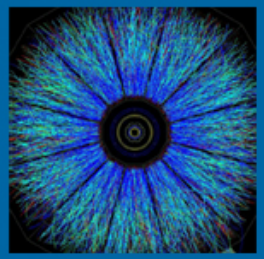
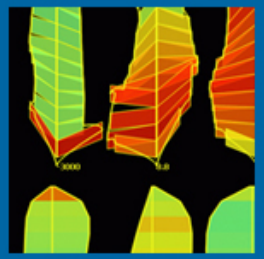
Swansea University
Prifysgol Abertawe

CSC349 User Experience

Introduction to User Experience 1: UX Research and Design

Lecture overview

The key points that this lecture will cover

- Defining what User eXperience (UX) is as best we can
- Understand how UX differs from Human-Computer Interaction that some of you have already studied
- What we will be doing over the next 12 or so weeks

How many people know what UX is?

In groups of 3, decide what is User Experience?

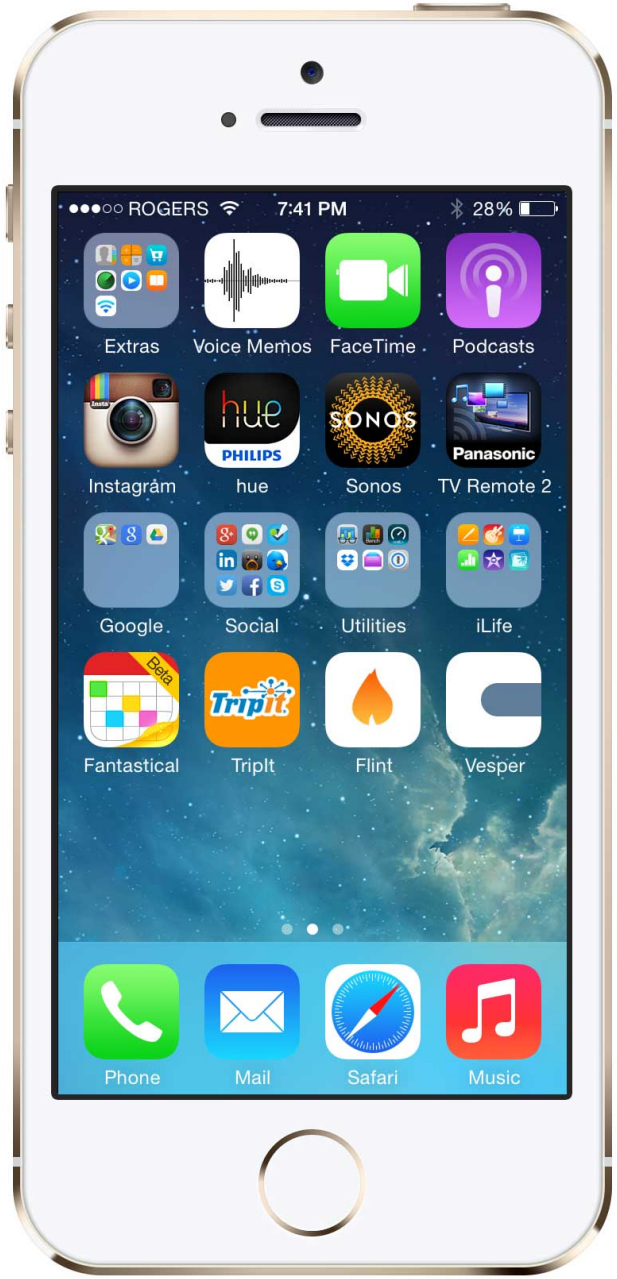
Defining User Experience

*"**User Experience** (UX) refers to a person's emotions and attitudes about using a particular product, system or service. User experience includes the practical, experiential, affective, meaningful and valuable aspects of human–computer interaction and product ownership"*

This definition is incredibly broad

Let's break it down with some examples

Good or Bad UX?



The iPhone – Good or bad UX

Obviously, this product is an example of good UX

- The device has won hundreds of design awards for it's aesthetics, construction, and reliability
- It's the most popular smart mobile phone model in the world
- The product revolutionised the mobile phone market after it was released
- The iPhone is used as the go-to example of good design in many books and design courses and is the product most readily associated with usability by members of the public

The iPhone – Good or bad UX

Obviously, this product is an example of bad UX

- The iPhone uses a closed ecosystem that means that many basic functions are needlessly complex
- The device is over priced
- Important elements of Apples software are not up to scratch compared to rivals
- The device is synonymous with Apple, their anti-competitive practices and modern mainstream culture

Good or Bad UX?

Good or bad UX – not a useful question?

A person's experiences are inherently subjective

- There is no objective UX "score" we can assign a product that decides if it is good or bad
  - and this notion of objective score isn't helpful either!
- Every individual will have a different specific experience with a product based on their own personality
- There are no absolute rules, even if a design seems terrible to you, some people might perversely enjoy it

So why is UX such an important concept if it can't be measured?

Because of what UX allows us to think about

- By having a term for it, we can think about it when we design products and be aware of what effects we might have on it with design decisions for the majority of users

Because of what we can do under the banner of UX

- UX acts as a unifying theory - it allows us to bring together many different ideas and techniques to answer a critical design question

Because whenever your work and decisions change the experiences of an end user, you can ask yourself about the UX of your product

- Simply thinking in these terms is the most important single element of UX design

What is User Experience Design?

What is User Experience Research?

Are they different…?

UX design and UX research

UX Design – create and alter a design while consciously trying to create specific types of experiences with it

UX Research – trying to understand the experiences that people have with an existing design in detail and the effect that changes on the design will have

Clearly the terms are strongly related and they face a common challenge….

Understanding a specific UX is hard

Predicting UX with a product you haven't built yet is even more so!

Drawing inspiration for creating a new product and experiences, even more so…so!!

But we do have some hope because people have created a large collection of different techniques we can use to help as we attempt these tasks

** Or genuinely impossible – this question keeps philosophers up at night*

What CSC349 teaches…

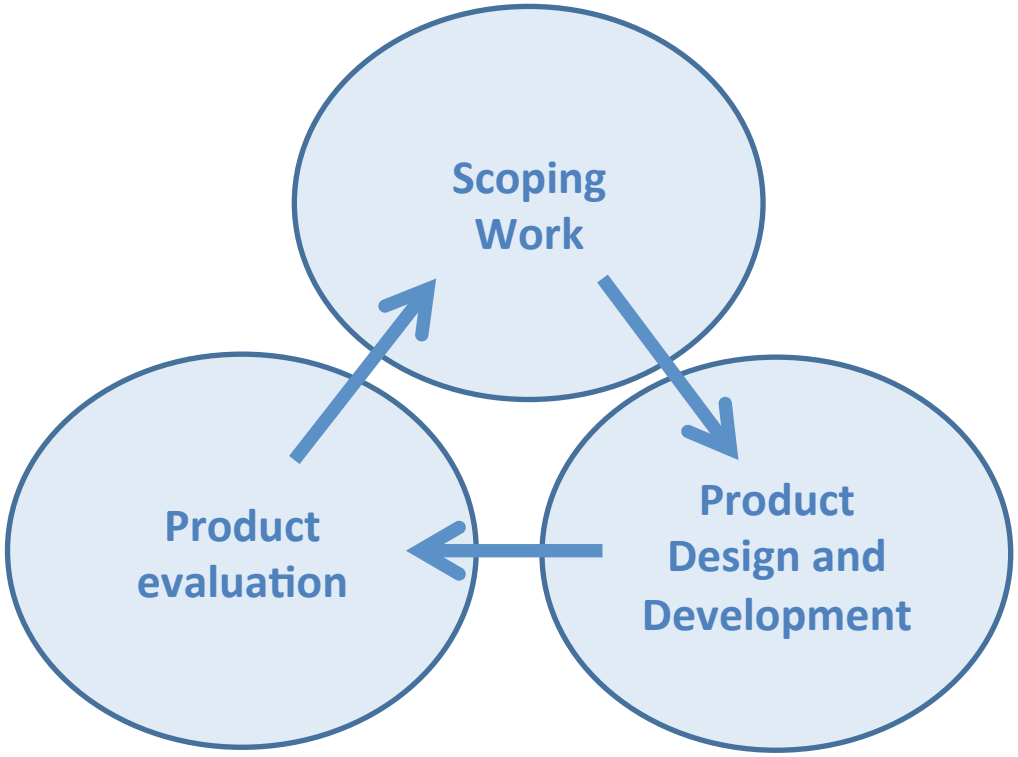
Primarily focusing on understanding and learning to use commonly techniques applied in UX design or research work grouped by **Design Stages:**

- **Scoping stage** – gathering information as you start
- **Design stage** – *"sketching"* out your ideas
- **Product evaluation stage** – testing your ideas in the world

In addition, we often need to analyse the data this generates

- **Statistical methods** – testing a hypothesis like A > B
- **Qualitative analysis** – organising spoken feedback

Design stages



Strengths and weaknesses of techniques

Scoping techniques

- Stakeholder identification; recruitment techniques; interviews; surveys; focus groups; ethnographies

Design techniques

- Personas and scenarios; sketching; prototyping; aesthetic and interface design; card sorting; participatory design

Usability evaluations (expert;heurisitc;walkthrough)

Product evaluation stage

- User metrics and A/B testing; Field trials; Diary studies

Assessment Structure

Coursework: due Wednesday 3rd May

1. UX design and a copy of your workbook due after Easter worth 30% of your module mark
   - Practical classes will help with this
   - Sub-deadlines must be met
   - Working on real world, not necessarily very digital concepts

Examination

- One exam worth 70% of your module mark

Timetable

Lectures (weeks 20-26)

- Thursday 1-2, Glyndwr Rm E
- Friday 1-2, Vivian Rm 404

Practical sessions (weeks 21-26)

- Tuesday 1-4, Fulton Lecture Room A

Timetable – 5 x 3 hour practical slots?

Practical sessions will aim to help you to develop the skills associated with being a UX practitioner

- And they include examinable material!

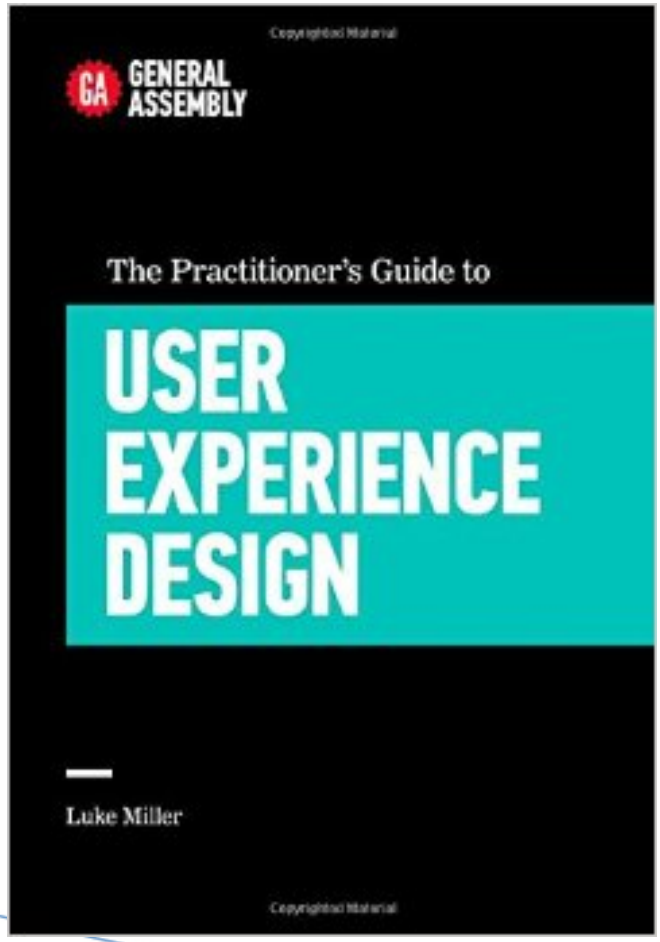
The sessions will also help enormously with the coursework you are expected to submit for CSC349

Practicals will require you get hold of a sketch-pad and pencil but don't panic, you (seriously) can only lose marks for drawings that are to good

Recommended Reading

User Experience Design
by Luke Miller

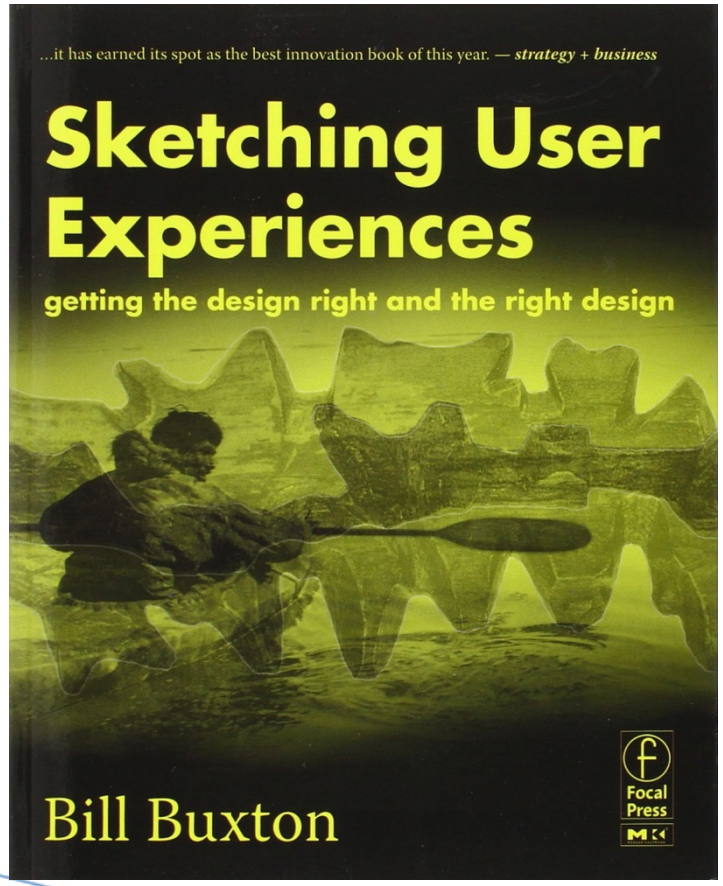
Copies available in the library, bookshops or Amazon/Kindle



Recommended Reading

Sketching User Experiences
by Bill Buxton

Copies available in the library, bookshops or Amazon/Kindle



Me - Stephen Lindsay

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Office hours: 10-12, Thursday Morning

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Talk to me, email me, come and visit me!

Lecture Summary

A rough idea of what UX is

A rough idea of why it is difficult to categorise and measure

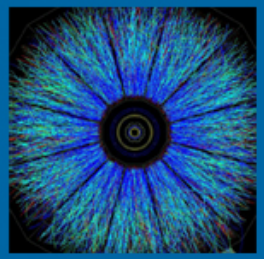
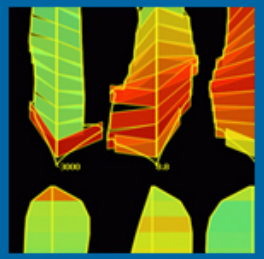
A sense of the individual techniques used in UX

Next lecture – design, creativity, inspiration and sketching, the real job of the UX practitioner

Swansea University
Prifysgol Abertawe

CSC349 User Experience

Introduction to User Experience 2: Design, creativity and inspiration

In this lecture we will look more into

What is design work?

How can we be “creative” when attempting to devise new products?

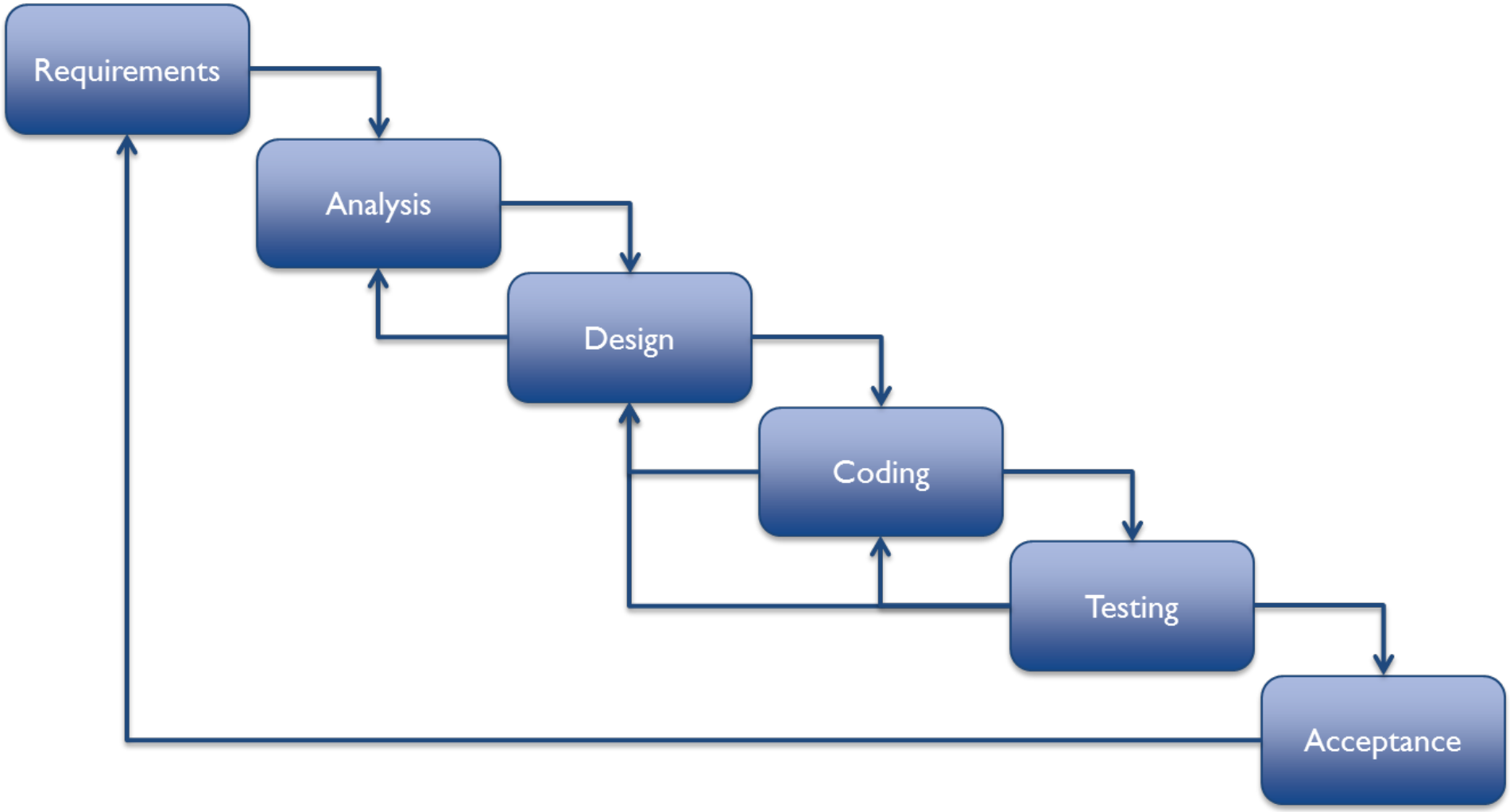
Where does inspiration come from?

What does a UX-designer actually *do* in a company?

What do you imagine when you think about people who are “designers”?

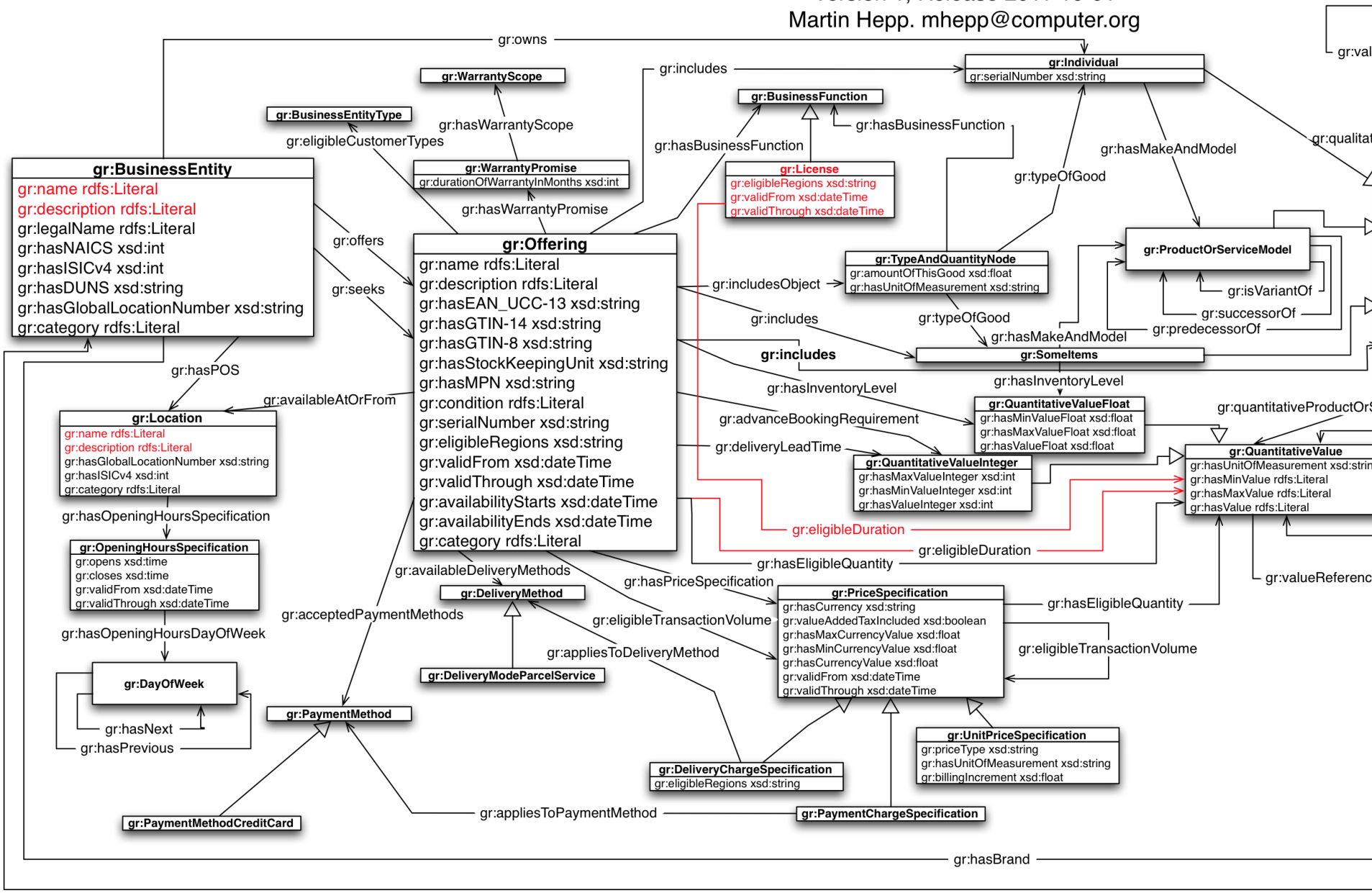
What jobs do they do?

How do they do them?


Requirements
Analysis
Design
Coding
Testing
Acceptance

Version 1, Release 2011-10-01

Martin Hepp. mhepp@computer.org



Notes:

1. The following GoodRelations elements are only shortcuts for simpler annotation or querying. See the documentation at http://purl.org/goodrelations/ for details:
   gr:hasValue (shortcut for setting both hasMinValue and hasMaxValue properties to the same value in one turn)
   gr:hasValueFloat (shortcut for setting both hasMinValueFloat and hasMaxValueFloat properties to the same value in one turn)
   gr:hasValueInteger (shortcut for setting both hasMinValueInteger and hasMaxValueInteger properties to the same value in one turn)
2. The following elements are now deprecated, but you can still use them, e.g. for staying compatible with older data consumers (e.g. Yahoo SearchMonkey):
   gr:ActualProductOrServiceInstance (now gr:Individual)

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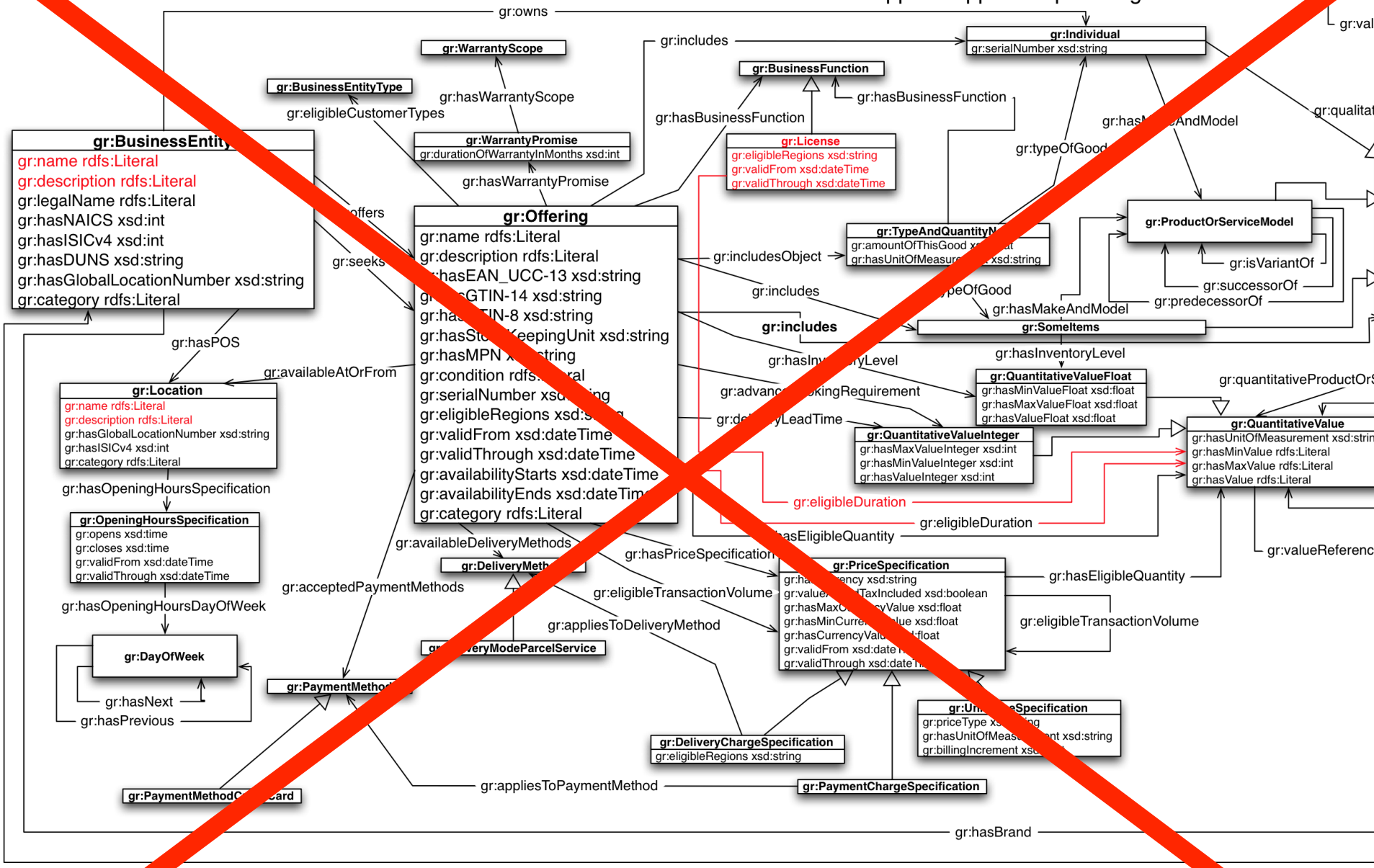

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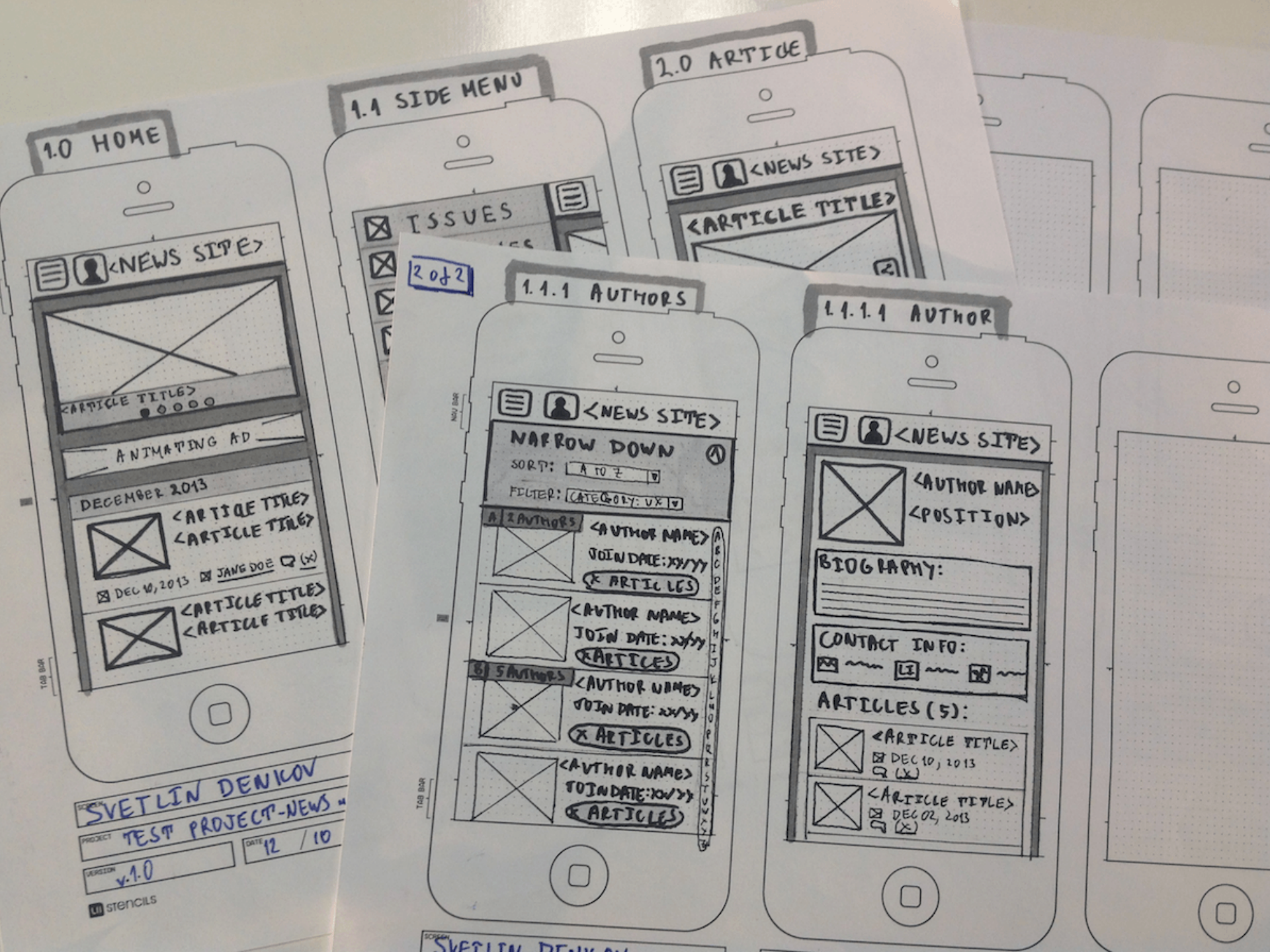
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<NEWS SITE>
<ARTICLE TITLE>
ANIMATING AD
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(x)
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TAB BAR
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2.0 ARTICLE
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2 of 2
1.1.1 AUTHORS
NAV BAR
<NEWS SITE>
NARROW DOWN
SORT: A TO Z
FILTER: CATEGORY: UX
A 2 AUTHORS
<AUTHOR NAME>
JOIN DATE: XX/YY
X ARTICLES
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B 5 AUTHORS
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1.1.1.1 AUTHOR
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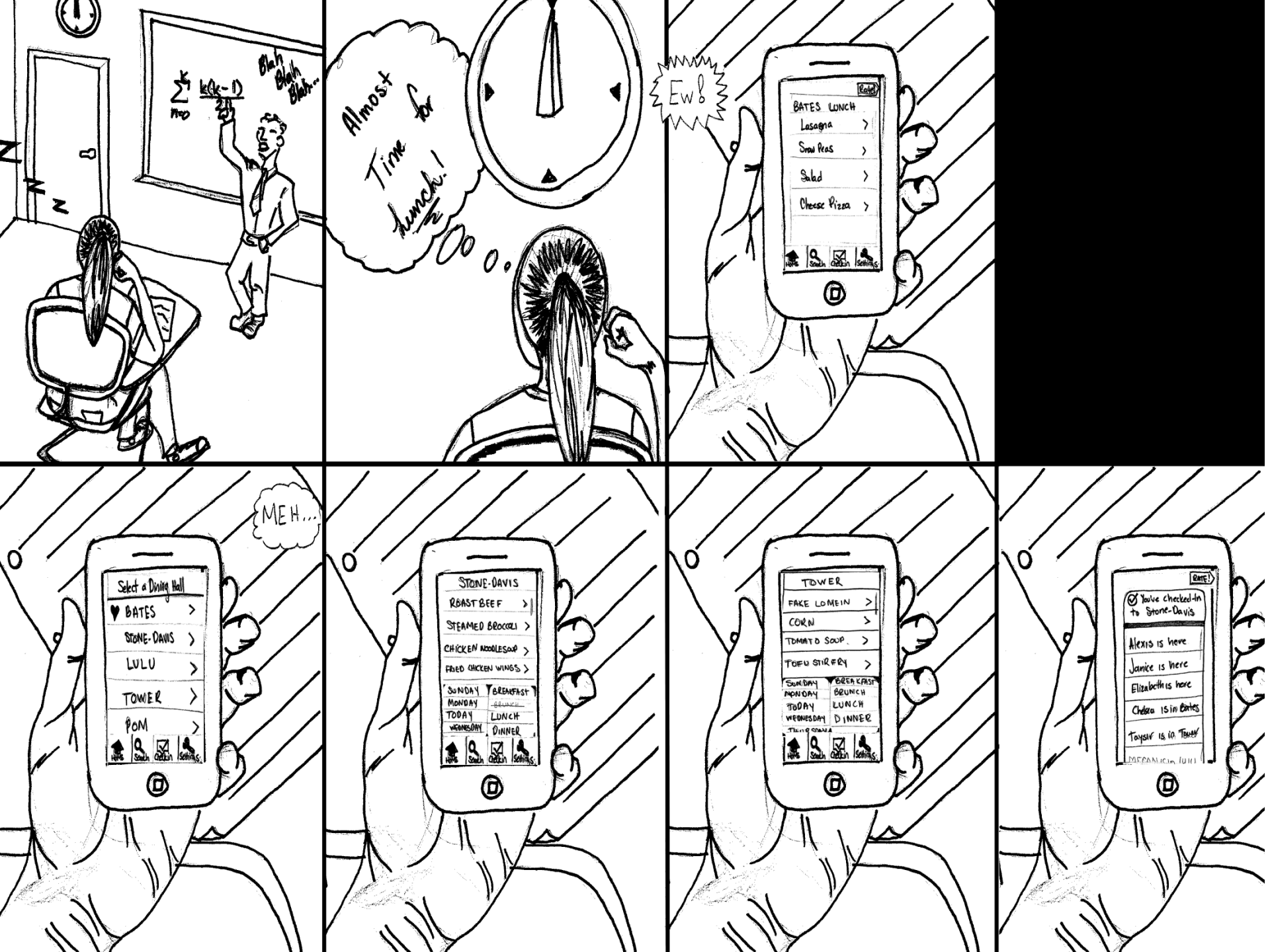
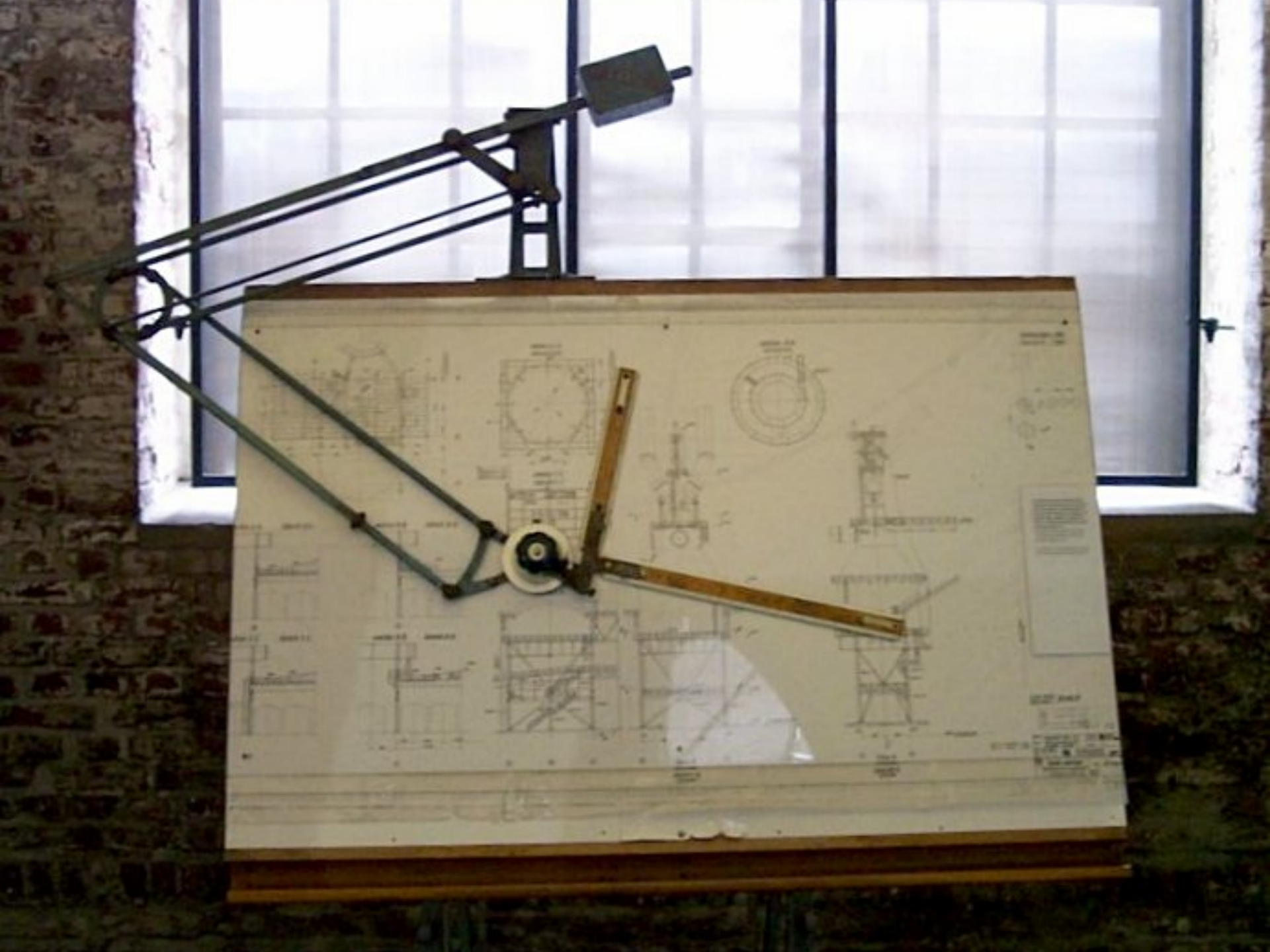

Blah Blah Blah...
Almost Time for lunch!
Ew!
Rate!
BATES LUNCH
Lasagna
Snow Peas
Salad
Cheese Pizza
MEH...
Select a Dining Hall
BATES
STONE-DAVIS
LULU
TOWER
POM
STONE-DAVIS
ROAST BEEF
STEAMED BROCCOLI
CHICKEN NOODLESOUP
FRIED CHICKEN WINGS
SUNDAY
MONDAY
TODAY
WEDNESDAY
BREAKFAST
BRUNCH
LUNCH
DINNER
TOWER
FAKE LOMEIN
CORN
TOMATO SOUP
TOFU STIRFRY
SUNDAY
MONDAY
TODAY
WEDNESDAY
BREAKFAST
BRUNCH
LUNCH
DINNER
RATE!
You've checked-in to Stone-Davis
Alexis is here
Janice is here
Elizabeth is here
Chelsea is in Bates
Taysir is in Tower



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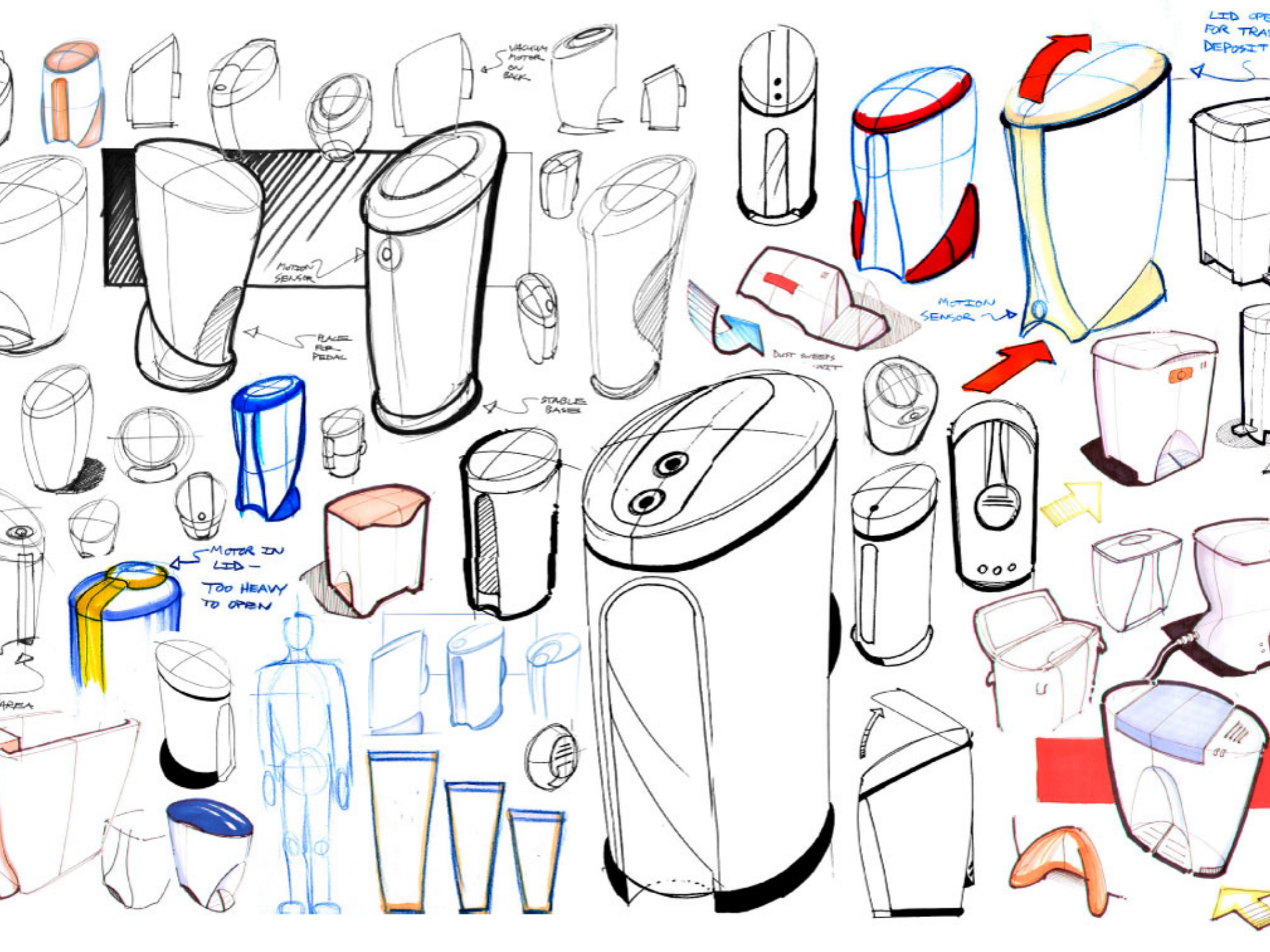
VACUUM MOTOR ON BACK
MOTION SENSOR
PLACE FOR PEDAL
STABLE BASES
DUST SWEEPS INTO
MOTION SENSOR
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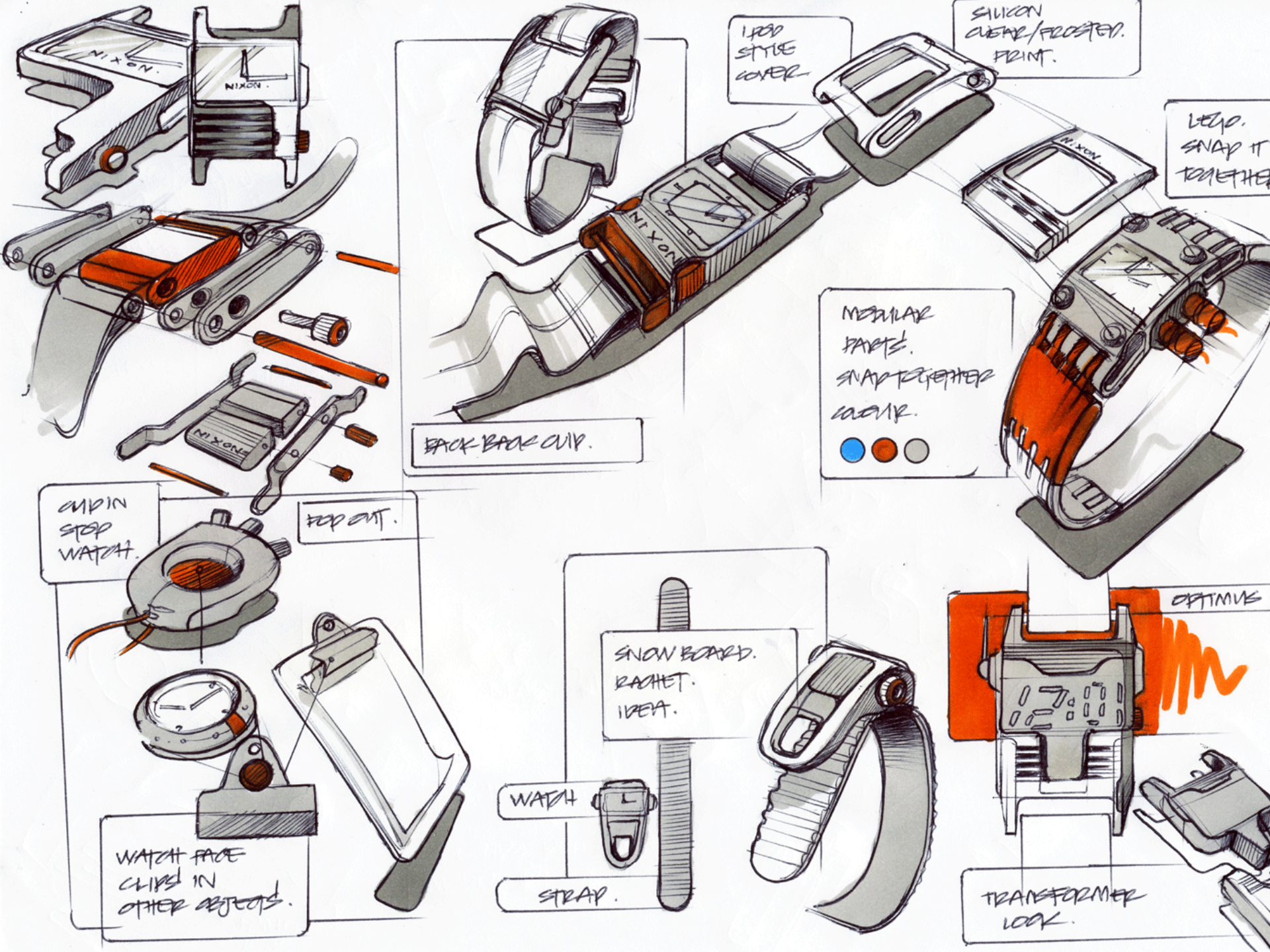
MOTOR IN LID
TOO HEAVY TO OPEN


NIXON.
NIXON.
NIXON
IPOD STYLE COVER
SILICON CLEAR/FROSTED. PRINT.
NIXON
NIXON
LEGO. SNAP IT TOGETHER
MODULAR PARTS. SNAP TOGETHER COLOUR.
BACK BACK CLIP.
CLIP IN STOP WATCH.
POP OUT.
WATCH FACE CLIPS IN OTHER OBJECTS.
SNOW BOARD. RACHET. IDEA.
WATCH
STRAP.
OPTIMUS
TRANSFORMER LOOK.

http://ux2.nesc.ed.ac.uk:3000
http://bit.ly/ux2library

What is UX design

It can be anything in this list but individual's talents will dictate where they work and how

Different UX design techniques are valuable at different stages of a product's development life cycle

While we aren't expecting you to become skilled drawers, being able to roughly sketch out your ideas has enormous value

How can you create new designs

Design requires you to create new “things out of the blue”

- How can you do that?

First, understand that’s not true!

- Ideas are grounded in past experience and come from multiple different sources
- While you can’t systematise it, there are certainly several things you can do that allow you to have creative ideas and allow you to get better at having creative ideas

How can you be (more) creative?

Architecture Design Studio Models

EMPATHIZE
ZEITGEIST
TREND
FORVANDLING
PERSONLIGHED
CONSTRAINTS
IDENTITET
IDEATE
SKØNHED
GETTING IT
KREATIVITE
VITALITET
HISTORIE
DELING
SOCIAL KAPITAL
VISUEL TILFREDSSTILLELSE
SE
LYTTE
TALE
SAMTALE
MÆRKE
FØLE
OPLEVE
FORSTÅ
MENE
DELE
VIDE
NØRDERI
DEHOV - LYST PROBLEM?
HUMOR
DEFINE
OUT OF FASHION

ADVENTURE (WEEKEND) | WORK (everyday) | URBAN (NIGHT)

K-mart Dept Stores

DIRTY HUMMER IS A HAPPY HUMMER

HUMMER ISSUED AUTHENTIC MADE IN USA EST 1982

HUMMER ISSUED GENUINE AUTHENTICA MADE IN USA

Like Nothing Else

TESTED PROVEN RUGGED Lfstyl

19 USA BZ HUMMER GENUINE

HUMMERS

HUMMER

TRACKS

AMAZING

TEE SHIRTS

KIDS (5)	WOMEN (5)	MEN (5)

H1 H2 H3

HUMMER DEALERSHIPS

Hummer NICE NAME

CAMO PATT.

ARMY AWARDS

FOREST TRAIL

CITY DRAIN

DIRTY HANDS

TOPOGRAPHICAL MAP / DIAGR

KING OF THE SANDBOX

END ICONS CITY RURAL COUNTRIES

ATB

BADGES

WORLD TRAVEL

ROCKET KIDS

ROUGH CALIGRAPHY

THERE'S NO CRYING WHEN IM RIDIN IN MY HUMMER

COLOR BY #'S ACCOMPLISHED WITH DIRT/ MUD. GRIT.

GENERATION H3

MY OTHER CAR SEAT IS IN A HUMMER TOO

CLEAN MOUTH DIRTY HUMMER

LITTLE HUMMER BOY

I ♥ Dirt.

I eat Dirt.

What makes you “creative”

1. Environment
   - Look at good and bad design around you
   - Look at other peoples designs
2. Community
   - Don’t censor yourself, let others see your ideas
   - Talk to other designers about designs
   - Talk to users about their experiences
3. Practice, practice, practice
   - Quantity over quality
   - As many pots as possible or a single good one?

What does a UX designer do?

Primarily, they interface between many other people in a company. For examples, UX designers:

- Provide specifications for interface developers (or they are interface developers!)
- Prioritise requirements with coders and developers
- Give feedback and direction to graphic designers
- Strike balances with product managers around release schedules, monetisation
- Support marketing efforts

What is the single biggest challenge to a UX designer?

The key challenge for the UX practitioner

User Experience is a buzzword in corporate environments

UX has won the battle but might have lost the war, everyone has some of the language of UX in their vocabulary

- *"This layout isn't very intuitive…. I don't think it has a particularly learnable interface"*

  - My Mum Who Can't Switch on a Smart Phone

Everyone has experiences with technology and this means that everyone has an opinion about it's design

- Dunning-Kruegeur effect – the less you actually know, the more you think you know

The consequences

You've tested a new design that will improve the readability of your companies News Aggregator App and found that people prefer a vertical rather than horizontal layout, now you need to relay your findings to your colleagues

Option 1	Option 2
Mock-up a prototype of the app and show your manager how it improves on the old version	Show the prototype to a sample of users and then present the study results to your manager

The consequences

You've tested a new design that will improve the readability of your companies News Aggregator App and found that people prefer a vertical rather than horizontal layout, now you need to relay your findings to your colleagues

Option 1	Option 2
Mock-up a [illegible]pe of the app and sh[illegible]r manager how it imp[illegible]ves [illegible]n the old version	Show the prototype to a sample of users and then present the study results to your manager

The consequences

UX is personal and a certain number of people will always like the less popular design choice

What happens if your (non UX trained) boss is one of the people who prefers the less-liked" feature

- If 30% of people like A and 70% like B, 3 times out of ten you'll have to argue with your boss if you present him with a prototype!

Gathering evidence is a critical part of the UX design process

- This is why "UX researcher" is also a common job title!

Summary

The term “design” covers a huge range of activities and skill-sets

Creativity is something that certain people have an aptitude for but everyone can get better at

Inspiration isn’t an accident – people surround themselves with opportunities to be “inspired”

The UX designer sit’s at the intersection of many different job and a key skill, just as important as design talent, is communicating and arguing for their ideas