(What is there to design in an interactive product?)

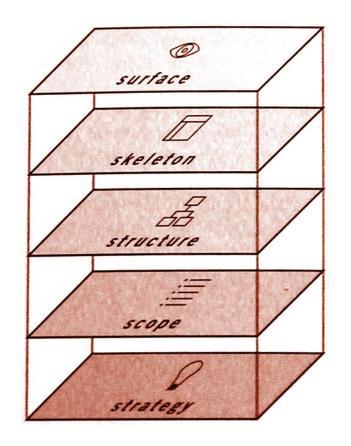
ID 405: Human-Computer Interaction Spring 2015

Venkatesh Rajamanickam (@venkatrajam) venkatra@iitb.ac.in http://info-design-lab.github.io/ID405-HCI/

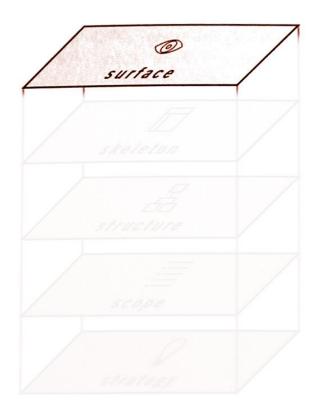
Elements of User Experience



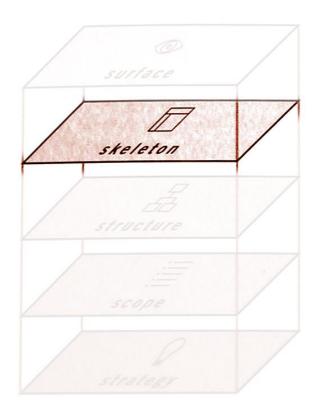
Jesse James Garrett,
The Elements of User Experience
New Riders (2003)
Second edition (2010)
http://www.jjg.net/elements/



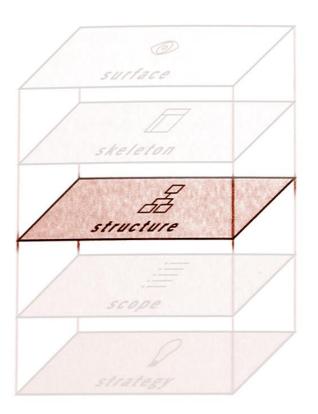
- Surface Plane
 - Text
 - Images
 - Look



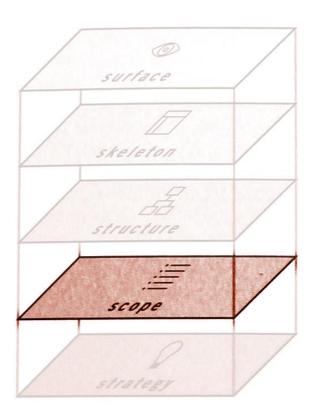
- Surface Plane
- Skeleton Plane
 - Layouts, placement, arrangement
 - Interface
 - Widgets
 - Navigation
 - Feel



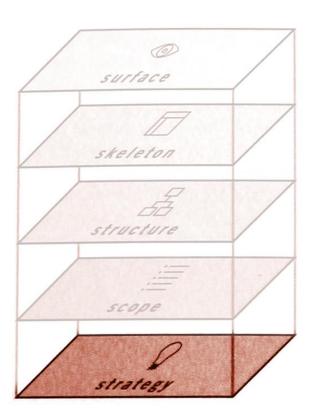
- Surface Plane
- Skeleton Plane
- Structure Plane
 - Categories
 - Hierarchy
 - Conceptual model



- Surface Plane
- Skeleton Plane
- Structure Plane
- Scope Plane
 - Features, functions
 - Services, facilities
 - Content



- Surface Plane
- Skeleton Plane
- Structure Plane
- Scope Plane
- Strategy Plane
 - User goals
 - Business goals



User goals, business goals

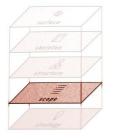
suisce | | suisce | suisce

Strategy

- Sell books
- Be the place to find books
- Encourage return customers
- Sell other non-touch-and-feel goods
- Assimilate competition

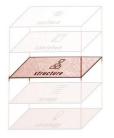


Features, functions, services, facilities, content

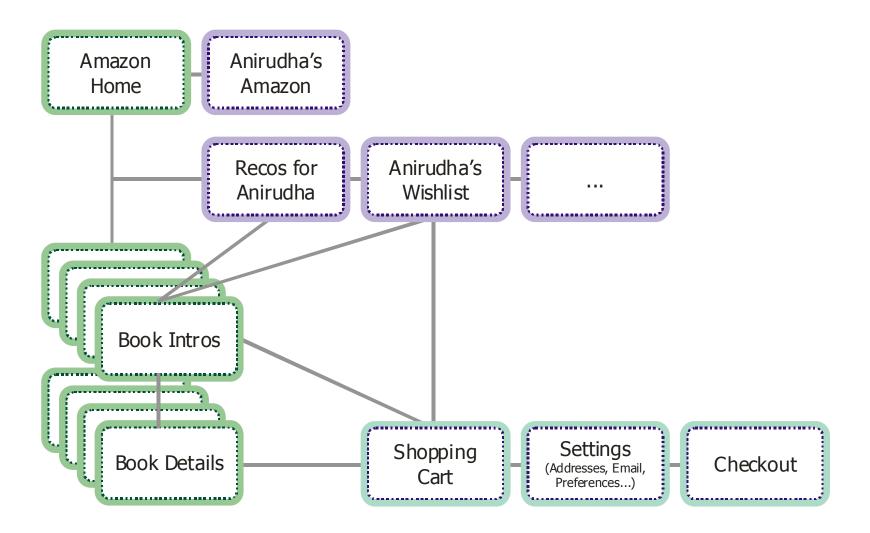


- Shopping cart
 - With gift wrap
 - Deliver world wide
- Book reviews
 - Review ratings
 - Book lists
- Cross reference books
- Remember addresses
- Recommendations
- Wish list and promos
- Second-hand books
- CDs, DVDs, Segway
- Partner programs

Categories, hierarchy, conceptual model



Structure





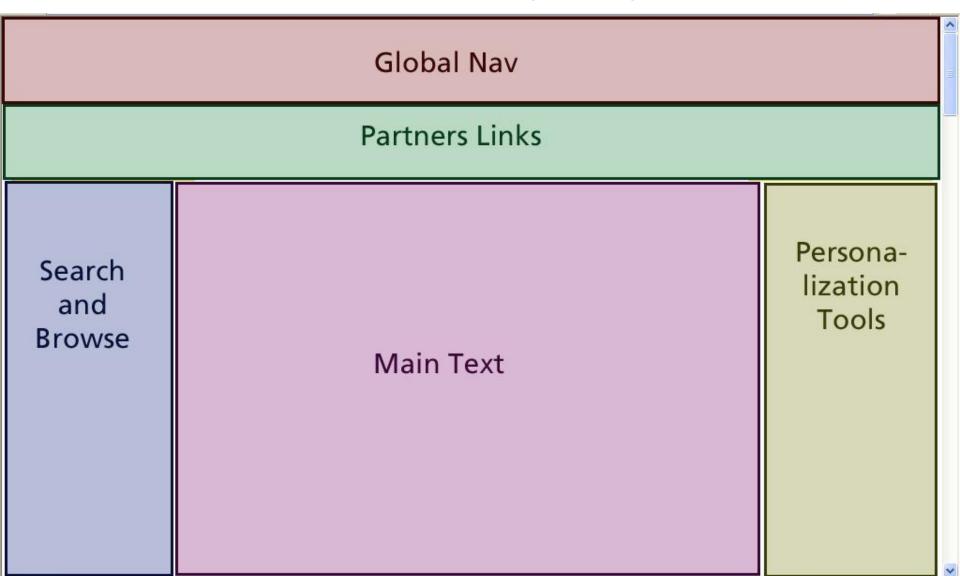
Skeleton

🍯 (1 item remaining) Downloading picture http://images.amazon.com/images/P/0767812158.01.THUMBZZZ.jpg...

Layouts, placement, arrangement, interface, widgets, navigation, feel

.....

Internet





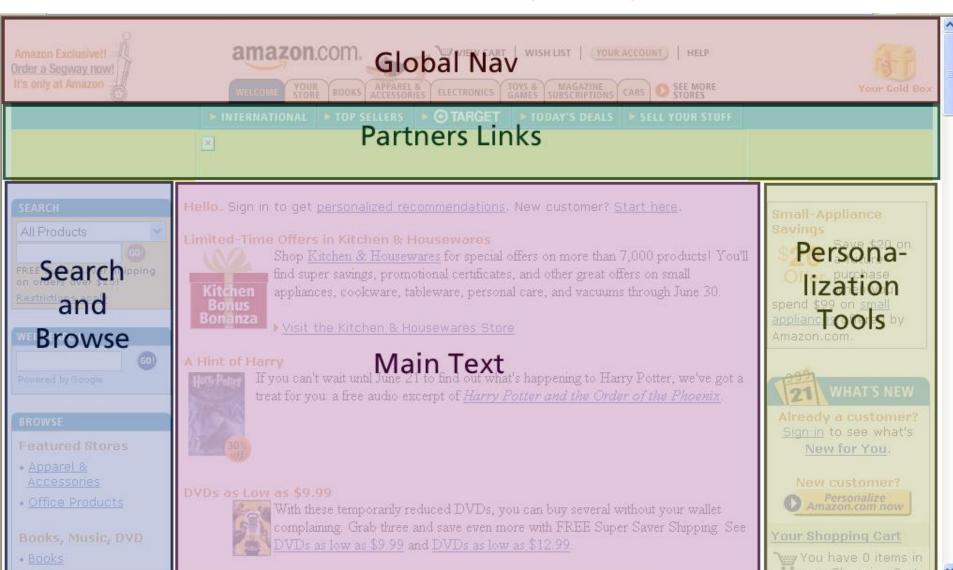
Skeleton

🍯 (1 item remaining) Downloading picture http://images.amazon.com/images/P/0767812158.01.THUMBZZZ.jpg...

Layouts, placement, arrangement, interface, widgets, navigation, feel

.....

Internet





Surface

🥙 (1 item remaining) Downloading picture http://images.amazon.com/images/P/0767812158.01.THUMBZZZ.jpg...

DUD

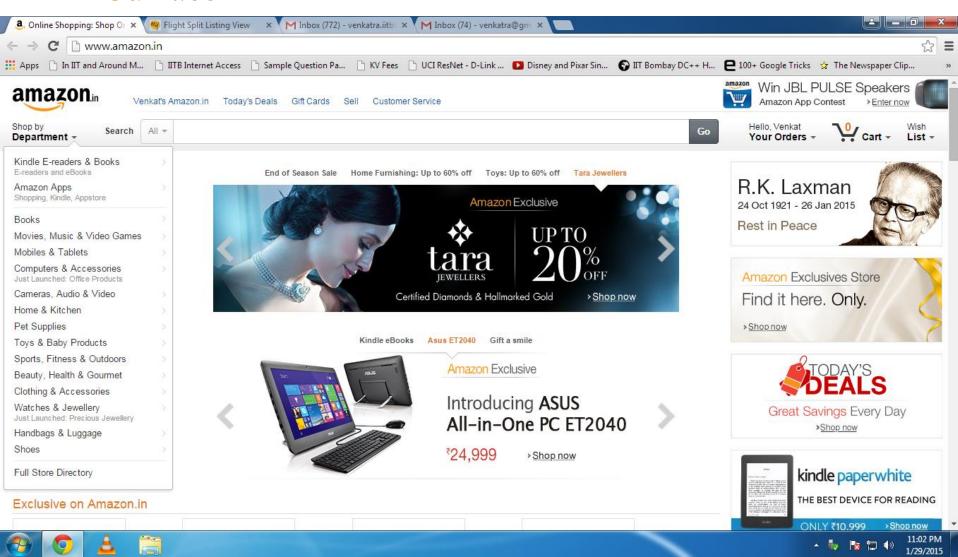


.....

Internet

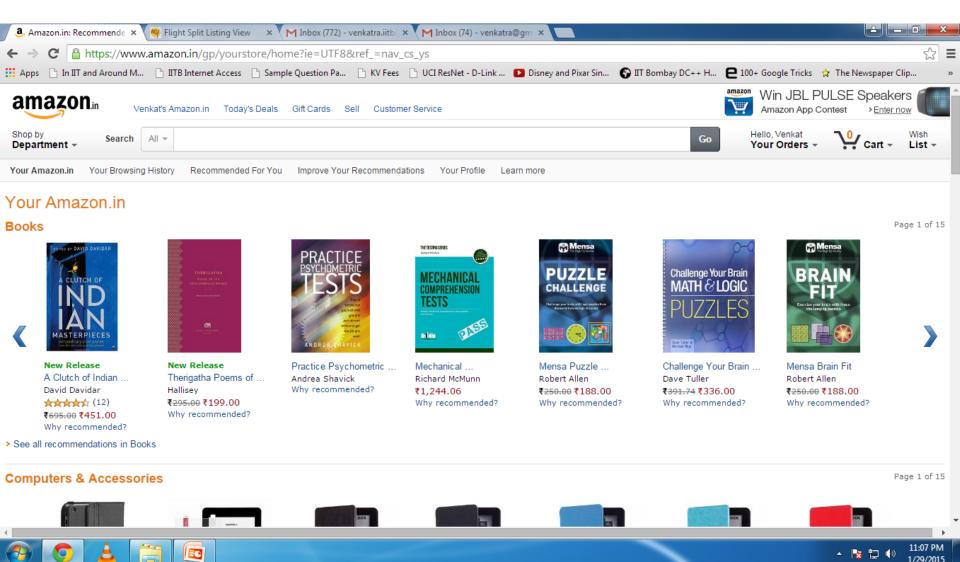


Surface



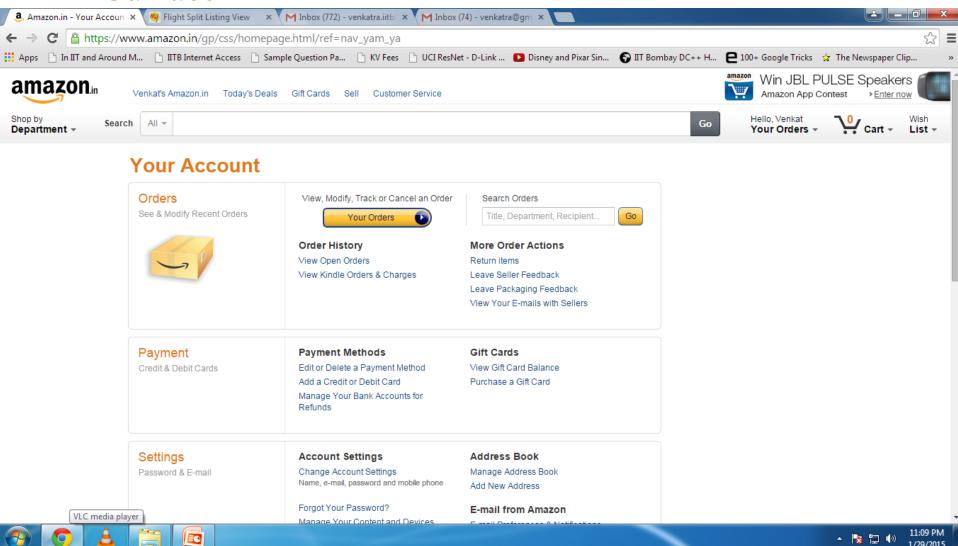


Surface

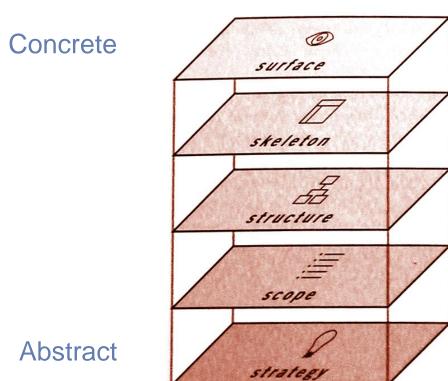




Surface

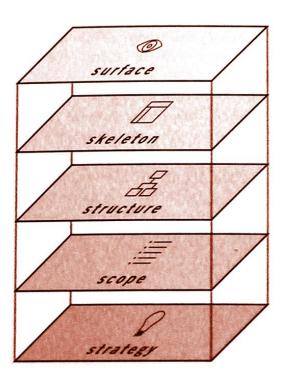


Elements of User Experience



Tool or Medium?

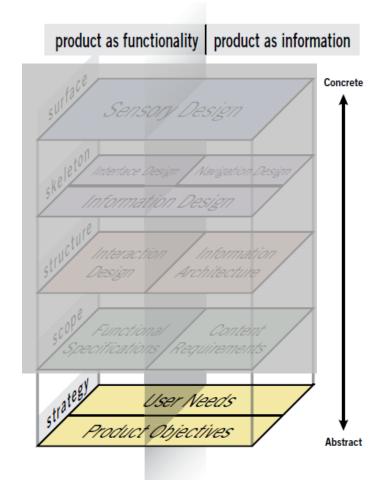
- Functionality
 - Tool
 - Automation
 - Productivity
 - Synthesis
 - Creativity



- Information
 - Medium
 - Hypertext
 - Publishing
 - Communication
 - Decision making

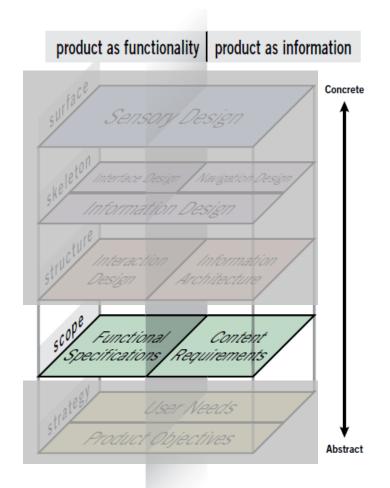
Strategy

- User needs
 - User goals
 - Expressed + latent needs
- Product objectives
 - Business goals
 - Brand strategy
- Why are we making this?



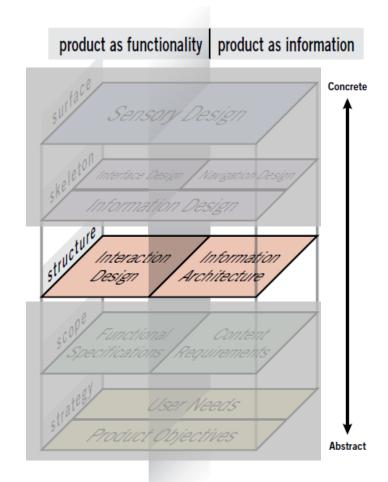
Scope

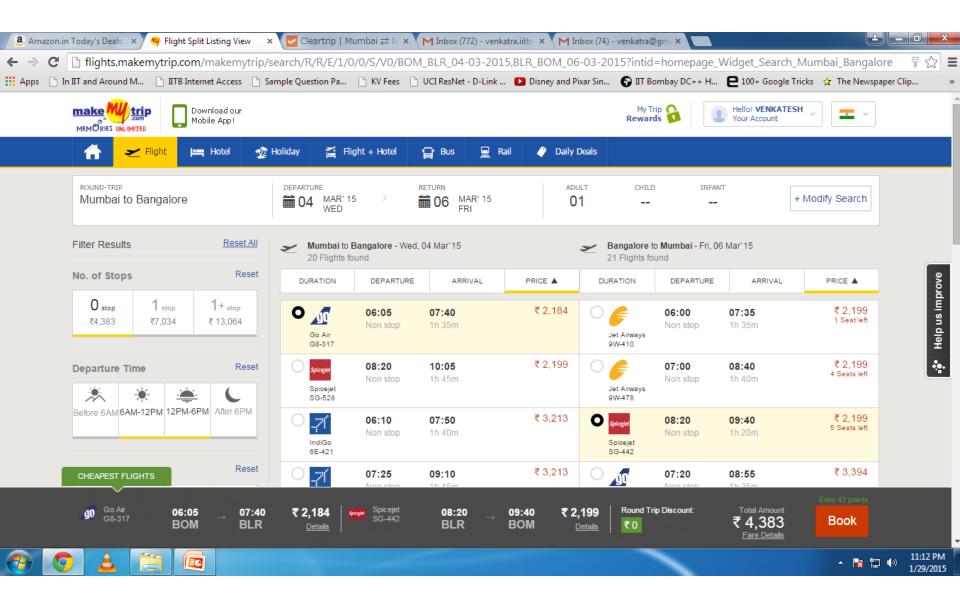
- Functional specification
 - Features, functions, services, facilities
 - Timelines, versions
- Content requirements
 - Content
 - Editorial workflow
 - Content shelf life
 - Timelines, versions
- What are we making when?

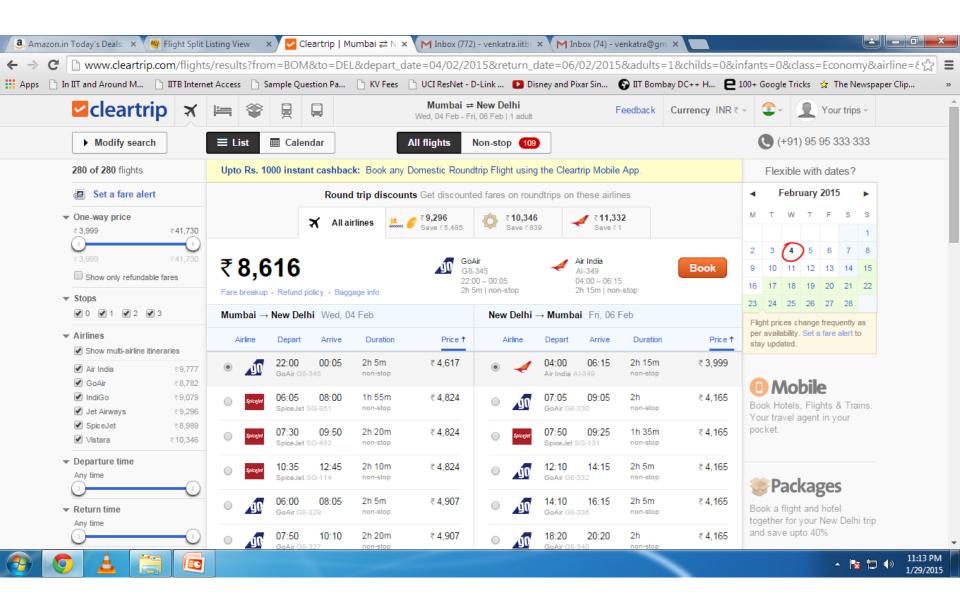


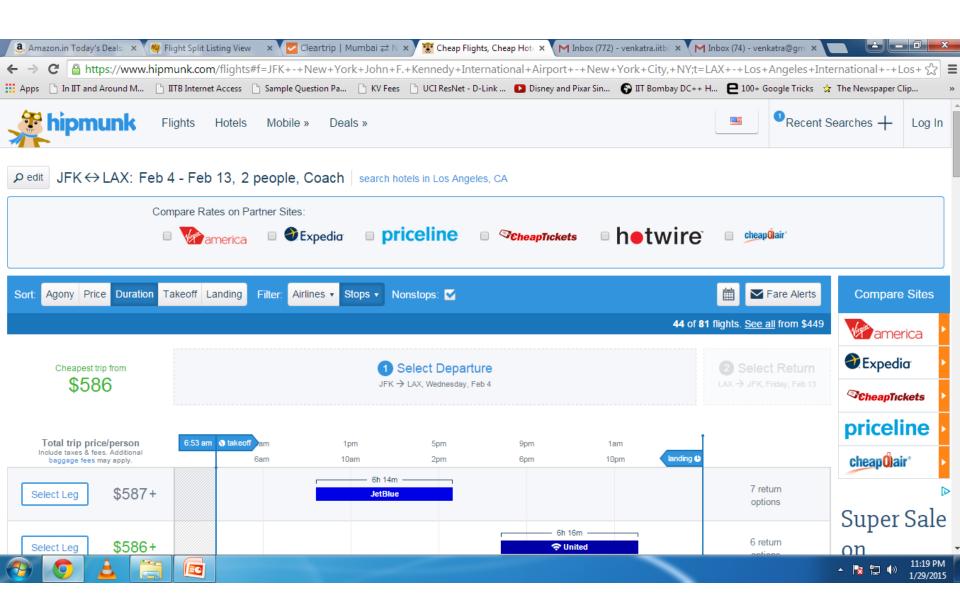
Structure

- Interaction design
 - Conceptual model
 - Scenarios, storyboards, workflows, use cases



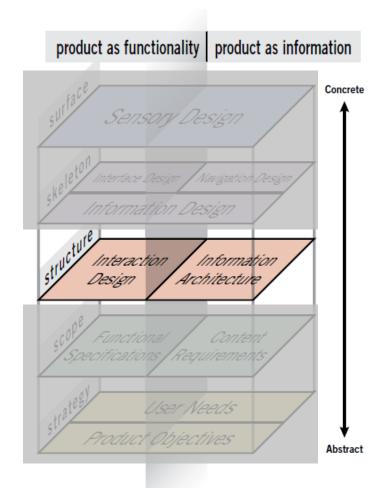






Structure

- Interaction design
 - Conceptual model
 - Scenarios, storyboards, workflows, use cases
- Information architecture
 - Categories
 - Hierarchy
 - Scenarios, storyboards, workflows, use cases





Sun, Jun 26, 20 Home City

Opinion Blogs

You are here: Hor

Civil soo again in PTI | 3 hrs ago

HRD minister on Hazare's de August 16, but sure the govern

Saina Nehv Super Serie IANS | 2 hrs ago

Defending cha complete her h Yihan Wang 2 Indonesian Op

Roger Fede says Sachir PTI | 3 hrs ago

Sachin Tendul met the winner Club after the to advance to

Actors earn n Baba Ramdev Left at God's r Top job can n Troubled by CAG refuses t Dud caste cer Usain Bolt's di

Nagpur Fo www.LivingS Get 50% Off C Now!

SPORTS

 ICC mul Tailenders Sign In

ind exp

You are here

LATEST N

20 days

Ramde

The yoga

follower Rai

8 1 Comm

After Ani

law-making

Minister ma

precedent; i

Bugging

questioned

All meeti

Ex-CJI a

successor

Pak mun

Videos

Have done

Sai nephew

Express

Editorial

to PMO

Lokpal Know wł



Updated: June 26, 2011 17:13 IST

Khabar

Movies

Cricket

Doctor

Book now

Good Times



ALL NEW

NDTV COOKS



Advertisement

RECIPES FROM INDIA'S TOP CHEFS

CLICK HERE FOR ALL-NEW

NOTY C

Advertisement

E-filing is optional

but an easy and convenient option.For

e-filing of Income Tax Return visit our website

www.incometaxindiaefiling.gov.in

www.austrian.com

NEWS	Live TV	Video	India	Cities World	Business	Sports	Cricket	t Trend	ds Photos	More V
LEISURE	Movies	Music	Health	Good Times	Recipes	Games	Gadgets	Social	Apps	
SERVICES	Shopping	B2B	Property	Matrimonials	e-Learnir	ng Class	sifieds	Travel	Loans	

Social

Latest Stories

NDTV

AR Rahman: I Did It My Way - June 26, 10 pm (IST) on ndtv.com









stuffed in a box; one held

Other Stories

Chidambaram: Many feel PM must speak on Lokpal | Full text

Pranabgate: BJP hits out | Sathya Sai Trust: at Chidambaram's 'nonevent' remarks

Clamour for transparency≥ Monsoon hits Delhi three days ahead of scheduled arrival







Sachin meets Federer at Wimbledon Read | See Pics

Watch

Videos »







Photos »



Big Picture

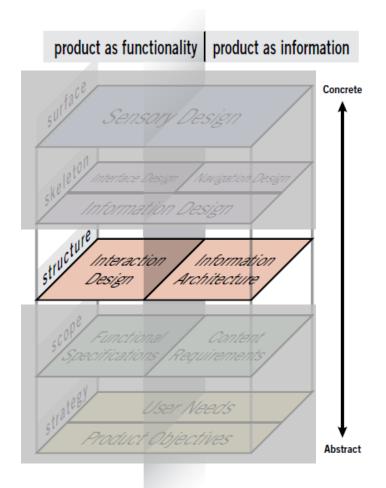


Meet the world's ugliest dog, Yoda: Its short tufts of hair, protruding tongue, & long, seemingly

Roll over to know more

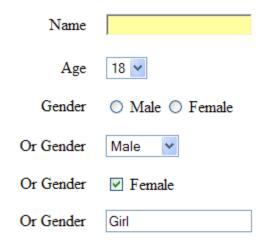
Structure

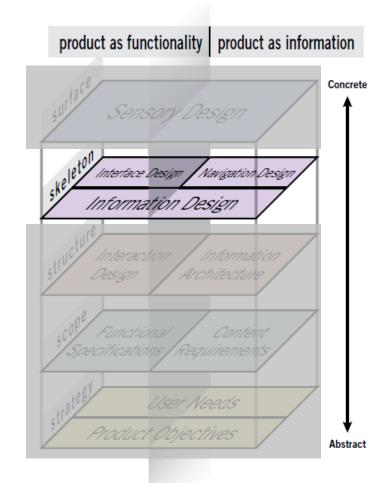
- Interaction design
 - Conceptual model
 - Scenarios, storyboards, workflows, use cases
- Information architecture
 - Categories
 - Hierarchy
 - Scenarios, storyboards, workflows, use cases
- How does the product fit in the life of the user?



Skeleton

- Interface design
 - Interface, widgets, controls
 - Tasks-flows / actions





Acquaintance With the Applicant

- 1) I have known the applicant for
- 2) I have known the applicant as (select as many as are applicable):
- I have served as the applicant's (select as many as are applicable):

- 4) Overall Intellectual Ability:
- 5) Knowledge in Chosen Field:
- Overall Scientific Ability:
- 7) Overall Imaginative/Creative Ability:
- 8) Motivation Perseverance Commitment:
- 9) Verbal Communication in English:
- 10) Written Communication in English:
- 11) Visual/Graphic Communication in English:
- 12) Analytical Ability:
- 13) Initiative:
- 14) Ability to Work Independently:
- 15) Ability to Work as a Team Member:
- 16) Maturity and Stability:
- 17) Rank relative to others you know who have applied to Georgia Institute of Technology:

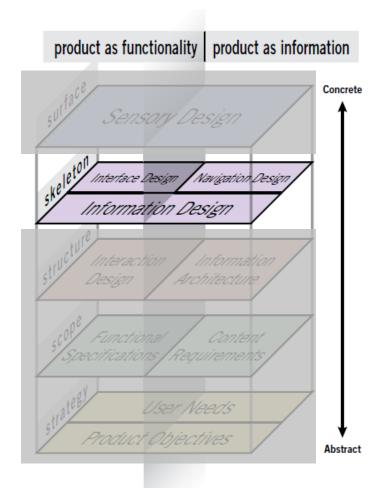
- 3-5 years 💌
- Undergraduate Student
- ✓ Graduate Student
- Research Assistant
- other:
- Research Advisor
- Major Advisor
- Teacher (one class)
- ▼ Teacher (many classes)
- Department Chair
- other:
- Excellent (Top 10%)
- Excellent (Top 10%)
- Excellent (Top 10%)
- Excellent (Top 10%)
- Outstanding (Top 5%)
- Excellent (Top 10%)

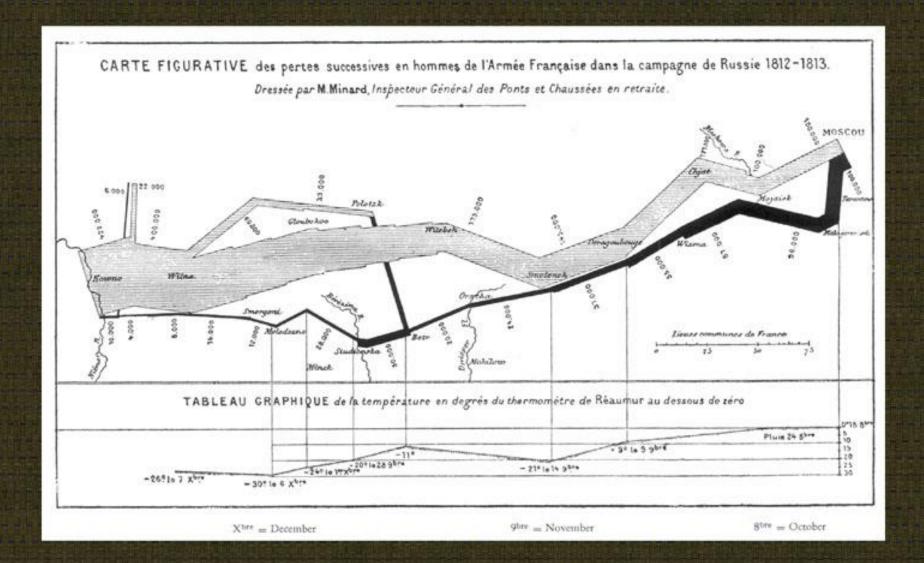
29

	Outstanding (top 5%)	Excellent (top 10%)	Good (top 25%)		Below Average (Bottom 50%)	Bad (Bottom 25%)
Overall intellectual ability	0	•	0	0	0	0
Knowledge in the chosen field	0	•	0	0	0	0
Overall scientific ability	0	•	0	0	0	0
Overall imaginative / creative ability		•	0	0	0	0
Motivation, perseverence, commitment	•	0	0	\circ	0	0
Verbal communication in English		•	0	\circ	0	0
Written communication in English	0	•	0	0	0	0
Visual / graphic communication in English	0	•	0	0	0	0
Analytical ability	0	•	0	0	0	0
Initiative		•	0	\circ	0	0
Ability to work independently		•	0	\circ	0	0
Ability to work as a team member		•	\circ	\circ	0	0
Maturity and stability	0	•	0	0	0	0
Rank with respect to others who you know have applied to xyz university	0	•	0	0	0	0

Skeleton

- Interface design
 - Interface, widgets, controls
 - Tasks-flows / actions
- Information design
 - Script
 - Page complexity
 - Visualization
 - Layouts, grid, hierarchy

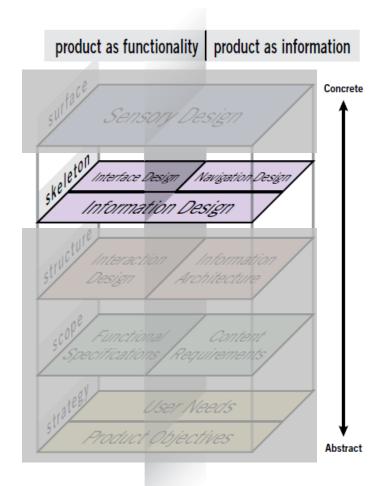




March on Moscow - Minard

Skeleton

- Interface design
 - *Interface*, widgets, controls
 - Tasks-flows / actions
- Information design
 - Script
 - Page complexity
 - Visualization
 - Layouts, grid, hierarchy
- Navigation design
 - Navigation elements





amazon.com

Unbox Video Downloads

Magazines & Newspapers

Computer & Video Games

Books

Music

DVD

VHS

Software

Amazon Shorts

Anirudha's Amazon.com

Electronics

Audio & Video

Office Products

Camera & Photo

Cell Phones & Service

Musical Instruments

Computers & PC Hardware

See All 35 Product Categories

Shoes

Grocery

Your Account | 🚟 Cart | Your Lists 🖸 | Help | 👑

Apparel & Accessories

Health & Personal Care

Jewelry & Watches

Sports & Outdoors

Tovs & Games



Search Amazon.com Hello, Anirudha N Jo:

Browse

Books, Music & Movies

Books DVD

Magazines & Newspapers

Music

Textbooks

Unbox Video Downloads VHS

Clothing & Accessories

Apparel & Accessories Jewelry & Watches Shoes

Computer & Office

Computers Office Products Software

Consumer Electronics

Audio & Video Camera & Photo Cell Phones & Service Computer & Video Games Musical Instruments



Men's

Warm ut

Wish List Fresh Flowers & Indoor Plants Wedding Registry Baby Registry Free e-Cards Your Profile

International Direct Auctions Outlet zShops Your Media Library AmazonConnect Amazon Entertainment

Gourmet Food Kitchen & Housewares Beauty Outdoor Living Pet Supplies Automotive Tools & Hardware

Home & Garden

Furniture & Décor

Bed & Bath

Industrial & Scientific **Broadband Services**

E-mail Subscriptions

Photo Services Travel Financial Services Advantage Program Paid Placements Web Services Corporate Accounts

Sell Your Stuff

Associates Program

amazon.com.



ere.) Make this your home page!

Anirudha's Ploq™ • 9 post:

50% Off Cashmere Sweater



Save 50% or mi up to our wide cashmere swea and women.

Shop now

Get Yourself A Little Something



Making Use: Scenario-Based Design of Human-Computer <u>Interactions</u> by John M. Carroll



The Enterprise Unified Process: Extending the Rational Unified <u>Process</u> by Scott W. Ambler



Finding Flow by Mihaly Csikszentmihalyi

Favorite Digital Frames



If you're looking picture-perfect off and share yo digital photos, c Amazon.com's si digital picture fra

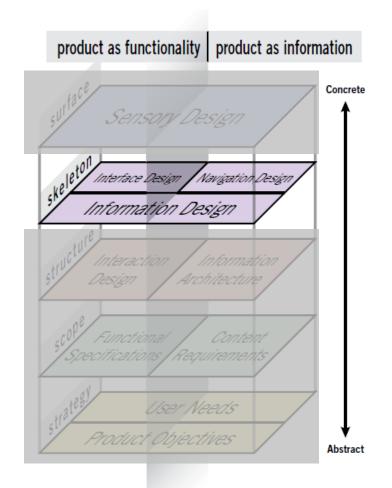
The Sony Mylo Is Here



All the fun of a palm of your h black or white

Skeleton

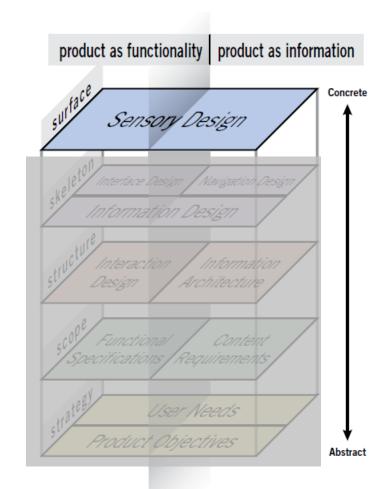
- Interface design
 - *Interface*, *widgets*, *controls*
 - Tasks-flows / actions
- Information design
 - Script
 - Page complexity
 - Visualization
 - Layouts, grid, hierarchy
- Navigation design
 - Navigation elements



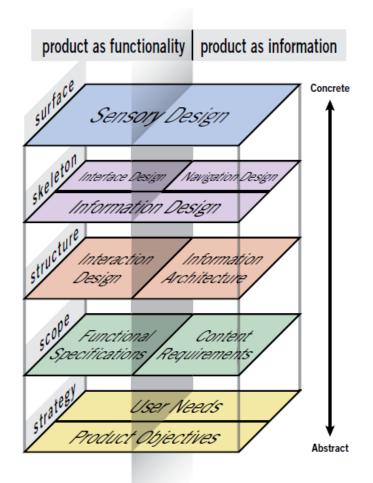
Surface

Sensory design

- Text
- Visual elements (colour, typography, photography, illustrations)
- Media elements (audio, video, animation)
- Hardware elements
- Identity, styling, finish



Elements of User Experience



Task