Week 2: Scope

PUCD 2125 Section D, Spring 2017

product as functionality | product as information

Concrete

surface

skeleton

structure

scope

strategy

Abstract

Strategy

product as functionality | product as information

strategy

User Needs

Product Objectives
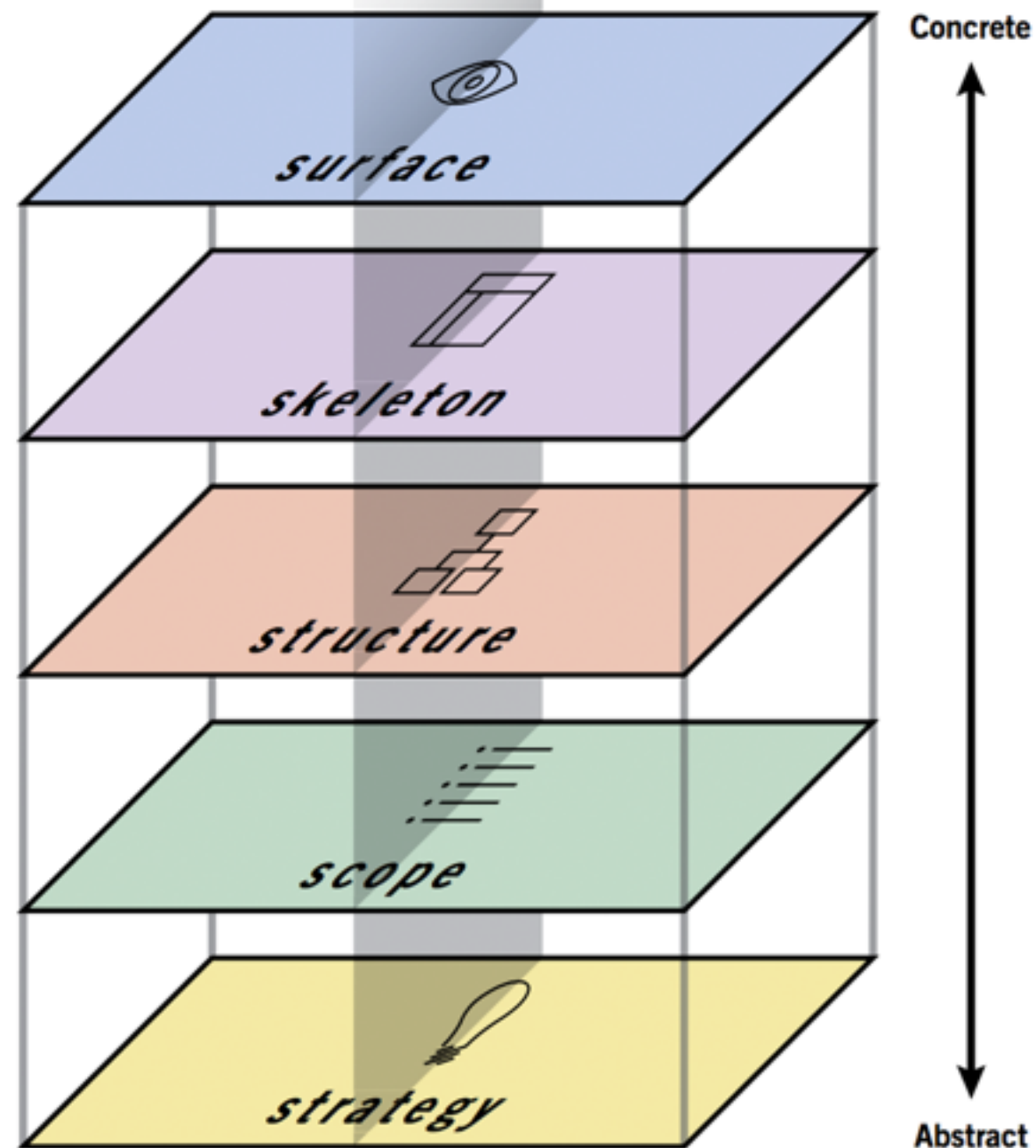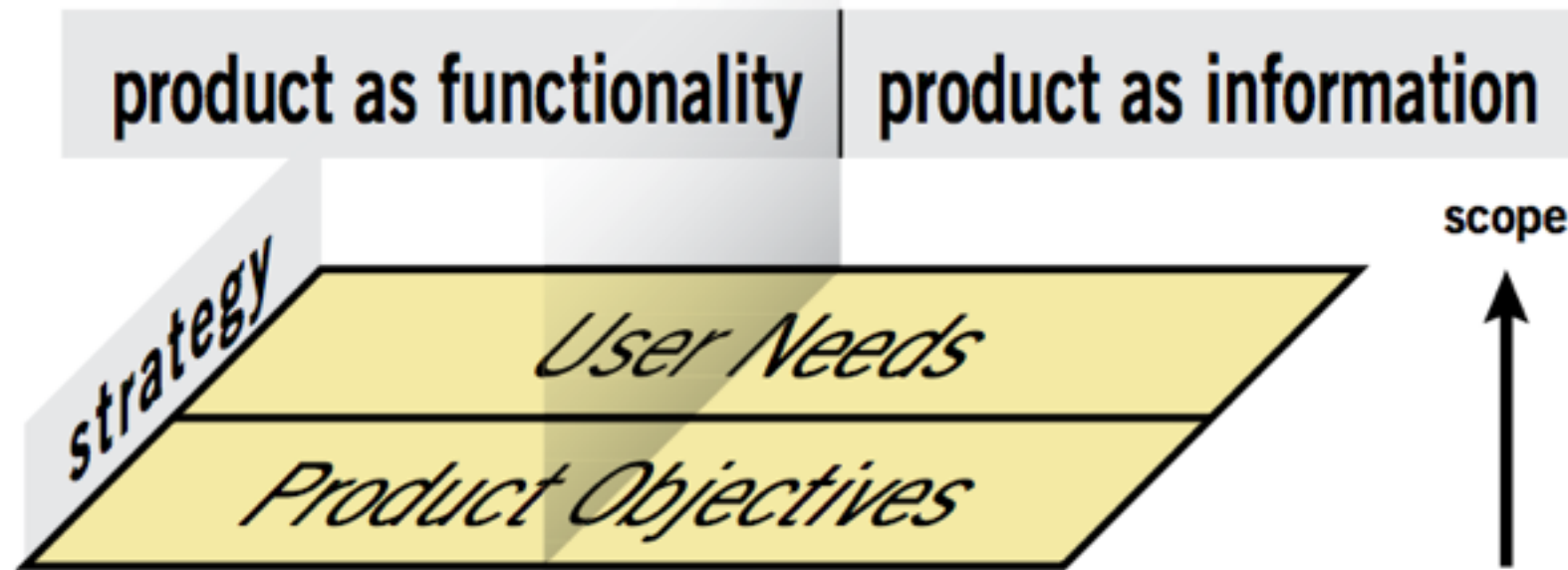
scope

Why are we designing and building something?

Who are we designing and building something for, what are their needs?

Scope

What are we making?

What are we **not** making?

Scope creep

Functionality & Content

product as functionality | product as information

scope

Functional Specifications | Content Requirements
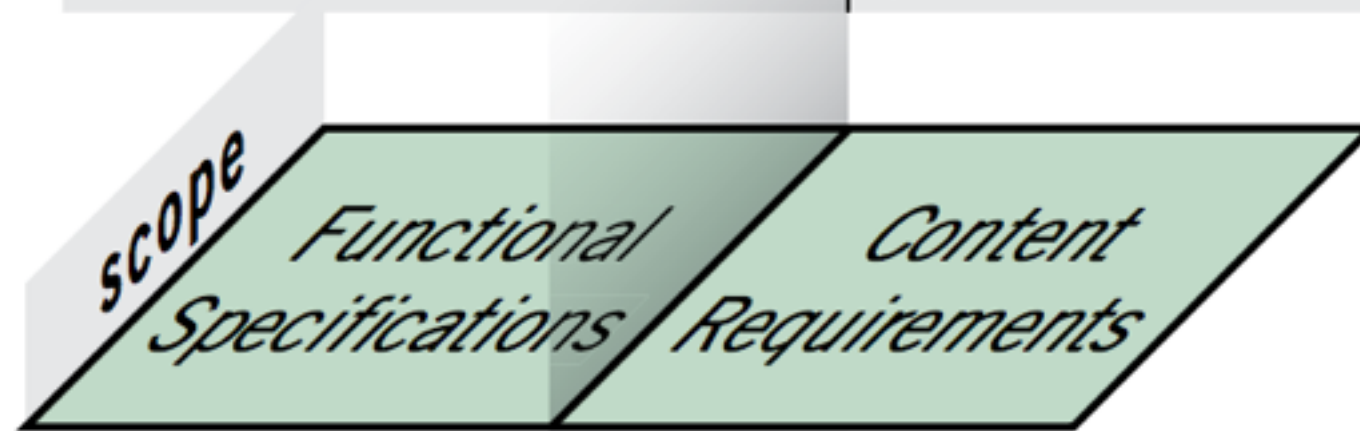
structure

strategy

What do our users need to be able to do?

What text, images, videos, etc. are we going to need?

Where do requirement come from?

- Research, precedents, or existing patterns.

- Stakeholders or decision makers.

- We make our own hypotheses (which should then be tested with real users).

- Talk to our intended audiences.

Users sometimes think they know what they want. They're sometimes right.

…but users sometimes don't know what they *really* want.

How the customer explainened it. | How the project leader understood it. | How the analyst designed it. | How the programmer wrote it. | What the customer really wanted.
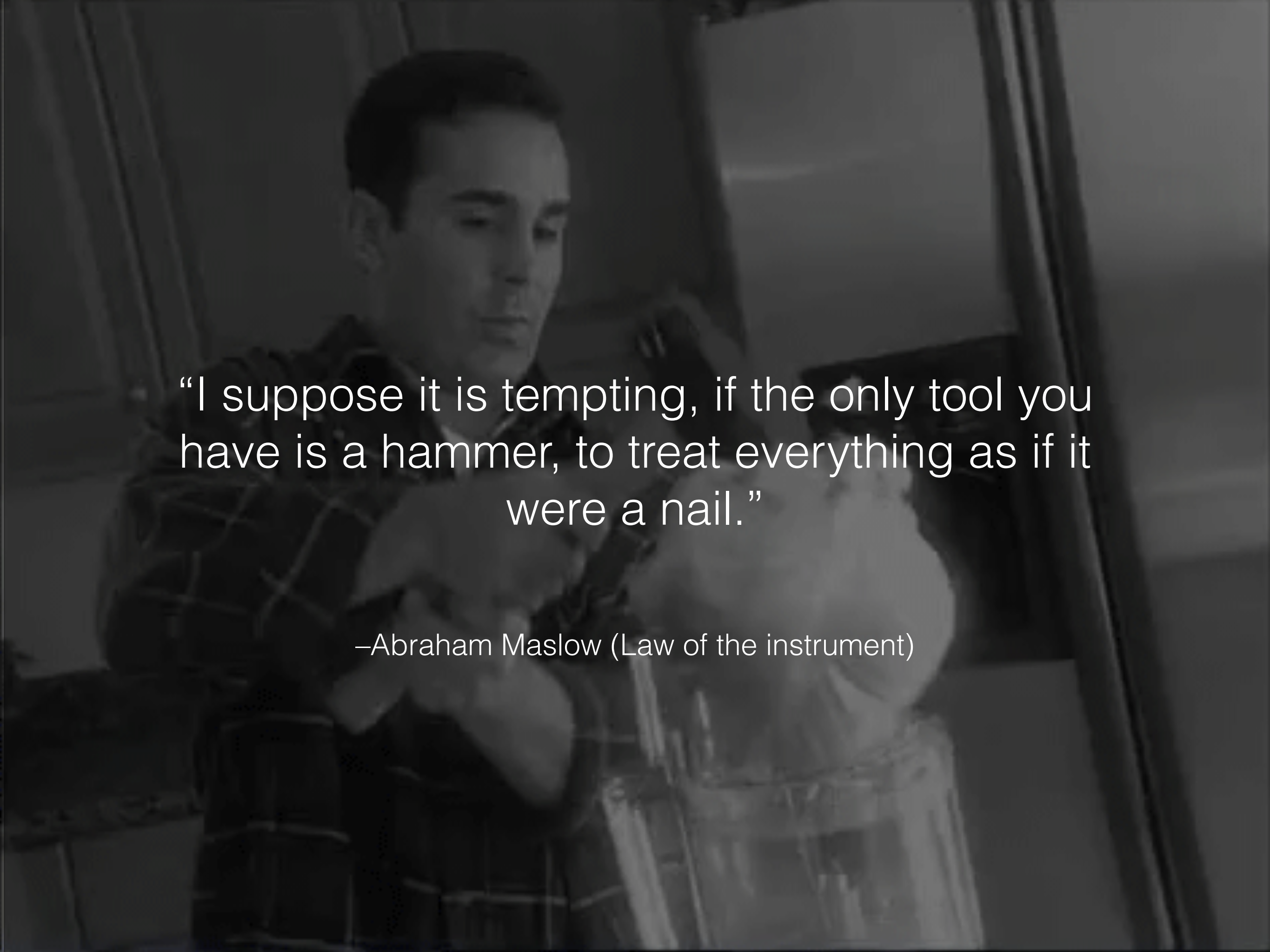
- Might want an impossible solution.

- Might be treating a symptom rather than a root cause.

- It's easy to be overly reliant on a known approach or pattern.

"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail."

–Abraham Maslow (Law of the instrument)

"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail."

–Abraham Maslow (Law of the instrument)

…and sometimes users have no f*ing idea want they want.

"If I had asked people what they wanted, they would have said faster horses."

–Henry Ford

Focus Groups

~~Focus Groups~~

What do requirements look like?

Scenarios

Scenarios

A short narrative about how a **persona** might go about trying to fulfill one of those user needs.

As a [user role],
I want to [action],
so I can [motivation].

As a **potential rider**,
I want to **see cars that are nearby**,
so I can be **reassured pickup time will be quick**.

User Stories

A short(er) narrative about how a **persona** might go about trying to fulfill one of those user needs.

Potential rider can see nearby cars on map.

- Potential rider can see their current location marked on map.

- Potential rider can see their pickup location marked on the map, defaulted to the closest street to their current location.

- Potential rider can drag map to adjust pickup location.

- Potential rider can see nearby cars on map.

- Potential rider can see nearby cars moving in simulated realtime.

- Potential rider can see their estimated pickup time (in minutes, rounded down)

- Potential rider can press the "Set Pickup Time" button to initiate a pickup.
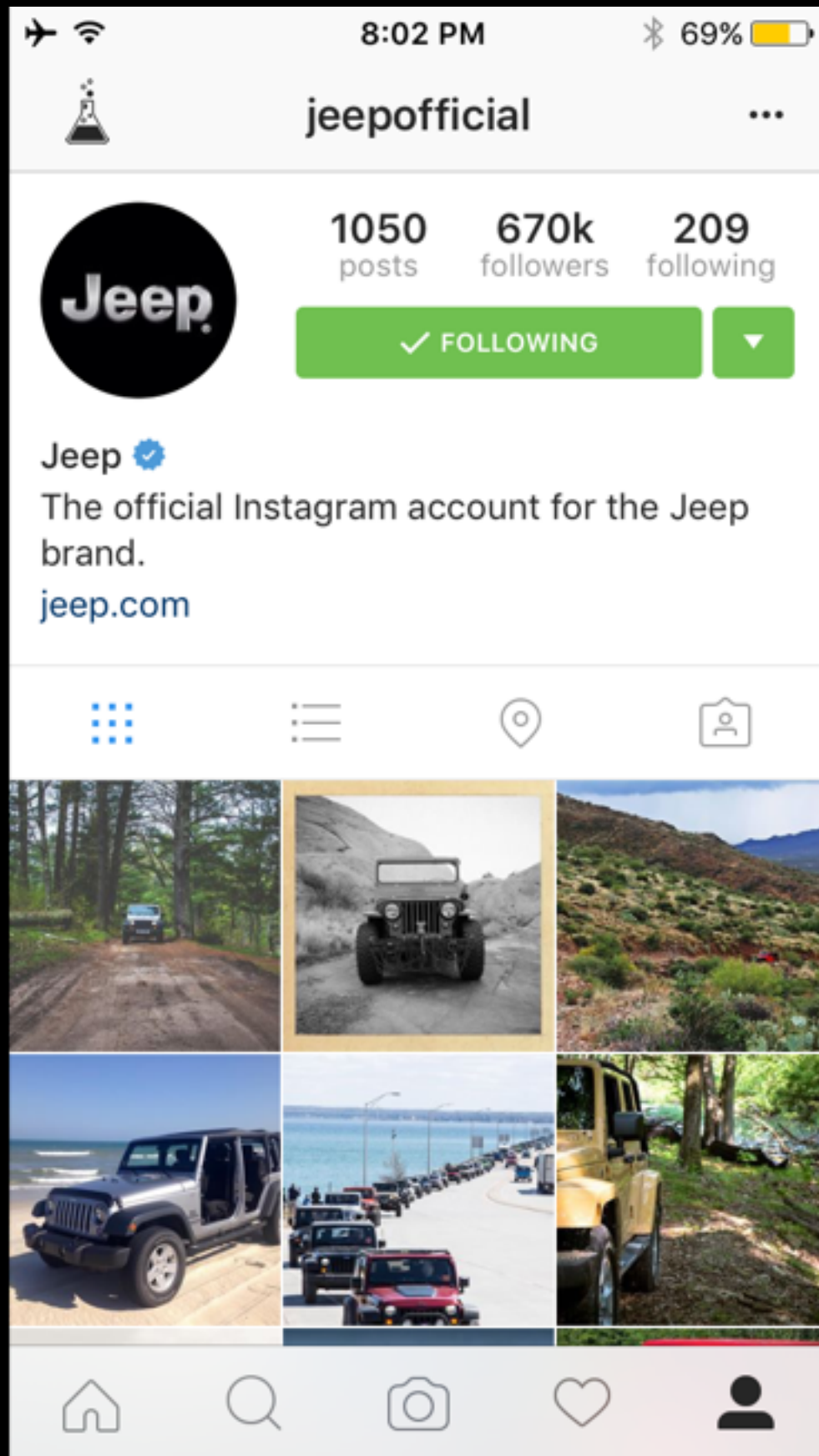
Functional Specifications

- Accurate rather than exhaustive

- "Living" documents– likely to evolve as project progresses.

- Become more valuable with more people involved in the project.

- "Product Roadmap"– what we're creating now, and what might come later.

- Be positive: describe what a user CAN do, rather than what they can't do.

- Be specific.

- Avoid being subjective.

Content Requirements

AUDIO/VIDEO

Nel secolo scorso, il grammofono è stato il formato di registrazione dominante e a tutt'oggi rimane un medium di nicchia. L'introduzione della cassetta a nastro magnetico ha permesso alla musica di diventare portatile aprendo al mercato la tecnologia della registrazione. Il primo grande formato commerciale di registrazione video è stato il nastro Quadruplex a due pollici della Ampex, ma la Sony ha compattato per prima questa tecnologia per il mercato consumer con il videoregistratore CV-2000.
La tecnologia analogica è stata sostituita da quella digitale non appena i dischi a lettura laser ottico sono subentrati al nastro magnetico.
I cd potevano essere ripetutamente copiati senza compromettere la qualità e non presentavano nessuno dei precedenti svantaggi come la deformazione e la distorsione. La creazione della Tv ad alta definizione ha generato un nuovo formato che aveva la capacità di sostenere una più elevata velocità di trasmissione dei dati. Sony, con la sua tecnologia Blu-Ray, ha affrontato nuovamente un'aspra guerra dei formati contro l'Hd-Dvd della Toshiba, uscendone, alla fine, vincitrice.

PESO IN PROPORZIONE DEI VARI SUPPORTI

IPOD CLASSIC
120GB

HARD DISK
500GB

TEMPO DI DOWNLOAD SU BANDA LARGA A 5MBIT

LP IN VINILE — 1950
AUDIOCASSETTA — 1955 / 1960
STEREO8 — 1965 / 1970
COMPACT DISC — 1975 / 1980 / 1985
SONY MINIDISC — 1990 / 1995
APPLE IPOD — 2000 / 2005

ESCE IL FORMATO MP3
LANCIO DI NAPSTER
NASCE ITUNES STORE
ITUNES È IL NEGOZIO DI MUSICA PIÙ GRANDE DEL MONDO

RISOLUZIONE VIDEO

SONY CV-2000 — 1970
BETAMAX — 1975
VHS — 1980
LASERDISC — 1985 / 1990
DVD — 1995 / 2000
BLU-RAY — 2005

100 LINEE / 250 LINEE / 240 LINEE / 420 LINEE / 576 LINEE / 1080 LINEE

TEMPO DI RIPRODUZIONE IN MINUTI

MAGNETICA
OTTICA
A STATO SOLIDO

MEMORIA

L'invenzione dei computer ci ha permesso di gestire immense quantità di dati ma ci ha anche creato il problema del loro salvataggio e trasporto. Al momento l'innovazione più consistente è arrivata dalle flash memory ampiamente impiegate in fotocamere e telefonini. Lo sviluppo della tecnologia dei circuiti integrati ha permesso a questi formati di crescere in maniera esponenziale quanto a capacità, senza cambiare format o misura.

TEMPI DI TRASFERIMENTO

FILE MUSICALE DA 5MB
VELOCITÀ MASSIMA DI LETTURA
FILE VIDEO DA 1GB

5.25" FLOPPY DISK — 0.5 MBIT/S
3.5" FLOPPY DISK — 0.5 MBIT/S
3.5" LS SUPERDISK — 5.3 MBIT/S
COMPACT DISC — 64.7 MBIT/S
IOMEGA ZIP DISK — 8 MBIT/S

COMPACT FLASH — 160 MBIT/S
SMART MEDIA — 50 MBIT/S
DVD — 232 MBIT/S
SECURE DIGITAL — 160 MBIT/S
BLU-RAY — 432 MBIT/S

- Our content inventory: what text, images, videos, etc. will we need.

- If we're serving multiple audiences, will each audience need different content?

- Focus on the **purpose** of the content rather than the **format** of the content (for now).

Prioritizing Requirements

Is this proposed feature or content helping to fulfill my strategic objectives or audience needs?

Feasibility?

- Is it technologically possible?

- How much time do have? Can some of these requirements be postponed (for now).

- What are the implications of a feature in relation to other features?

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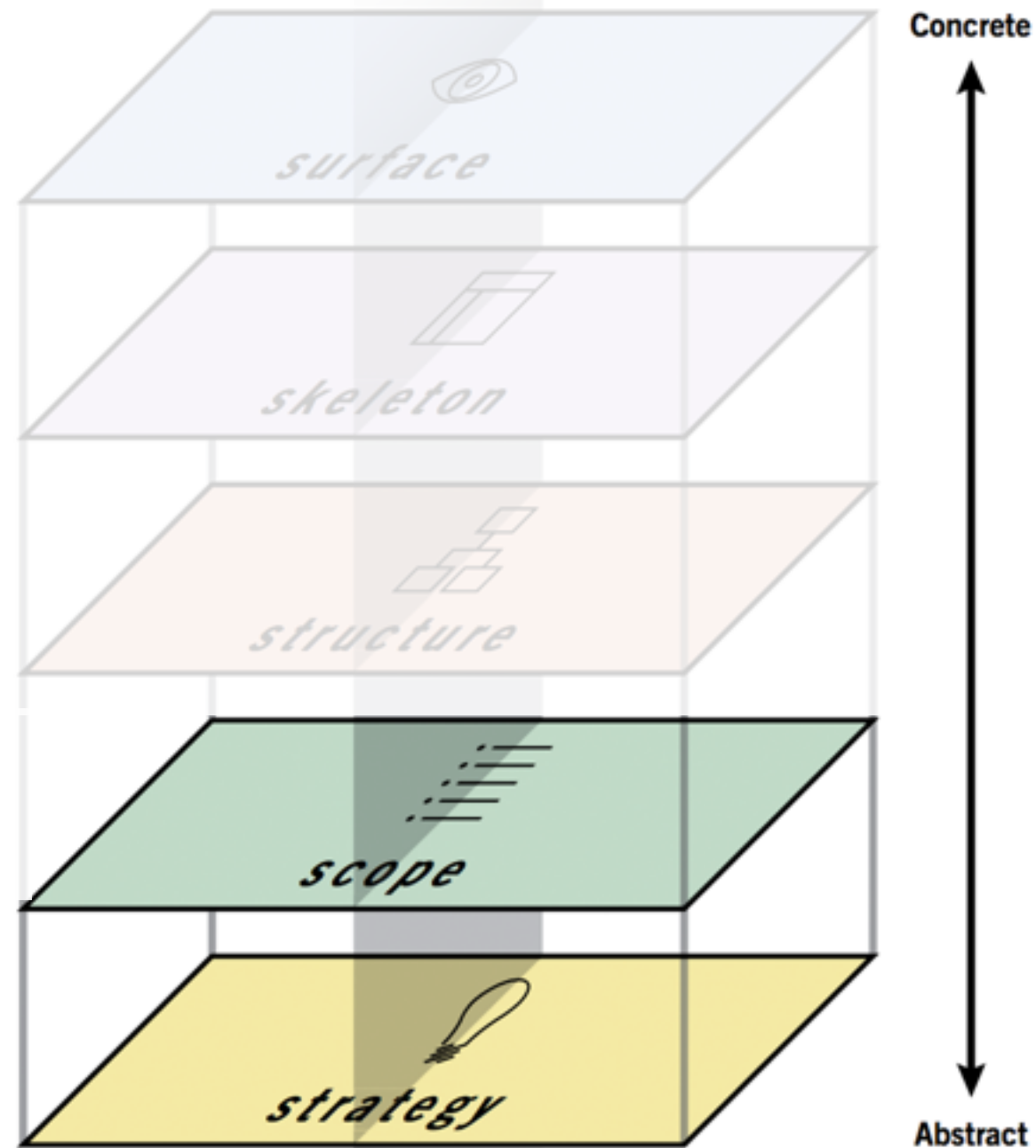
Exercise:

- Pick a website or app that you use somewhat regularly

- Outline the site/app's *Objectives*

- Outline the site/app's *Audience Needs*

- Outline the site/app's *Functional Requirements*

- Outline the site/app's *Content Requirements*

For Tuesday:

- Read: The Elements of User Experience, Chapters 5-6.

- Download the software FreeMind

- Keep working on Project 1

  - Figure out your Content Requirements

  - Figure out your Functional Requirements

  - Start designing and building your experience (we'll review progress next Thursday).