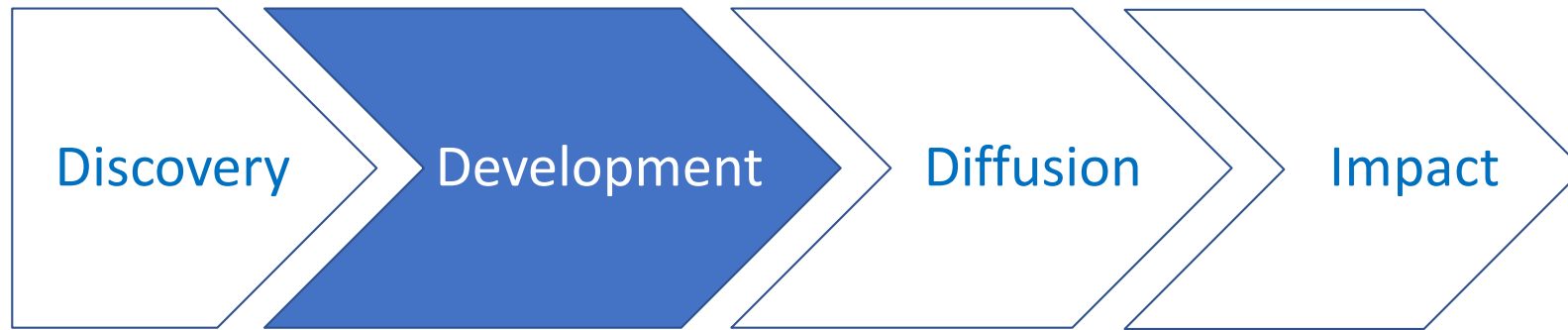


Innovation for Entrepreneur

Innovation for Entrepreneur

DIN147 (888147) 3(3-0-6)



9. Turning ideas into products and services

Bad design

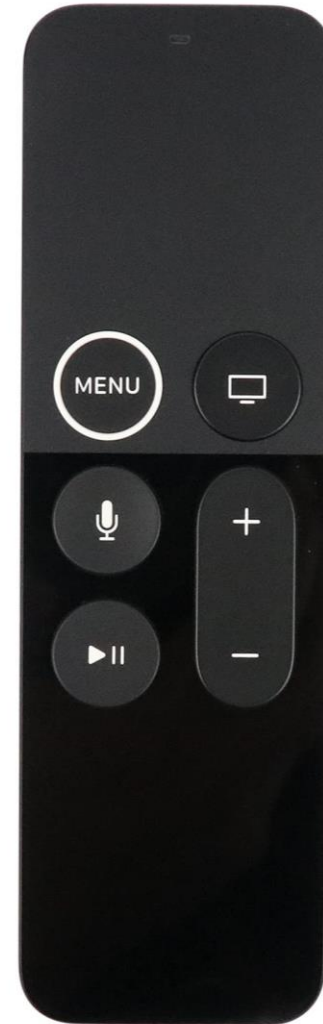


Bad design



Bad design

- Apple has often been praised for its good design
- But how would you switch on this Apple TV Siri Remote?



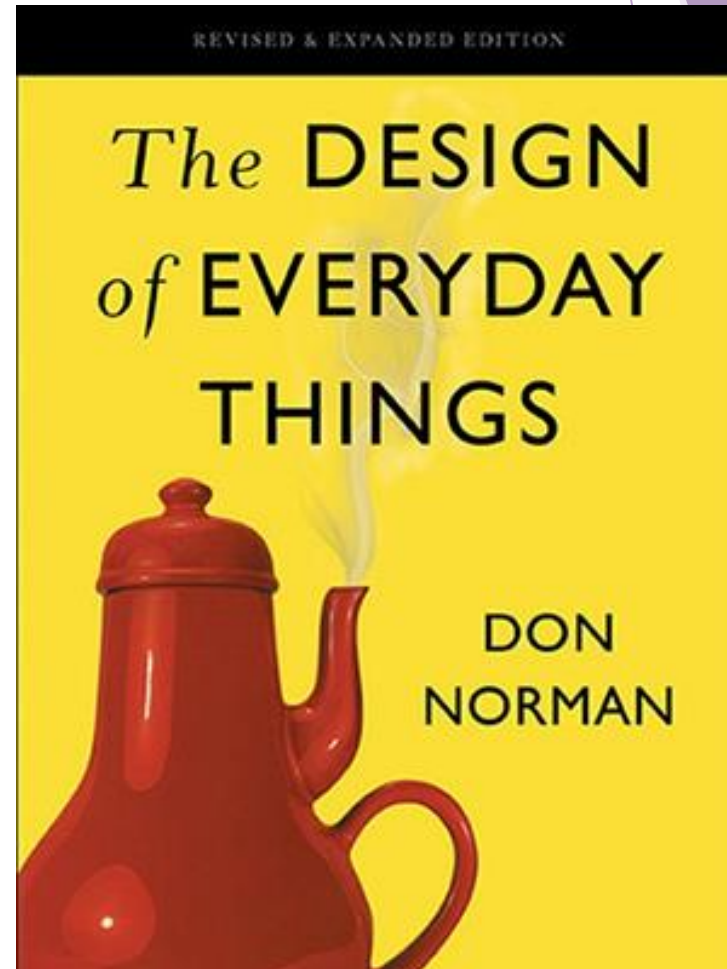
Good design



- The best design is one that needs no instructions

Design is about *communication*

- Don Norman is one of the world's most influential thinkers on design
- Worked at Apple, HP, IDEO
- “We must design for people the way they are, not the way we wish them to be”



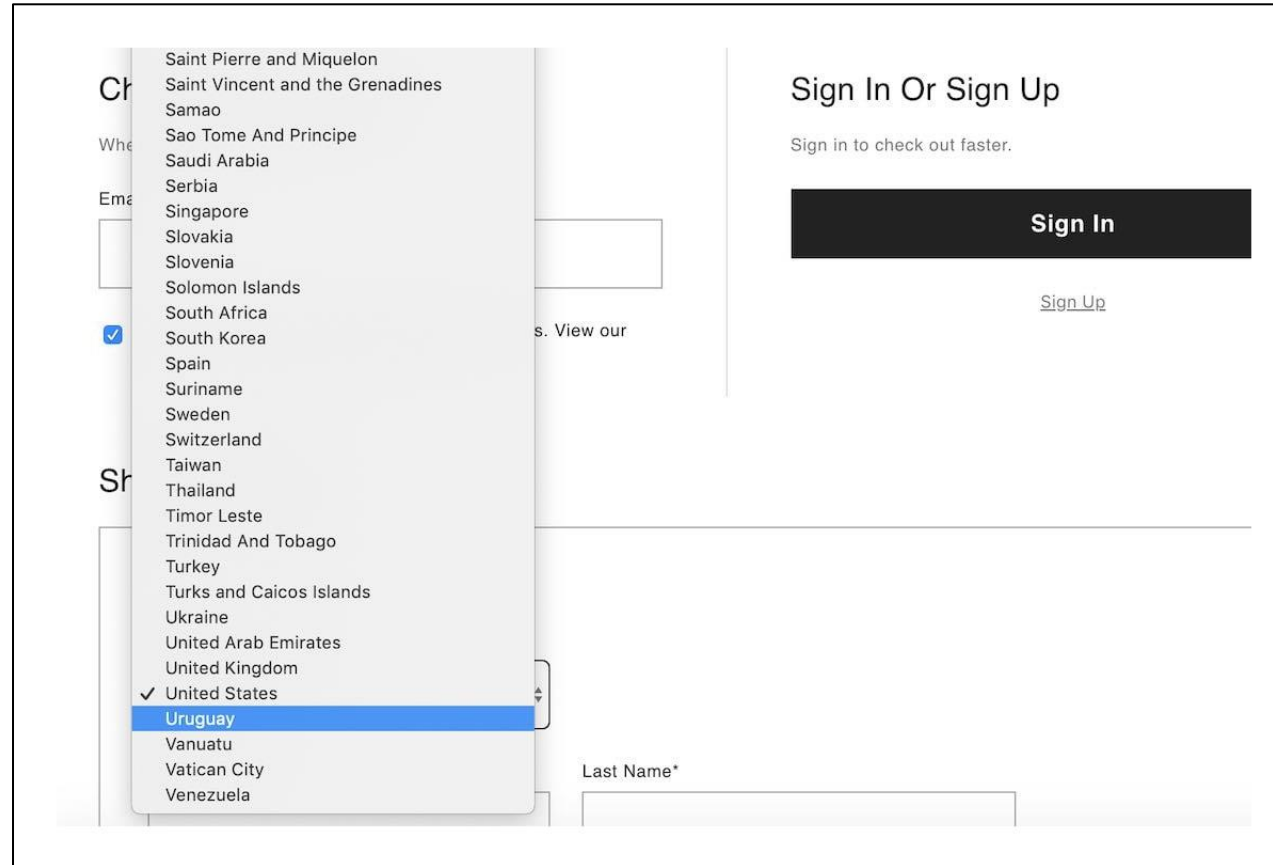
User experience (UX) design

- A **good UX design** prioritises the needs and goals of the user, making it easy for them to accomplish tasks and achieve their objectives using the product
- The interface should be aesthetically pleasing, visually appealing, and easy to navigate
- The user should feel confident and in control when using the product

User experience (UX) design

- **Bad UX design** is characterised by a disregard for the user's needs and goals
- The design may be cluttered, confusing, and challenging to navigate, causing frustration and even anger
- As a result, the user may feel lost or overwhelmed, and the design may not effectively support their tasks and goals

Bad digital design



The screenshot shows a web form with a long dropdown menu on the left and a sign-in section on the right. The dropdown menu lists 30 countries, with 'Uruguay' highlighted. The sign-in section has a 'Sign In' button and a 'Sign Up' link.

Country list (from top to bottom):

- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Samoa
- Sao Tome And Principe
- Saudi Arabia
- Serbia
- Singapore
- Slovakia
- Slovenia
- Solomon Islands
- South Africa
- South Korea
- Spain
- Suriname
- Sweden
- Switzerland
- Taiwan
- Thailand
- Timor Leste
- Trinidad And Tobago
- Turkey
- Turks and Caicos Islands
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- Uruguay**
- Vanuatu
- Vatican City
- Venezuela

Sign In Or Sign Up

Sign in to check out faster.

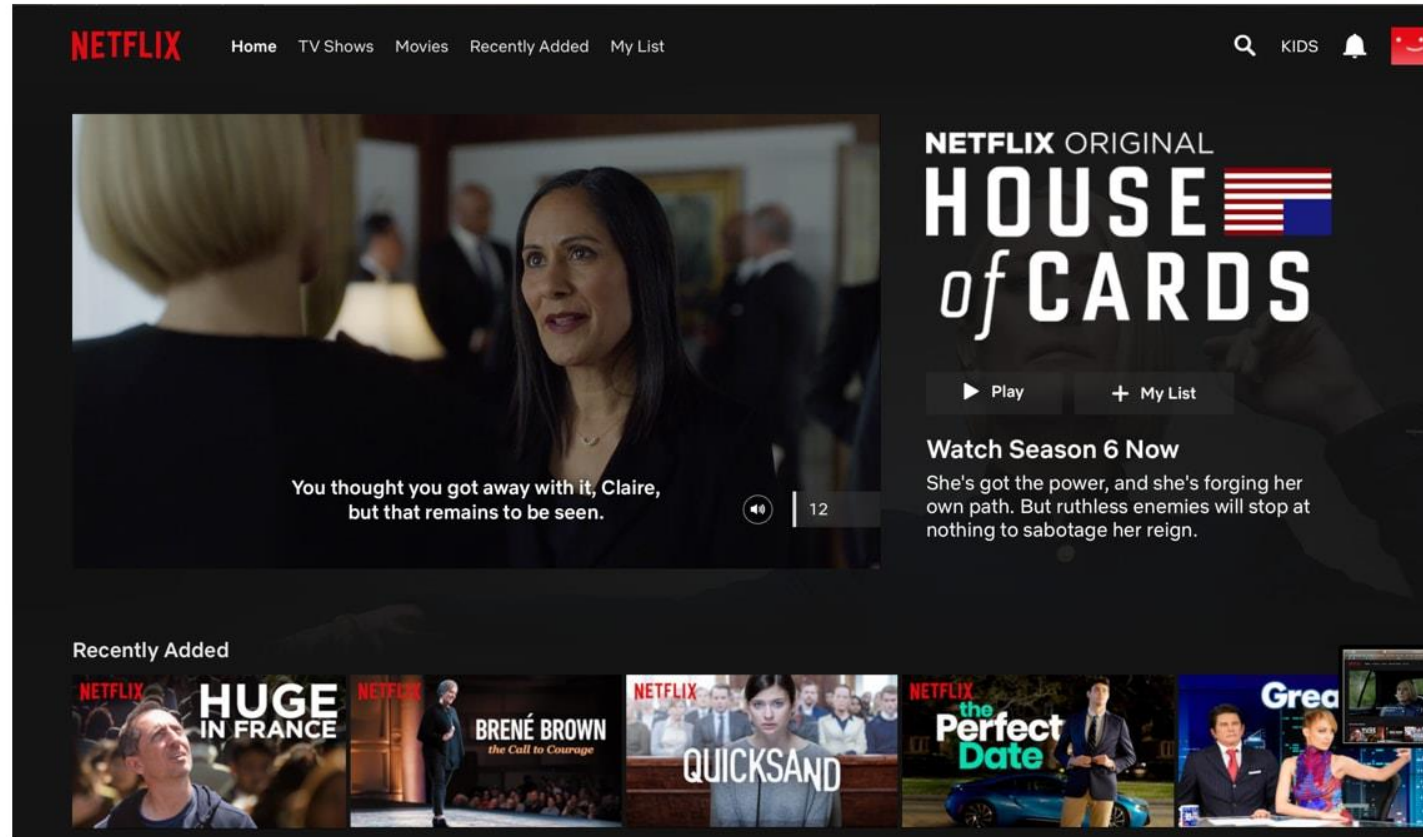
Sign In

[Sign Up](#)

Last Name*

- Super-long drop-down menus without sub-headings or filters

Bad digital design



- Netflix's hover auto-play – starts playing a trailer when you just want to read about the programme

Bad digital design



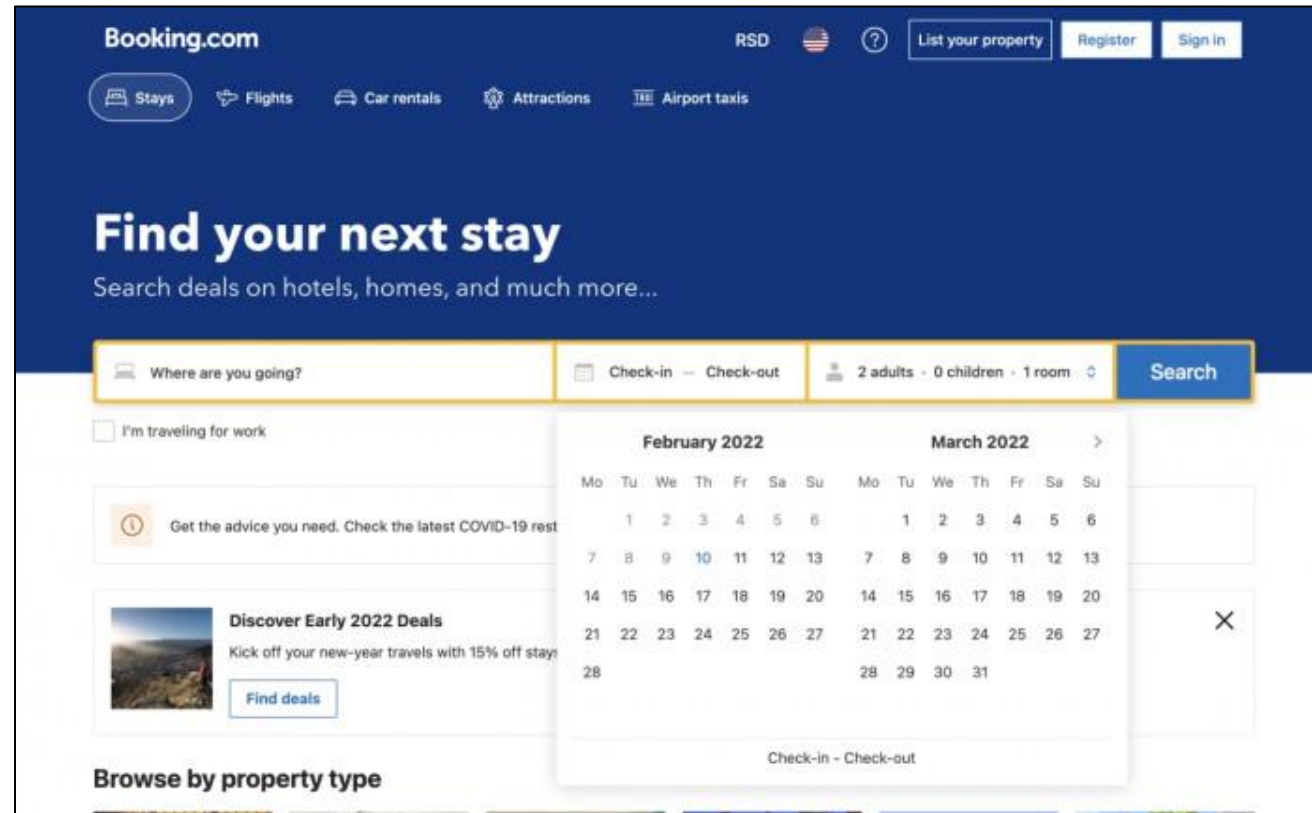
- What are my options here? What happens if I hit 'Done'? And now I've missed the photo opportunity

Bad digital design



- This is the Zara home page – where do I find anything?

Bad digital design



- Features like drop-down calendars don't work with screen reader software, making websites inaccessible to blind or partially sighted people

prototyping

The background features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark, almost black tones. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The overall composition is clean and modern, with the text 'prototyping' centered in a simple, sans-serif font.

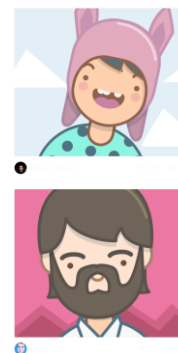
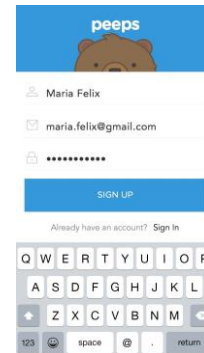
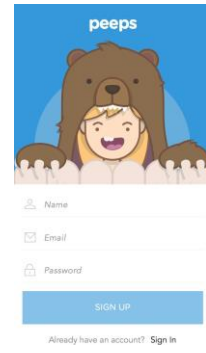
What is a prototype?

- A Prototype is an **early sample, model, or release of a product** built to test a concept or process.
- A prototype is generally used to **evaluate a new design**
- Helps build a real system
 - Find issues early
 - User / customer feedback

Prototyping examples

The background features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark, almost black tones. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The overall composition is clean and modern, with the text centered on a white background.

Marvel Prototype App



Pages for Marvel Prototype

CONFO

SUMMARY

No.	ID.	Description	Locat	Location
1	BSC-10305	I-Beam #34		Yard II
2	ITL-30007	Roof Girder		Yard II
3	KPM-11127	Cyclone #3		Main Depo
4	GGC-21206	Conveyor-small		Factory
5	PLD-06302	Metal sheet		"Free-issue"
10	DSL-43859	Epoxy		store

Page 1 2 3 4 ... 250 Next

CONFO

TRACK

ID: BSC-10305

DESC: I-Beam #34

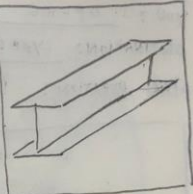
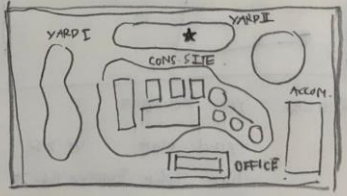
Weight 235 kg.

Manufacture: Siam Steel

Arrival: Feb 12, 2020

Status: On site

Location: Yard II

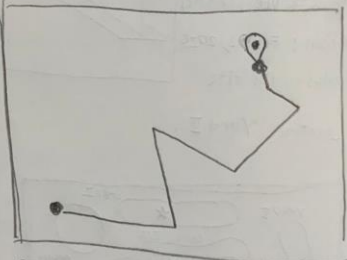
CONFO

MAP

YOU: OFFICE

DESTINATION: YARD II

APPX. DURATION: 12 min



Route: your location

Head west 40 m

Turn left toward rd. 25 10m.

Yard II

Contextual inquiry

The background of the slide features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark, almost black tones. These shapes are primarily located on the right side and bottom of the frame, creating a modern, layered aesthetic.

Requirements & Solutions

Contextual Inquiry

Talk to specific customers in the field

Interpretation Session

Interpret the data as a team to capture key issues

Work Models and
Affinity Diagramming

Consolidate data across customers for a full market view

Visioning

Redesign people's work with new technology ideas

What matters to users – characterizing what they do**New Ideas and direction****Define & Validate Concepts**

Storyboarding

Work out the details of particular tasks and roles

User Environment Design

Design system to support this new work

Paper Mock-Up Interviews

Mock up the interface using interaction patterns for testing

Interaction & Visual Design

Design and test the final look and user experience

Redesign activities and technology to provide value**Iterate the system with users**

Contextual Inquiry

Contextual Inquiry

- focused interview
- observation

Holtzblatt and Beyer

- core premise of CI is very simple
- go where the customer works
- observe the customer working
- talk to the customer about work
- results in a better understanding of your customer

What is a prototype - example

- Example: mobile phone apps
- Design process
 - Contextual inquiry
 - Modeling
 - Design
 - Evaluation

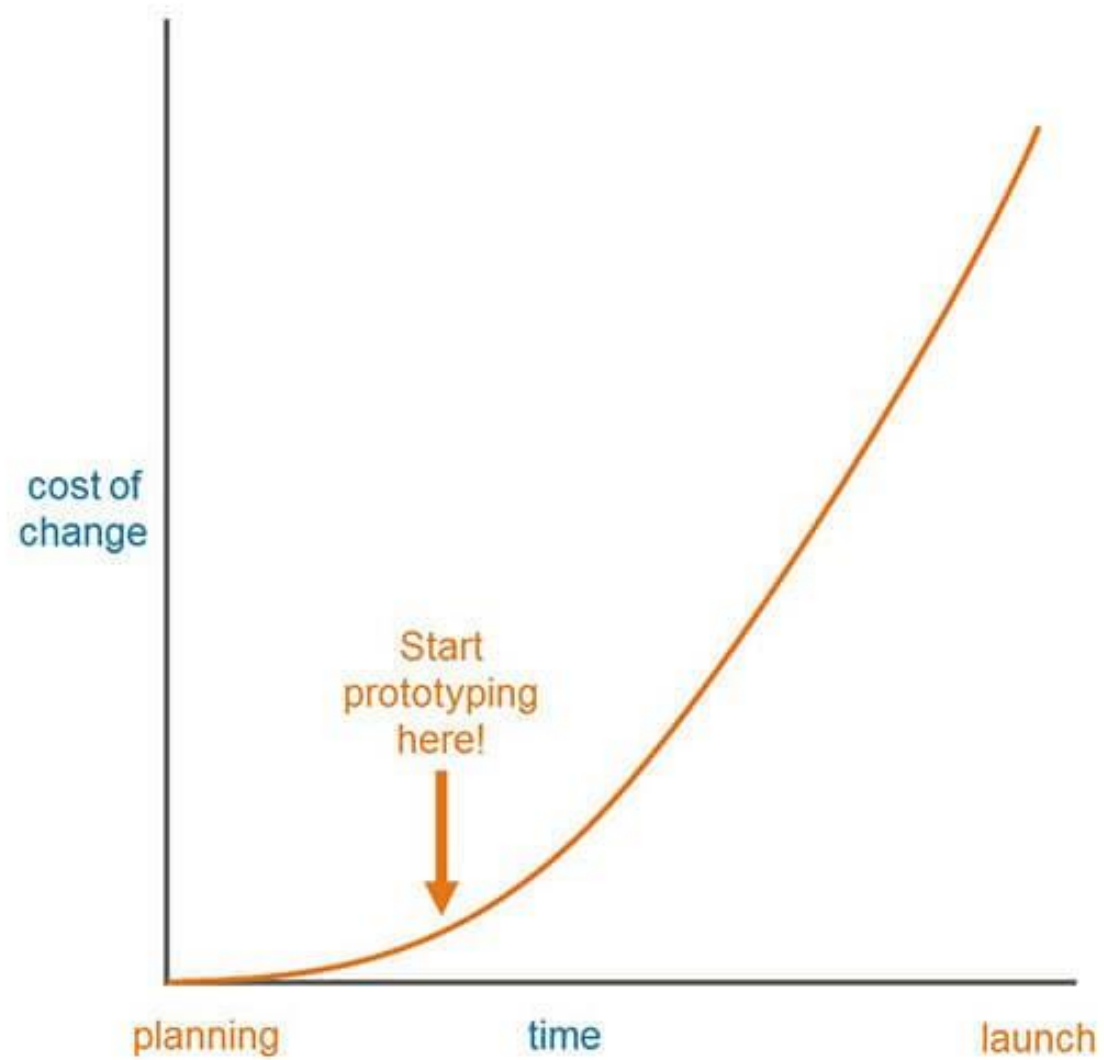
Contextual inquiry

- Ideas -> research idea
- Competition – what exists, what could be improved?
- Who needs what?
- What is your solution?
- Why is it better?

Prototyping

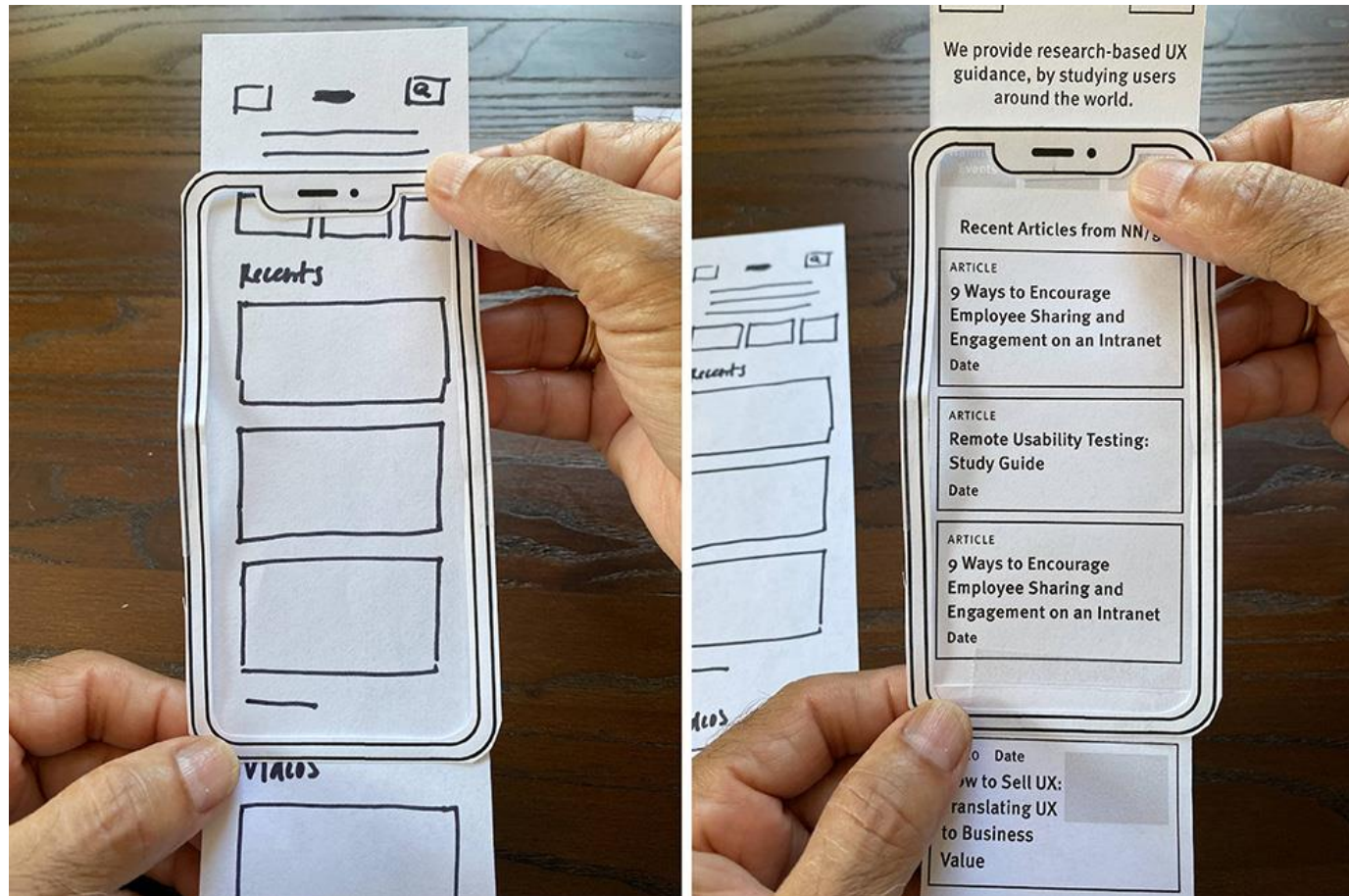
- A prototype is an early sample, model, or release of a product built to test a concept or process
- A prototype is used to evaluate a new design. Prototyping serves to provide specifications for a real, working system rather than a theoretical one
- Used in a variety of contexts, including design, electronics, and software programming, and services
- Helps to visualize a product/service for users, and get feedback

Prototyping



Types of prototypes

Sketches/paper prototypes:



Types of prototypes

Sketches/paper prototypes:

- Pros:
 - Fast and cheap
 - Disposable
 - Easy to make changes and test new iterations
 - Allows a quick overall view of the product
 - Anyone can produce them
 - Encourage design thinking (later) since prototypes are obviously not finalized

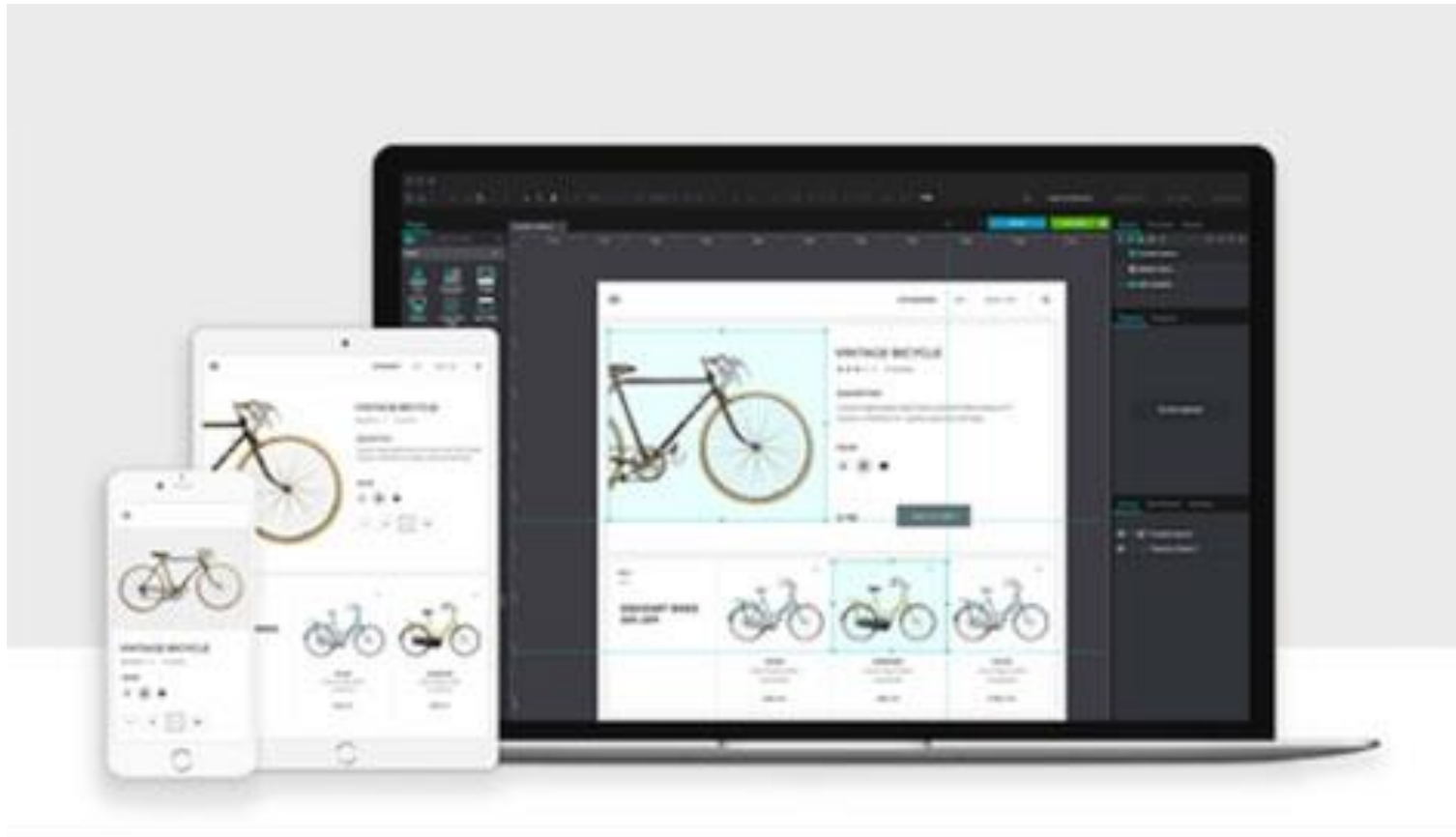
Types of prototypes

Sketches/paper prototypes:

- Cons:
 - Lack of realism, so users might have a hard time giving feedback
 - Hard to apply results from crude early versions
 - May be too basic to reflect the user experience of the finished product
 - Can oversimplify complex issues
 - Lack of interactivity deprives users of direct control
 - Users must imagine how they would use the product

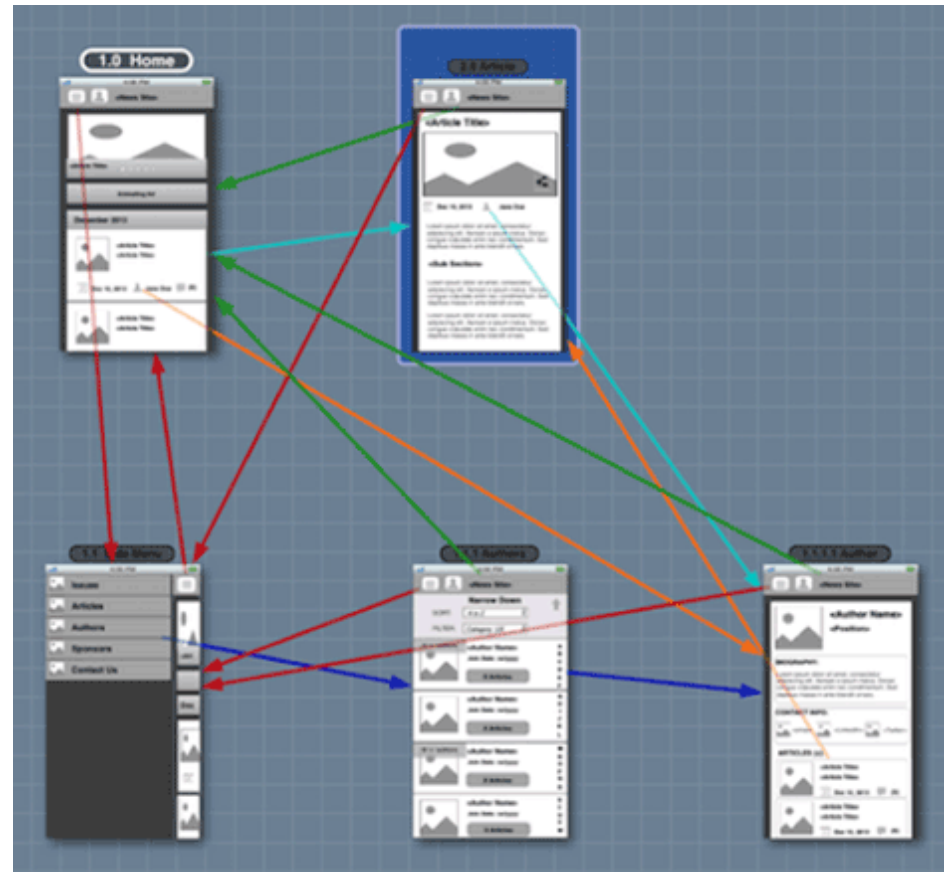
Types of prototypes

Digital prototypes:



Types of prototypes

Clickable prototypes:



Types of prototypes

Digital/clickable prototypes:

- Pros:
 - Engaging – stakeholders have the vision realized in their hands and can judge how well it matches users' needs and solves their problems
 - Testing will yield more accurate, more useful results
 - Versions closest to the final product enable you to predict how users will take to it in the real market

Types of prototypes

Digital/clickable prototypes:

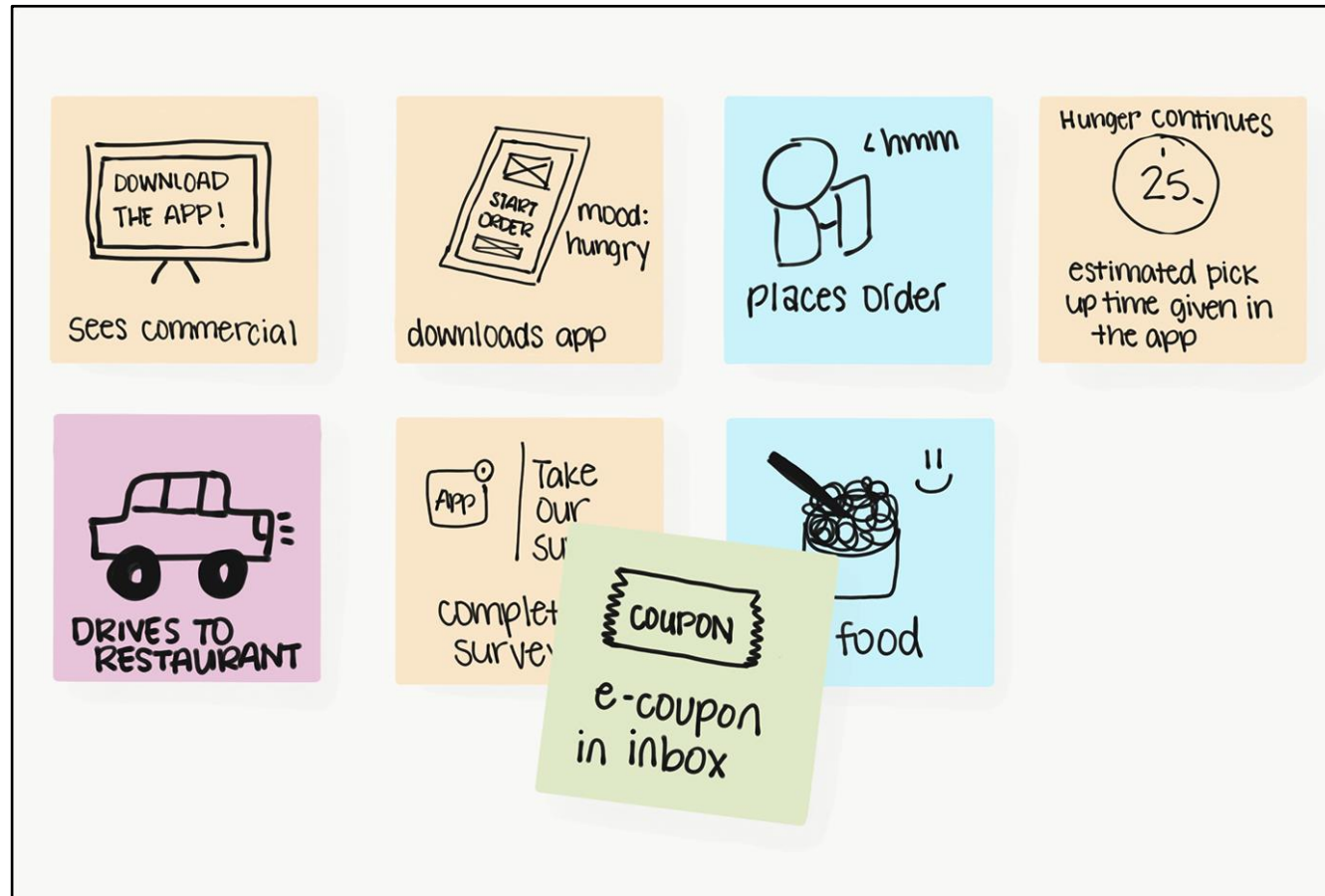
- Cons:
 - Takes more time/costlier to create
 - Users are more likely to comment on superficial details than on content
 - After hours of work, you the designer are likely to dislike the idea of making changes, which can take considerable time
 - Users may mistake the prototype for the finished product

Service prototypes

- Storyboarding – the customer/user journey through your service
- Service advertisement – a visualization of your service
- Video prototyping – a film illustrating how your service could look
- Desktop walkthrough – small-scale representations of service concepts and part of the service systems and processing by using handcraft materials and toys
- Roleplaying – acting out the service with colleagues and/or potential users
- Experience prototyping – allowing potential users to feel what a service could be like
- Live service prototypes – pilot services to test out the idea in practice

Service prototypes

E.g. Storyboarding:



Service prototypes

E.g. Desktop walkthrough:



Usability testing

- Watching users attempt activities is better than interviewing them about their behavior
- You will get a more truthful and accurate understanding of how they will try to use your product/service

Usability testing

Why Usability Test?



Uncover Problems



Discover Opportunities



Learn About Users

Top Tips

- **Recruit realistic participants** — people who would actually perform these tasks in real life.
- **Use 5-8 participants** for qualitative usability testing.
- **Avoid influencing participants** during testing. The easiest way to do this is stay quiet during the study.
- **Ask open-ended, neutral questions** when you speak to the participant.

<https://nngroup.com/articles/usability-testing-101>

Nielsen Norman Group **NN/g**

Usability testing

The screenshot displays the Chiang Mai University website interface. At the top, there is a navigation bar with links for 'Curricular', 'Studying at CMU', 'Faculties and Departments', and language options 'TH', 'EN', 'CN', along with a search icon. Below this is a dark blue header containing the university's logo and name in Thai and English, and navigation links for 'NEWS', 'ABOUT CMU', and 'CONTACT'. The main content area features a large banner for the 66th anniversary with Thai text: 'ยินดีต้อนรับนักศึกษา สหส 66 สู่วังม่วง มหาวิทยาลัยเชียงใหม่'. The banner includes images of students and the CMU logo. To the right of the banner are four small image-based links: 'Current Students', 'Parents', 'Alumni', and 'Staff'. Below these are three dark blue buttons: 'Scholarships', 'Academic Calendar', and 'Tuition & Fees'. A section titled 'Research, Innovation and Outstanding News' follows, containing three featured articles with images and titles in Thai and English.

Curricular | Studying at CMU | Faculties and Departments | TH EN CN 🔍

มหาวิทยาลัยเชียงใหม่ CHIANG MAI UNIVERSITY CMU CHIANG MAI UNIVERSITY

NEWS ABOUT CMU CONTACT

ยินดีต้อนรับนักศึกษา สหส 66
สู่วังม่วง มหาวิทยาลัยเชียงใหม่

Current Students Parents
Alumni Staff

Scholarships
Academic Calendar
Tuition & Fees

Research, Innovation and Outstanding News

CHIANG MAI

วิทยาลัยการศึกษาดูดชีวิต มหาวิทยาลัยเชียงใหม่
ได้รับรางวัลชนะเลิศ

Journal Animals
ISI / Scopus Q1
คณะสัตวแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่
วัดระดับสถานะสุขภาพของช้างเอเชียป่วยและช้างเอเชียที่แข็งแรงในสวนสัตว์ในประเทศไทย
เรื่อง "Measures of Oxidative Status Markers in Relation to Age, Sex, and Season in Sick and Healthy Captive Asian Elephants in Thailand"



Thank you!
any questions?