

Human Computer Interaction

Layout and Gestalt Principles Tutorial

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1 Introduction

Layout of information can have a huge impact on how usable it is. Even seemingly small changes can make a large difference in how easy it is to find and group information. In this tutorial we are going to look at a couple poor user interface designs and then try and fix them. Below are the Gestalt Principles we learned about in lecture. In this tutorial you will be applying these principles to several graphical interfaces to improve them.

- Proximity
- Similarity
- Continuity
- Closure
- Symmetry
- Figure/Ground
- Common Fate

Good example: A bakery sign

Figure 1 is of a cafe sidewalk sign that is showing the same menu items in both English and Spanish. This sign does a good job of using Gestalt Principles to make the sign easy to read.

Sign Goals: There are three types of information on this sign: 1) name of the bakery, 2) menu items in English, and 3) menu items in Spanish. It is also important that a reader have full confidence that they have read the sign correctly, even if they only speak English or only Spanish.

Principle Usage: The sign makes good use of the grouping principles to address these issues. First off, all the menu items are clustered together in the middle (*Proximity*) suggesting to a reader that all these items may be of the same type. The English menu items are all in bold font (*Similarity*) and all are right justified which creates a line on the right (*Closure*). All of which suggests that the bold right-aligned words are of a similar type. Similar with the Spanish menu items which are not bold and are all left justified. So a reader should see the English items as one type of thing, and the Spanish items as a related thing that is different in some way.

The sign also uses *Proximity* and *Closure* to group the English and Spanish words together so that a reader knows that they are related even if they cannot read both words. The words “Cakes” and “Queques” have the same vertical alignment, they are also quite close to each other suggesting that they might be something that should be grouped. Even though a reader might not be able to read both words, seeing them grouped like this suggests that they are related things, so it is quite likely that “Queques” is Spanish for “Cakes”.

The bakery’s name also uses *Similarity* and *Proximity* to ensure that it is grouped differently than the menu items. It has a different font, is center-aligned and has space between it and the menu items. All of which cause people to see the name as different from the menu items. The word “Bakery” is also in close



Figure 1: Bakery sign in English and Spanish.

proximity to “Jim´enez” suggesting that they go together, but still appears in a different font (Similarity) to highlight that this is a bakery which happens to be called “Jim´enez”. The name “Jim´enez” also uses Figure/Ground to add a fancy red outline while still ensuring that the reader focuses on the blue text.

Activity 1: Redesign Nile Valley Menu

The Nile Valley is a restaurant located across from Appleton Tower in Edinburgh. They have delicious food, but a very unusable menu. In this activity you will be working in groups to re-design their menu to make it more user friendly. You can see their current menu in Figure 2.

Break into groups and discuss the following questions in relation to Figure 2:

1. **Goal of the design.**
2. **What are the information-elements in the design that need to be grouped or separated?**
Information on a display often has multiple groupings sometimes in hierarchies and sometimes in overlapping groups.
3. **What Gestalt Principles are being used currently?** Are the principles being used in a way that makes the design easy to understand? Why or why not?

Once you feel like you understand the goals and problems of the current design, try and create a new design. Layout can be strongly influenced by the details so we will be creating these designs using a mock-up tool.

The Nile Valley

Experience of 20 years

BEST FLAFEL, AFRICAN, BARY, CHICKEN AVOCADO & CHICKEN MAYO WRAPS

Chicken Salad - Chicken Breast With Garlic & Mayo	£3.50
Chicken & Avocado	£4.00
Flafel With Humus	£4.00
Flafel With Fuul (Broad Beans)	£4.00
Full Bil Jibna With Onions & Tomato	£3.95
Humus & Salad	£3.25
Humus & Aubergine	£4.00
Humus & Mixed Peppers	£3.75
Baba Ganoush & Salad	£3.75
Baba Ganoush & Falafel	£4.00
Guacamole & Aubergine	£4.00
Tuna & Salad	£3.00
Tuna & Sweetcorn	£3.35
Spicy Tuna Salad	£3.25
Spicy Fetta Cheese	£3.50
Fetta Cheese Cheese & Salad	£3.00
Cheddar Cheese & Salad	£3.00
Extra Toppings	£0.25
Africa Wrap (flafel, Fuul, Fetta, Cheese)	£4.00
Bary Wrap (falafel, Humus, Chicken Fuul)	£4.50
Fetta Cheese Sundry Tomato	£3.95
Cartons	£0.80
Can	£0.75
Bottled Drinks	£1.00
All Coffee	£1.75



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for parties and functions for students for hot meals
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INFORMATION CALL 0131 667 8200**

**SPECIAL
LENTIL SOUP**
sit in or
takeaway

Figure 2: Menu for The Nile Valley located across the road from Appleton Tower

Have one member of the group open Balsamiq or Figma and start a new design. They should then either share the link to the design or share their screen so that everyone can co-create the improved design.

Activity 2: Redesign a web shopping page

Figure 3 shows a screenshot of an online shopping page. The screenshot is purposely taken mid-way down the page to represent what a user might see after they have scrolled a bit and can no longer see any cues that might be at the top.

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Activity 3: Redesign a installation screen

Figure 4 shows a screenshot of a software installation screen. As part of the installation the software is offering to also install a browser tool called MySearch App. Unfortunately the information and options being shown to the user are rather confusing.

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Information on a display often has multiple groupings sometimes in hierarchies and sometimes in overlapping groups.
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Paper tape

£2.95

[Add to Basket](#)

[♥Add to Wishlist](#)



Suki Earl Grey loose leaf tea

£4.80

[Add to Basket](#)

[♥Add to Wishlist](#)



Bamboo cotton swabs

£2.10

[Add to Basket](#)

[♥Add to Wishlist](#)



Body loofah

£2.75

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[♥Add to Wishlist](#)



Bottle Brush

£3.25

[Add to Basket](#)

[♥Add to Wishlist](#)



Loofah washing up pad

£2.85

[Add to Basket](#)

[♥Add to Wishlist](#)



Wooden rainbow puzzle



Wooden solar system



Bee-Leaf in You Card

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£22.00

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[♥Add to Wishlist](#)

£2.99

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Figure 3: Online shopping page.

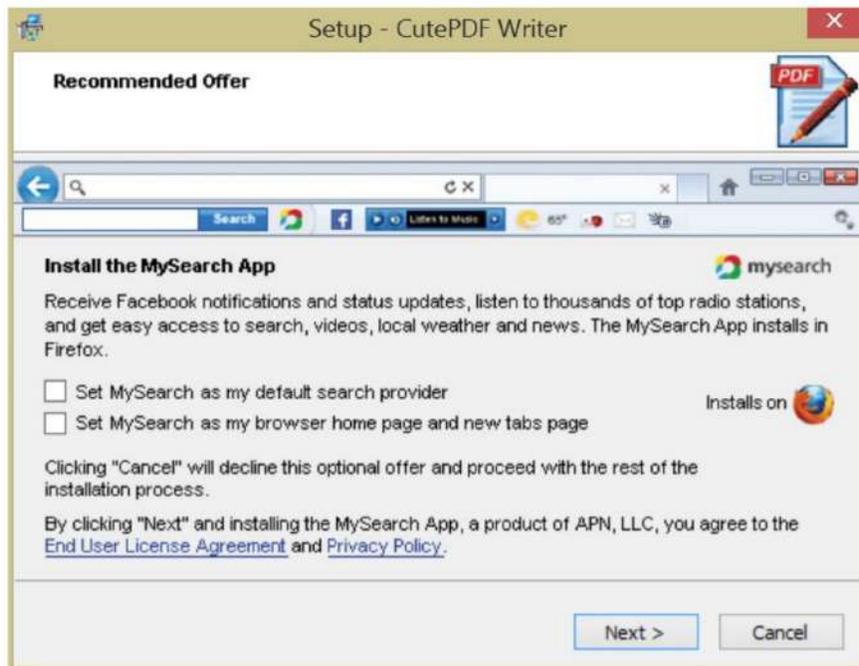


Figure 4: Software installation screen for CutePDF.