

DESIGN PROCESS: NAVIGATION AND INTERFACE DESIGN

Course Code:CIS121

Module Leader: Md. Minhaj Hosen

Lecturer (CIS),

Daffodil International University (DIU)

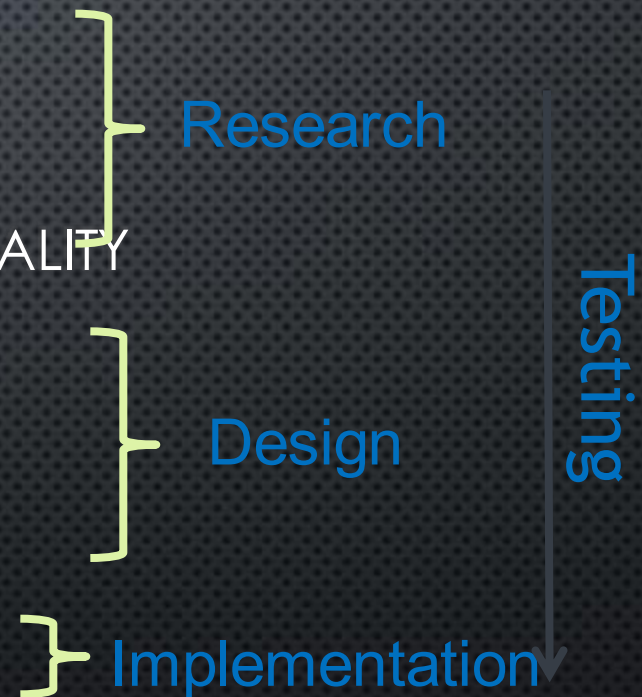
LEARNING OUTCOMES

- BY THE END OF THIS TOPIC, STUDENTS WILL BE ABLE TO:
 - EXPLAIN THE IMPORTANCE OF SITE STRUCTURE AND NAVIGATION IN THE CONTEXT OF USER-CENTRED WEB DESIGN
 - USE A SITE STRUCTURE DIAGRAM AND WIREFRAME MODELS TO SPECIFY THE DESIGN OF A WEBSITE
 - EXPLAIN THE MAJOR PRINCIPLES OF INTERFACE DESIGN FOR WEBSITES

WEB DESIGN PROCESS

► THIS TOPIC EXPLORES THE DESIGN STAGE OF THE PROCESS:

- DEFINING GOALS
- LEARNING ABOUT USERS
- DEFINING CONTENT AND FUNCTIONALITY
- **DESIGNING SITE STRUCTURE**
- **DESIGNING NAVIGATION**
- **INTERFACE DESIGN**
- WRITING (X)HTML AND CSS



DEFINING CONTENT AND FUNCTIONALITY

- AT THE END OF THE RESEARCH STAGE THE OUTCOME WAS A COLLECTION OF CONTENT AND FUNCTIONALITY REQUIREMENTS.



HIERARCHIES

- WEBSITES ARE ORGANISED HIERARCHICALLY
 - USERS ARE FAMILIAR WITH HIERARCHIES
- DESIGNING THE SITE STRUCTURE INVOLVES:
 - ORGANISING THE CONTENT CHUNKS INTO SECTIONS AND SUB-SECTIONS
 - LABELLING THE SECTIONS

JB Contemporary Jewellery

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graph TD; Root[JB Contemporary Jewellery] --- About[About JB Contemporary Jewellery]; Root --- Collection[Collection]; Root --- Materials[Materials And Process]; Root --- Shop[Shop]; Root --- Galleries[Galleries]; About --- Contact[Contact Us]; About --- Betty[Betty's Biography]; About --- Jim[Jim's Biography]; About --- Company[Company History]; About --- Testimonials[Customer Testimonials]; Collection --- Earrings[Earrings]; Collection --- Pendants[Pendants]; Collection --- Bangles[Bangles]; Collection --- Necklaces[Necklaces]; Collection --- Brooches[Brooches]; Materials --- Gemstones[Gemstones]; Materials --- Metals[Metals]; Materials --- Woods[Exotic Woods]; Materials --- Process[The Jewellery Making Process]; Shop --- Basket[Shopping Basket];
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About JB
Contemporary
Jewellery

Contact Us

Betty's
Biography

Jim's
Biography

Company
History

Customer
Testimonials

Galleries

Collection

Earrings

Pendants

Bangles

Necklaces

Brooches

Materials
And Process

Gemstones

Metals

Exotic
Woods

The Jewellery
Making Process

Shop

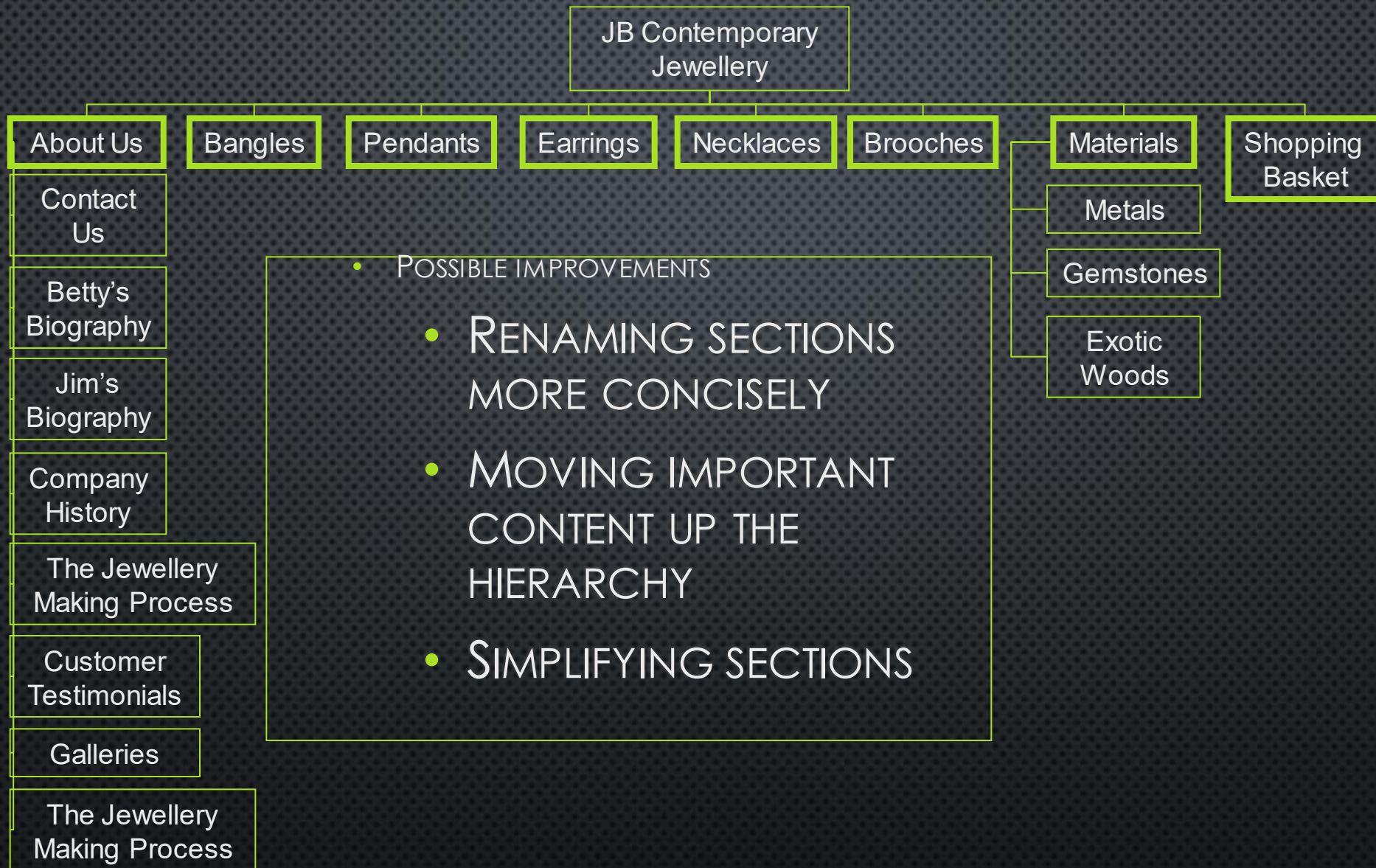
Shopping
Basket

DESIGNING SITE STRUCTURE

- DESIGNING SITE STRUCTURE IS AN IMPORTANT STAGE
 - DEFINES NAVIGATION
- CAN'T RELY ON SEARCH FACILITIES
 - NOT ALL USERS WILL USE A SEARCH FACILITY
 - SEARCHES DON'T ALWAYS RETURN USEFUL RESULTS
 - ONLY USEFUL FOR LARGE SITES
- DESIGNING SITE STRUCTURE IS OFTEN CHALLENGING
 - INFORMATION DOESN'T ALWAYS FIT NEATLY INTO CLEARLY SEPARATE CATEGORIES
 - SECTION HEADINGS CAN EASILY BE CONFUSING

SITE STRUCTURE DESIGN PRINCIPLES

- THERE ARE A NUMBER OF PRINCIPLES THAT CAN BE USED WHEN DESIGNING SITE STRUCTURE
 - EACH CONTENT ITEM SHOULD BELONG IN ITS SECTION
 - SECTION LABELS SHOULD CLEARLY DESCRIBE THE CONTENT
 - SECTION LABELS WITH THE WORD 'AND' SHOULD BE AVOIDED
 - LABELS SHOULD BE AS SHORT AS POSSIBLE
 - THE MOST IMPORTANT CONTENT SHOULD BE AT THE TOP LEVEL OF THE HIERARCHY
- QUESTION - LOOK BACK AT SLIDE 7 AND THE SITE STRUCTURE DIAGRAM FOR JB CONTEMPORARY JEWELLERY. HOW COULD YOU RE-DESIGN THE PROPOSED SITE STRUCTURE TO IMPROVE IT?




INVOLVING USERS – CARD SORTING

- CARD SORTING IS A TECHNIQUE TO INVOLVE USERS IN DESIGNING SITE STRUCTURE
 - EACH CONTENT CHUNK IS WRITTEN ON AN INDEX CARD OR POST-IT NOTE
 - USERS ARE ASKED TO GROUP RELATED ITEMS AND GIVE EACH GROUP A NAME
 - A RECORD IS MADE OF THE CARD SORT
 - DIFFERENT CARD SORTS BY DIFFERENT USERS ARE COMPARED
- CARD SORTS CAN ALSO BE 'CLOSED'
 - USERS SORT CARDS INTO PRE-DEFINED SECTIONS


DESIGNING NAVIGATION

- NAVIGATION DEFINES HOW USERS FIND THEIR WAY AROUND A WEBSITE
 - DEVELOPED FROM SITE STRUCTURE
- NAVIGATION PLAYS AN IMPORTANT ROLE IN
 - TELLING THE USER WHAT THEY CAN DO ON A SITE
 - TELLING THE USER WHERE THEY ARE IN THE SITE STRUCTURE
- COMMONLY USED NAVIGATION SYSTEMS
 - PERSISTENT NAVIGATION
 - LOCAL NAVIGATION
 - BREADCRUMBS

PERSISTENT NAVIGATION - 1



Welcome to IKEA United Kingdom.



Shopping online

Your local IKEA store
IKEA FAMILY
My Shopping List

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My Account
Shopping trolley

[All products](#) [New](#) [Summer](#) [Living room](#) [Bedroom](#) [Kitchens](#) [Children's IKEA](#) [Textiles](#) [All departments](#)


Living room

- Stylish living room ideas
- Living room styles
- How to... +
- Series
- New Living room

Products


- Sofas & armchairs**
 - Fabric sofas
 - Leather sofas
 - Sofa-beds
 - Modular sofas
 - Chaise longues
 - Armchairs**
 - Footstools & pouffes
 - Extra covers
- TV stands & media solutions
- Living room storage +

POÄNG series



All POÄNG series products

EKTORP series




Many functions with coordinated textiles to mix and match
All EKTORP series products


All Armchairs v | Sort by colour v | Sort by relevance v | ☐ Products to buy online

Show comparison | Slideshow


1 2 3 Show all




AGEN
chair
£15.31




BYHOLMA
armchair
£79



HEJKA
chair cushion
£13.27



HEJKA
rocking-chair
£80.68



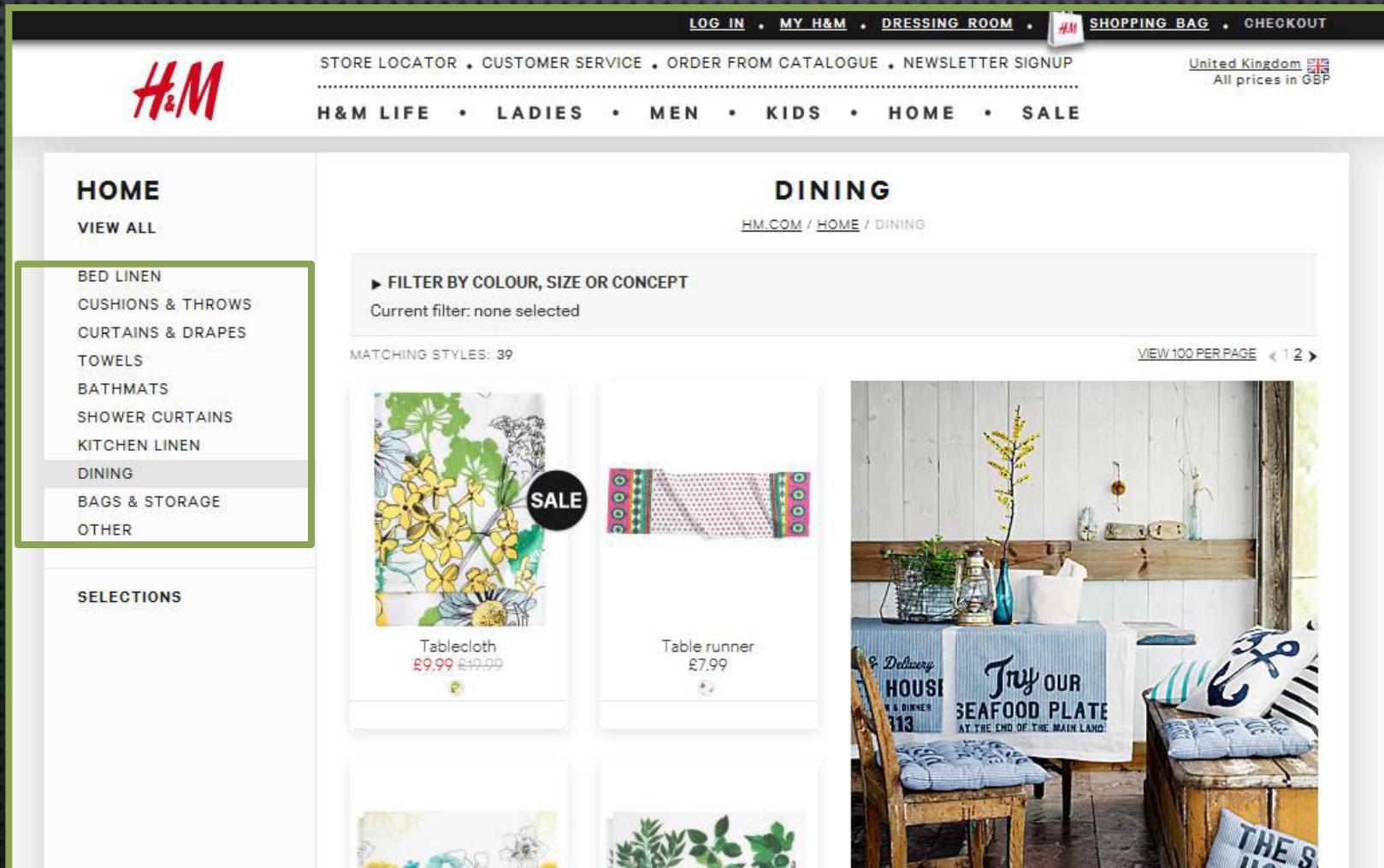
HULTÖ
easy chair
£39.83

<http://www.ikea.com>

PERSISTENT NAVIGATION - 2

- THE NAVIGATION ELEMENTS THAT APPEAR ON EVERY PAGE OF A SITE
 - IMPLEMENTED AS A NAVIGATION BAR
 - LARGE SITES WILL HAVE SECTIONS AND SUB-SECTIONS
 - EASY ACCESS TO SITE CONTENT AND FUNCTIONS
 - MAJOR SECTIONS
 - SEARCH
 - LINK HOME
 - FUNCTIONS E.G. SHOPPING BASKET
- PROVIDES REASSURANCE TO USERS
 - SHOULD BE IDENTICAL ON EVERY PAGE OF THE SITE

LOCAL NAVIGATION - 1



<http://www.hm.com>

LOCAL NAVIGATION - 2

- LOCAL NAVIGATION SHOW LINKS TO PAGES AT THE CURRENT LEVEL OF THE HIERARCHY
 - USUALLY IMPLEMENTED AS A SEPARATE NAVIGATION BAR
 - 'YOU ARE HERE' INDICATORS SHOW USER'S CURRENT POSITION
 - VISUALLY HIGHLIGHTING THE CURRENT PAGE ON THE NAVIGATION BAR

BREADCRUMB NAVIGATION - 1

The screenshot shows the Office Depot website interface. At the top, there are navigation links for Home, United States (English), and Corporate/Government Customers. A shopping cart icon indicates 0 items for \$0.00, with options for Delivery or Pick-Up. A promotional banner offers \$50.00 more for FREE Next Business Day Delivery. The main navigation bar includes Office Supplies, Technology, Furniture, Our Services, and My Account. A search bar is present with a 'GO' button. The breadcrumb trail is highlighted with a green box and a green arrow pointing to it: **Home > Office Supplies > Binders & Accessories > Binders**. Below the breadcrumb, the 'Shop Office Supplies' section shows 'Binders 90 Results Found'. A list of binder types is on the left, and a grid of binder products is on the right. Each product card includes a 'Compare' button and a 'Video' icon. The 'Compare' button is highlighted with a green box and a green arrow pointing to it.

Home > Office Supplies > Binders & Accessories > Binders

<http://www.officedepot.com>

BREADCRUMB NAVIGATION - 2

- BREADCRUMB NAVIGATION SHOWS LOCATION IN THE HIERARCHY
 - EASY TO RE-TRACE STEPS
- USEFUL IN LARGE SITES WITH DEEP HIERARCHIES
 - NOT A REPLACEMENT FOR PERSISTENT NAVIGATION
- MANY SITES USE VISUAL CONVENTIONS
 - ANGLE BRACKETS TO SEPARATE ITEMS, SMALL TEXT, THE CURRENT PAGE IS EMPHASISED

WIREFRAME MODELS - 1

JB
Contemporary
Jewellery

Shopping Basket

About Us

Jewellery

Materials

Recognition

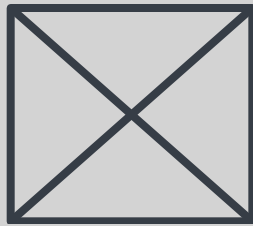
Earrings

Bangles

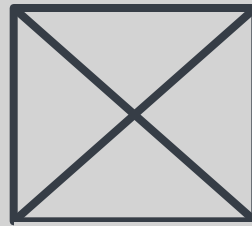
Brooches

Necklaces

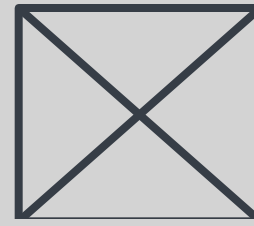
Bangles



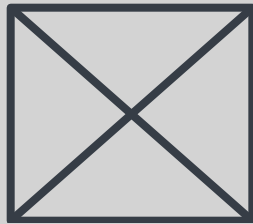
Bangle Design 1



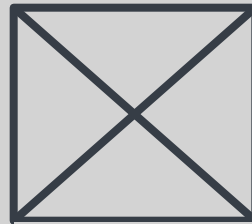
Bangle Design 2



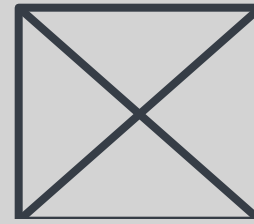
Bangle Design 3



Bangle Design 4



Bangle Design 5



Bangle Design 6

WIREFRAME MODELS - 2

- WIREFRAME MODELS SHOW PAGE LEVEL DETAIL
 - NAVIGATION OPTIONS
 - INDICATE OTHER PAGE LEVEL CONTENT - PAGE TITLE, SITE IDENTITY
 - CAN SHOW LINEAR PROCESSES E.G. SHOPPING CART
 - NOT ABOUT VISUAL DESIGN
- PRODUCED FOR MAJOR PAGES IN THE SITE
 - NOT EVERY PAGE
- CAN BE USED FOR TESTING WITH USERS
 - RUN THROUGH SAMPLE TASKS

INTERFACE DESIGN

- ▶ INVOLVES TAKING WIREFRAME MODELS AND PRODUCING PAGE DESIGNS
 - ▶ DECIDING ON LAYOUT, COLOURS, FONTS ETC.
 - ▶ WIREFRAME MODELS TELL US THE PAGE CONTENTS
- ▶ ALL IMPORTANT PAGE ELEMENTS SHOULD BE IMMEDIATELY VISIBLE TO USERS
 - ▶ THE USER SHOULDN'T HAVE TO SCROLL TO SEE PAGE ELEMENTS

USER SCAN WEB PAGES

- USERS SCAN WEB PAGES
 - TASK FOCUSED
 - DON'T READ PAGES
- USERS 'SATISFICE'
 - SELECT FIRST NAVIGATION OPTION THAT SEEMS TO FIT
- A USER-CENTRED PAGE DESIGN MAKES IT EASY FOR USERS TO SCAN PAGES AND MAKE CHOICES

VISUAL HIERARCHIES

- THE VISUAL HIERARCHY TELLS THE USER ABOUT THE MEANING OF PAGE ELEMENTS
- CLEAR VISUAL HIERARCHY MAKES THE PAGE EASY TO SCAN
 - GROUPING RELATED ITEMS
 - CREATING CONTRAST
 - ALIGNMENT
 - CONSISTENCY

GROUPING RELATED ITEMS - 1

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don't make me think

Search

My Shopping Basket

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Gifts & Gadgets

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Home

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Recommendations

Kids

Biography

Sci-fi & Fantasy

Chick-Lit

Crime & Thrillers

BBC Audiobooks

Clearance

Home ▶ Search "don't make me think" ▶ Books ▶




Don't Make Me Think!: A Common Sense Approach to Web Usability | Paperback

Author: [Steve Krug](#) | Format: Paperback
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Description

Product Details

Customer Reviews (0)

Delivery & Returns


Five years and more than 100,000 copies after it was first published, it's hard to imagine anyone working in Web design who hasn't read Steve Krug's "instant classic" on Web usability, but people are still discovering it every day. In this second edition, Steve adds three new chapters in the same style as the original: wry and entertaining, yet loaded with insights and practical advice for novice and veteran alike. Don't be surprised if it completely changes the way you think about Web design. Three New Chapters! *Usability as common courtesy -- Why people really leave Web sites *Web Accessibility, CSS, and you -- Making sites usable and accessible *Help! My boss wants me to _____ --

<http://www.play.com>

GROUPING RELATED ITEMS - 2

- ▶ RELATED ITEMS SHOULD BE GROUPED VISUALLY
 - ▶ THROUGH ASPECTS SUCH AS POSITION, BORDERS AND COLOUR
 - ▶ BREAK A PAGE UP INTO DISTINCT AREAS
 - ▶ CAN BE DIFFICULT WITH LIMITED SCREEN SPACE
- ▶ EXAMPLES
 - ▶ NAVIGATION OPTIONS GROUPED IN NAVIGATION BARS
 - ▶ SITE FUNCTIONS VISUALLY SEPARATE FROM SECTIONS

CONTRAST - 1

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Home Books Bargains Recommends Kids Biography Sci-fi & Fantasy Chick-Lit Crime & Thrillers BBC Audiobooks Clearance

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Steve Krug
DON'T MAKE ME THINK
A Common Sense Approach to Web Usability
SECOND EDITION

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CONTRAST - 2

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TESTIMONIALS

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Andrew

To view more [CLICK HERE](#).

TOP SELLERS



<http://www.proppa.com/>

CONTRAST - 3

- IMPORTANT PAGE ITEMS SHOULD STAND OUT VISUALLY
 - USE OF SIZE, ALIGNMENT, COLOUR AND TYPEFACE
- EXAMPLES
 - 'YOU ARE HERE' INDICATORS ON NAVIGATION BARS
 - PAGE NAME AND COMPANY LOGO BEING THE MOST VISUALLY PROMINENT PAGE ELEMENTS
 - NAVIGATION OPTIONS BRIGHTLY COLOURED AND LOOK LIKE BUTTONS
- IF TOO MANY ELEMENTS ARE EMPHASISED PAGES CAN BECOME 'NOISY'

ALIGNMENT - 1



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What's new

Page 1 of 3 - [Previous](#) / [Next](#)



Ossobuco

25.05.2011

A simple but delicious recipe for Osso Bucco from The River Cafe

[Watch video](#)



The Diary of Me

06.05.2011

Here is a taster tape of our new musical we are pitching out - we are making it in partnership with Big Balls Films and Thomas Schonberg. It is written by Simon James Green and Sarah Counsell with music by Ruarri Joseph.

[Watch video](#)



River Cafe Spring


06.05.2011

Delicious Asparagus Frittata

[Watch video](#)

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ALIGNMENT - 2



What's new

Collaborators

Case studies

Partners

Team

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Atomized

 is a production company that creates content for TV, web and mobile, funded by broadcasters and brands

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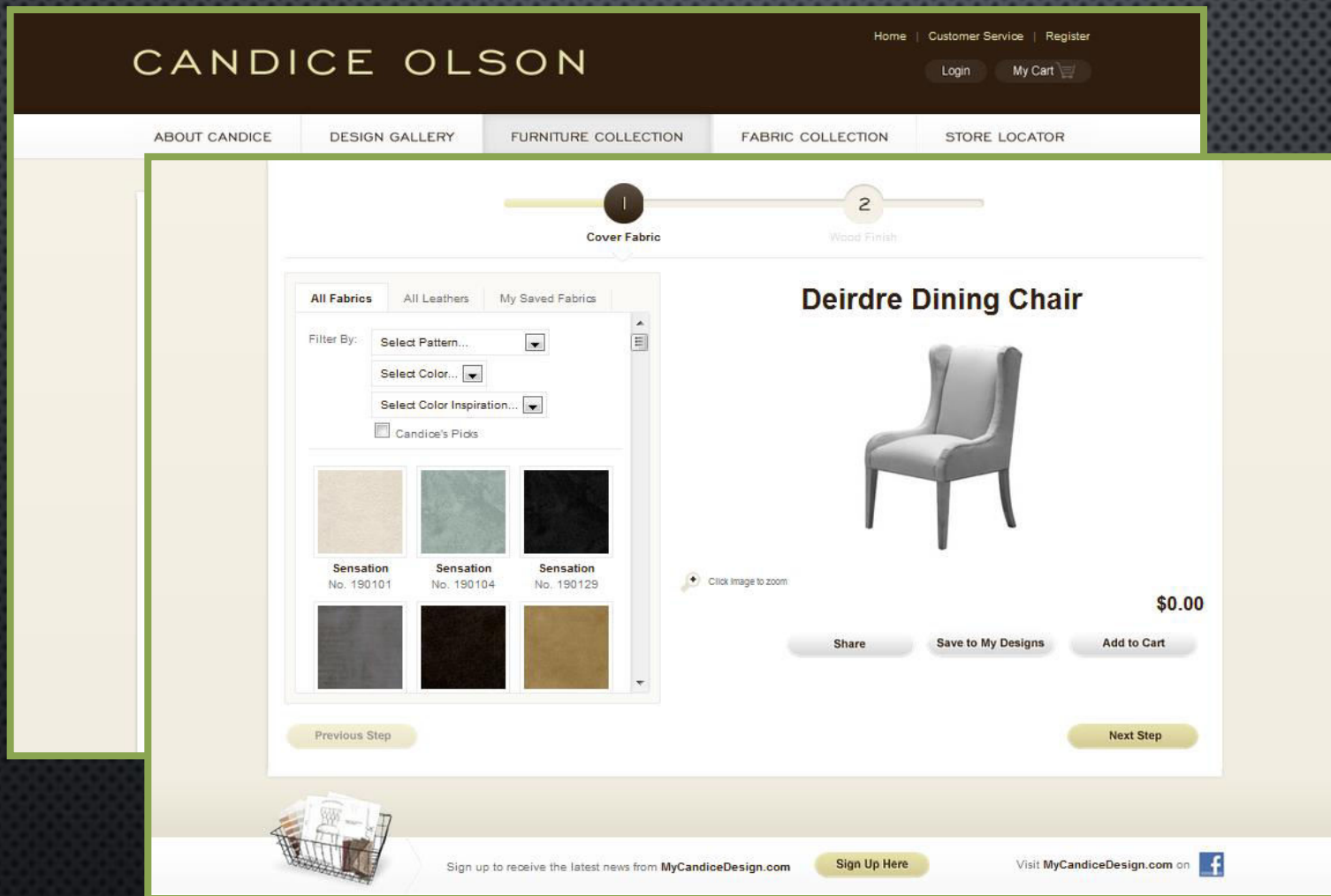
Watch video

<http://www.atomized.tv/>

ALIGNMENT - 3

- PAGE ELEMENTS SHOULD BE VISUALLY CONNECTED TO EACH OTHER
 - PROVIDE INVISIBLE LINES TO DIRECT THE EYES
 - EASIER TO SCAN THE PAGE
- MANY SITES USE GRIDS TO LAYOUT PAGE ELEMENTS
 - VERTICAL AND HORIZONTAL GUIDELINES USED TO PLACE ELEMENTS ON A PAGE
- CSS GRID FRAMEWORKS
 - [HTTP://WWW.BLUEPRINTCSS.ORG/](http://www.blueprintcss.org/)
 - [HTTP://960.GS/](http://960.gs/)

CONSISTENCY - 1



<http://www.mycandicedesign.com/>

CONSISTENCY - 2

- ▶ DESIGN FEATURES SHOULD BE RE-USED
 - ▶ USERS RECOGNISE AND UNDERSTAND FAMILIAR ELEMENTS
- ▶ EXAMPLES
 - ▶ PERSISTENT NAVIGATION BARS
 - ▶ USE THE SAME VISUAL STYLE FOR ALL HYPERLINKS
 - ▶ PAGE LAYOUT REMAINING IDENTICAL THROUGHOUT THE SITE

CONVENTIONS

- THE WEB HAS LOTS OF CONVENTIONS
 - E.G. COMPANY LOGO IN TOP-LEFT CORNER
- WE SHOULD USE CONVENTIONS IN PAGE DESIGNS
 - USERS RECOGNISE ELEMENTS FROM PAST EXPERIENCE
- EXAMPLE CONVENTIONS
 - UNDERLINED TEXT IS A HYPERLINK
 - PERSISTENT NAVIGATION
 - NAVIGATION BARS ARRANGED HORIZONTALLY ALONG THE TOP OF A PAGE OR VERTICALLY ON THE LEFT-HAND EDGE

INTERFACE DESIGN

- PAGE DESIGNS CAN BE DEVELOPED IN A NUMBER OF WAYS
 - BY HAND USING PENCIL AND PAPER
 - AN IMAGE EDITING APPLICATION E.G. GIMP
 - WORK DIRECTLY WITH HTML AND CSS

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