Module 2

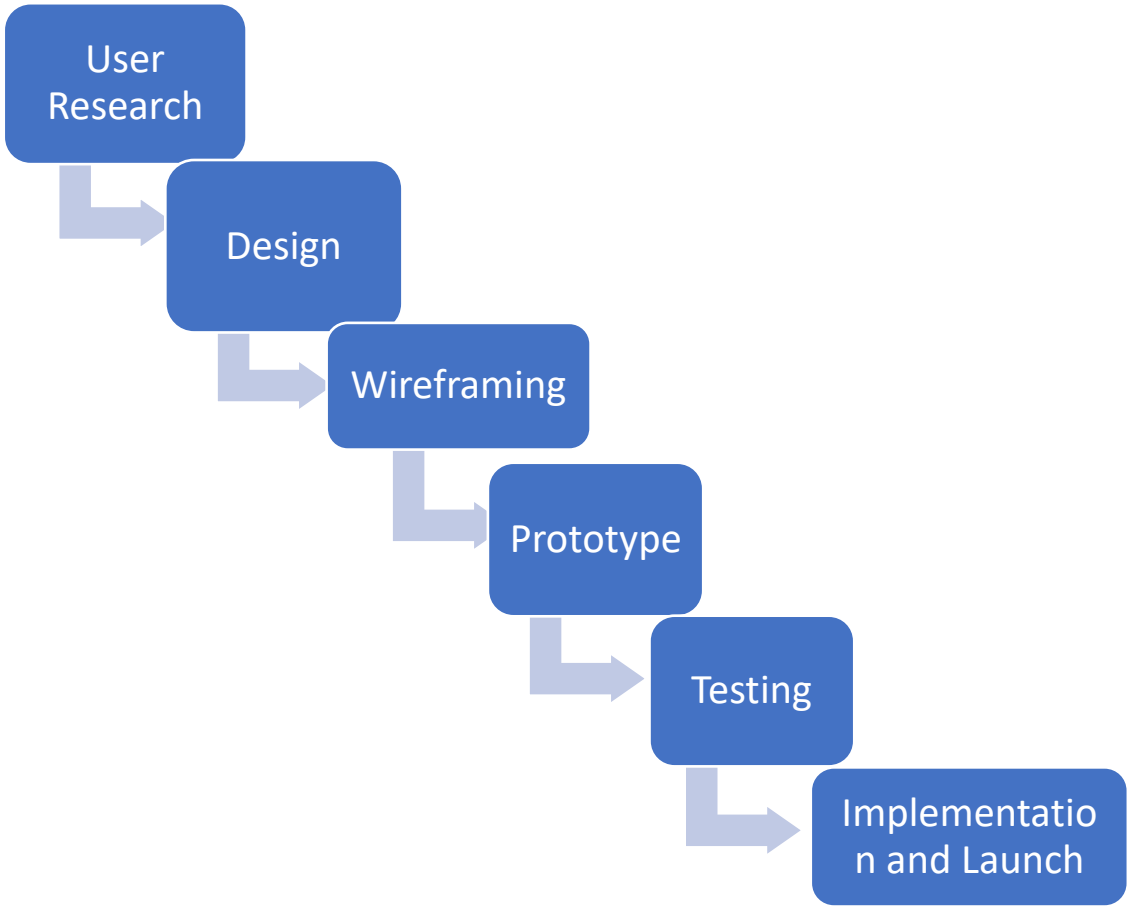
The UX Design Process – Understanding Users & Structure

What is **U**ser E**X**perience

- The term refers to the relationship between products and services and the users interacting with them.

- Good UX designs create a positive experience for the user. Bad user interfaces leave users unsure, unhappy and unable to complete a task they want to do.

Design Process and Methodology



Design Process and Methodology

- User Research
- Design
- Wireframing
- Prototype
- Testing
  - Usability Testing
  - A/B Testing and Multivariate testing
- Implementation and Launch

Understanding User Requirement and Goals

- User needs and goal is crucial part in Ux(researching, audience, preferences, behaviour)
- Conducting user interviews and surveys
- Create user personas
- Analysing the data and identifying patterns and trends.
- Continuously test the design with real users

Understanding the business requirements and goals

- Business and organization have their own requirements.
- Business goals include:
  - Increase Profit
  - Increase market share
  - Retain share
  - Use resources more efficiently
  - Offer more products and services

User Research

1 .Market research

2.User testing

3.Contextual enquiry

- Typically done at starting of your project.
- Qualitative UX research
- Quantitative UX research
- What is the purpose of user research

2.2

Visual Design Principle

Information Design and Data Visualization Interaction Design

UI Elements and Widgets

Screen Design and Layouts

- Convey a tone / communicate the brand
- Lead users through the visual hierarchy
- Provide visual structure and flow at each level of organization
- Signal what users can do on a given screen
- Respond to commands
- Draw attention to important events
- Build a cohesive visual system to ensure consistency across the experience
- Minimize the amount of visual work
- Keep it simple

- Convey a tone / communicate the brand

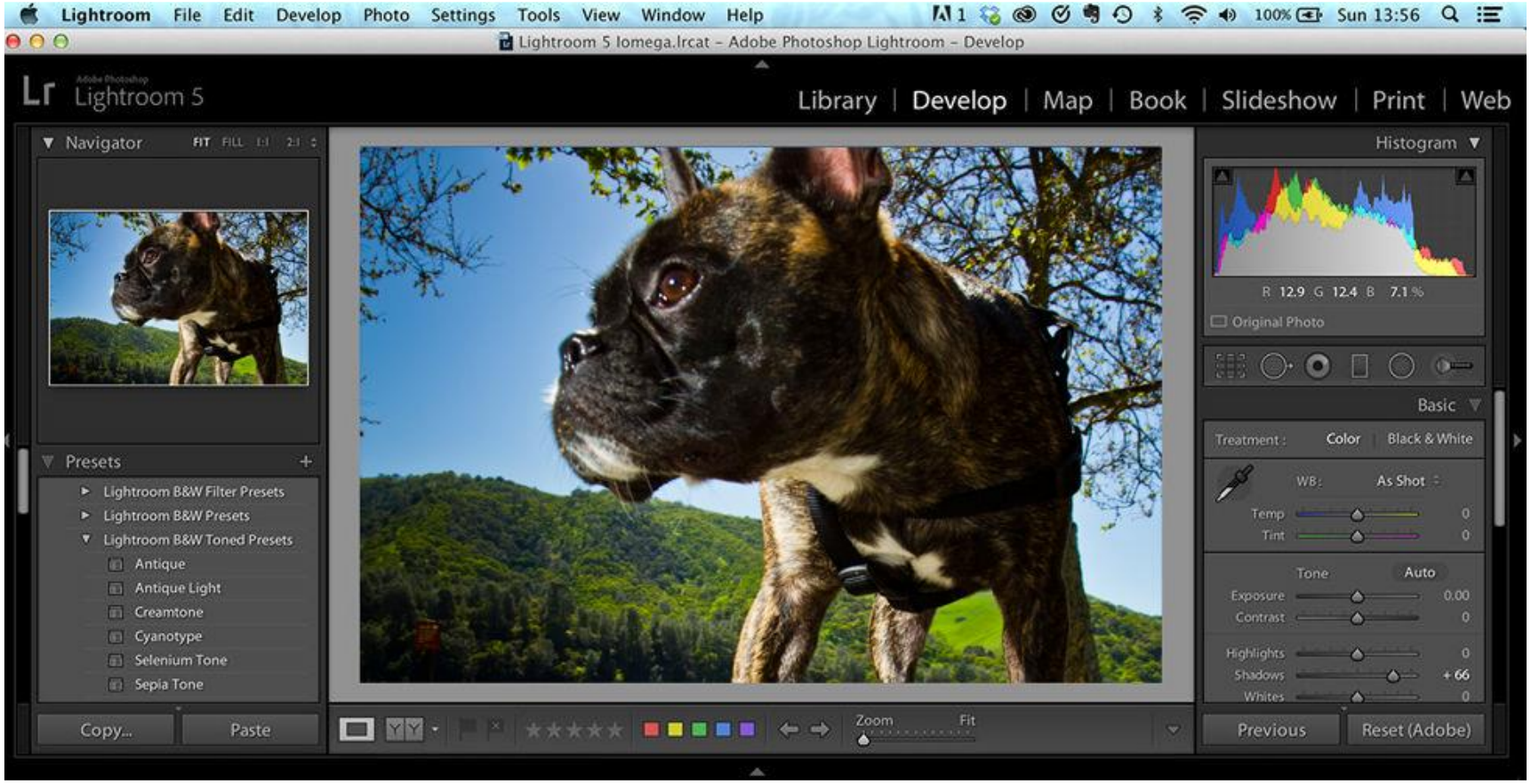
Lead users through the visual hierarchy

“What’s important here?” followed almost immediately by **“How are these things related?”**

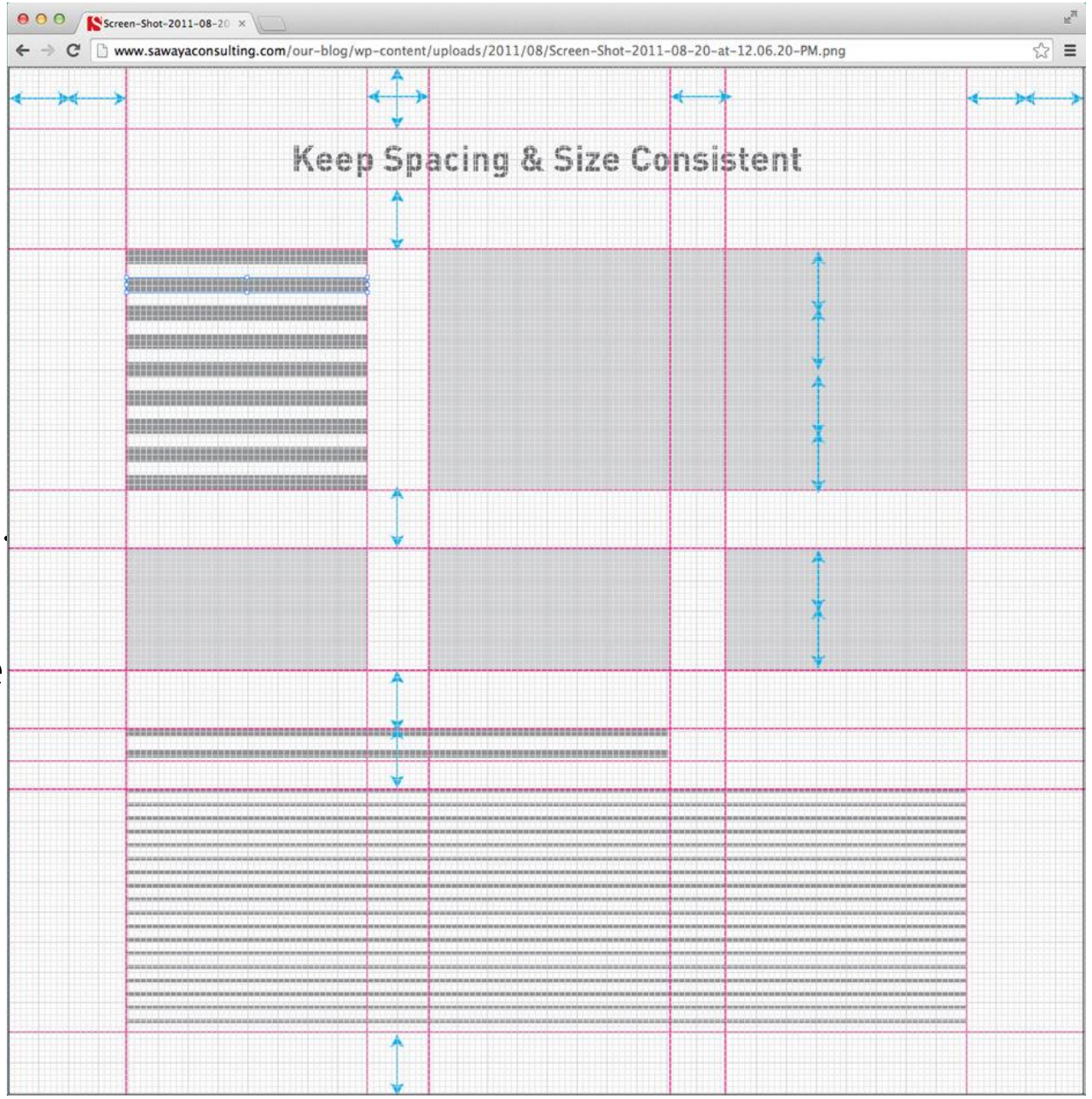
- We need to make sure our user interfaces provide answers to both of these questions by creating hierarchy and establishing relationships.
- Use the basic visual elements (position, color, size, etc.) to distinguish levels of hierarchy.
- The most important elements could be larger which have greater contrast in hue, saturation, and/or value in relation to the background and be positioned above and indented or outdented in relation to other items.
- Less important elements could be less saturated, have less value and hue contrast against the background, and should be smaller than and placed in consistent alignment with other items.

Provide visual structure and flow at each level of organization

- Align to a grid(A *grid system* is one of the most powerful tools available to the visual designer.)



- This sample layout grid prescribes the size and position of the various screen areas employed by a website.
- This grid ensures regularity across different screens. It also reduces the amount of work that a designer must do to lay out the screens and the work that the user must do to read and understand the screens.



Signal what users can do on a given screen

- Use icons:Bold, cartoonish icons may be great if you’re designing a whereas precise, conservatively rendered icons may be more appropriate for a productivity application. Whatever the style, it should be consistent.
- Associate visual symbols with objects:For example, in a photo management app, each image file is represented by a thumbnail.

Draw attention to important events

- The attention-getting mechanisms are not under our conscious control.
- when you consider that they evolved to alert us to sudden changes in the environment.
- Blinking objects command our attention so strongly that it’s difficult to pay attention to anything else.

Minimize the amount of visual work

- Visual noise within an interface is caused by superfluous visual elements that detract from the primary objectives of communicating affordances and information. The same is true for user interfaces.
- Cluttered interfaces attempt to provide an excess of functionality in a constrained space, resulting in controls that visually interfere with each other

- **Respond to feedback**
- **Keep it simple**

Information Design and Data Visualization Interaction Design

- Information design comes down to making decisions about how to present information so that people can use it or understand it more easily.
- Is a pie chart the best way to present that data, or would a bar chart work better for our users?
- Sometimes information design involves grouping or arranging pieces of information.

- **For Example**

➢ State

➢ Job title

➢ Telephone number

➢ Street address

➢ Name

➢ Zip code

➢ Organization

➢ City

➢ E-mail address

- Name
- Job title
- Organization
- Street address
- City
- State
- Zip code
- Telephone number
- E-mail address

- **Following be the arrangement that could be clarified further:**

Personal information

- Name
- Job title
- Organization
- Address information

Street address

- City
- State
- Zip code

Other contact information

- Telephone number
- E-mail address

- **Structured information**

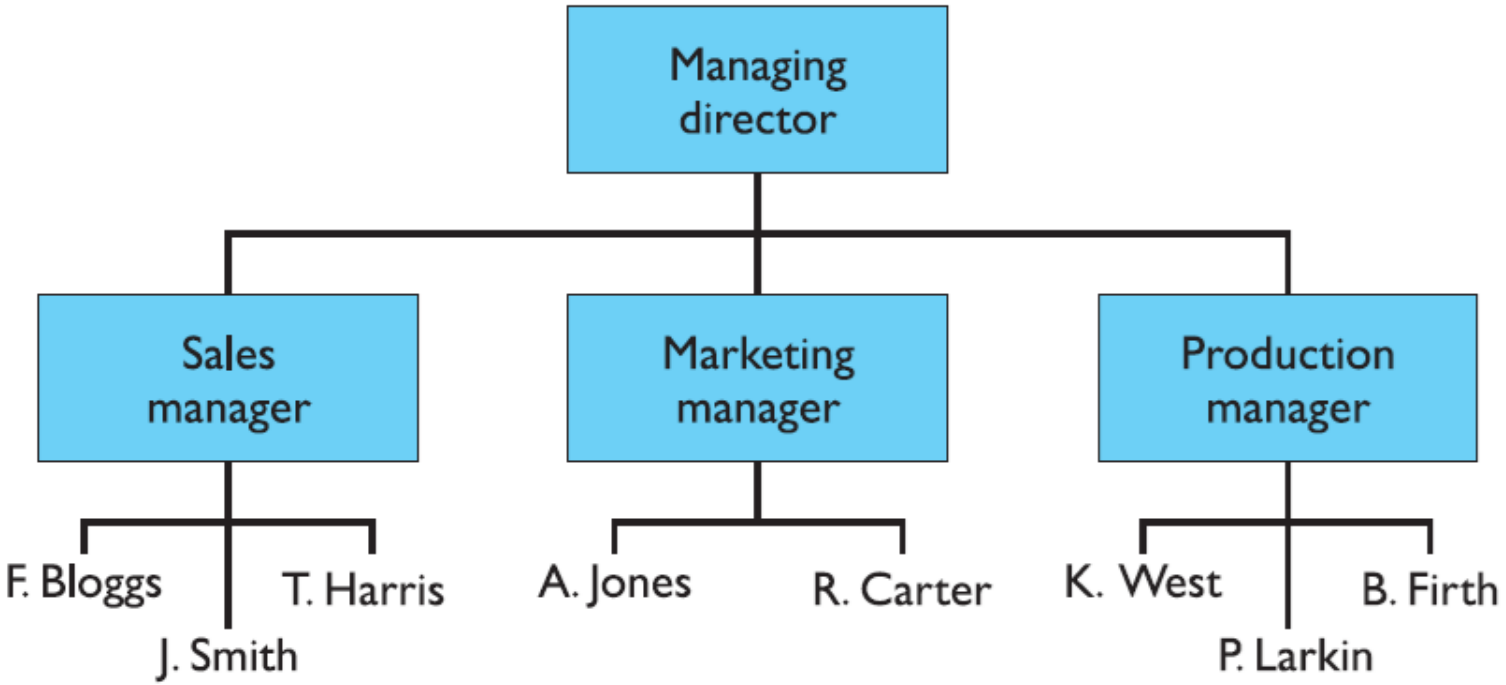
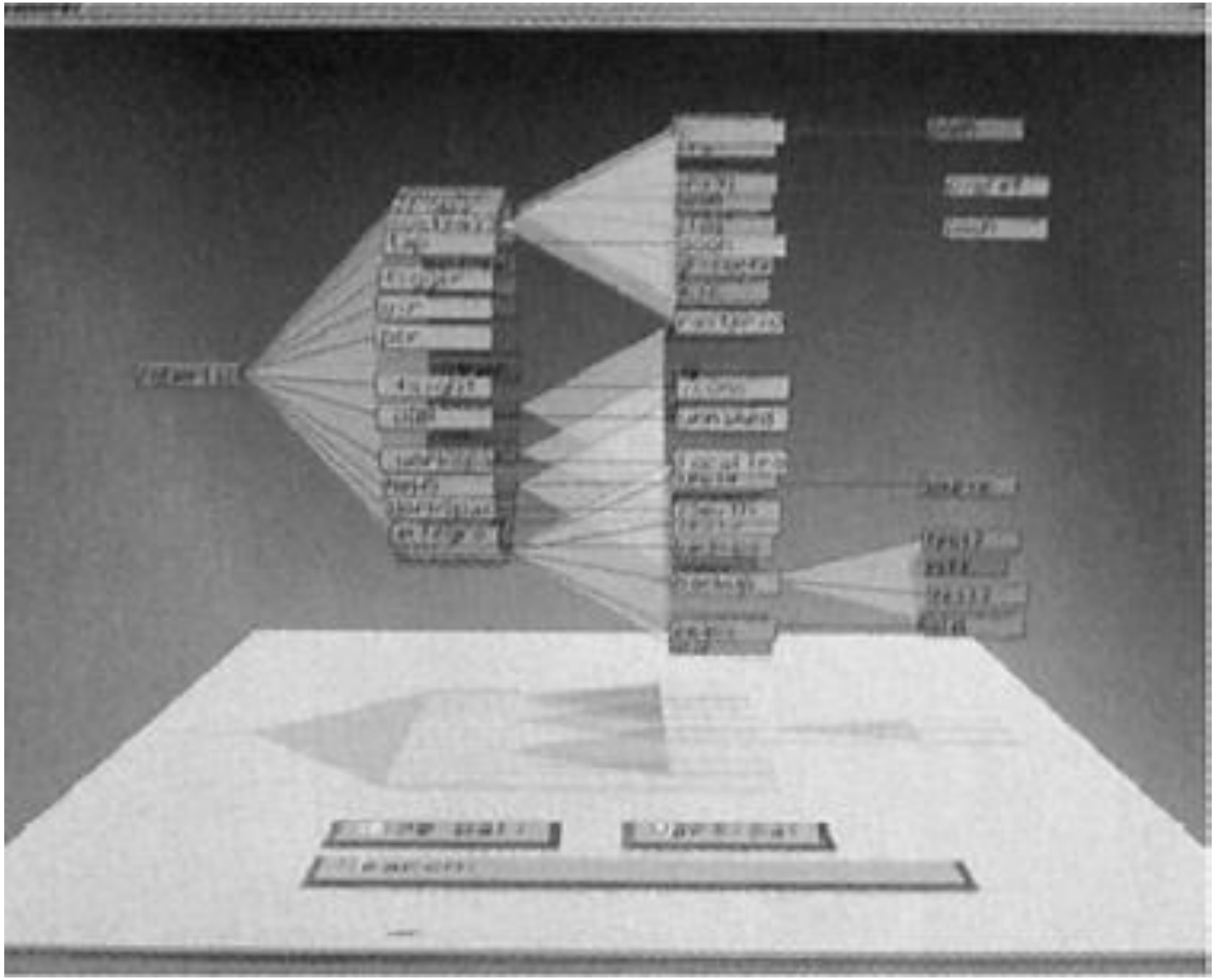


Figure. Two dimension Organization chart



- Figure. Camtree – visualizing hierarchies

- **Time and Interactivity**

For Example :Gantt chart

- The interface not only gather information from the user, but communicate information to the user as well.
- **For Example:** Instructional Information

UI Elements

- **Input elements**(dropdown, buttons, text field, checkboxes, radio button)
- **Output elements**(alerts, warnings, error messages, success)
- **Helper elements**(notification, Icons, tooltip)

Widgets

- Menu design
- Edit contact
- Delete Contact
- Icon design
- Search

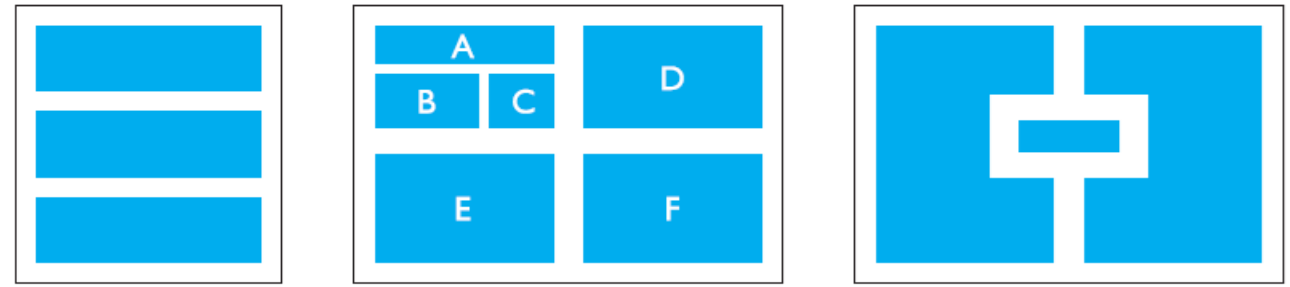
Screen Design and Layouts

1.Tools for layout

Grouping and structure

Alignment

White space



(i) Space to separate (ii) Space to structure (iii) Space to highlight

Figure. white space in layout

2.User action and control

Entering information

Knowing what to do

Affordances

3.Appropriate appearance

- Presenting information
- Making a mess of it: color and 3D