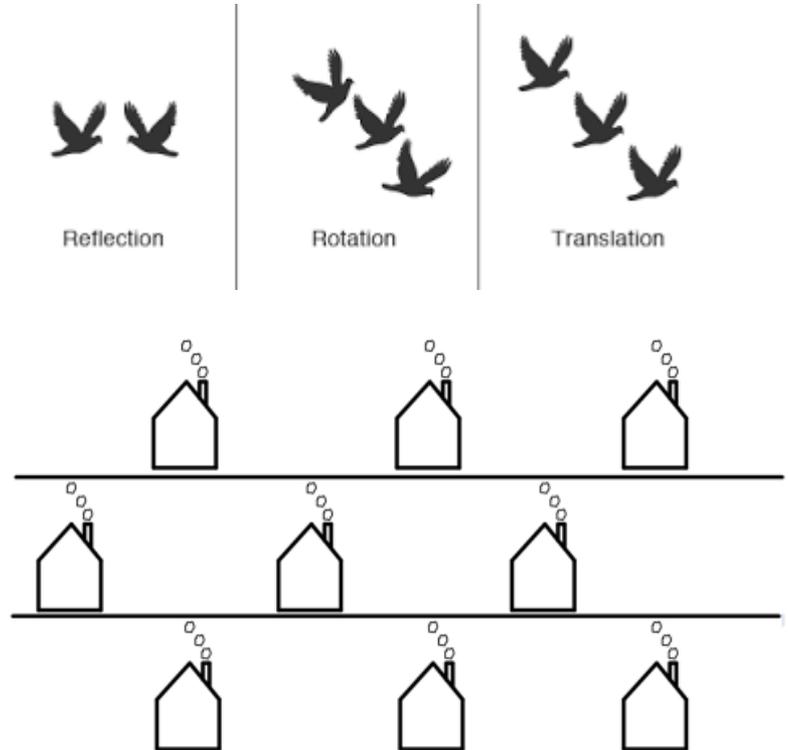
Ex: wheels of a moving car,  
petals growing on a sunflower



# Translational Symmetry

(or crystallographic symmetry)  
occurs when elements are  
repeated over different  
locations in space

Ex: Repeating fence



# Typography

## Free Typography Lessons

Why Should You Take These Lessons?: So you can learn...

font size, line height and line length....

different styles of typefaces and things like type contrast and weight....

How to choose and combine typefaces...rhythm and modular scale

# Contrast

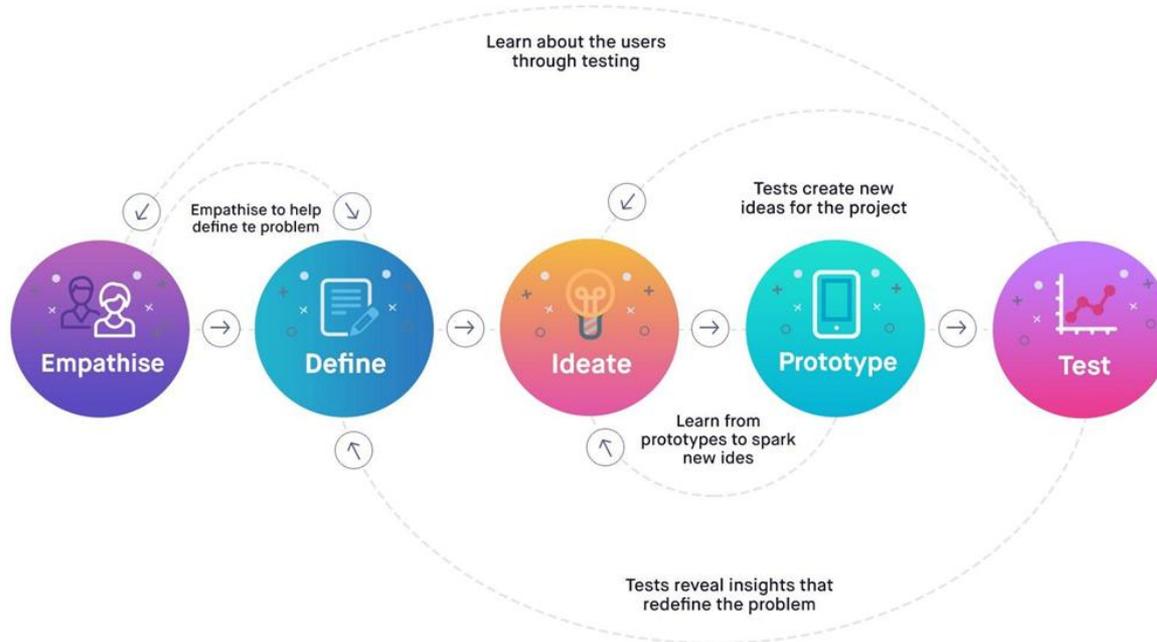
- **GRABS ATTENTION!**
- Helps Organize Info
- Creates a Focus

## *Things to Think About:*

1. How are you creating contrast? Is it through texture, typography, color, or shape?
2. If you want to achieve contrast through typography, which fonts are you using? Are they very different, or just a little bit different? Be bold with your font choices but remember to make sure the text is legible.
3. Is contrast strengthening your design idea?

## 2- Understand the UX design process

# Design Thinking



# Empathize

The first stage of the Design Thinking is about getting to know the users, their wants, needs and objectives. This includes: observing and engaging with people their experiences and motivations, as well as immersing yourself in the physical environment so you can gain a deeper personal understanding of the issues involved. All of the insights gathered at this stage are carried over the next stages. Here is a list of questions to ask while working on this stage:

1. Do users need the product you are making?
2. Do they want it enough that they will either pay for it or if it is free, spend time looking for it and learning to use it?
3. Are you missing a key feature they will need?
4. Are you spending time building features they will never use?

# Define

The second stage in the Design Thinking process is dedicated to defining the problem based on the information you have gathered during the Empathize stage. During Define stage you will analyze your observations and put them in order to define the key problems that you and your team have identified so far. Once you've created a problem statement you can start to progress into the third stage of Design thinking, Ideate.

# Ideals

All of the insights from the previous stages have given you very solid foundation in the terms of understanding your users, so it's time to generate potential solutions to the problem statement you've defined during the define stage. There are many different types of ideation technique that will help you to generate potential solutions and ideas: brainstorming, mindmapping, bodystorming. If based on previous stages, we have decided what to build, we need to decide how. It is in the structure and skeleton phases where the application really takes shape, so you ought to answer some critical implementation questions like:

1. How should the content be organized so that users can easily find it?
2. Will users find your App easy to use? Where do they get confused or lost?
3. What content is needed and how should it be written to be most engaging?

The main goal of this stage is to generate as many potential solutions as possible when moving in the next design phase- Prototype

# Prototype

The fourth step in the Design Thinking process is all about experimentation and turning ideas into tangible products. A prototype is basically a scaled-down version of the product which incorporates the potential solutions identified in the previous stages. This step is key in putting each solution to the test and highlighting any constraints and flaws. Throughout the prototype stage, the proposed solutions may be accepted, improved, redesigned or rejected depending on how they fare in prototype form. In this stage, we need to focus on the surface of the product. What is the product going to look like visually? This is an important step because a user's first impression is critical, so try to find answers to the following questions:

1. What should the visual tone of the product be?
2. How do users feel when they see your product? Do they trust it?
3. Is the product visually appealing and does it spark joy?
4. Is the visual design usable and accessible?

# Test

Testing stage is about validating the product before final developing it. This is the final stage of the 5 stage- mode, however the results generated from the testing phase will often lead you back to a previous stages of the process, providing the insights you need to improve the current built of your product and test it over again.

Design Thinking is flexible & iterative process — that means process doesn't have to follow the steps in a sequential order — The 5 stages should be understood as different modes that contribute to a project.

3- Learn how to design user interfaces and sharpen your visual design skills

- **Get familiar with UI/UX design patterns**
- **Copy top designers**
- **Details really matter**

# Get Familiar with UX/UI Patterns

You need to get familiar with the UI/UX design patterns and what particular problems they solve. Generally speaking, a UI/UX Design patterns are recurring solutions that solve common design problems you might encounter every day working as UI/UX designer. Design patterns are also known as standard reference points, guides, templates that designers might use to solve a particular problem when designing a website or mobile App, so you do not have to reinvent the wheel every single time trying to solve a particular design problem.

Here is a list of some of the best places to find design patterns on the web:

<https://ptrns.com/> A great collection of mobile design patterns

<https://www.uisources.com/> — mobile design patterns & interactions

<https://uigarage.net/>

<http://ui-patterns.com/> - User Interface Design patterns are recurring solutions that solve common design problems

<https://uimovement.com/> - The best UI design inspiration, every day

# Copy Top Designers

There is no better thing than learning from better and more experienced designers. Not everyone has a mentor or someone helping in learning UI/UX design, so I'd like to share with you very effective method that will help you improve your visual skills on your own

How to start? You need to go to Dribbble, Behance, Pinterest (or any other website where you might find good designs) and start copying top designers, but not blindly. Study and be careful with close attention to detail.

Layout (UI placement, spacing, padding, grids, etc)

Navigation (placement, size)

Typography (font sizes, line height, serif or sans-serif

Icons (what type of the use? How and when they place them)

Background (gradient, photo used?)

Focus on layout, navigation, typography, icons, background, content etc. and try to understand how all of those small details are coming together. Copying and recreating others will give you that good taste, so you will have better understanding and idea how good design looks like. Remember though— It's all about the practice! you're not reselling this stuff.

# Details Really Matter

When it comes to UI/UX design attention to details is crucial — sometimes even really small and subtle change might make huge difference, so you need to start paying attention to every single detail of your designs. You need to be able how to differentiate good from bad design. You need also train your eye every single day — go do Dribbble, Behance and study very carefully top designers — how they use white space, typography, spacing, colour combinations etc. Right practice makes perfect.

## 4- Work on fake/training projects

### **Right practice makes perfect**

In order to improve your visual/UI design skills you should start also working on the fake/concept projects. This is great practice method which will help you to build your portfolio and then get new clients or landing full time job. In addition to that working on the fake projects is also a great fun as you've got total freedom to play around with different design ideas, layouts, colors, typography etc. so enjoy the learning process and have a great fun! Good Visual UI design will draw attention to the peoples

## 5- Learn UI/UX related tools

If you're a Mac user, Sketch is highly recommend. If you're on Windows you should try the Adobe XD.

Software to check out:

Sketch — leading UI/UX design tool (for Mac users)

Adobe XD for interface design and prototyping

Framer — Interactive design and prototyping tool

Figma for collaborative interface design

UXPin — for design, prototyping, collaboration (web browser based app)

Invision App for prototyping and collaboration

# Recap

What we have learned so far?

# Next Session

- Website User Experience Checklist



# **Web Design Private Coaching Sessions**

Web design and development tutoring sessions- Weekly and monthly plans



coding-bootcamps.com

Thank you



**Coding**  
Bootcamps

END