The Elements of User Experience

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Meet The Elements
“Worst Movie Ever!”
Who Gets the Blame?

- “I probably overlooked the right choice.”
- “I must not have read the instructions closely enough.”
- “I guess I’m not smart enough to use this.”
Products Are People Too
User-Centered Design

- A philosophy of product development
- The product is not an end in itself
- The product is a *means* toward the end of providing a good experience for the user
- Suite of methods emphasizing understanding *people* rather than technology
User Experience

- How a product behaves and is used in the real world
- Beyond the product to its context in people’s lives
- Incorporates diverse range of factors
Surface
Skeleton
Structure
Scope
Strategy
The Five Planes

- Strategy
- Scope
- Structure
- Skeleton
- Surface
The Language Barrier

Functional Specifications
Interaction Design
Information Architecture
Interface Design
Content Requirements
Navigation Design

Information Design
Web as information
Web as application
A Basic Duality

Web as software interface
- Visual Design
- Interface Design
- Interaction Design
- Functional Specifications
- User Needs

Web as hypertext system
- Information Design
- Navigation Design
- Information Architecture
- Content Specifications
- Site Objectives

Concrete

Abstract
The Strategy Plane

- **User Needs:** what the site must do for the people who **use** it
- **Site Objectives:** what the site must do for the people who **build** it
User Needs

- Some are fundamental – users need products that:
  - work
  - they can use
  - meet their expectations
- But most are specific to your users and your product
Best way to discover user needs

Many techniques, ranging from quick and cheap to lengthy and expensive

Read the book!
User Segmentation

- Make identifying user needs more manageable
- Break your audience down into segments based on shared characteristics
Character sketches based on user research

Extrapolate from a general set of characteristics to a specific case

Janet

“I don’t have time to sort through a lot of information. I need quick answers.”

Janet is frustrated with working in a corporate environment and wants to start her own accounting practice.

Age: 42
Occupation: Accounting firm vice president
Family: Married, two children
Household income: $140,000/year

Technical profile: Fairly comfortable with technology; Dell laptop (about one year old) running Windows XP; DSL Internet connection; 8-10 hours/week online

Internet use: 75% at home; news and information, shopping

Favorite sites:

WSJ.com
Salon.com
Travelocity.com
Site Objectives

- Often framed in terms of business
  - Business goals
  - Business drivers
  - Business requirements
- Should be specific to the site
- Independent of your organization’s other activities
Success Metrics

- The only way to know if changing your site has made a difference
- Closely tied to site objectives
- More on this tomorrow!

![Graph showing visits per month (registered users only)]
The Scope Plane

- **Functional Specifications:** application features the site must include
- **Content Requirements:** content elements the site must include
What application features will users need to fulfill their goals?

Focus on “what it does”

not “how it works”

not “what it doesn’t do”

Be specific, but don’t dictate system design
What information will users need or want from the site?
What form should it take?
Where will it come from?
Who’s responsible?
Define elements according to their purpose
“Docs are a waste of time.”
- No one reads them
- They’re never up-to-date
- They’re too much trouble to maintain

Time spent planning the site becomes time saved producing the site

Integrate documentation into the process, rather than making it a separate step
The Structure Plane

- **Interaction Design:** how the user moves from one step in a process to the next
- **Information Architecture:** how the user moves from one content element to the next
Interaction Design

- *Inter-action*
  - Actions the user can take with the system
  - Actions the system can take in response to the user
Information Architecture

- Defines conceptual relationships between content elements
- Reflects the way users think about the subject matter
- Often hierarchical, but not necessarily
Top-down vs. Bottom-up

- Top-down starts with categories and slots content into them
Bottom-up starts with content and builds up to categories.
Visual representations tend to work best

Diagrams can be as simple or as complex as you need

Visual Vocabulary: jjg.net/ia/visvocab
The Skeleton Plane

- **Information Design**: facilitates comprehension of information
- **Interface Design**: facilitates user input and system output
- **Navigation Design**: facilitates movement through the site
How can we present this information so that people can understand and use it?

- Communicate relative importance of different pieces of information
- Guide the user from one piece to the next
- Draw attention to important details
- Communicate relationships between elements
Interface Design

Provides a means for users to interact with application functionality
Navigation Design

- Communicates the choices available to the user
- Facilitates movement
- Different designs have different effects
Wireframes

- Brings all skeleton issues together into one high-level “sketch”
- Illustrates relative priority of page elements
- Suggests page layout approaches
The Surface Plane

- **Visual Design**: the “look” in “look and feel”
- Usually the part people think of when you say “Web design”
- More than just aesthetics
Color Palettes
Typography

Apple Garamond is Apple’s custom corporate identity font.

Lucida Grande is used for body text and navigation.

Helvetica Black is used for some graphics.

Geneva is used for legibility at small sizes.
The Elements of User Experience

- Strategy
  - User Needs
  - Site Objectives

- Scope
  - Functional Specifications
  - Content Requirements

- Structure
  - Interaction Design
  - Information Architecture

- Skeleton
  - Interface Design
  - Navigation Design

- Surface
  - Visual Design

- Web as software interface
- Web as hypertext system
Intermission
The Elements Applied
Search Engines

- Almost every site has one
- Every site seems to take a slightly different approach
Strategy

- **User Needs**
  - Do users want a search engine?
  - Are there limits to the kind of search functionality users need?

- **Site Objectives**
  - Is implementing search feasible given our resources?
  - Would implementing search limit our ability to fulfill other goals for the site?
Scope

- Functional Specifications
  - keyword entry
  - other fields for specifying criteria
  - ability to narrow result set

- Content Requirements
  - labeling
  - result data
  - help docs
Structure

- Interaction Design
  - choices available to users at each step
  - system behavior under various conditions

- Information Architecture
  - architectural scope as search criterion
  - metadata structures
Skeleton

- Information Design
  - layout of search results
  - communicating error conditions
- Interface Design
  - user input mechanisms
- Navigation Design
  - moving into and out of search flow
  - moving through search results
Surface

- Visual Design
- color
- typography
- layout
Asking the Right Questions

- What problem are we trying to solve?
- What are the consequences of our proposed solution to the problem?
- Will this solution force us to re-think other problems?
The Marathon and the Sprint

- A sprint is a short race
  - Get a quick start
  - Burn energy as quickly as possible
- A marathon is a long race
  - Pace yourself
  - Choose when to burn energy
- Which race are you trying to run?
- Which race are you actually in?
“Our market research tells us everything we need to know about our users.”
- Demographic data is not user insight
“We’ll just follow this list of guidelines we found on the Internet.”
- Rules of thumb are necessarily general
“Interface is easy – technology is hard.”
- Which is more complicated: machines or people?
Answering Objections

“"We can’t afford to hire experts.””
- You don’t need experts for *everything*

“"We’ll figure it out as we go.””
- Improvisation is for jazz, not design

“"We’ll fix it in QA.””
- By that time, it’s already too late

“"There’s no time in the schedule.””
- You’ll be saving time on the next release
Pitfalls to Avoid

- **Design by default:** “We should do whatever is easiest to implement.”
- **Design by mimicry:** “If it’s good enough for Amazon, it’s good enough for us.”
- **Design by fiat:** “Because I said so.”
Waterfalls Are Dangerous
Iterative Development

- Your site is never finished
- Do what you can right now
- Always look ahead to the next release
The specific roles you choose don’t matter – if you’ve got all the planes covered
The Nine Pillars

- Core competencies common to successful teams
- Must be reflected in the team’s:
  - Roles
  - Processes
User Research

- The foundation of user-centered design
- Informs all strategic decisions
- Primary responsibility for identifying user needs
- Titles:
  - User Researcher
  - Usability Analyst
Site Strategy

- Primary responsibility for defining site objectives
- Decides priorities and success metrics
- Titles:
  - Business Analyst
  - Product Manager
  - Executive Producer
Technology Strategy

- Often responsible for functional specifications
- Decides technical platforms and standards to adopt

**Titles:**
- Senior Engineer
- Development Manager
- Technical Lead
Content Strategy

- Often responsible for content requirements
- Decides appropriate format and subject matter
- Titles:
  - Content Strategist
  - Content Editor
  - Editor-in-Chief
Abstract Design

- Turns strategy into design concepts
- Always responsible for Structure plane
- Sometimes responsible for Scope and Skeleton planes
- Titles:
  - Information Architect
  - Interaction Designer
  - UI Specialist
Technology Implementation

- Tactical execution of technology strategy
- May incorporate many roles, from coding to integration to testing
- Titles:
  - Software Engineer
  - HTML Developer
  - QA Tester
Content Production

- Tactical execution of content strategy
- Gathering, editing, producing, and deploying content (not just text)
- Titles:
  - Content Producer
  - Writer
  - Editor
Concrete Design

- Tactical realization of abstract design
- Always responsible for Surface plane
- Sometimes responsible for Skeleton and Structure planes
- Titles:
  - Interface Designer
  - Visual Designer
Project Management

- Binds together all tactical competencies
- Often overlooked in smaller organizations
- Titles:
  - Producer
  - Project Manager
The Nine Pillars

- Not a nine-member team
- Not a nine-step process
- You should be able to look at both and see the pillars beneath them
What It’s All About

- Plan before you build
- Have *conscious* reasons for your choices
- Articulate them *explicitly*
- Make things people love!
Thanks!