# CSE-463 Human Computer Interaction ASU-ID: 1218506822

Assignment-6

# 1.Proximity:

## **Description:**

This defined as one of the Gestalt principles of perception. According to this law, it states that elements that are close together are treated as a single chunk or similar group. These elements are perceived as more related when compared to the elements that are far away from each other. Grouping similar elements decrease the design complexity, enhances the relatedness of the elements thereby reinforcing the right perception. Lack of proximity results in a perception of disparate multiple elements, enforcing the differences among them. Therefore, it is very important for a website to organize similar and related elements in one single group.

#### Usage of the principle during Redesign:

On the order page of the website we are implementing the proximity principle because visually the related information fields of the form are not properly categorized, bound together under labels this can make it unappealing. We decided to organize the information under personal, recipient, payment, and additional categories. The category labels of the form, supporting information, and its corresponding elements are bound together. This increases the perception of the user while filling the form, makes it more systematically impressive and intuitive.

### Issue with the Original Design:

Refer Fig-1, The information fields of the form are not represented properly according to the proximity principle. Though the fields have labels for different categories. The labels and their related elements do not appear together as a single unit because the elements are not grouped properly and visually appear irrelated from each other, also different category elements are not separated by a boundary to enforce the separation between them. It is not systematically impressive and increases the visual complexity while filling the form

RECIPIENT INFO	PAYMENT INFO	PERSON PLACING ORDER		
	Same as Recipient	Same as Recipient		
	Same as Recipient	Same as Recipient		
First Name *	First Name *	First Name *		
Last Name *	Last Name *	Last Name *		
Email *	Address *	Email *		
Business Name	City *	Phone *		
Address *	Province/State *	Total not including taxes \$596.25		
		Additional Order Comments		
Suite/Apt	Postal/Zip Code *			
Postal Code *	Card Number * VISA (MARIES)	☐ I agree to the Dlish T&C		
		CLICK HERE to read the T&C		
Phone *	CCV * Expiry Month * Expiry Year *	NEXT >		

Fig-1

# 2.Consistency:

#### **Description:**

According to this law, it states that the systems can be more learnable and usable, when there exists a consistency across similar elements. Familiarity with the similar patterns enables users to complete their tasks effortlessly by taking advantage of their past experiences to complete their tasks. It helps the users to learn things quickly as well as drives their attention to the relevant aspects of the task. Therefore is important for a system to maintain aesthetic, functional, internal, external consistency.

#### Usage of principle during Redesign:

Refer Fig-2, We decided to implement Aesthetic and Internal Consistency in our system. There exists a navigation bar across all the pages except order page. We decided to add navigation bar to communicate style, emotion of navigation to maintain aesthetic consistency. This also forms a familiarity of navigation flow from order page to another pages just like the previous pages and maintains internal consistency.



Fig-2

## Issue with the Original Design:

Refer Fig-3, In the original page, there is no navigation bar in the order page, it lacks navigation consistency between the order page and other previous pages of the order page. This The navigation bar presence and flow of navigation from order page to any other page is not consistent and affects Aesthetic and Internal Consistency.



Fig-3

# 3. Modularity:

#### **Description:**

This principle hides and manages the complexity of the system. It identifies similar funcitonal items and put them under a specific functionality container. It structures the system to handle the complexity. The system is designed in such a way to hide the internal complexity and interact with the specific modules through simple interfaces which are needed on a given time. This improves reliability, functionality and maintainability.

#### Usage of principle during Redesign:

The flavour section of the website has a passive chart which represents the items available per day. For the user to figure out the items every time. He need to refer to the chart where there is redundant and unnecessary information available about the other days of the week. We decided to implement the modularity here, where items are classified into day module based on the selection and other internal information is hided using combo box.

#### Issue with the Original Design:

Refer Fig-4, In the original Design, the items of the day are not clustered, all the items which are both necessary and unnecessary are placed below the passive chart, the interface is complex and the user has to put effort to remember an item from a day to locate the items listed below the chart. As per the Miller's law, the average user only remember 7 plus or minus 2 items. Therefore, the simple interface with day modularity must be implemented to increase the performance.

		1.1				þ	rint schedule
<b>flavour</b> schedule	MON.	TUE.	WED.	THU.	FRI.	SAT.	SUN.
banana				0			
carrot						0	0
chocolate	0	0	0	0	0	0	0
chocolate coconut		0		0			
chocolate marshmallow					0	0	
coconut	0				0		
cookies and cream			0			0	
dulce de leche		0		0			
lemon		0					0
nutella		0		0		_	
peanut butter chocolate chip	0					0	
red velvet	0	0	0	0	0	0	0
salted caramel	0		0	0	0	0	
salted chocolate		0					0
strawberry					0		0
strawberry on chocolate	0	_	0		_		_
vanilla	0	0	0	0	0	0	0
vanilla chocolate chip	0		0		_	_	
vanilla latte					0	0	
vanilla on chocolate	0	0	0	0	0	0	0

fig-4

#### References:

Lidwell, William, Kritina Holden, and Jill Butler. *Universal principles of design, revised and updated: 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design.* Rockport Pub, 2010.