

**molly clare wilson**

user experience design



# Contents

## Design Process

## Case Study

Lifelong Learning for Pharmacists

## Project Overviews

Matching MOOC Tutors

Learning Design Thinking Online

Managing Sales Payroll

Tools for Complex Interaction Prototyping

## Sketching

Animation

Sketchnotes

Illustration for Teaching

Animals, Travel, This & That

## DESIGN PROCESS

I follow a **human-centered, iterative** design process to make sense out of complexity.

### DEFINE

- Learn about the market and technological landscape
- Inventory any existing product(s) or service(s)
- Plan field research
- Recruit & screen participants
- Conduct research: ethnographic interviews, observations, cultural probes...
- Synthesize fieldwork findings
- Clarify technical and business challenges
- Define a design brief

### DESIGN

- Define an information architecture
- Sketch design ideas
- Facilitate stakeholder workshops
- Refine design ideas
- Create interactive prototypes
- Get lightweight user feedback

### REFINE

- Test strategic areas of design
- Create detailed design
- Communicate specifications for edge cases
- Co-design even more closely with other departments: business design, graphic design, engineering, communications, marketing...
- Make a plan for continuous testing & learning

# Case Study

Here's an in-depth look at one of my projects during my time at Sliced Bread Design in Mountain View, CA.

The project **Lifelong learning for pharmacists** spotlights my skills at turning user needs into product features.



# LIFELONG LEARNING FOR PHARMACISTS

Help a medical publisher redesign the way pharmacists find information and maintain their professional licensures.



## CLIENT

### **TRC (Therapeutic Resource Center), Stockton, CA**

*One of the most trusted names in US/Canadian medical publishing, TRC was facing major design debt, and challenges from a range of better-designed competitors.*



therapeutic research center

## MY ROLE

*Sliced Bread Design redesigned the entire digital experience: information architecture and search, continuing education, and visual identity. As well as being the main interaction designer on the project, I conducted user research and user testing.*

## CASE STUDY // LIFELONG LEARNING FOR PHARMACISTS // INTRODUCTION

The Pharmacist's Letter has been a **trusted, industry-standard information source** for medical professionals since 1985. It is thorough, frequently updated, and, most of all, scrupulous about disclosing all contacts to the pharmaceutical industry.

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Unbiased Evidence and Recommendations for the Pharmacist on New Developments in Drug Therapy

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[NATURAL MEDICINES COMPREHENSIVE DATABASE PROFESSIONAL VERSION](#)

[NATURAL MEDICINES COMPREHENSIVE DATABASE CONSUMER VERSION](#)

[IDENT-A-DRUG REFERENCE](#)

**Pharmacist's Letter**

You'll play a critical role in the 2017-2018 flu season. About one in 4 adults who had a flu vaccine last year got it at a pharmacy. [Read more...](#)

[Table of Contents of Current Issue](#)

[Previous Issue](#)

**Search**

- [Simple](#)
- [Advanced](#)
- [Browse](#)

**CE & Training**

- [Your PL CE & Training Organizer](#)

**Preceptor Home**

- [Preceptor Training CE](#)
- [Teaching Resources](#)
- [Live Preceptor CE](#)

**Colleagues Interact**

- [Read Messages](#)
- [Start a Discussion](#)

**Manage My Account**

- [View My Account](#)
- [eLetter](#)

**New Drugs**

- [List of New Drugs](#)

[Privacy and Security Alert](#)

**Share Your Thoughts**

You've seen lots of your colleagues' comments on our site, and we'd love your comments, too. Submit Your Feedback to the PL staff and if you want, we'll add it to the site. [Submit Feedback](#)

Charts	Rumor vs. Truth	Guidelines	Patient Education
<b>Browse by Category</b>	<b>MedGuides</b>	<b>Formulary/Drug Comparison</b>	
<ul style="list-style-type: none"><li><a href="#">Bone &amp; Joint</a></li><li><a href="#">Cardiology</a></li><li><a href="#">Dermatology</a></li><li><a href="#">Diabetes &amp; Endocrinology</a></li><li><a href="#">Drug Information</a></li><li><a href="#">Gastroenterology</a></li><li><a href="#">Geriatrics</a></li><li><a href="#">Hematology &amp; Oncology</a></li><li><a href="#">Hospital Practice</a></li></ul>	<ul style="list-style-type: none"><li><a href="#">Infectious Diseases</a></li><li><a href="#">Interactions</a></li><li><a href="#">Men's Health</a></li><li><a href="#">Natural Medicines</a></li><li><a href="#">Neurology &amp; Pain</a></li><li><a href="#">Nutrition</a></li><li><a href="#">Ophthalmology</a></li><li><a href="#">Oral Health</a></li><li><a href="#">OTC Products</a></li></ul>	<ul style="list-style-type: none"><li><a href="#">Patient Safety</a></li><li><a href="#">Pediatrics</a></li><li><a href="#">Practice</a></li><li><a href="#">Psychiatry</a></li><li><a href="#">Renal &amp; Urology</a></li><li><a href="#">Respiratory &amp; Allergy</a></li><li><a href="#">Women's Health</a></li></ul>	

TRC's home page, before redesign

### What does TRC need?

- Become a one-stop shop for pharmacists and pharmacy assistants to earn their state credentials
- Stay competitive by bringing a fresh but trustworthy look to a loyal long-term audience
- Enhance findability so that people use all of the many products on offer

### What do users need?

- Up-to-date information about pharmaceuticals at their fingertips – unbiased by pharmaceutical companies
- Support in their professional development
- Help navigating confusing state licensure and CE (continuing education) requirements

We conducted **12 in-person contextual interviews** with customers – pharmacists, nurses, and pharmacy technicians. We observed their work routines, focusing on how they receive pharmaceutical information.



## Judy

NURSE PRACTITIONER, OAKLAND, CA

- Patient education is her favorite part of her job
- Works hard to get to the bottom of a diagnosis and help her patients understand what's going on
- Likes to listen to pharmacy-related podcasts while doing dishes
- Prints out Pharmacist's Letter on paper so she can mark it up

"People have, like, pictures of their their kids on their desk, and I just have medication interaction charts... I can see my kids when I get home!"

*Handwritten notes on the left side of the page:*

D/D = B6/FH/2B0  
 B6 deficiency (causes anemia)  
 FH = folic acid deficiency (causes anemia)  
 2B0 = B12 deficiency (causes anemia)  
 B12 deficiency (causes anemia)  
 B12 deficiency (causes anemia)  
 B12 deficiency (causes anemia)

Laboratory Findings in Microcytic Anemias					
	Red cell morphology	Serum iron level	Total iron-binding capacity	Percent saturation	Serum ferritin level
Iron deficiency anemia	low MCV, Microcytic, hypochromic	Decreased	Increased	< 16%	Decreased
Anemia of chronic inflammation	Normocytic, microcytic	Decreased	Decreased	↑ CRP	Increased
Sideroblastic anemia	Microcytic, hypochromic	Increased	Normal	check Lead!	Increased
Thalassemia	Microcytic, target cells	Normal or increased	Normal	30% - 100%	Normal

*Handwritten notes on the right side of the page:*

Elevated red cell count  
 Iron deficiency anemia: Physical findings: glossitis, koilonychia (spoon nails), gastritis, angular stomatitis, causes: acute alcohol, ↑ menstruation, ↓ diet  
 Chronic inflammation: long standing infections, neoplasms, rheumatoid arthritis  
 SLE → block Fe<sup>2+</sup> transport from storage to bone marrow  
 Acquired sideroblastic anemia (causes: anti-Tb meds, ETOH abuse, lead poisoning)  
 Preleukemic states (esp. after chemo)

*Handwritten notes on the left side of the page:*

goal = 26.5%  
 or < 7%  
 based on RPS  
 hypoglycemia  
 metformin (417-157)  
 (contraindicated if serum > 21.5 mg/dl)  
 if target alc not achieved in 3 mo, consider 2nd agent

Class	Agents	Notes
Sulfonylurea	(417-157)	GLP-1 agonist
glipizide	(417-157)	GLP-1 agonist
glimepiride	(417-157)	GLP-1 agonist
glyburide	(417-157)	GLP-1 agonist
(not preferred)		
Basal insulin	(417-157)	GLP-1 agonist
if target alc not achieved in 3 mo, consider 3rd agent		
TZD or DPP-4 inhibitor or insulin		
GLP-1 agonist		
check B12!!		

*Handwritten notes on the right side of the page:*

Type 2 DM diagnosis  
 ↓  
 Lifestyle modification  
 (diet, exercise, 91-101)  
 metformin (417-157)  
 (contraindicated if serum > 21.5 mg/dl)  
 if target alc not achieved in 3 mo, consider 2nd agent  
 ↓  
 TZD or DPP-4 inhibitor or insulin  
 GLP-1 agonist  
 check B12!!  
 for diabetic neuropathy → gabapentin or duloxetine / pericarditis if 3rd agent

Judy's notebook, with charts printed from Pharmacist's Letter

## I THOUGHT...

Pharmacists are basically checking boxes; if they cared a lot about people, they'd be doctors or nurses

The licensure process is an annoying formality

TRC's website looks so unattractive and outdated that it can't possibly be trustworthy

## I LEARNED...

Pharmacists have enormous medical and legal responsibility, and see themselves as patients' primary line of defense

Employers, unfortunately, see pharmacists as glorified store clerks

Pharmacists gladly use their free time to learn. They usually do more courses than are required for licensure

The only really annoying part about licensure is keeping track of complex requirements

The "bad" design actually increases trust: if the website looked too sexy, it would be suspicious!

Pharmacists' main complaint: "I get lost on this website"

## AND WHAT'S MORE...

Pharmacists are under constant time pressure from employers; they have tight service targets to meet

Employers won't even pay for fast internet or up-to-date computers in the pharmacy

Every pharmacist has a massive "to-read" list (on paper, digital, or both)

Education is the key to career growth, and they're responsible for it themselves

Some loyal readers aren't even aware that TRC offers continuing education!

Pharmacists adore guidelines, charts, and process maps

Pharmacists are highly linear, structured thinkers

## DESIGN PRINCIPLES

Make all searches as quick and predictive as possible

Design with mobile in mind

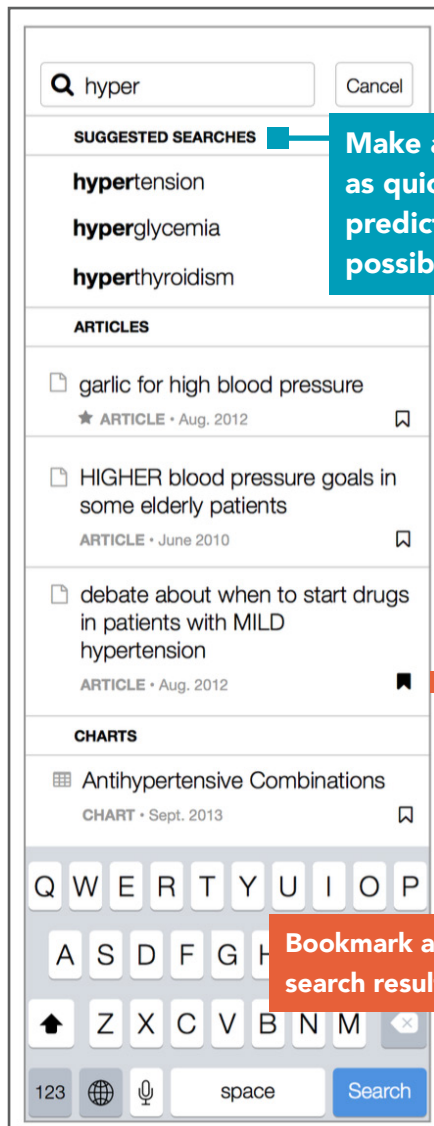
Support on-demand learning

Make education offerings easy to find, and emphasize how they meet licensure requirements

Focus on UX improvements; modernized UI design is a nice-to-have

Prioritize clear IA & navigation throughout, at all levels





Make all searches as quick and predictive as possible

Bookmark articles directly from search results to read later

TRC has over 10 content types, from articles to charts to videos. Icons, labels, and ordering all indicate the content type

Recency is important in some cases, but not all

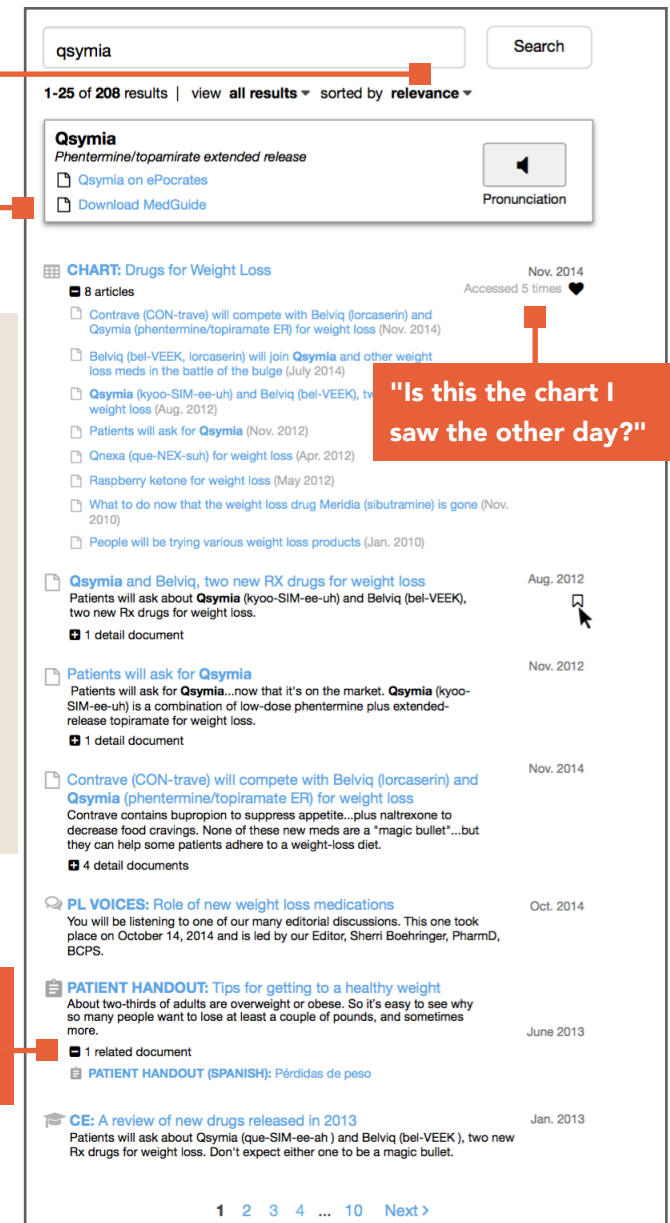
When a user searches for a medication, they probably want basic facts

Quickly finding content is a core task. Prescribers work under time pressure. Whether they're looking up content at work or in their free time, they need an **accurate, fast search experience**.

Many pharmacies have very slow internet on their official desktop computers, so employees often used their mobile phones – this meant we needed to not only redesign **desktop search**, but also design **mobile search**.

We also needed to design a **bookmarking feature**. In our preliminary interviews, 10 of 12 users were unable to find a piece of content they had liked in the past. Users often printed content out because they were afraid they wouldn't be able to find it again.

Often a user is looking for the references in a result, rather than the result itself



"Is this the chart I saw the other day?"

Our finished design was much simpler than our drafts. Users reported complex behaviors around finding and saving content, but my designs became cluttered as I tried to accommodate them and make all of these behaviors "one-touch." With this more serene, less busy interface, users didn't mind a couple more clicks.

trc | pharmacist's letter

Choose Traditional Site Login Subscribe

qsymia

HOME LETTER ▾ BROWSE ▾ CE & TRAINING ▾ NEW DRUGS ▾ TRC SITES ▾ HELP

## Search Results

1 - 15 of 16 Results for "qsymia"

**FILTER RESULTS**

- ☐ SELECT ALL
- ☐ Article
- ☐ Topic
- ☐ Chart
- ☐ Patient Education
- ☐ PL Voices
- MORE FILTERS

**DATE RANGE**

Past 5 Years ▾

**SORT RESULTS:** Relevance ▾

**POPULAR SEARCH RESULTS**

- ★ CHART: [Anticipated Availability of First-Time Generics](#) August 2016
- ★ CHART: [Meds That Should Not Be Crushed](#) January 2017

**MEDGUIDE:** [Qsymia \(Phentermine/topiramate ER\)](#) September 2017

**ARTICLE:** [Patients will ask for Qsymia](#) November 2012

**ARTICLE:** [Belviq \(bel-VEEK, lorcaserin\) will join Qsymia and other weight loss meds in the battle of the bulge](#) July 2013

**ARTICLE:** [Don't Combine Weight Loss Agent \*Contrave\* With Opioids](#) November 2014

**TECHNICIAN TUTORIAL:** [Drugs During Pregnancy and Breastfeeding](#) December 2016

No more medication box! Users have other reference sources for basic medication facts; they read TRC for an editorial, advisory point of view, "like a trusted colleague"

When users save favorites, we can identify and spotlight which content gets saved often

We kept the content type clear in search results, but also enabled filtering

pharmacist.therapeuticresearch |

trc | pharmacist's letter

MENU

## Search Results

Qsymia Search

**FILTER RESULTS** Filters ▾

**DATE RANGE** Past 5 Years ▾

**SORT RESULTS:** Relevance ▾

Search CE & Learning

**POPULAR SEARCH RESULTS**

- ★ CHART: [Anticipated Availability of First-Time Generics](#) August 2016
- ★ CHART: [Meds That Should Not Be Crushed](#) January 2017

**MEDGUIDE:** [Qsymia \(Phentermine/topiramate ER\)](#) September 2017

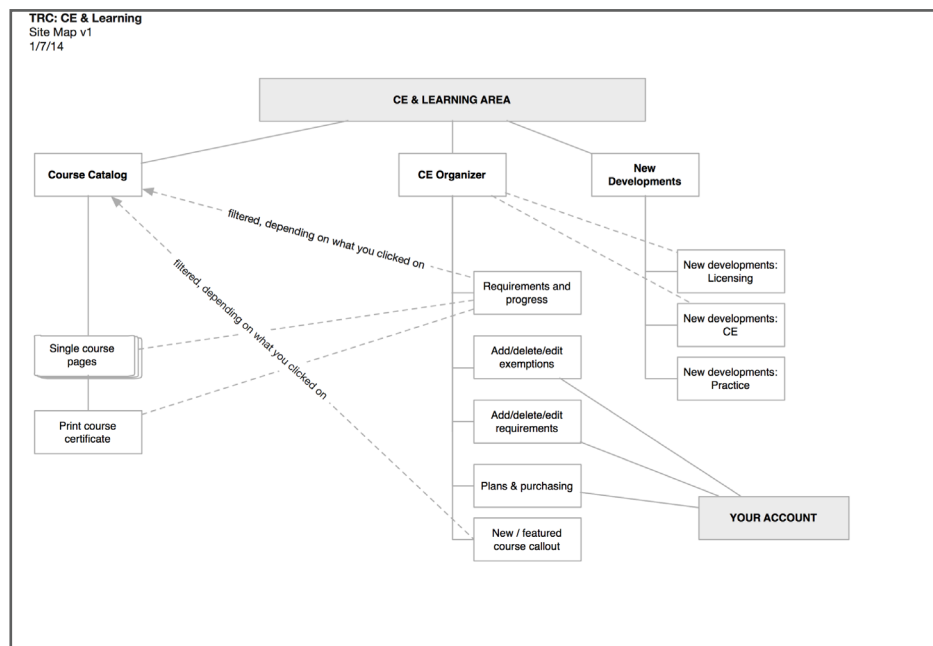
**ARTICLE:** [Patients will ask for Qsymia](#) November 2012

**ARTICLE:** [Belviq \(bel-VEEK, lorcaserin\) will join Qsymia and other weight loss meds in the battle of the bulge](#) July 2013

Pharmacists and pharmacy technicians need to fulfill certain education requirements to maintain their licensure. These requirements vary significantly by state and province. How many hours are required? What form can the classes take? Are there different specialties? What requirements are on one-year, two-year, or three-year cycles? Do particular employers have special requirements? And the list goes on.

Most pharmacists maintain licenses in multiple states for maximum professional flexibility; one pharmacist we interviewed had seven different licenses.

In redesigning the education section of TRC, my first task was to **organize the content** and **map out all the licensure requirements**.

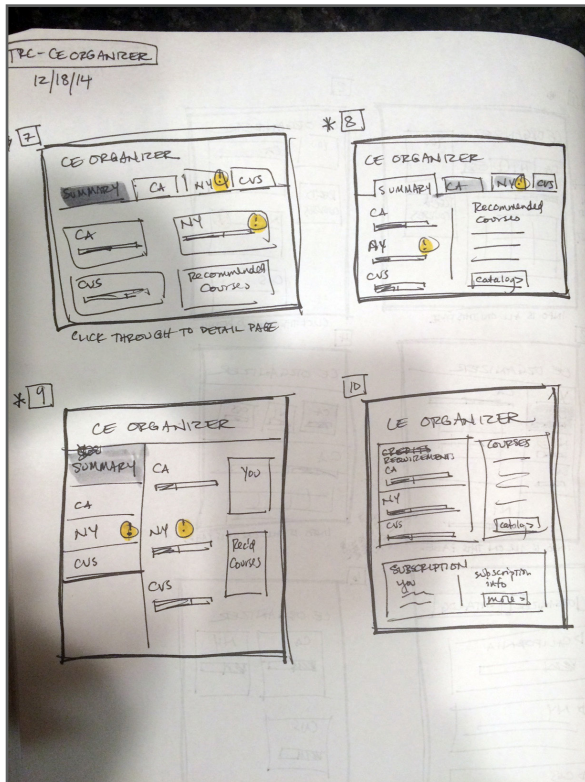


Site map for restructured CE (Continuing Education) & Learning area

CE Requirements - Quick Sheet					
State	Pharmacists CE Req		Technician CE Req		ACPE CE Required? - Techs Only
	Total (15 hrs)	General (12 hrs), Live (3 hrs)	Registration + CE (3 hrs)	General (2 hrs), Live (1 hr)	Can PTU Training Be Used?
Alabama					ACPE or BOP
Alaska		General (30 hrs)		License + CE General (10 hrs)	Any
Arizona	Total (30 hrs)	General (27 hrs), Law (3 hrs), Immunizers need: Imm CE (5 hrs) every 5 yrs	License + Nat'l Certification (PTCB) + CE Total (20 hrs)	General (18 hrs), Law (2 hrs)	ACPE or NPTA
Arkansas	Total (30 hrs)	General (18 hrs), Live (12 hrs) Immunizers need: Imm CE (2 hrs of 30)	Registration only		N/A
California		General (30 hrs)	License / Registration only		N/A
Colorado		General (24 hrs)	Technicians not regulated		N/A
Connecticut	Total (15 hrs)	General (9 hrs), Live (5 hrs), Law (1 hr)	Registration + Nat'l Certification (PTCB, NHA)		Any
DC	Total (40 hrs)	General (26 Hrs), Live (10 Hrs), HIV/Aids (2 hrs), Med Errors (2 hrs) Immunizers need: Imm CE (2 hrs of 40)	Technicians not currently regulated Legislation pending - B19-0293		N/A
Delaware	Total (30 hrs)	General (28 hrs), Med Errors (2 Hrs) Immunizers need: Imm CE (2 hrs of 30)	2 Levels of Techs - Pharmacy Technician & Certified Pharmacy Technician (PTCB) CE req only to maintain certification		N/A

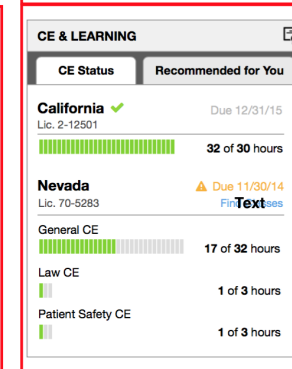
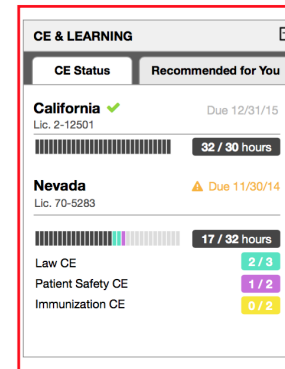
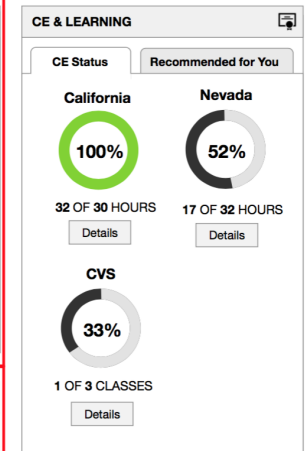
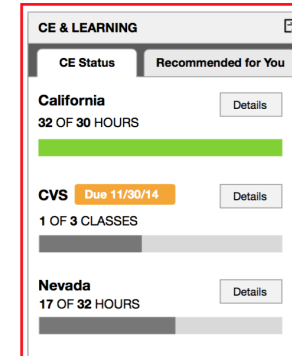
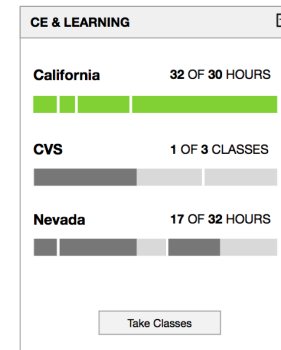
US state licensure requirements for pharmacists and pharmacy technicians (supplied by TRC)

To help pharmacists navigate the maze of licensure requirements, I designed an **"at-a-glance" dashboard module**.



### Users need to know...

- › "What states do I still need to take classes for?"
- › "For those states, what specific requirements do I still have to fulfill?"
- › "Are any of my certifications expired, or about to expire?"



**Make education offerings easy to find, and emphasize how they meet licensure requirements**

### I needed to learn...

- › Is a "summary" relevant – do the states' progress bars need to be all visible at once?
- › What's more relevant, number of hours completed or percent completion?
- › How extreme are the edge cases? Is anybody licensed in 50 states? Does any state require 100 hours of courses?

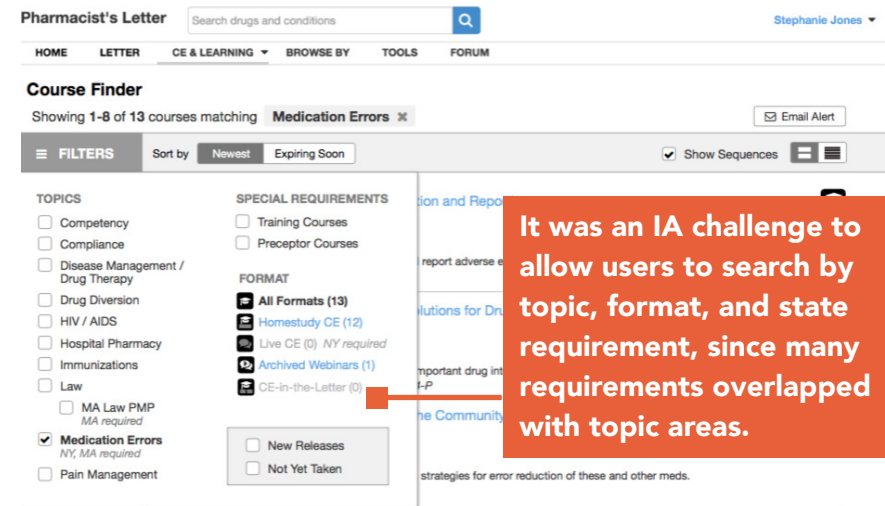
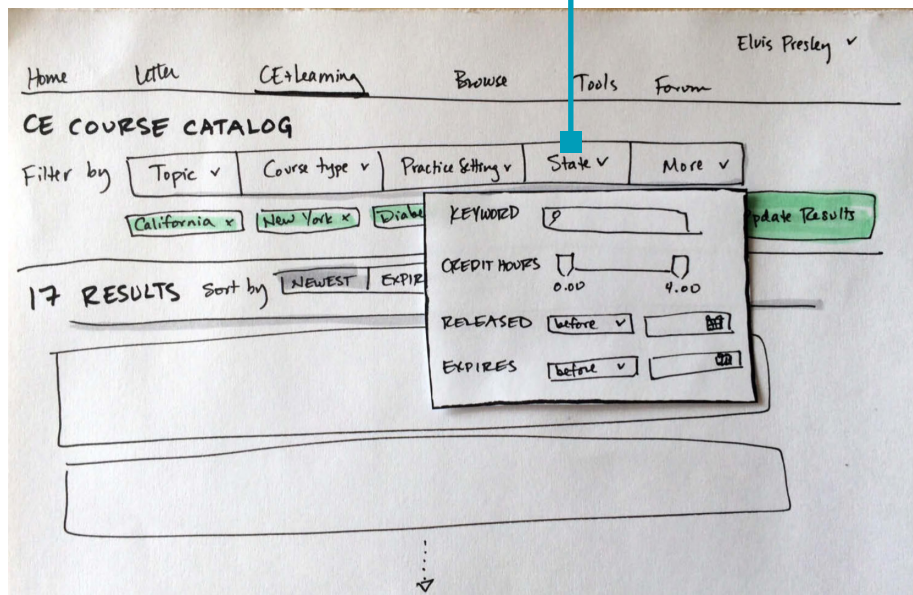




Many pharmacists didn't even know how much education content TRC had. We needed to show off the richness and variety of the course catalog – and the best hook we had was showing them content relevant to their licensures. So I designed a **course finder** to help subscribers find courses that applied to their licenses.

The old design emphasized TRC's internal organization of courses, which didn't always make sense to users. I needed to learn what users cared about, and reconcile that with what search and filtering options were available with TRC's existing database structure.

Make education offerings easy to find, and emphasize how they meet licensure requirements



It was an IA challenge to allow users to search by topic, format, and state requirement, since many requirements overlapped with topic areas.

#### Opioids: Risk Evaluation and Mitigation

##### Part 1: Overview of Long-Acting and Extended-Release Opioids

Release Date 01/01/12  
Credit Hours 1.00  
Reviews this class of drugs as part of FDA's Risk Evaluation and Mitigation Strategy (REMS) to ensure safe and appropriate use.  
ACPE #0422-0000-12-208-H05-P

##### Part 2: Safely Using Long-acting and Extended-release Opioids

Release Date 01/01/12  
Credit Hours 1.00  
Reviews appropriate patient selection, awareness of abuse and addiction, and counseling points for this class of drugs.  
ACPE #0422-0000-12-208-H05-P

#### Medication Safety: Strategies for Preventing Medication Errors

Release Date 10/01/13  
Credit Hours 1.00  
Highlights several high-alert medications and presents strategies for error reduction of these and other meds.  
ACPE #0422-0000-13-310-H05-P #0422-0000-13-310-H05-T

#### Medication Safety: Strategies for Preventing Medication Errors

Release Date 10/01/13  
Credit Hours 1.00  
Highlights several high-alert medications and presents strategies for error reduction of these and other meds.  
ACPE #0422-0000-13-310-H05-P #0422-0000-13-310-H05-T

#### Medication Safety: Strategies for Preventing Medication Errors

Release Date 10/01/13  
Credit Hours 1.00  
Highlights several high-alert medications and presents strategies for error reduction of these and other meds.  
ACPE #0422-0000-13-310-H05-P #0422-0000-13-310-H05-T

Users often finished courses halfway, and wanted an interface that helped them keep track of where they'd left off.

How do pharmacists actually prove that they've learned the content they've watched? The usual model is to take a quiz. Though it wasn't in the original design brief, we realized that the **quiz experience** needed an overhaul.

Together with the experts from TRC, I mapped out how credit-hours are earned, stored, and reported. I translated this flow into a series of interfaces that integrated these quizzes into videos and articles.

## PL Voices: Prescribing Insights Roundtable October 2014

Start CE Quiz

---



Talking: Jeff Jelin

**PL VOICES: Prescribing  
Insights Roundtable**

**October 2014**

**October 23, 2014**

ACPE #0422-0000-14-690-H01-P, CE Broker #20-419261, #10-1483886

- 1 Course introduction (4m 18s)
- 2 Causes and contributing factors of resistant hypertension, and appropriate antihypertensive agents (15m 29s)
- 3 Role of SGLT2 inhibitors, or "flozins," in type 2 diabetes (32m 02s)
- 4 Treatment options for patients with chronic urticaria (8m 12s)

This course is worth **1 hour** of CME/CE credit. To receive credit, you must watch the presentation and get 70% of the quiz questions correct.

You must take the quiz by **December 30, 2014** to receive credit.

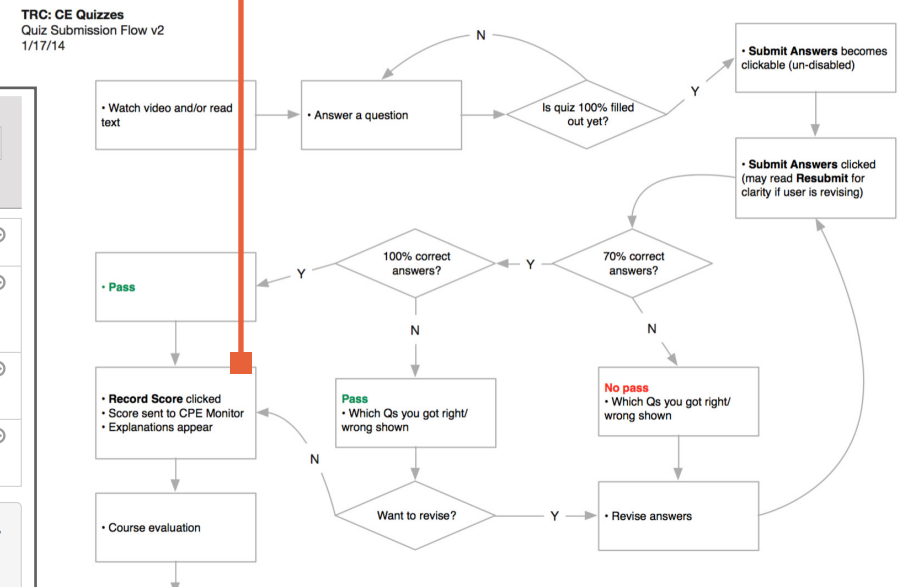
This is a recording of a live presentation. If you already claimed credit for the live presentation, you cannot also claim credit for watching the recording.

ACPE #0422-0000-14-690-H01-P  
CE Broker #20-419261, #10-1483886

[More Course Information](#)

Including bookmarks in the video was controversial, because it might be seen as encouraging viewers to skip around and take shortcuts. In the end, the users loved the feature so much that we left it in.

**The wording needed several rounds of testing; "submitting" a score and "recording" a score need to be two different actions, and the difference needs to be clear to users.**



These numbers aren't just bureaucratic junk. Pharmacists want to see it because the digits communicate a lot of information about the course's topic and the requirements it fills.

The new content and education portal launched in early 2017, and received high praise from users. It is now live at [pharmacist.therapeuticresearch.com](http://pharmacist.therapeuticresearch.com).

[BusinessWire](#) quotes a satisfied subscriber: "I really like the new website! It's easy to navigate through the content on the new site and it's even easier to read... I love getting my pharmacology CME credits through Prescriber's Letter too."

The screenshot displays the 'trc' (Therapeutic Research Company) website interface. At the top, there's a search bar for 'Search Drugs, Conditions, and CE' and a user profile for 'Stephanie Jones'. The main navigation includes 'HOME', 'LETTER', 'CE & LEARNING', 'BROWSE', 'TOOLS', and 'FORUM'. Below this, there are links for 'CE & Training Organizer', 'Course Finder', 'Live CE Calendar', and 'Suggest a Topic'. The user's profile is set to 'New York' (indicated by a red exclamation mark icon). The profile shows '15 of 45 hours completed' with a green progress bar. Key details include 'LICENSE NUMBER: #52810', 'LICENSE RENEWAL PERIOD: 2/1/2014 - 1/31/2016 (First Renewal)', and 'CE RENEWAL PERIOD: 2/1/2014 - 1/31/2016 (First Renewal)'. A warning icon indicates 'CE renewal period ends 1/31/15 (in 18 days)'. A sidebar on the right contains 'CE SETTINGS' with fields for 'NABP E-PROFILE ID' (25082) and 'INTERESTS' (Depression/Anxiety, Diabetes & Endocrinology, Fibromyalgia, GERD, Nausea/Vomiting, +19 more). Below this is a 'NOTIFICATIONS' section with an 'Email' checkbox and a list of notifications: 'Requirement due', 'Completed requirement due', and 'New courses'. At the bottom, a dark bar shows 'NOTIFICATIONS 5'. A text box at the bottom left provides information about the January 1, 2015 CE renewal period for Massachusetts pharmacists.

trc Created by Pharmacist's Letter

Search Drugs, Conditions, and CE

HOME LETTER CE & LEARNING BROWSE TOOLS FORUM Stephanie Jones

CE & Training Organizer Course Finder Live CE Calendar Suggest a Topic

CVS Massachusetts New York + Add New

15 of 45 hours completed

CE renewal period ends 1/31/15 (in 18 days)

LICENSE NUMBER: #52810

LICENSE RENEWAL PERIOD: 2/1/2014 - 1/31/2016 (First Renewal)

CE RENEWAL PERIOD: 2/1/2014 - 1/31/2016 (First Renewal)

Edit state

Add CE from other sources

Carryover CE to another renewal period

Print certificates

NY Board of Pharmacy website

CE SETTINGS

NABP E-PROFILE ID Edit

25082

INTERESTS Edit

Depression/Anxiety

Diabetes & Endocrinology

Fibromyalgia

GERD

Nausea/Vomiting

+19 more

NOTIFICATIONS Edit

Email

Requirement due

Completed requirement due

New courses

NOTIFICATIONS 5

Beginning with the January 1, 2015 CE renewal period, all Massachusetts pharmacists must earn 20 hours of CE each year of the 2-year renewal cycle.

Pharmacists who perform sterile compounding are required to obtain 5 of the 20 hours in the area of sterile compounding.

Pharmacists who perform non-sterile compounding are required to obtain 3 of the 20 hours in the area of non-sterile compounding.

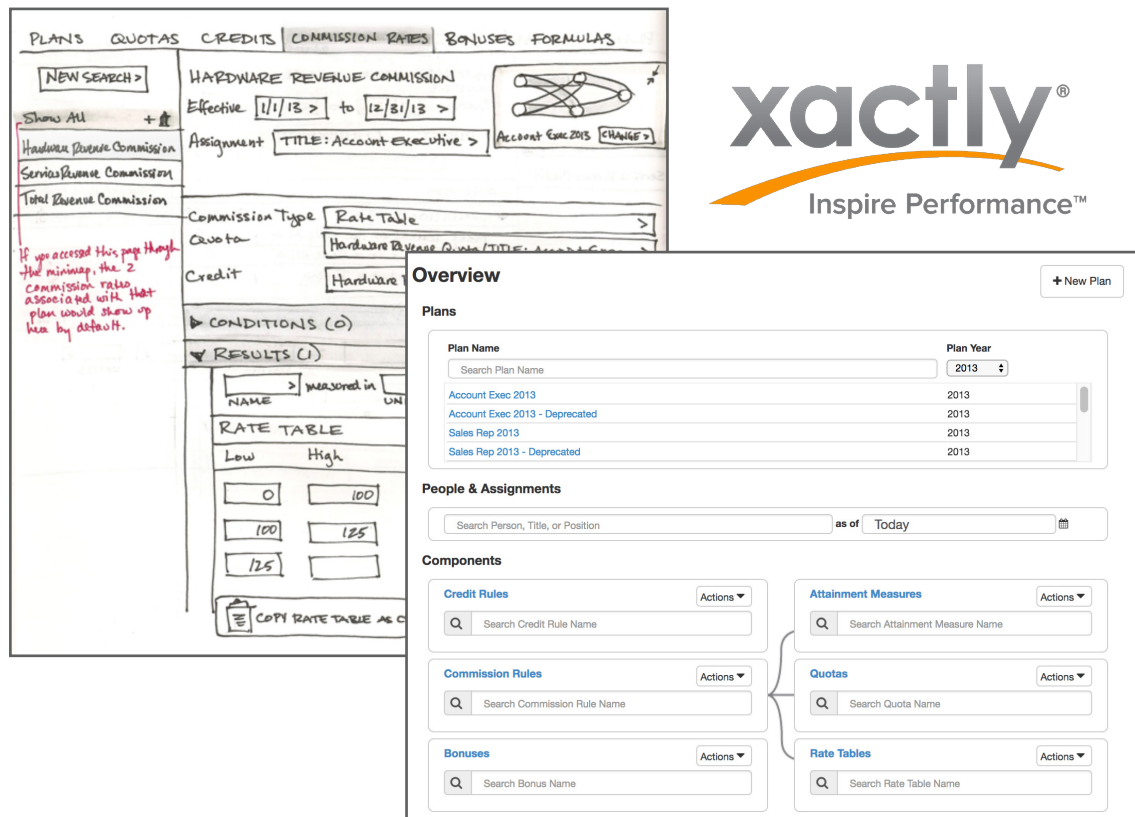
These requirements are not yet in your CE and Training Organizer. We are working to include them as soon as possible.

# Project Overviews

Here are quick snapshots of a variety of my other interaction design projects. They show the variety of industries, timescales, and team constellations I've worked on.

# MANAGING SALES PAYROLL

Redesign an admin interface for a famously complicated payroll task.



**TIME**

8 months (2014-15)

**CLIENT**

Xactly (San Jose, CA)

**AGENCY**

Sliced Bread (Mountain View, CA)

**TASKS**

Interaction design  
Usability testing

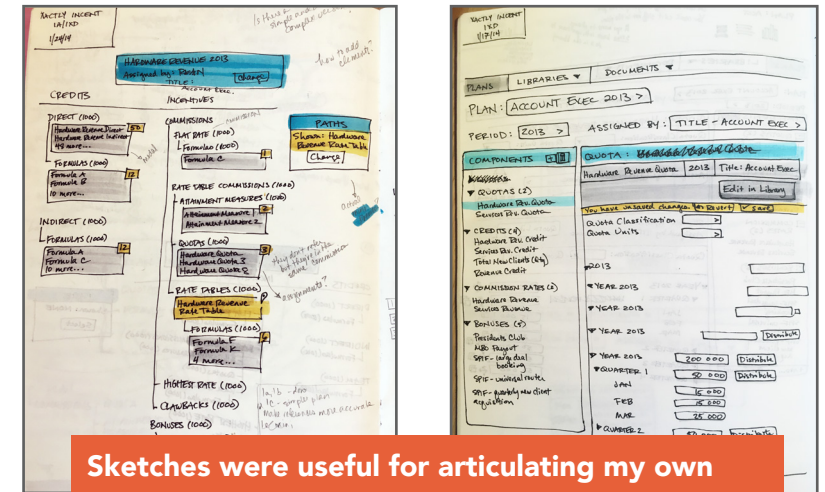
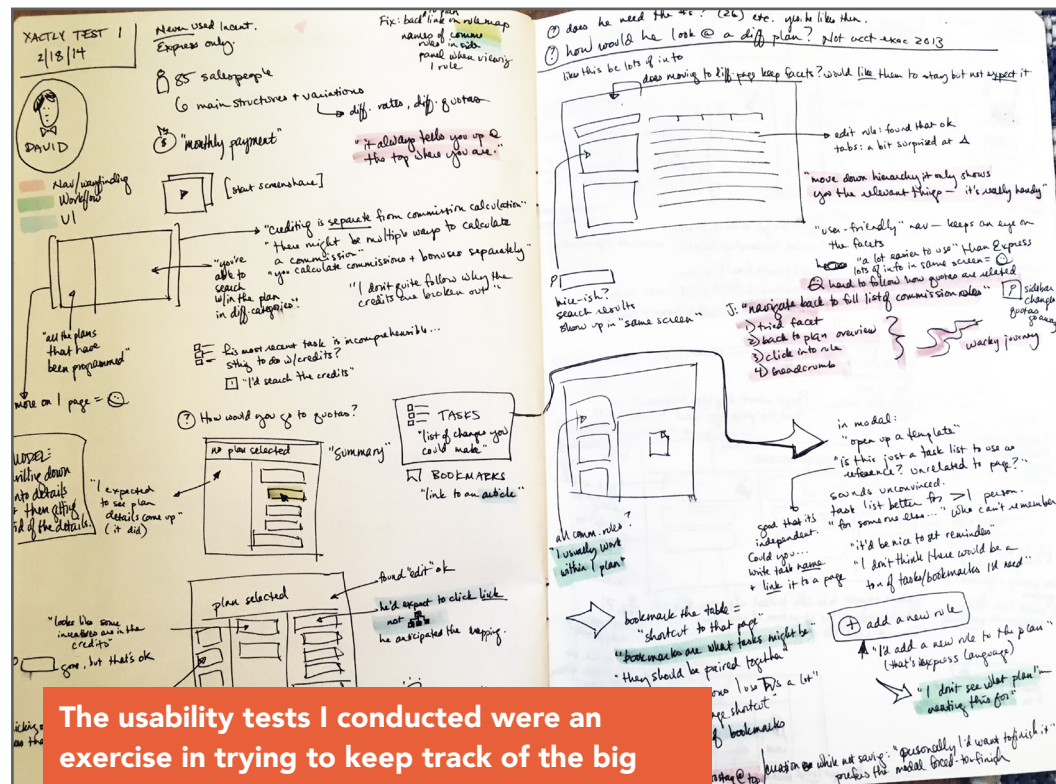
How to design and administer compensation structures for salespeople is a highly sophisticated problem. Whether they're selling cars, software, or real estate, salespeople earn commissions based on many factors.

Xactly, Inc. is a market-leading SaaS company that helps other companies manage incentivization and payroll for salespeople. Their flagship product, which helped admins model and assign different compensation structures, was overdue for a redesign. I dove into the world of sales compensation and helped bring many spreadsheets under one



The biggest challenge was the **information architecture of sales compensation plans**. Each sales plan had anywhere from 5 to 100 custom components that related to one another in ways that were difficult to standardize.

I needed to design an **administrative interface** that accurately depicted the relationships between sales plan components, but also spoke the same "language" as the people using the software.



Sketches were useful for articulating my own understanding of the component relationships.

**Quotas**

Plan: Account Exec 2013 Rule: Account Exec Product Sales Commission

Advanced Search Actions

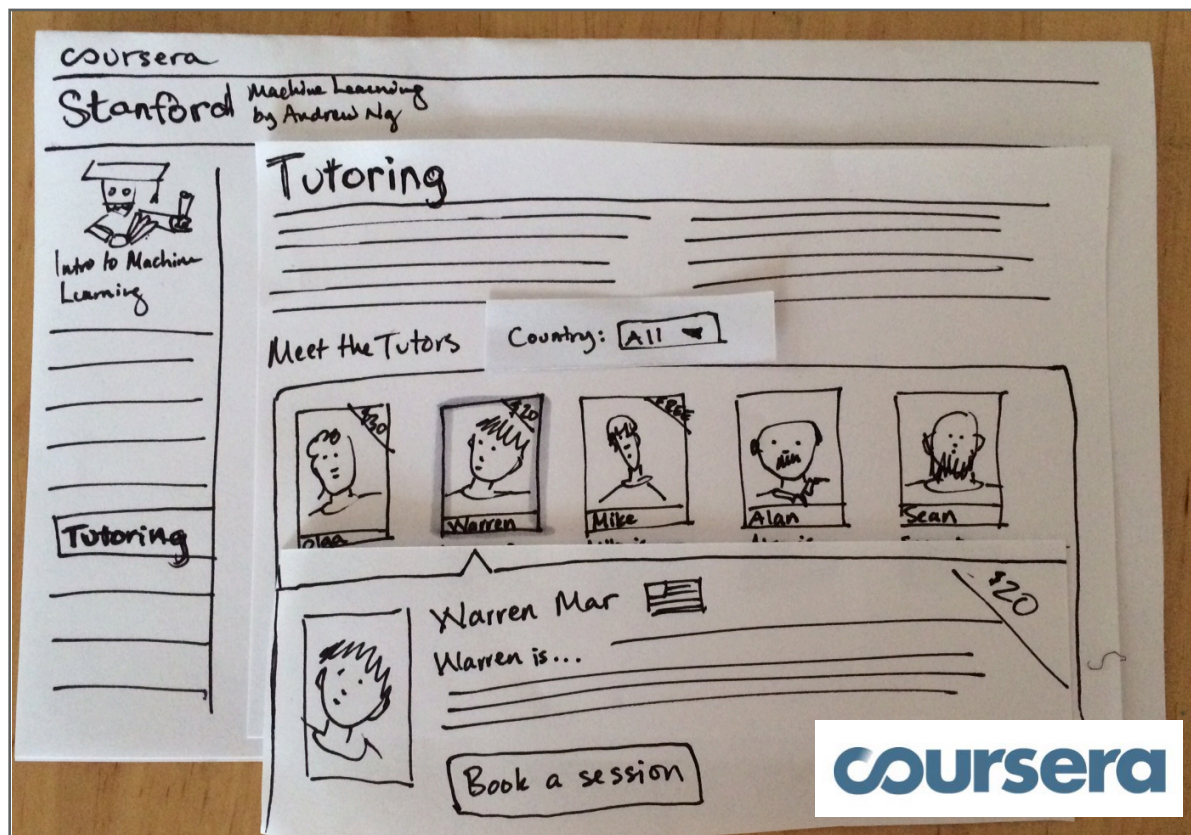
Commission Rules (1) Attainment Measures (1) Quotas (2) Rate Tables (2) Bonuses (0)

Quota Name	Type	Assignment	Quota Amount	Units
Quota name	All Types	Assignment	=	Amo USD
Product Revenue Quota	Plan		100,000.00	USD
Product Revenue Quota	Title	Account Executive	100,000.00	USD
Product Revenue Quota	Title	Sr. Account Executive	110,000.00	USD
Product Revenue Quota	Title	Jr. Account Executive	90,000.00	USD
Product Revenue Quota	Position	Account Executive Twin Cities	100,000.00	USD
Product Revenue Quota				
Product Revenue Quota				
Services Revenue Quota				

In order to learn from users about their actual workflow, I needed to move quickly to HTML wireframes.

# MATCHING MOOC TUTORS

Work fast and light to help a MOOC provider figure out how to offer online tutoring.

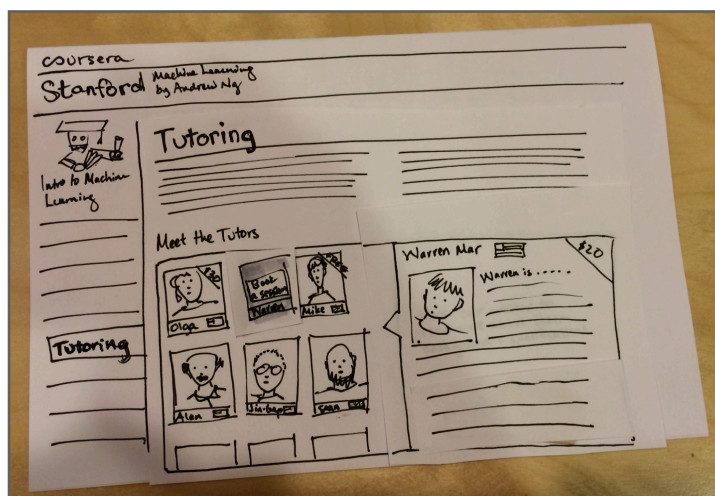


<b>TIME</b>	1 week (2014)
<b>CLIENT</b>	Coursera (Mountain View, CA)
<b>AGENCY</b>	Sliced Bread (Mountain View, CA)
<b>TASKS</b>	Interaction design Usability testing

In 2014, MOOC pioneer Coursera was exploring launching tutoring for their machine learning MOOC (massive open online course). They needed a quick interface to test whether tutoring would be an appealing offering.

Our core questions were around **tutor selection criteria and pricing**. What would make a MOOC student choose a particular tutor – or any tutor at all?





Paper prototypes helped me learn about the design constraints of Coursera's CMS.

Coursera's plan was simply to let tutors set their own prices. However, my tests showed that this approach wasn't likely to work.

If it wasn't clear why some tutors cost more money than others, users wouldn't trust the tutoring service in general.

The most important takeaway from this sprint was that Coursera had to be **transparent and consistent with their pricing model**.

More information on the tutoring pilot: <https://www.class-central.com/report/coursera-peer-to-peer-tutoring-google-helpouts/>

**Stanford** Machine Learning by Andrew Ng

**Tutoring**

Coursera's Tutoring program through Google Helpouts offers tutoring to students currently enrolled in Coursera's Machine Learning course. Each Tutor has taken the course before and understands the material very well. He or she remembers what it's like to be a student and is able to help you on any part of the material that you want to spend extra time on.

If you are a beginner, your Tutor can review the background material needed to complete the course, or help you with the basic topics you'll need to understand. If you have questions about the homework, your Tutor can go through practice problems that will help you understand the necessary concepts. If you are a very advanced student, your Tutor can help you explore additional topics in more depth.

[View all tutors](#)

**Meet the tutors**

Read more about the Machine Learning tutors below. When you're ready to book a 30-minute session, view your tutor's availability and choose a time that works for you.

Tutor	Price / session
John Yetter Graduate Student in Bioinformatics, UC Santa Cruz	\$30 / session
Tom McComb Software Engineer, Intel	Free
AJ Sanchez Senior Systems Architect, Microsoft	\$20 / session
Yogesh Bhalerao Undergraduate Student in Computer Science, Stanford	Free
Richard Chung Front-End Developer, Apple	\$30 / session
Eugene Zak Graduate Student in Human-Computer Interaction, Oxford	Free

**Location is important because of time zones – can we only show tutors in your time zone?**

**Users assume every tutor here speaks English, but what if they want a tutor who speaks another language?**

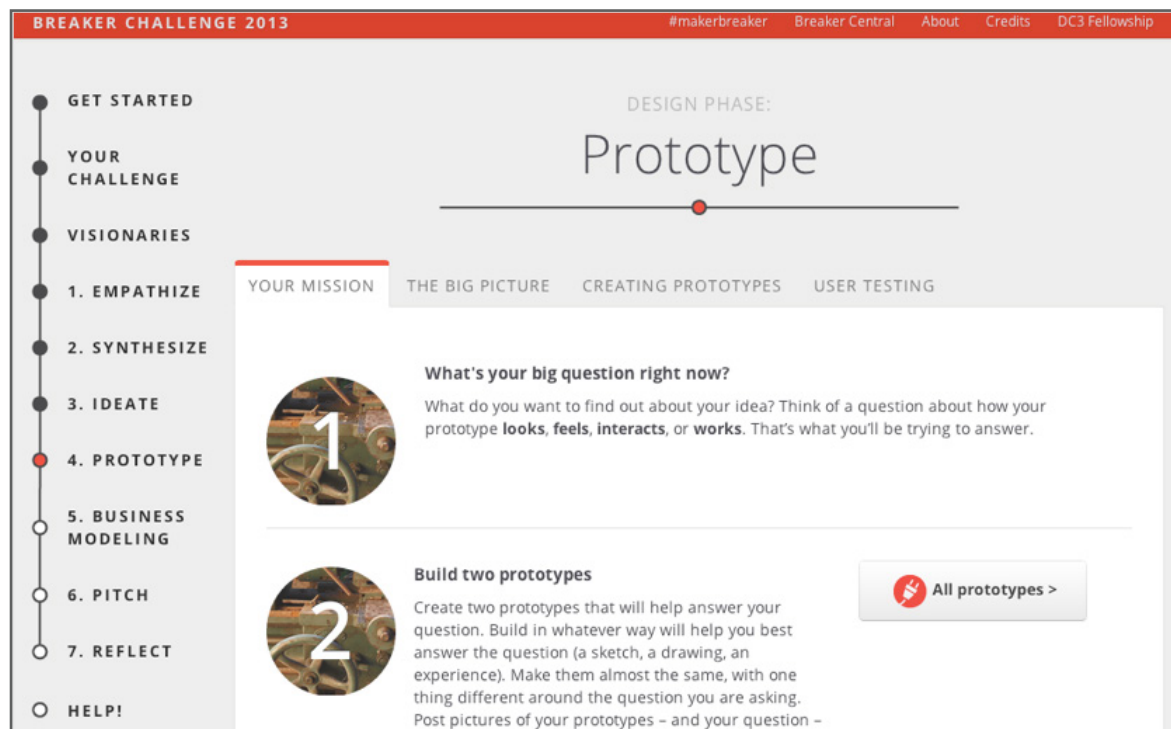
**"A session is only 30 minutes? I assumed it was an hour."**

**"If I'm investing time in tutoring, I want good tutors – are the free ones good?"**



# TEACHING DESIGN THINKING ONLINE

Create an online "ride-along" experience to parallel a New-York-based course in design thinking and entrepreneurship.



## TIME

3 months (2013)

## PARTNERS

Stanford d.school (Palo Alto, CA)  
Project Breaker (New York, NY)

## TASKS

Course design  
Graphic design  
Website development

Project Breaker, an entrepreneurship program for at-risk students in New York City founded by TED fellow Juliette LaMontagne, received funding to create a parallel online experience in cooperation with the Stanford d.school.

Design thinking and entrepreneurship are complex topics – how could we make this material clear and accessible?

How could we design and structure an online course that felt as exciting, clear, and immersive as the in-person experience?

I was responsible for design, content, and implementation for the website that hosted Project Breaker's core curriculum and guided students through the class.

Interactions between participants were supposed to happen on a discussion platform we designed; however, we quickly figured out that people were using social media, rather than our bespoke message board.

One of our key learnings was that an online course needs to leverage **as many familiar interactions and habits as possible**. Asking people to undertake unfamiliar tasks alone requires a leap of faith, and they need **guidance and support** along the way.

The website is live at <http://futureofstuffchallenge.org>. I also [blogged](#) about the experience of running the course.



article by d.school; image by epsos.de

## Why do empathy, anyway?

Find out why empathy is at the center of human-centered design.

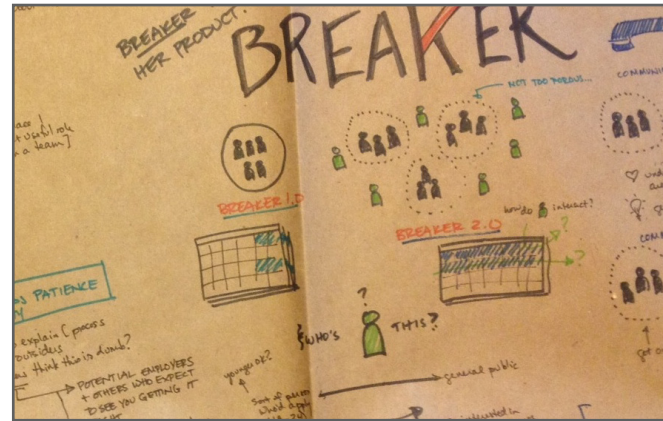


BEGINNER



ARTICLE

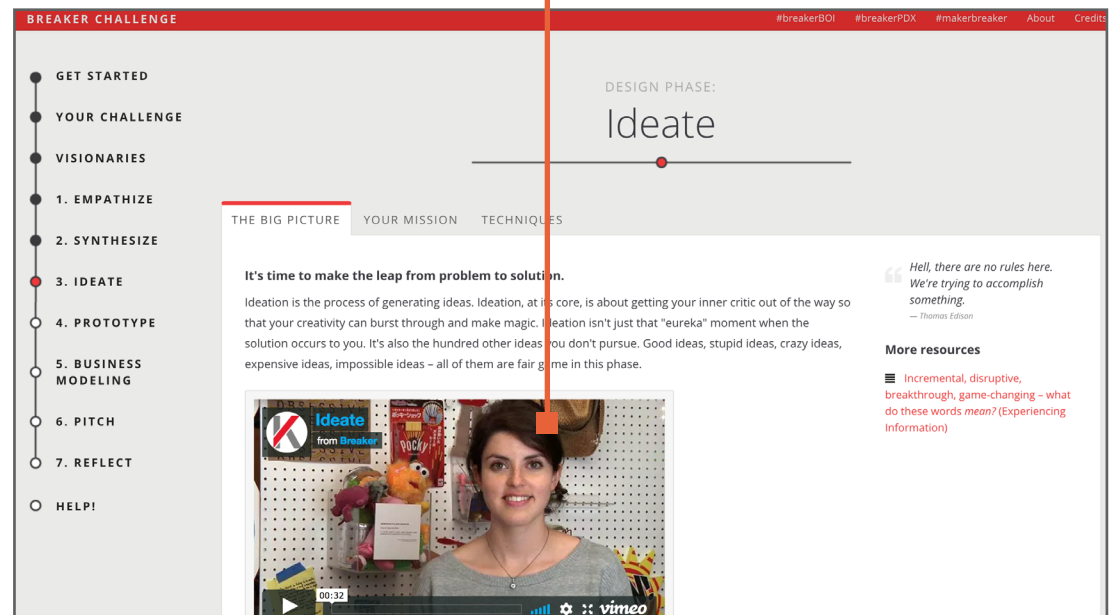
I designed and tested various ways to display and organize teaching content.



Before designing the website, I interviewed past and prospective Project Breaker students to learn about their motivations for participating.

We added this "help" section during the course because nobody was turning to our discussion forum for support.

We shot short videos with student "hosts" to help the online course feel more personal and engaging.



# TOOLS FOR COMPLEX INTERACTION PROTOTYPING

Design and implement a library of HTML/CSS/JS components and templates for a design agency that specializes in complex UIs.

SAMPLE

How large a swimming pool do you need for a capybara?

How large a swimming pool do you need for a capybara?

How large a swimming pool do you need for a capybara?

How large a swimming pool do you need for a capybara?

How large a swimming pool do you need for a capybara?

How large a swimming pool do you need for a capybara?

## TIME

7 months (2014-15)

## AGENCY

Sliced Bread Design (Mountain View, CA)

## TASKS

Library design  
Library creation & programming  
Iteration & maintenance

At Sliced Bread, where I was a staff designer, we prototyped directly in HTML. This may sound like overkill, but it wasn't: our designs had so many screens, states, and specific needs that we regularly crashed every "drag-and-drop" prototyping tool we tried.

We already had a component library, but it looked dated, wasn't interactive, and often crashed. So, as the most experienced with HTML/CSS/JS, I **redesigned our library of components**: from text to tabs, buttons to accordions, icons to column layouts. I kept the default ingredients **modern, consistent, and visually neutral**, so as not to unintentionally imply UI design decisions.

The finished library contained **hundreds of components, all documented with copy-and-paste snippets**. It was a big project for one designer, but seeing our "rough" prototypes take on a more unified, professional appearance was rewarding – and, since it was an internal project, I could have some fun with it!

## Boxes, borders, and spacing

These are the classes you might want to memorize: they deal with padding, spacing, and borders. Many jQuery UI and Bootstrap elements are composed of these classes, thanks to the extra code we wrote in the starter CSS. If something isn't responding to these classes, and you'd like it to, let us know and we'll add some custom code so it works smoothly.

These classes are all custom – you won't find them in Bootstrap.

### Borders

Choose a border for your box by adding the class `border-square` or `border-rounded`.

`.border-square`

I have a square border.

```
<div class="border-square">I have a square border.</div>
```

I combined Bootstrap, jQuery UI, and some custom JS to create snippets for every component we used in our HTML prototypes.

Because of the range of HTML/CSS/JS expertise at the agency, I needed to define and explain each component thoroughly.

## #\$\*& It, Use Tables?

Whether you use CSS or HTML, tables are one of the most common ways to layout content that isn't a single line of text.

### Use tables

- For tabular data
- If you prefer tables

### Don't use tables

- For the highest quality
- For vertical lists
- For tablet, mobile, and other devices
- If you are inconsistent
- If you prefer tables
- If you're having trouble with the `radius` for rounded corners or having problems with the `border` class

Could go either way

## CSS Positioning 1: Go with the Flow

### EVERYTHING IS BOXES

**CSS is a series of boxes.** Everything inside every tag is a box.

If you had an infinitely wide computer screen, all these boxes would line up, left to right, like a freight train.



Because your screen isn't infinitely wide, the boxes will wrap. This is called the normal flow: left to right, top to bottom.

Text and color

Layout

Boxes, borders, and spacing

Buttons

Lists

Icons

Forms

Dashboard components

Tables

Miscellaneous

SBD elements

# Sketchbook

Consistent visual practice keeps my design skills sharp.

I've taken coursework in sketching, printmaking, animation, watercolor, and digital illustration, among other subjects.







**"Wish You Were" (2005)**

Coursework at Harvard University (Prof. Lorelei Pepi)

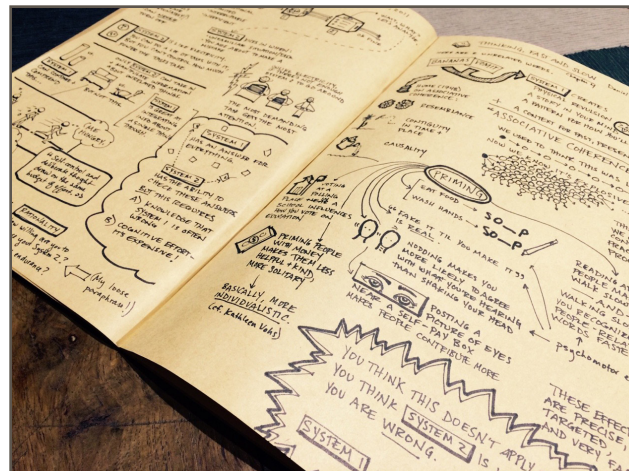
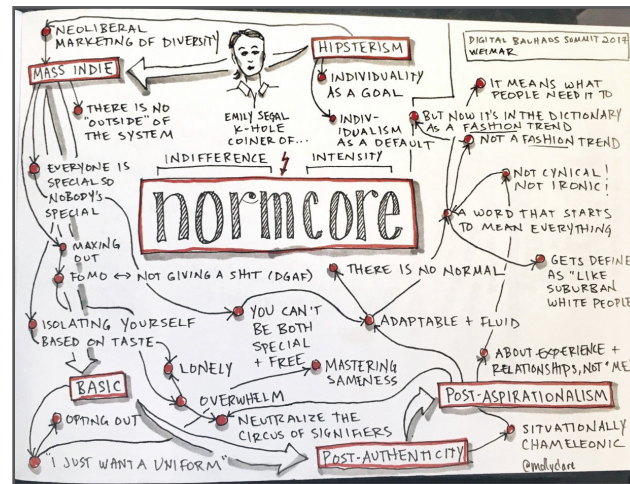
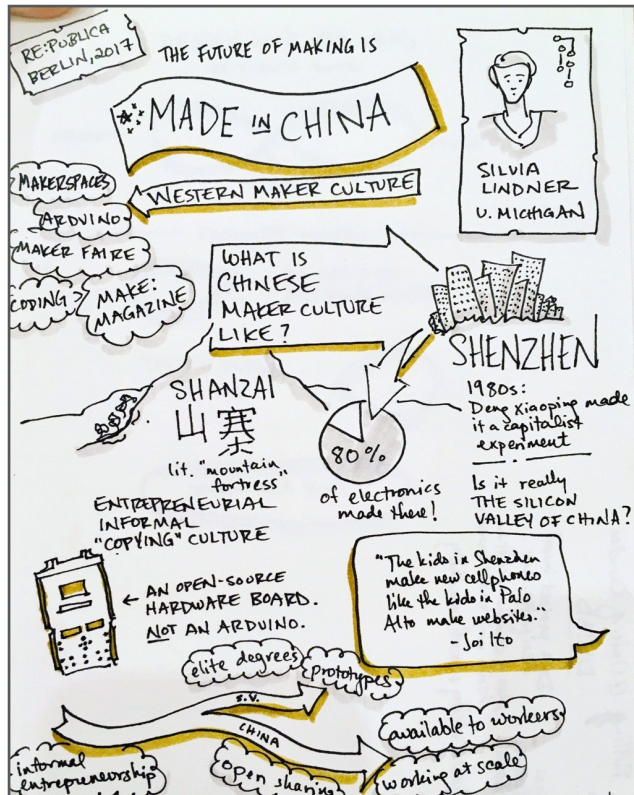
Jury prize for best student animation, New England Film Festival 2005

Other personal animation and video work is [on my Vimeo site](#).



**"Make a Star" (2006)**

Coursework at Harvard University (Prof. Ruth Lingford)



*Clockwise from top left:*

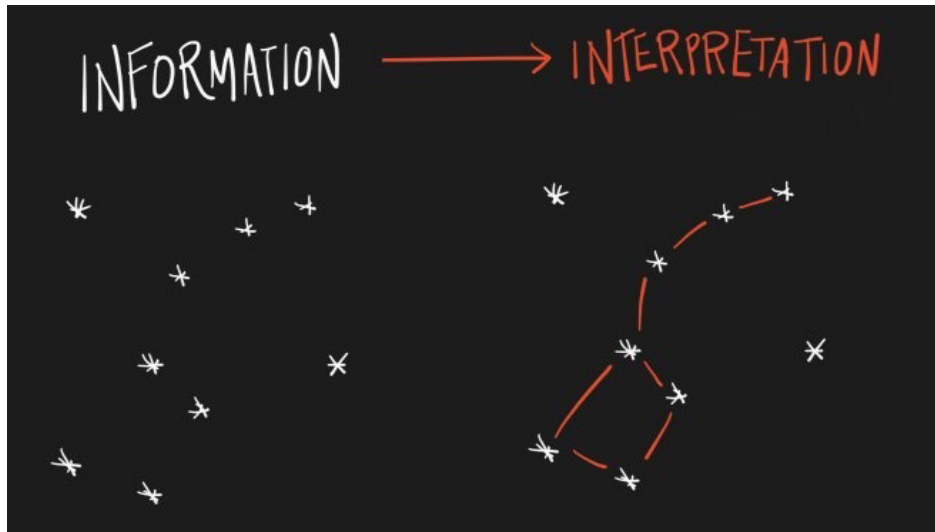
*Silvia Lindner (re:publica 2017, Berlin)*

Emily Segal (Digital Bauhaus Summit 2017, Weimar)

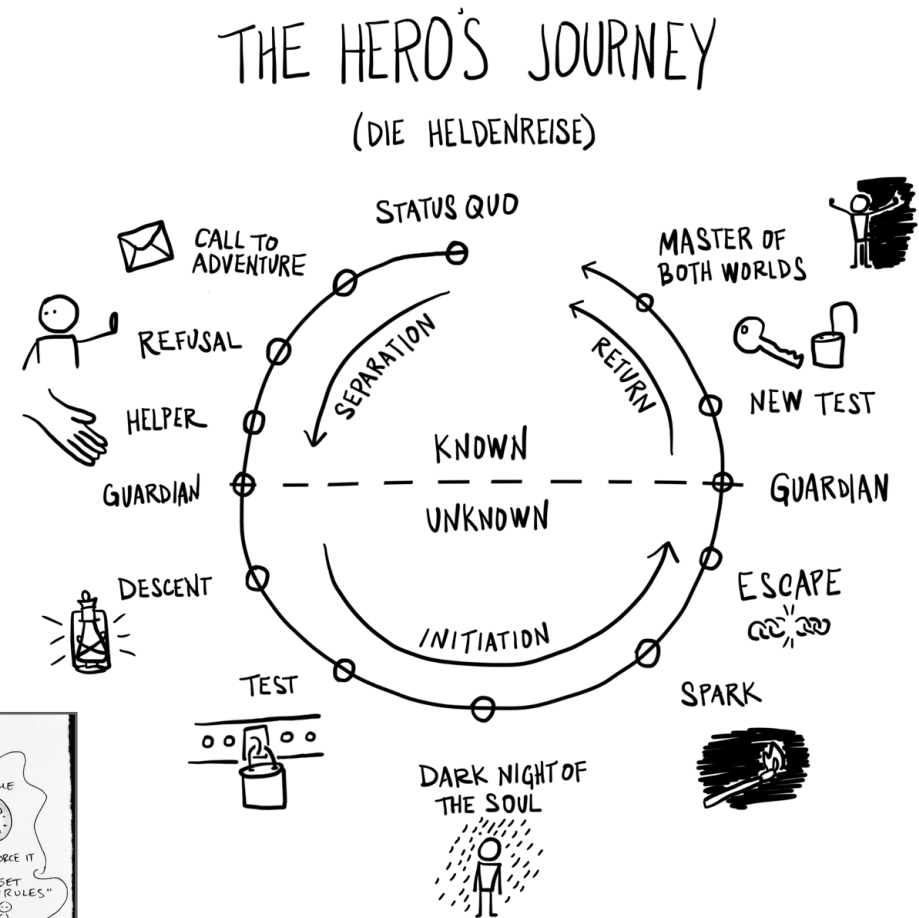
*Tobias Frere-Jones (Beyond Tellerrand 2015, Berlin)*

Book notes for "Thinking Fast and Slow" by Daniel Kahnemann



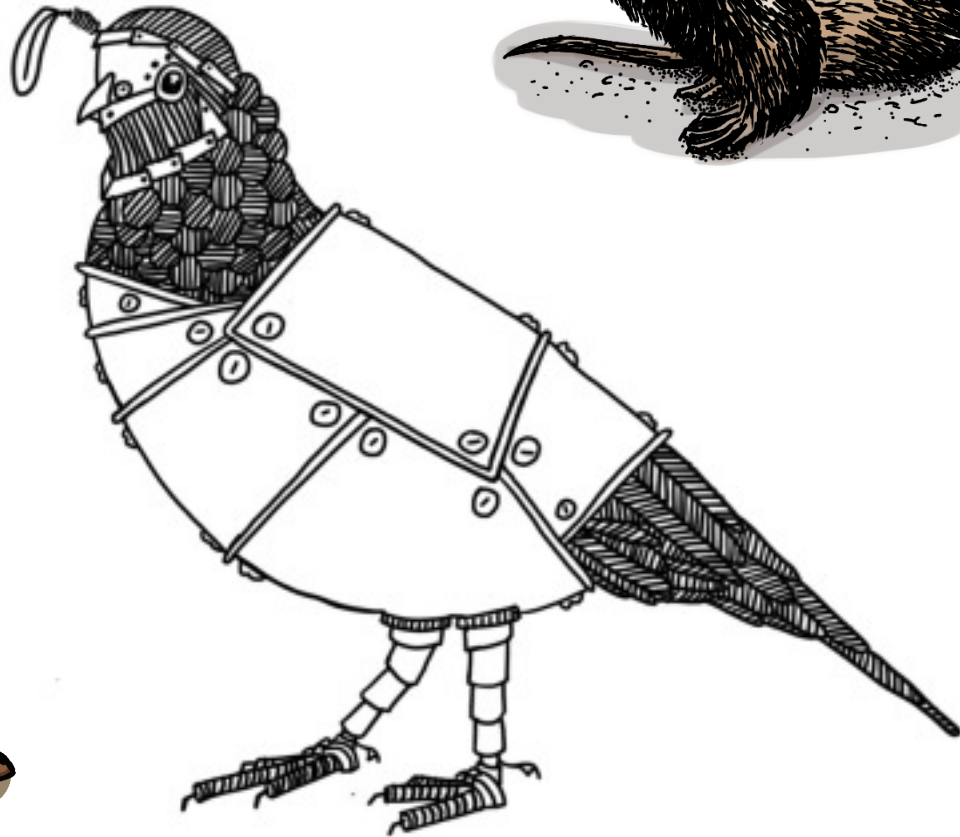
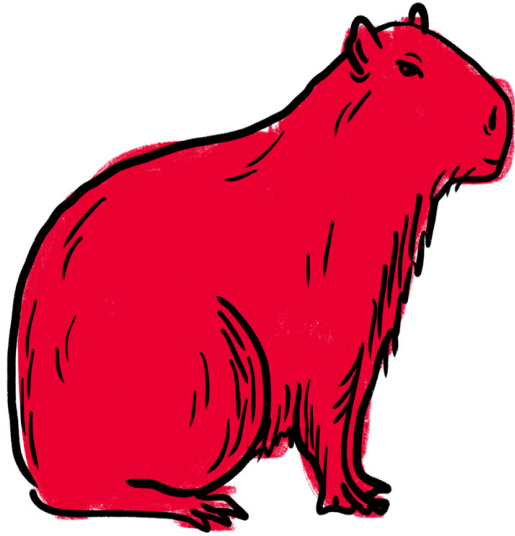


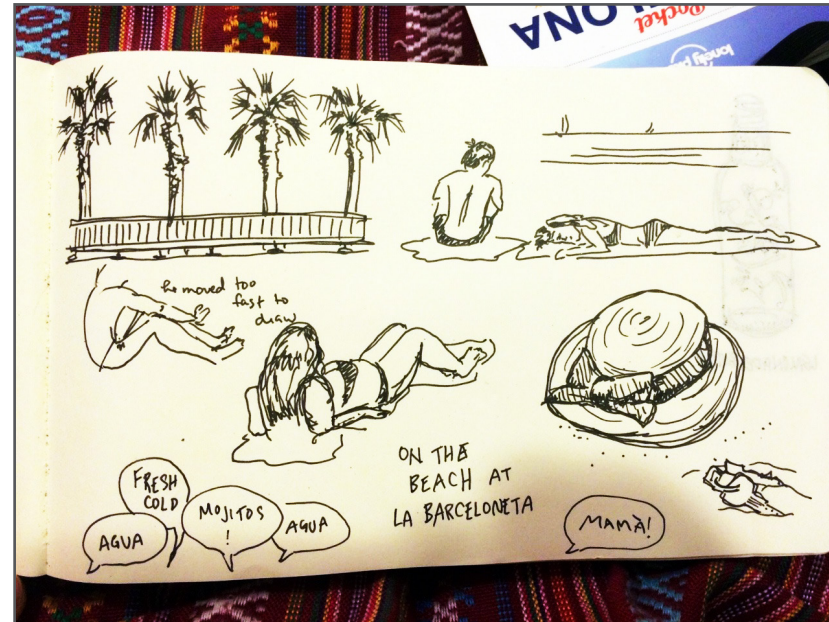
DOING  
is the new  
DISCUSSING



Clockwise from top left:  
Graphic for expert talk in "Inspirations for Design" MOOC, 2017  
Graphic for "The Hero's Journey" for HPI D-School, 2017  
Notes on facilitation, HPI D-School, 2015  
T-shirt design, HPI D-School, 2017

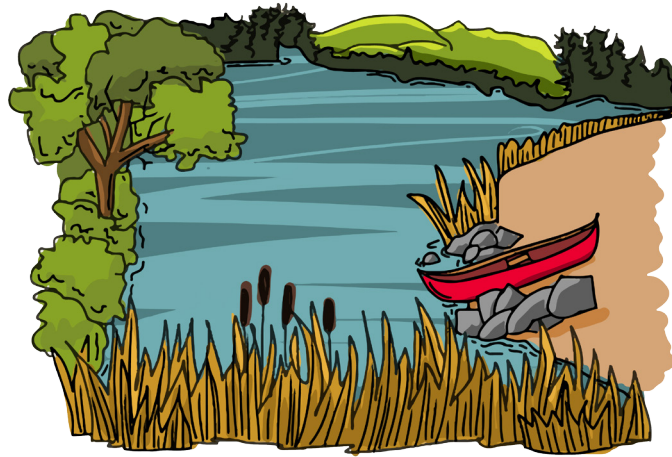




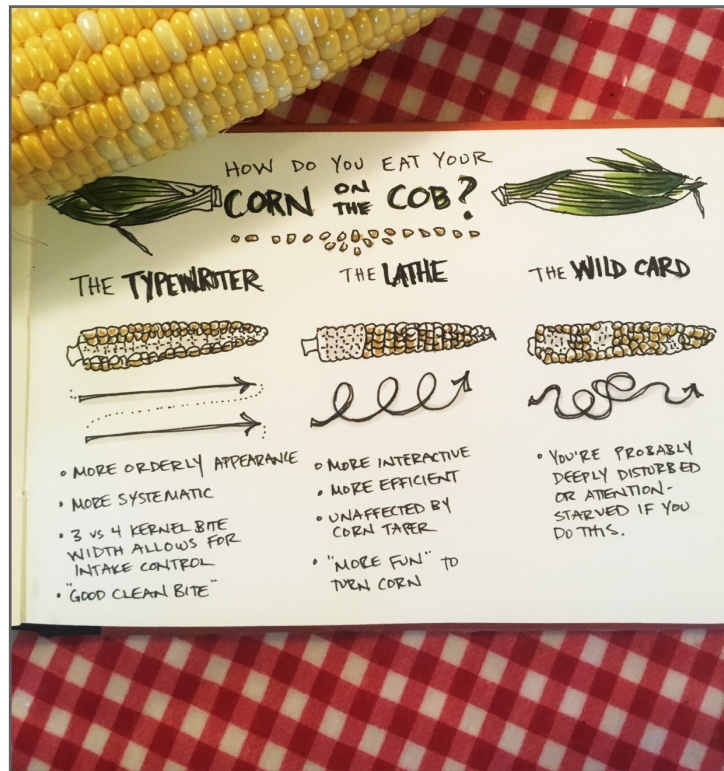


Clockwise from top left:  
Marrakech  
Barcelona  
Stockholm  
Jutland





Clockwise from top left:  
California & Minnesota sticker designs  
Screwdriver  
Corn-eating analysis  
Custom vinyl laptop decal



## MANIFESTO

**Design is an exploratory craft.** It's easy to turn to the finished work of others for inspiration. But exploring and understanding materials, whether that means pixels, paper, or bits, metal or clay, water, soil, or glitter, is an essential part of generating design ideas.

**Design is creative leadership.** Designers are often natural, fluent, and pragmatic communicators in a variety of media. With these skills comes a responsibility to use them wisely: a designer needs to have something to say.

**Design is a service profession.** We're here to see things about the world that nobody else sees, to hear what nobody else hears, and to bring these insights into the light. Designers must bring a humble, hardworking spirit to any problem with which we're entrusted.

*"Beyond the age of information is the age of choices."*  
– Charles Eames

