Proximity can backfire: example

CA.gov website. Pic from https://www.nngroup.com/

Proximity can backfire: example

- In the CA.gov website page, the «add» button, required to add employment information, is placed near unrelated buttons (move to the next step, save submission as draft, and cancel).

- When looking around the page, users may **only look at one item within a perceived grouping and use that to make a judgement about what the other items in that group must be**.

Proximity can backfire: example

Proximity can backfire: fixing the example

Principle of Connectedness

- Elements that are connected (or share a border) are perceived as related or part of the same group

- How many groups do you see in the shapes below?

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- Connectedness **overrides** proximity and similarity
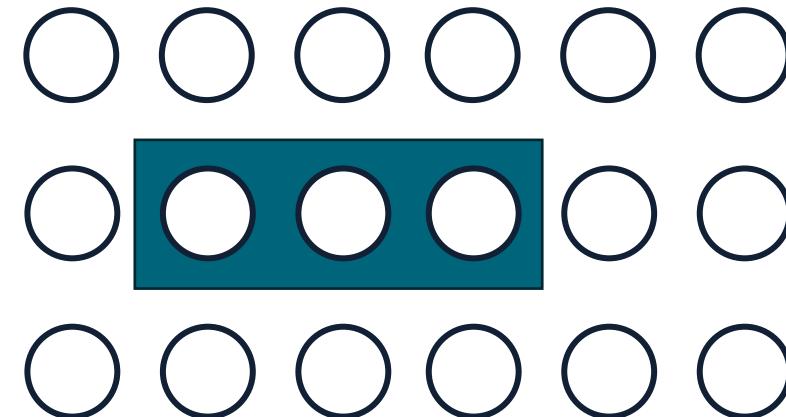
Principle of Connectedness in UI Design

- In Google Maps (web version) the search box is connected (share a border) to recent queries and saved locations
  - This suggests that those features are related

- Long forms can also be split in multiple phases or steps. The steps in the indicator on top of the figure (from fluentforms.com) are connected
  - This conveys the fact that these step belongs to the same, larger process
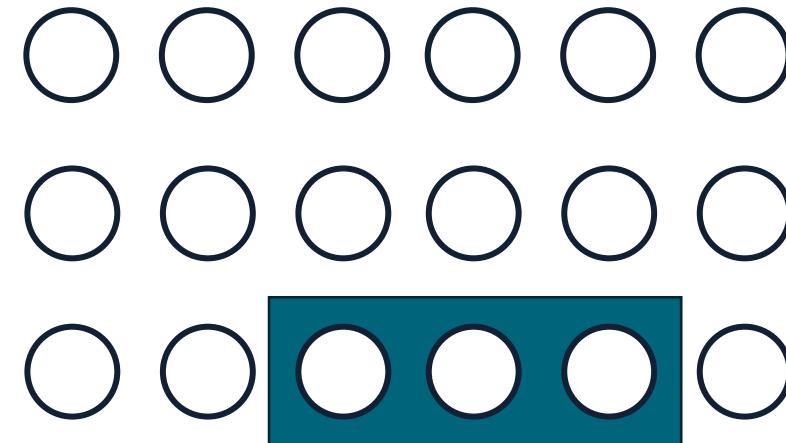
Principle of Common Region

- Items within a boundary are perceived as a group and assumed to share common characteristics or functionality
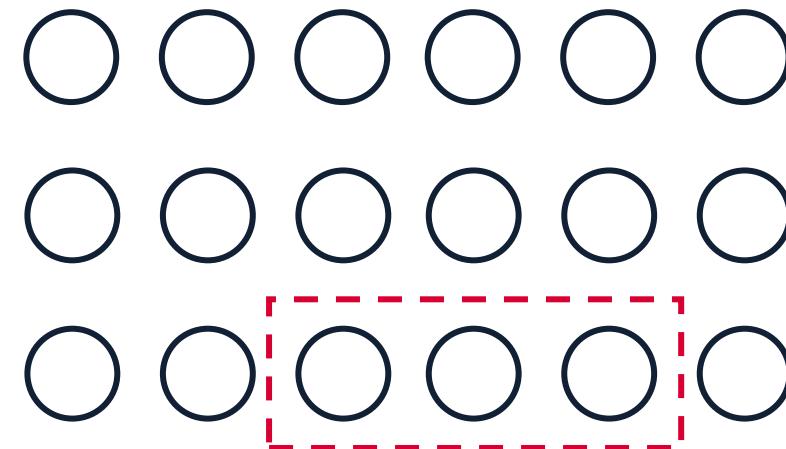
Principle of Common Region

- Items within a boundary are perceived as a group and assumed to share common characteristics or functionality
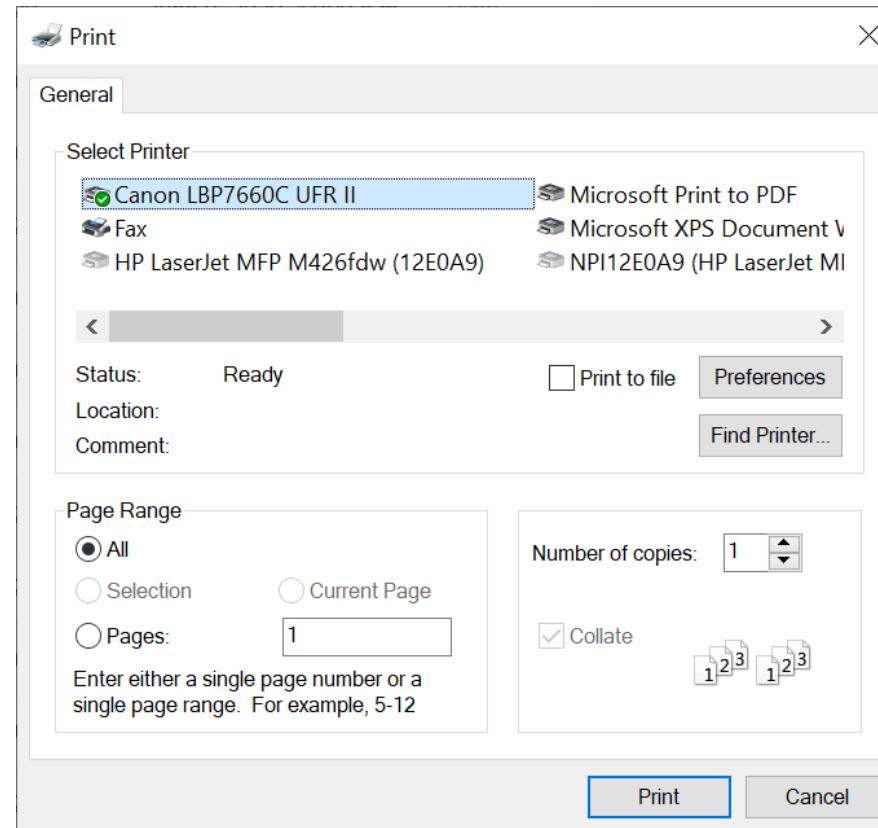
Principle of Common Region

- Items within a boundary are perceived as a group and assumed to share common characteristics or functionality

Principle of Common Region: examples

Printing dialog on Windows 11.
Pic from https://www.nngroup.com

Principle of Common Region: examples

Footer in the teacher's personal website: https://luistar.github.io
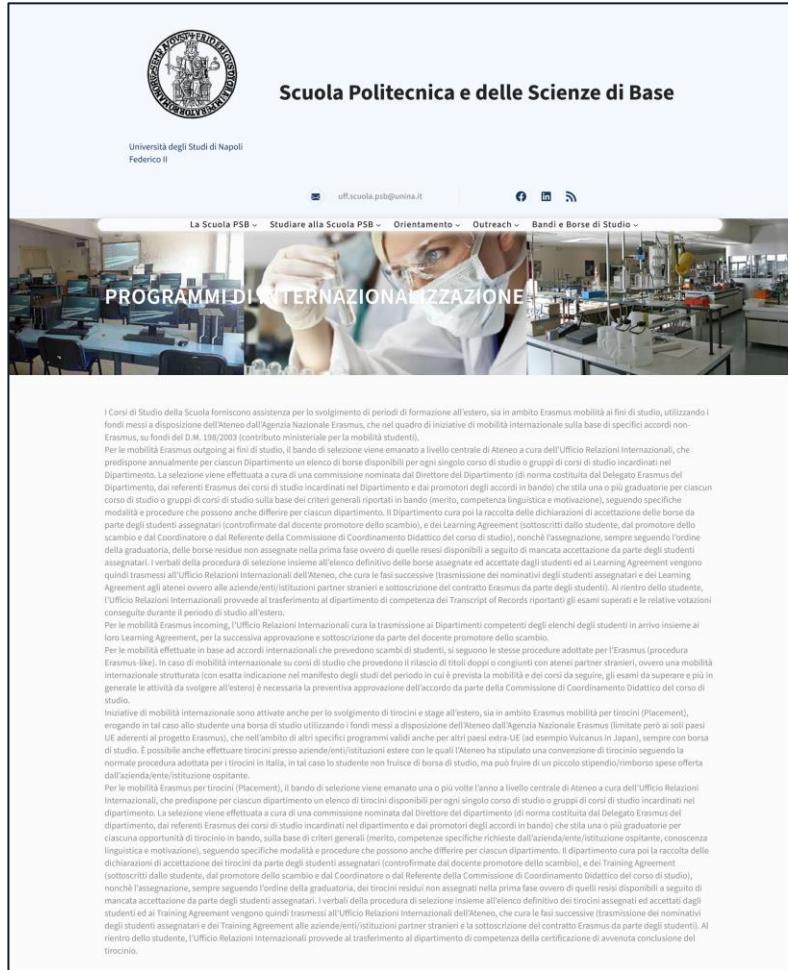
Visual Hierarchy in UI Design

- Have you ever seen a website or an app presenting a screen full of information, and you don't even know where to start looking?

- When that happens, it's likely that the layout is missing a clear **visual hierarchy**

- **Visual hierarchy** (of a 2D layout) refers to the organization of the design elements on the screen/page so that the eye is guided to consume each design element in the order of intended importance.

Lack of a Visual Hierarchy on arngren.net
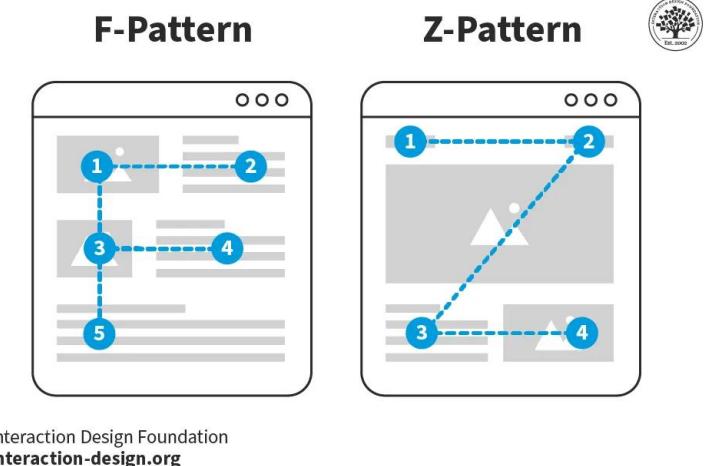
Lack of a Visual Hierarchy (SPSB website)

https://www.scuolapsb.unina.it/programmi-di-internazionalizzazione/
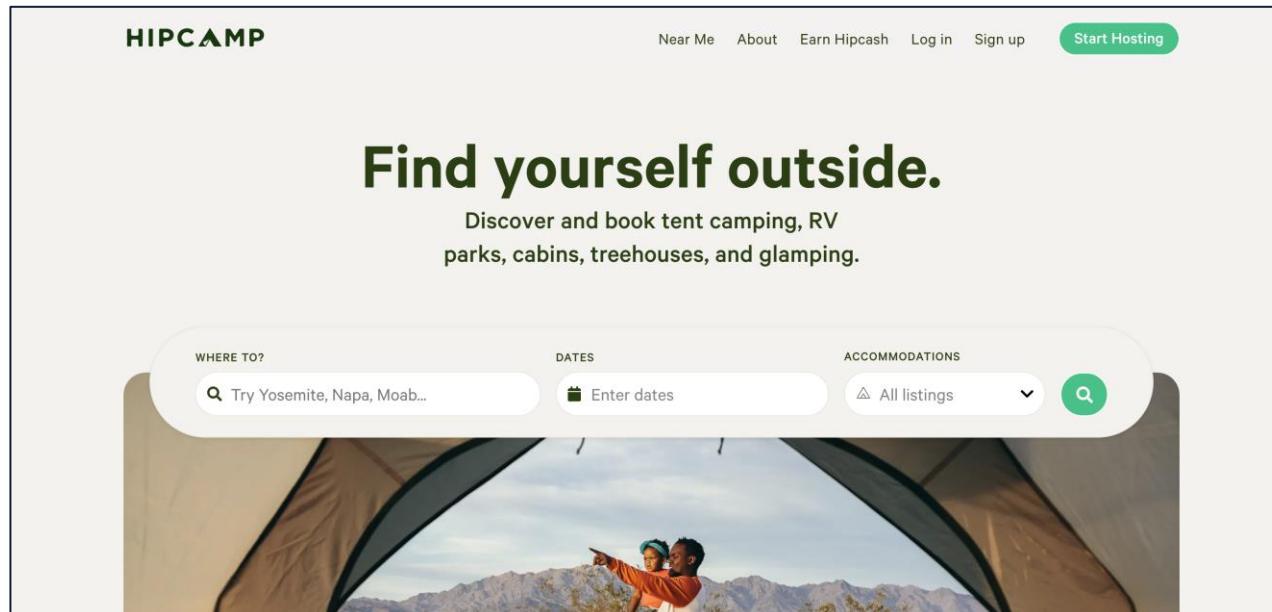
Creating a Visual Hierarchy

- You should use what you learned about colors, typography, and Gestalt principles to ensure that your designs have a clear visual hierarchy

- Designs should guide users so that they consume contents in the desired order

- Keep in mind that western users typically scan a UI using a **F-** and **Z-pattern**
  - You can reinforce these natural patterns

- **Scale**, **colors** and **groupings** are powerful tools to create a visual hierarchy

F-Pattern   **Z-Pattern**

Interaction Design Foundation
interaction-design.org

Creating a Visual Hierarchy: Scale

- Users pay more attention to big things than to small things
- More important elements should be larger than less important ones
- Users will notice larger elements first
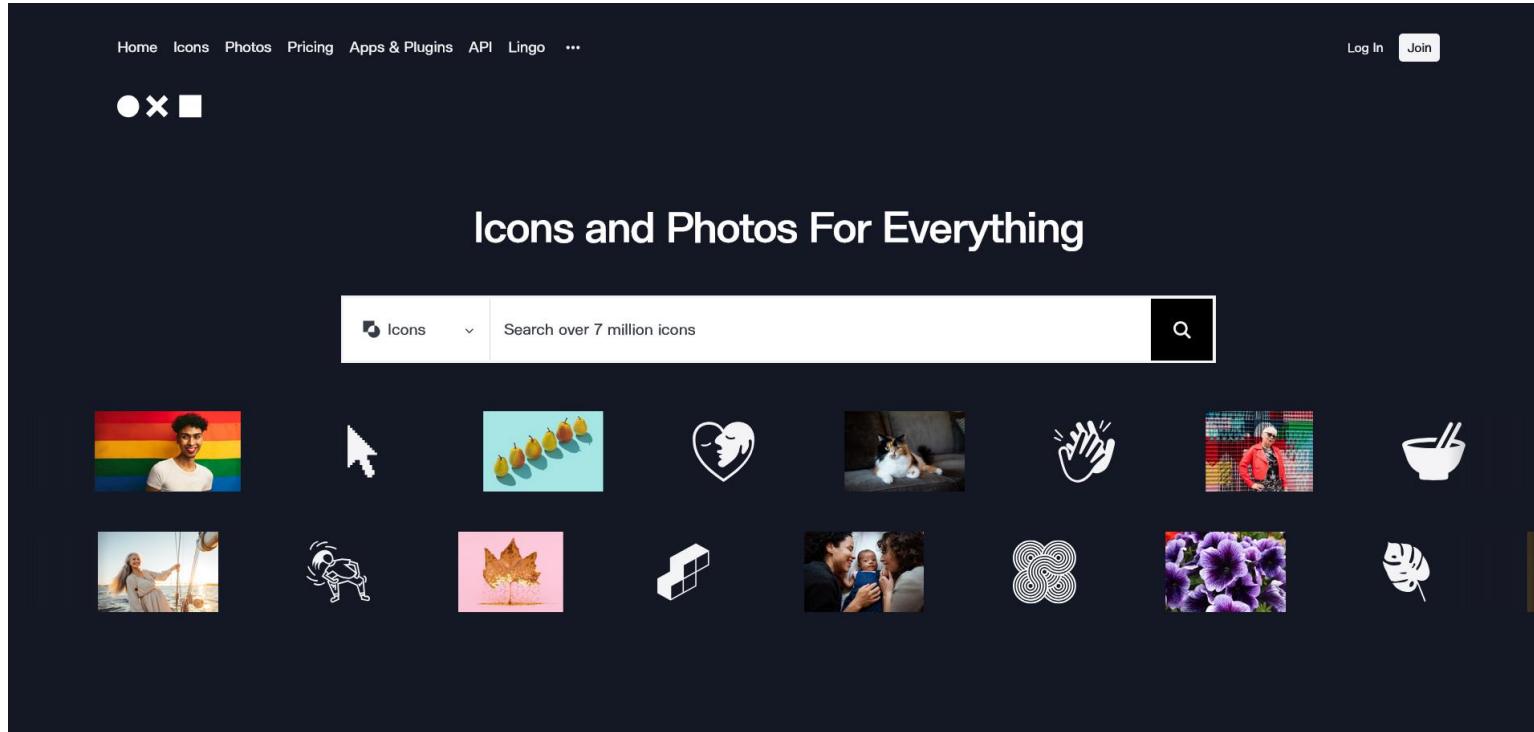
Hipcamp.com: *The visual hierarchy is communicated through font size. The eye is drawn first to the "Find yourself outside" text due to its large, bolded size. This text gives you a general idea of what you can do on this website.*

From https://www.nngroup.com/

Creating a Visual Hierarchy: Color / Contrast

- Color and contrast is a good way to make some elements appear in advance while others recede

In thenounproject.com, attention is drawn to the search field both because of its size and because of its high contrast w.r.t. the dark background.

Creating a Visual Hierarchy: Grouping

- Implicit and explicit groupings help us see the bones or the structure of a layout and allow us to direct attention to those areas of the screen that are likely to be relevant to our goal

- Gestalt principles (proximity, similarity, common region) can help convey groupings

- In the Spotify app (pic from nngroup.com), we immediately see 3 different groupings.