




**Daniel Murray**

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Your only sales person that works 24/7  
is your website.

This is why great copy and content  
matters.

10:56 AM · 5/6/21 · [Twitter for iPhone](#)

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# Constraints, Discoverability & Feedback

MIS3506\*Spring 2024

# What is a Constraint?

- A limitation or restriction
- A control that limits or restricts
- Something that keeps you within a particular limit
- Limits the number of choices that a user can act upon
- Leads to a smoother, more functional product within given parameters

# What is a Constraint in User Experience?

## Client Specific

- Brand, Logo, Guidelines, Attitude

## Project Specific

- Timeline, Budget, Goals
- UX – Smooth

## Accessibility and Clarity

- Compliance
- Privacy



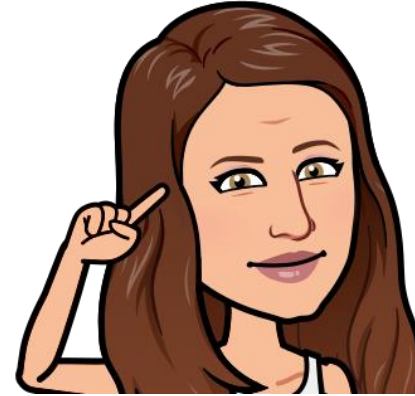
Is a Constraint always Bad?

What do you do when  
you have to operate  
something you've  
never used before?



# Knowledge

- In the Head – Logical, cultural and semantic constraints



- In the World – Physical Constraints





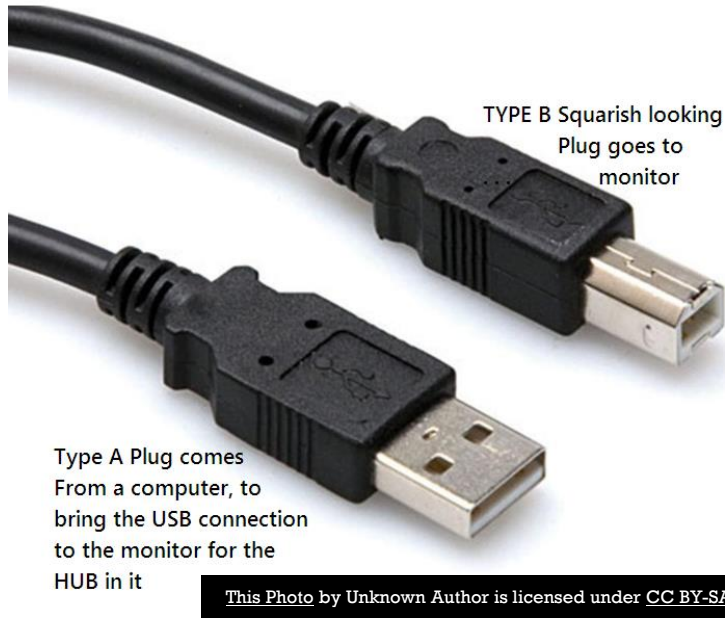
How do you turn that into this?



# Constraints



**Constraints let people readily determine proper course of action, even in a novel situation (Norman, p. 125)**



Physical Constraints:  
Limit the possibility of operations with physicality, highly visible

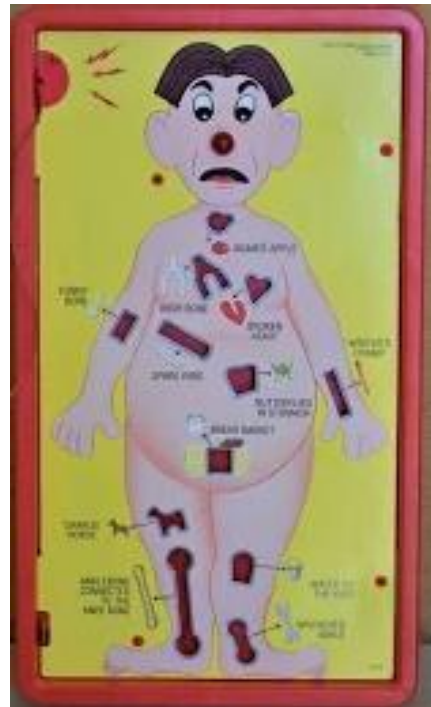


Cultural Constraints:  
Conventions Shared by a Cultural Group





Semantic Constraints:  
Rely on the Meaning of Situation to Control the Actions



Style 1

DOB  
Enter the date of birth

DD / MM / YYYY

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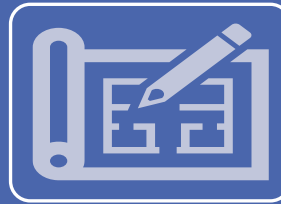
Style 2

Date of Birth  
Date format DD/MM/YYYY

\_ / \_ / \_

Logical Constraints:  
Make use of reasoning and logic to determine possible actions

# Additional Constraints



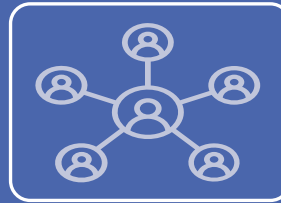
## Technical Constraints

- Platform Limitations
- Browser capabilities
- Device Constraints



## Business Constraints

- Budget & Resources
- Brand Guidelines
- Deadlines



## User Constraints

- User Literacy
- Accessibility
- Complexity/Cognitive Load



## Content/Legal Constraints

- GDPR/CCPA/ADA Compliance
- Content localization – text size for languages

# Constraints – some thoughts to consider

Logical – Tell a user to select 5 things & only 4 are readily visible – what does that tell the user?

Logical constraints = good conceptual model

Cultural – scroll bar on the right – what does that tell the user?

Physical constraints make some actions impossible: there is no way to ignore them.

Logical and cultural constraints are weaker in the sense that they can be violated or ignored, but they act as valuable aids to navigating the unknowns and complexities of everyday life.

Semantic constraints – one part conditions what the other part is likely to be

## Handling Constraints in a Design Project

- IBIT project experience: designing a website for a local bakery
- Needed to make sure the platform could be integrated with Clover (the client's current POS system) and Hazlnut (the ordering system associated with Clover)
- **Google is your friend—do your RESEARCH!**





## Order Summary



Sweet Potato Bun (dozen)

\$6.60

Kind: Bun

Qty 1

Remove

To check out, your order subtotal must be \$10.00 or more.

Subtotal	\$6.60
Tax	-
Shipping	-
<b>Total</b>	<b>\$6.60</b>

## Schedule a Lesson - Gibson School of Music and Arts

Please fill out this form to request a virtual lesson. We will call you back within one business day to schedule your lessons.

NOTE: In response to COVID-19, we are hosting sessions virtually for the health and safety of our students. Also, we continue to offer private music lessons and classes at GMA School following the CDC guidelines.

\* Required

Email address \*

Your email



This is a required question

The background of the slide features a series of concentric, curved lines in a light gray color, creating a sense of motion or a circular path. These lines are more prominent on the left side and fade out towards the right.

# Feedback

- The information that you give your users about the effect of the action they've taken or the state of the request they have submitted
- The visible response that one gets from performing an action

# Characteristics of Good Feedback

- Specific – concrete and relatable
- Timely (immediate!)
- Appropriate
- Focus on the Behavior
- Descriptive
- Not judgmental
- Accurate
- Enhances – does not leave the user wondering what happened

# Tools for the Designer



# Constraints

In Teams: Define each of the constraints in your own words and provide an example for a digital experience

Physical

Cultural

Semantic

Logical

# ICA Breakout



Design three  
interactions with  
constraints for your  
new UX

# Design Principles

