

DES 420 / Week 5 / Content

1.00-2.00 - Example MAD Concept Presentation

2.00-2.15 - Break (15 min)

2.15-2.25 - SAGE

2.25-2.45 - Layout, spacing, composition

2.45-4.00 - Lab

4.00-4.35 - Longer Break (35 min)

4.35-6.40 - Lab

Scalable Adaptive Graphics Environment (SAGE™)

SAGE is cross-platform, community-driven, open-source visualization and collaboration middleware that utilizes shared national and international cyberinfrastructure for the advancement of scientific research and education.



Scalable Adaptive Graphics Environment (SAGE™)

A framework enabling participants to access, display and share a variety of data-intensive information, in a variety of resolutions and formats, from multiple sources, on tiled display walls of arbitrary size.

-Digital-cinema animations

-High-resolution images

-High-definition video-teleconferences

-Presentation slides

-Documents

-Spreadsheets

-Laptop screens

Scalable Adaptive Graphics Environment (SAGE™)

Users want to juxtapose more than one visualization, not use the entire wall for a single visualization.



Scalable Adaptive Graphics Environment (SAGE™)

Ethernet address

Windows> ControlPanel> Terminal > config-all

Ethernet Address:

MAC > About This MAC> More Info>System Report>Network>WiFi

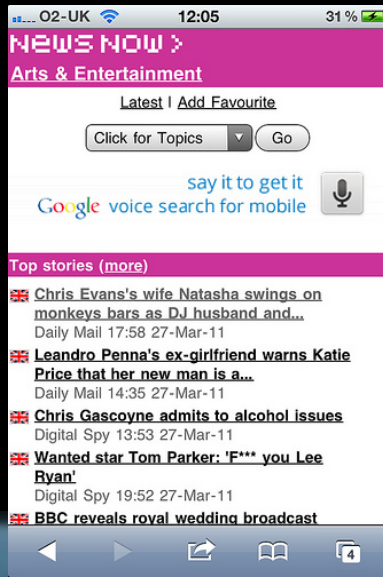
MAC Address:

Example: 9k:g1:a3:84:a3:1k

Layout & Spacing

Consistent alignment and spacing contributes to more efficient information access and positive user experience.

Spacing allows information to appear more organized.



Layout & Spacing

White Space is generally defined as the space between printed text or graphics.

Spacing border – consecutively equal and enough spacing given to GUI elements.

Layout & Spacing

Alignment – the position of GUI elements in relation to each other and in the scape they reside.

Consistent

Grid

Balance

Layout & Spacing

The concept of alignment says that everything on a page should be visually connected to something else on the page.

Nothing should be placed arbitrarily.

When elements are aligned they are connected to each other, even if they are separated on the page.

Composition

Composition is the placement or arrangement of visual elements or ingredients in a work of design, as distinct from the subject of a work.

It is the organization of the elements of art according to the principles of design.

Basic Composition Principles

Hierarchy

Variety

Unity

Balance

Contrast

Rhythm

Composition Principles video by Jake Collinge, CG Spectrum's Concept Art Department Head

<http://www.youtube.com/watch?v=wEyMUM9RwEY>

Basic Composition Principles

Hierarchy

A good design contains elements that lead the reader through each element in order of its significance.

The type and images should be expressed starting from most important to the least.



Basic Composition Principles

Variety

Objects with different characteristics lacking uniformity.



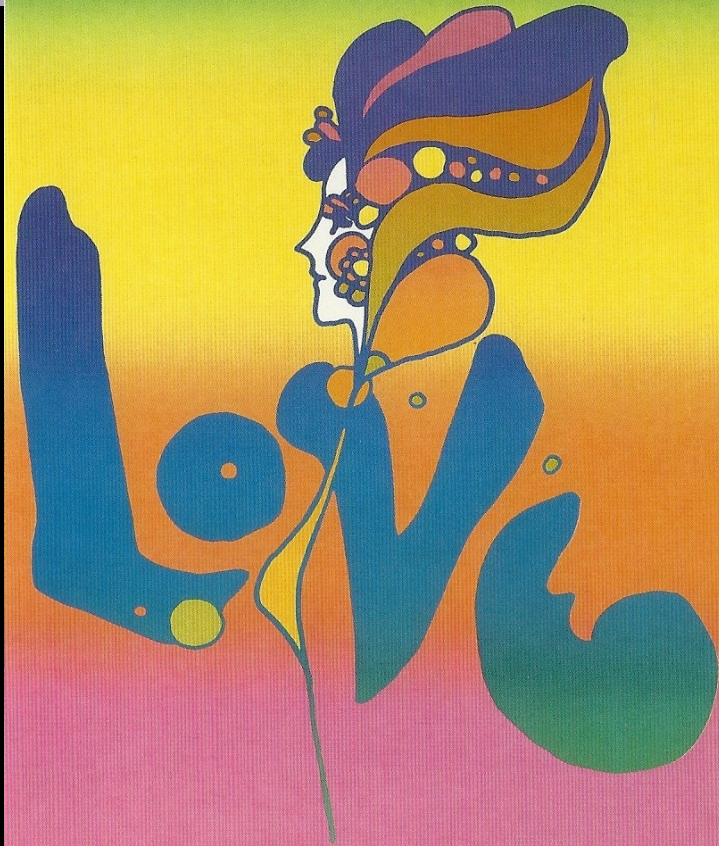
Basic Composition Principles

Unity

When all elements are in agreement, a design is considered unified.

No individual part is viewed as more important than the whole design.

A good balance between unity and variety must be established to avoid a chaotic or a lifeless design.



Basic Composition Principles

Balance

It is a state of equalized tension and equilibrium, which may not always be calm.

- Symmetry
- Asymmetrical produces an informal balance that is attention attracting and dynamic.
- Radial balance is arranged around a central element. The elements placed in a radial balance seem to 'radiate' out from a central point in a circular fashion.
- Overall is a mosaic form of balance which normally arises from too many elements being put on a page. Due to the lack of hierarchy and contrast, this form of balance can look noisy.

Basic Composition Principles

Balance



Basic Composition Principles - Contrast

Contrast

Opposite ideas to keep interest and add dynamics

- Space
 - Filled / Empty
 - Near / Far
 - 2-D / 3-D
- Position
 - Left / Right
 - Isolated / Grouped
 - Centered / Off-Center

Basic Composition Principles - Contrast

Contrast

Emphasis is created by contrasting size, positioning, color, style, or shape. The focal point should dominate the design with scale and contrast without sacrificing the unity of the whole.

Similarity and contrast

Planning a consistent and similar design is an important aspect of a designers work to make their focal point visible. Too much similarity is boring but without similarity important elements will not exist and an image without contrast is uneventful so the key is to find the balance between similarity and contrast.

Basic Composition Principles - Con

- Form
 - Simple / Complex
 - Beauty / Ugly
 - Whole / Broken
- Direction
 - Stability / Movement
- Structure
 - Organized / Chaotic
 - Mechanical / Hand-Drawn



Basic Composition Principles - Contrast

- Size
 - Large / Small
 - Deep / Shallow
 - Fat / Thin
- Color
 - Grayscale / Color
 - Light / Dark
- Texture
 - Fine / Coarse
 - Smooth / Rough
 - Sharp / Dull



Basic Composition Principles - Contrast

- Density
 - Transparent / Opaque
 - Thick / Thin
 - Liquid / Solid
- Gravity
 - Light / Heavy
 - Stable / Unstable

Basic Composition Principles - Contrast

Rhythm

