Contents

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0.1 Assessment

Participation and Consultation (Weekly from Week 2 to Week 13):
- Group discussions on that week's topic
- Design activities for website project
- Formative submission of Design Report: Part A
- General participation in practicals/tutorials

During Week 10 Practicals:
- Series of tasks to test your knowledge of HTML and CSS
- Everyone will be asked to complete the same type of task

Due Exam Week 1:
- Design Report describing and justifying design of website
- Website Implementation (HTML/CSS/jQuery/JavaScript) according to brief

Web 4.0: mobile web
Web 4.0 & 5.0: connections and serendipity

Chapter 1

Lecture Notes

1.1 History of the Web

1.1.1 Origins

- Originated in 1960s – ARPANet
- TCP/IP introduced 1982
- DNS developed in 1984
- Internet was commercialized in 1995
    - When NSFNET was decommissioned

1.1.2 WWW

- System of interlinked hypertext documents accessed via Internet
- Created by Tim Berners-Lee in 1990 while with CERN
    - HTTP, HTML, web browser, web server
    - WorldWideWeb released 1991 publicly
- Mosaic (web browser and Gopher client) 1993
- W3C World Wide Web Consortium founded 1994
- Commercialization of WWW late 90s

1.1.3 WaSP

- "The Web Standards Project" setup in 1998 by a group of professional web devs and designers
- Reforming the W3C recommendations as standards
- Push to standardize approaches and implementations across all browsers

1.1.4 Evolution of WWW

Web 1.0: static (information retrieval)
Web 2.0: collaborative (sharing and production)
Web 3.0: semantic and personal (meaningful web)

1.2 Web Design

1.2.1 What Is It?

- Process of creating the 'front-end' of a website
- What the users sees and interacts with
- Bringing media together into a cohesive whole
- Creating a good user experience

1.2.2 Who's Involved

- Client
- Users (indirectly)
- Web designer
- Web developer
- Content editor

1.2.3 What's Involved

Pre-planning and planning

- Client goals, feature requests, target audience
- Design documentation
- Content gathering/definition

User analysis

- Who are the users?
- What will they want/need to do on the site?
- Why are they there?
- Is your site:
    - Usable
    - Useful
    - Efficient
    - Memorable
    - Enjoyable
    - Aesthetically Pleasing
    - Fun
    - Safe

Information architecture

- How will content be structured on the site?
- How will that structure be represented to the user?

Navigation and interaction design

- How will people move around?
- How will they know where they are?
- What will they be able to do? And how?

Aesthetic and visual design

- What will it look like?
- Typography, color, layout
- How are elements arranged on the page?
- How does it fit with and extend the clients brand?

Prototyping

- Low/high fidelity
- Represent aspects of the site
- Technological or design based

Evaluation

- User testing
- Performance testing
- Improve before going live

Accessibility design

- Standards to ensure equal access
- Structural, semantic HTML
- Allow for different modes of content access

Trust, personalization and globalization

- Engender trust in your site
- Build in content personalization/contextualize
- Going global and local at the same time

> **Note 1: What makes a good website**
>
> - Site purpose and function is clear to the user
> - Easy to navigate and use
> - Content is credible, original, useful and timely
> - Multimedia, where used, is appropriate
> - Visual design is consistent, appropriate and well organized
> - Loads quickly and is responsive to user interaction

1.3   Stakeholders

Customers == users! There are other users too:

- Internal stakeholders
  Customer service, sales, etc
- External stakeholders
  Suppliers, couriers, etc

1.3.1   User Centred Design (UCD)

> "Users just aren't that into you. It's not personal. It's business. Unles what you're writing...
> - solves their problem
> - provides useful information
> - entertains them
> - makes them feel like they rule
>
> ... it's irrational to expect users to care about it."

From Users Don't Care About You by Jeff Atwood

1.3.2   Stakeholder Levels

Primary (key users): Actively uses the site
Secondary: Served by the site
Auxiliary: Impacted by the site

1.3.3   Understand the User

- Basic demographics
  - Age (elderly, small children, generational styling)
  - Gender (masculine, feminine, gender-neutral)
  - Where they live and work
  - Physical/intellectual impairments
    Visual/motor impairment
    Colour-blindness, dyslexia
  - Don't get caught in the trap of creating user groups solely from demographics
- Social/cultural characteristics
- Relationship to business
- Goals of use
- Context of use
- Tools and preferences

1.3.4   How to get Information

- **Interviews**
  One-on-one, clear agenda and questions
- **Focus Groups**
  Moderated group discussion
  Invited actual and/or intended users
- **Observation/Contextual**
  Visit users in situational, especially useful for unique contexts

Watch as they use, think-aloud, recall through video
- **Questionaires**
  User Tasks
  Intentions
  Impressions (via Likert Scale - strongly agree/disagree)
- **Card Sorting**
  For content-based or complex sites
  User understanding and grouping of content
- **Usability Testing**
  Observation - human and digital
  Users perform specific tasks on website/application

1.3.5 Core of a Persona

Precise description of a *typical user*:
- Distillation of user group characteristics
- Derived of patterns/commonalities in your data
- May have more than one *typical* user

A persona describes:
- What motivates the user
- Why they are really using your website
- What they are really trying to accomplish

Elements of a Persona

- Name
- Photo
- Tagline
- Background - Demographics, Skill Level
- Narrative
- Attitudes (as related to your site)
- Behaviours and Tasks (as related to your site)
- Goals
- Frustrations and Pain Points
- Scenarios

1.4 Planning and CSS

1.4.1 Determining Content

- Make a list of necessary content (client)
- Prioritise the information (user)

1.4.2 Organisational Schemes

- **Exact** organisational schemes: Great for known item searching

  - Alphabetical
  - Chronological
  - Geographical
- **Ambiguous** organisational schemes: Reflects nature of language (imprecise)
  - Topical
  - Task-oriented
  - User-specific
  - Metaphor-driven

Hybrid Schemes

- Combines multiple organisational schemes
- Unless the schemes are physically separated, confusion will result
- They allow for multiple entry points to the content

1.4.3 Organisational Structures

- Hierarchy
- Hypertext
- Database

Scheme vs Structure

- A **scheme** groups similar things together
- A **structure** shows how those groups are related

1.4.4 Card Sorting

Step 1

Analyse documents for:
- Objects (noun)
- Actions (verb)
- To identify content and tasks for users on website

Step 2

- Identify the set of keywords/topics to be categorised
- Write each keyword/topic on an index card/post-it note

Step 3

Can be done:
- In-person with an observer
  User thinks aloud as they categorise (gives insight into their thought process)

- In-person without an observer
  Participant works along (can interview after if needed)

Open Card Sort

- Users **organise** cards into piles (that make sense to them)
- Users **name** each group (in a way that accurately describes the content)
- You learn how users group content and what terms/labels they use

Closed Card Sort

- Provide users with **pre-defined** categories
- Users **place** cards into a category (that makes most sense to them)
- Learn how users relate content to categories