

Practical UX & UI for Developers

Frameworks and Guidelines for delivering
Exceptional User Interfaces

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 **Survey - Let me know how I did!**

Overview

- **Terms** ... shared terminology
- **Frameworks** ... conceptual models
- **Processes** ... how to fish
- **Resources** ... next steps

Follow Along!



<https://kylemit.github.io/Presentations/UX/>

Terms

UX ≠ UI

UX =

User + Experience



User Experience Facets

- **Surface**
 - Graphic Design
 - Visual Design

- **Skeleton**
 - Interface Design
 - Navigation Design
- **Structure**
 - Interaction Design
 - Information Architecture
- **Scope**
 - Content Requirements
- **Strategy**
 - User Needs
 - Business Objectives
- **Support**
 - Marketing
 - Help Desk



Interface

Shared boundary between two layers

- **API** - **A**pplication **P**rogramming **I**nterface



- **UI** - **U**ser **I**nterface



- **GUI** - **G**raphical **U**ser **I**nterface



Fundamental Principles of Interaction

- Discoverability
 - **Affordances** ... what actions are possible
 - **Signifiers** ... where the action should occur
- Understanding
 - **Mapping** ... layout of actions
 - **Feedback** ... results of an action
 - **Conceptual Models** ... universe of actions

Usability vs. Learnability

Kiosk vs. Cockpit



Increased Repeated Exposure

Frameworks

 Navigation

 Proximity

B Emphasis

 Philosophies

Navigation



Path - Set of Steps needed to complete a task



Step - Physical and Mental Effort



Length - Amount of *Time* to complete



Width - Amount of *Difficulty* to complete

Path Example

ex. Mountain Biking

Path



Load Bike on Car



Drive to Kingdom Trails

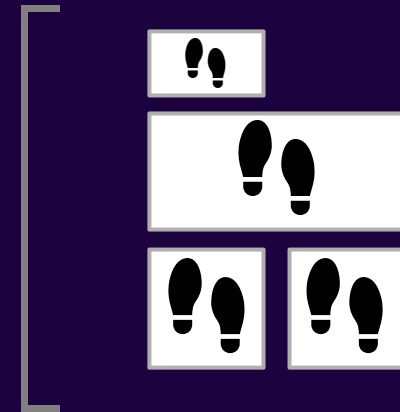


Bike up and down course

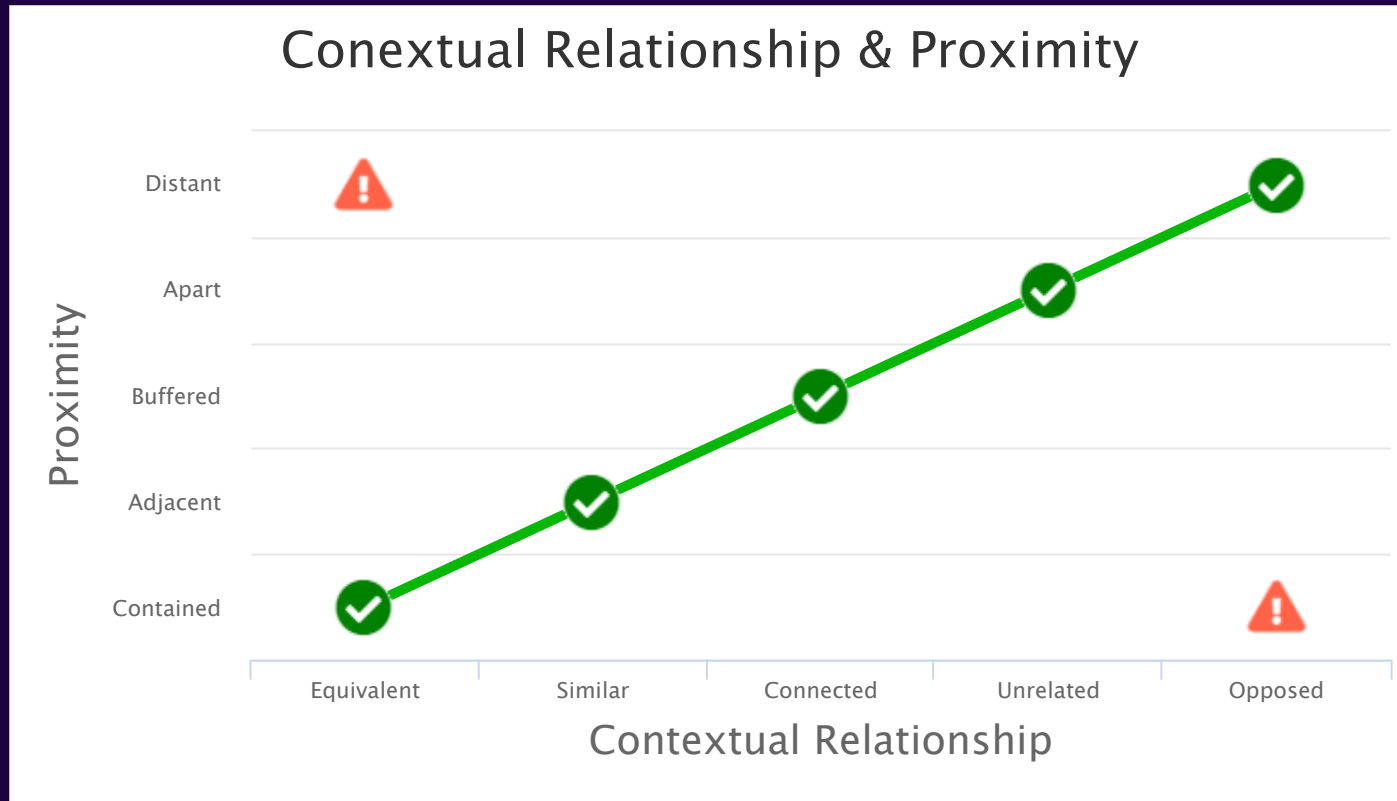
How to Make a Path Easier:

- **Shorten** Steps
- **Widen** Steps
- **Reduce** # of Steps
- **Alternative** Steps

Path

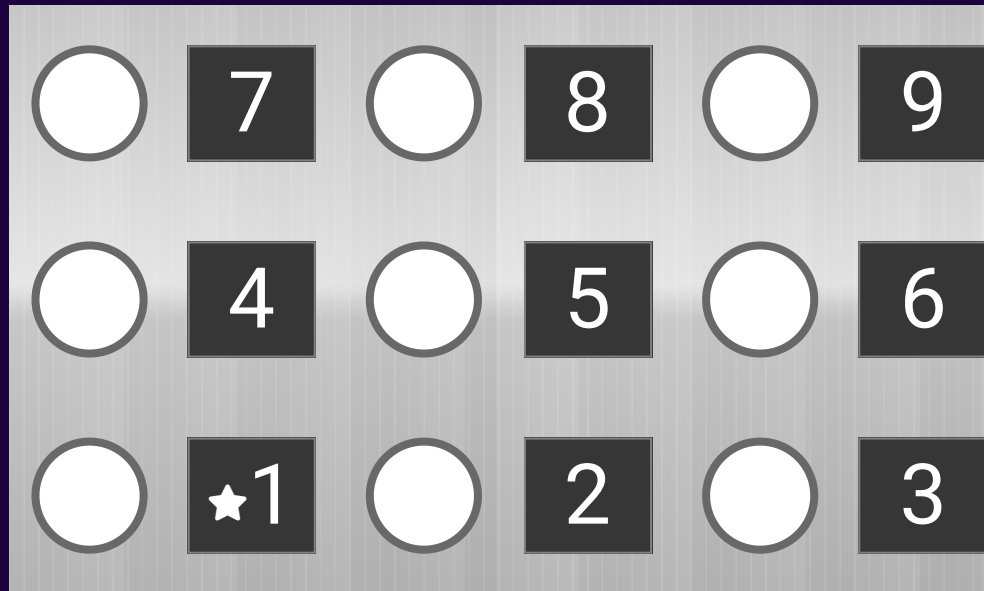


Conceptual Relationship & Proximity



Proximity Example

ex. Elevator Buttons



Informational Relevance & Emphasis

- **Information Relevance**

How important a piece of information is to the users goals

- **Emphasis**

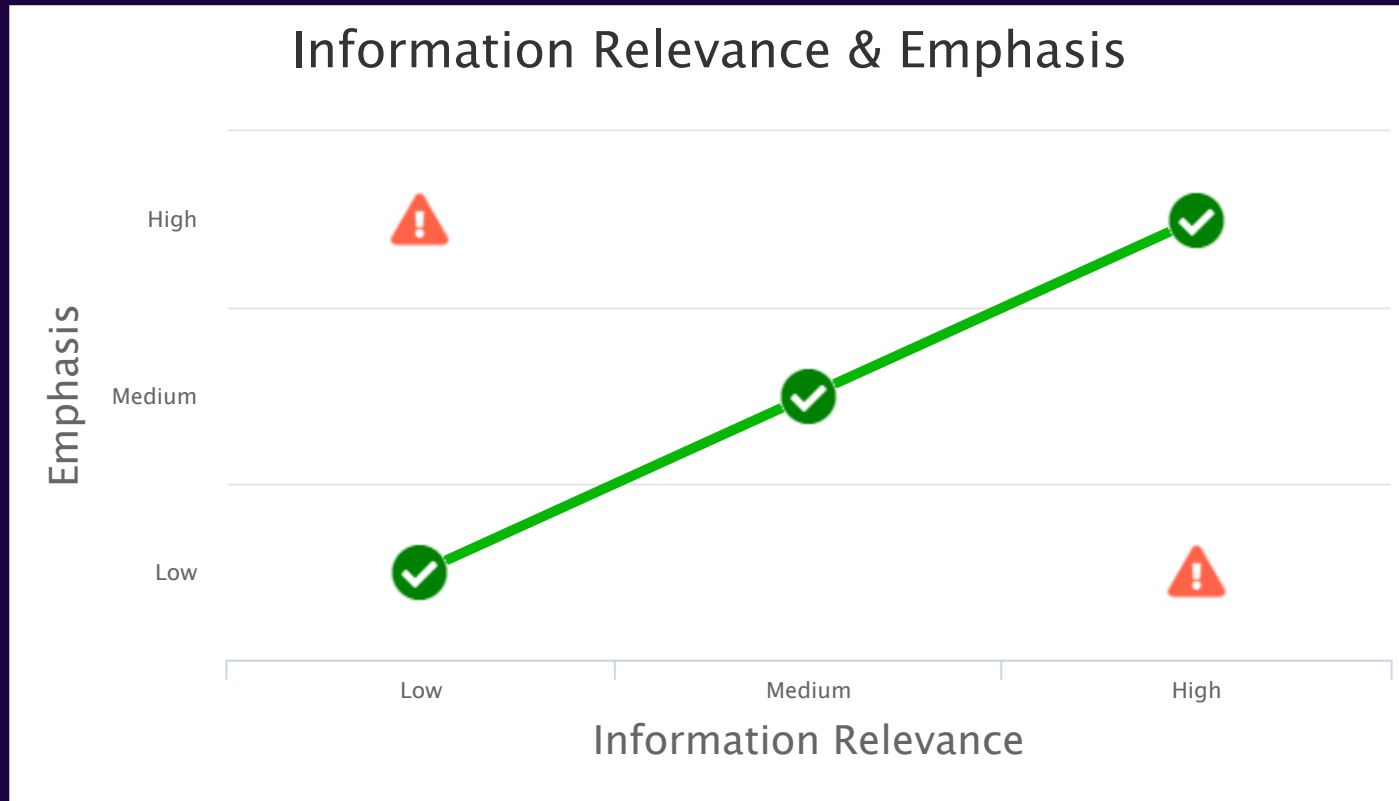
The ability to draw attention to some pieces of information over others

Emphasis




Every pixel on a screen conveys information that your brain must process

- Emphasize with **thickness**
- Emphasize with contrast
- Emphasize with **color**
- Emphasize with **size**
- Emphasize with spacing

Informational Relevance & Emphasis



Design Philosophies

-  Human Centered Design
-  Conversational Design
-  Universal Design

Process

Software ~~Development~~ Life Cycle (SDLC)
Design

Jakob's Law

Users spend most of their time on a site that's not yours

AKA Don't re-invent the wheel

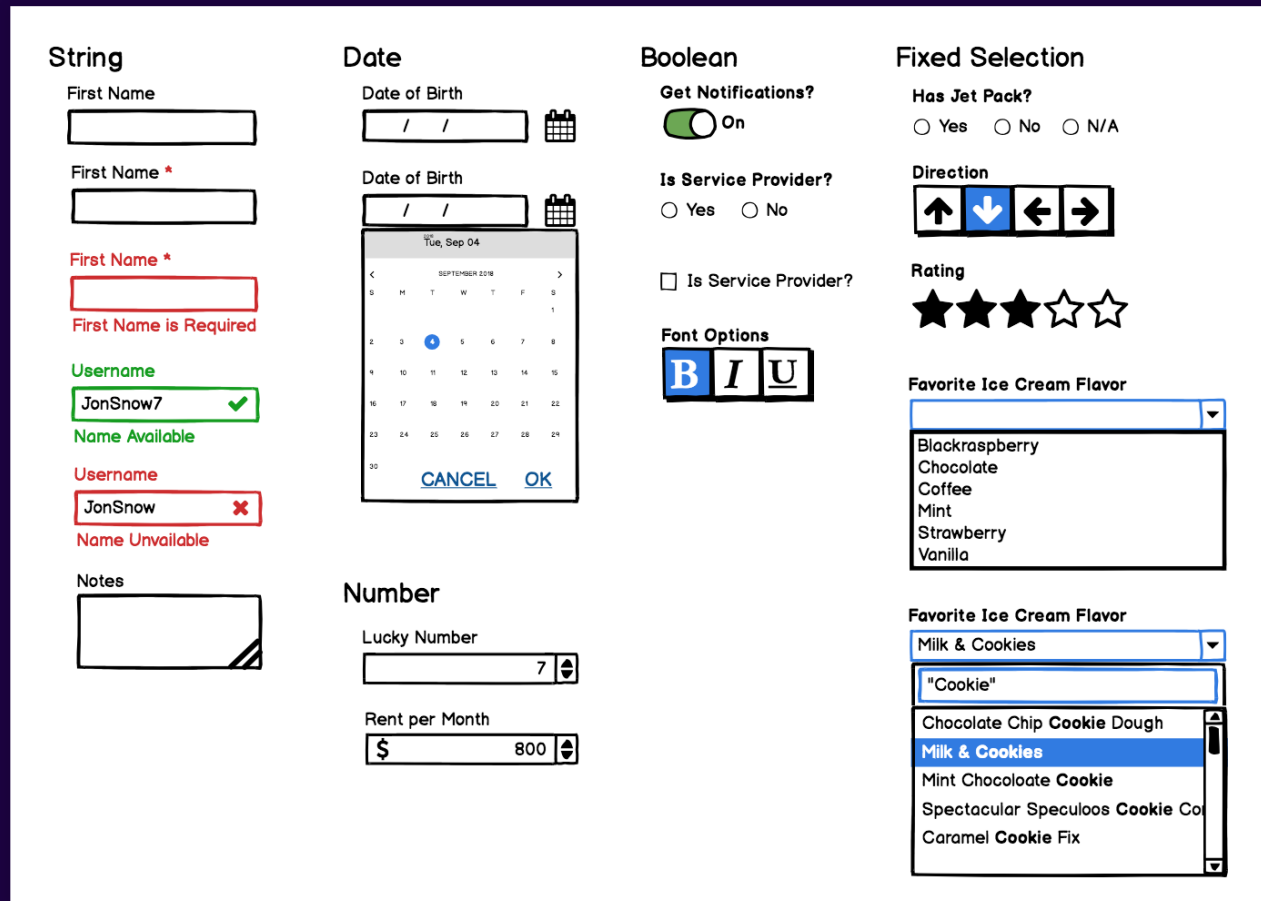
 *Jakob's Law of Internet User Experience* by **Jakob Nielsen**

When adding components...

Check if a similar UI Metaphor already exists:

1. Somewhere else in your **project**
2. In whatever **framework** you're using
3. In any **commercial** products
4. *Otherwise*, do lots of **research** and design

Prototyping



...with Balsamiq

Hallway Usability Testing

Grab a random person from the hallway and watch them use your product

Do's & Dont's

✓  Watch

✓  Listen

✗  Justify

✗  Ego

Project Paper Cuts



Every Month



For One Hour



One on One



Review *minor* issues



And fix *immediately*

Fix Everything Two Ways

1.  Help Desk
2.  Code Base

 *Seven steps to remarkable customer service by Joel Spolsky*

Resources

Design Languages

 **Google** - Material Design

 **Apple** - Human Interface Guidelines

 **Microsoft** - Fluent Design

Online Learning

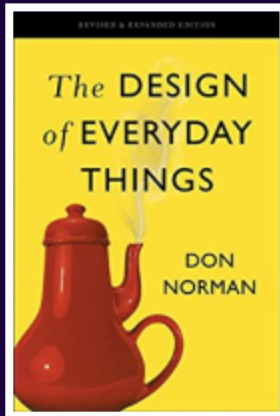


UX StackExchange

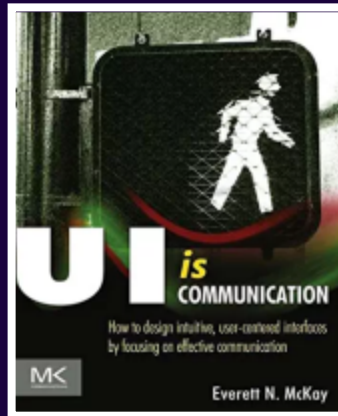


Nielsen Norman Group

Books



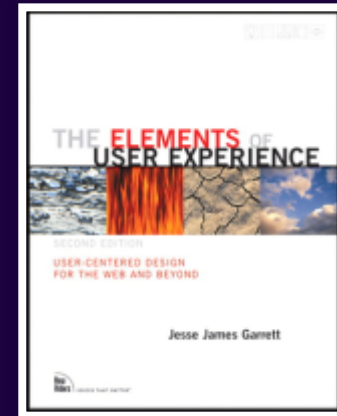
The Design of Everyday Things
by Don Norman



UI is Communication
by Everett N McKay

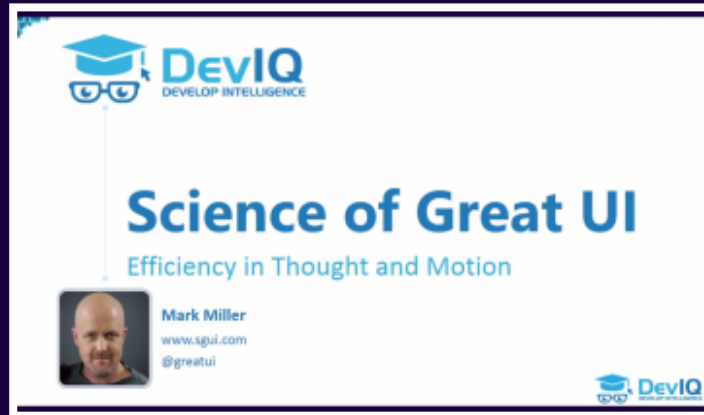


Don't Make Me Think
by Steve Krug



The Elements of User Experience
by Jesse James Garrett

Video

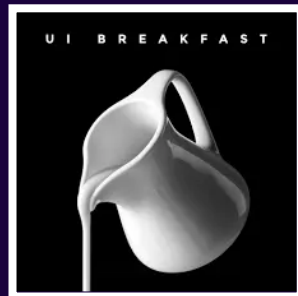


Science of Great UI by *Mark Miller*



Pluralsight

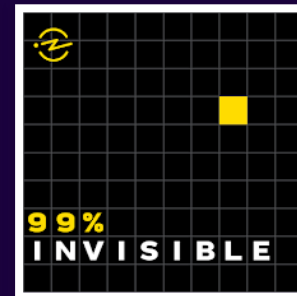
Podcasts



UI Breakfast



UX Podcast



99% Invisible



Design Notes

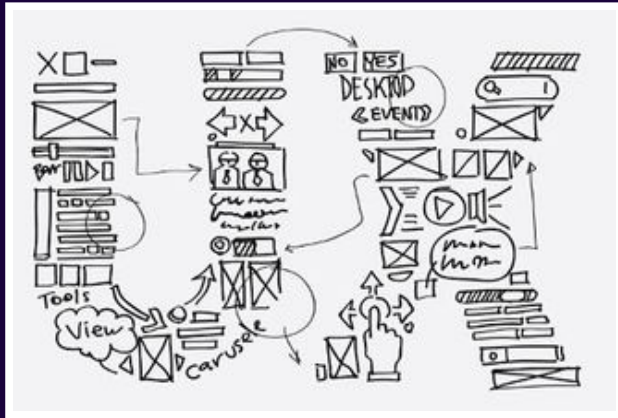


Hacking UI



Dot Net Rocks

Local



Meetup - UX Speakeasy



Meetup - Vermont Coders Connection

Vermont Code Camp 2018 Sponsors

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Thank You

Yes, You!

Like, sincerely, I'm really excited to be able to talk about design with y'all

Questions ?

- Slides made with [reveal.js!](#)
- Icons by [Font Awesome](#) 
- Font is my own [Font Smiler](#)