CO3707 Assignment (Stage 1) User Need Analysis

Generation 60+, Kitchen & Bathroom Safety

Focus on kitchen and bathroom safety for generation 60+ with and without disabilities! Develop a Website instead of a Flash Application for accessibility reasons.

	Area of interest	Analysis results	justification	Some design implications
	User Group –Eld	erly people		
1	Age	60+	Bathroom / kitchen very dangerous for older people -> Website No upper age limit!	Keep it simple
2	Gender	Male and Female	Both genders have to use a bathroom. Kitchen Safety is maybe more important for women but the topic should be available for both genders.	Do not design for a particularly gender
3	Disabilities	Blind/Short sighted, Deaf or Hard of Hearing, Physical Disabilities and Motor Impairments	1 in 2 Americans 65 years and older has a disability (Paciello, M. G. (2002) Web Accessibility for People with Disabilities) Therefore, accessibility is important at the age of the defined user group.	Comply with all legal mandates and standards, Use W3C WAI Standards for Webdesign, Publish information also in alternative ways. Consider screen readers! Do not use small fonts! Ensure nothing is relayed by sound alone! Check keyboard usage!
4	Educational Background	No special education	No further education should be needed to access and understand the information	Very different background – use simple language!
5	IT Skills	Everyone who knows how to use a browser	All youngsters have IT skills	According to the Government guidelines all school pupils must do IT

6	Cultural, Linguistic and Social		The Website is designed for UK based people. There are different issues in other countries e.g. two water tabs, so it is only useful for people living here.	Use English as language set
7	Motivation		Available 24x7 – 'any time, any place, any where'	Availability at home, possibility to print, look up things, fun by taking the quiz
8	Environment	Home	Very different knowledge levels about computers / web browsing! All kinds of access speed / processing power!	No special downloads should be needed. Optimize for small bandwith!
	Other stakeholders			
	Age	Children: 30+/-	Want to make their parents home more safe for them	
		Grandchildren: 15+/-	Show their grandparents how to use computer/internet	
	Gender	Everyone	Male and female alike	
	Disabilities	Every stakeholder	See 3	
	Educational Background	Crandahildran	Vary from no qualifications to PhD	Cannot assume any qualification level
		Grandchildren	Low level because of age but maybe computing skills	
	Cultural, Linguistic and Social	Every stakeholder	See 6	
	Motivation	Government	A wider understanding of health and safety issues	Internet as a cheap possibility to reach a lot of people
		Children Company I work for	Safety for parents Develop a platform for image reasons	

		and promote products	
Environment		See 8	
Background Knowledge	Children	Knowledge may differ	Do not make assumptions on the level of knowledge.
	Grandchildren	Knowledge may differ	Do not make assumptions on the level of knowledge.

Accessibility

- Optimize to W3C Accessibility Standards (barrier-free)
- Optimize for screen readers
- Technical
 - CD with "autostart" of the HTML page in default browser
 - Online Website
- Optimized Print View
- Keyboard only usable

Usability

- Commonly used Icons / Positions
- Colour guided Navigation
- o Flexible Font Size
- Provide larger targets
- Avoid fancy font types / italic types for better reading on screens
- Avoid technical terms
- Links should be identified in a consistent and obvious way
- Visited Links should change colour
- Links should have a hover effect
- Users should not need to install software (Acrobat Reader for example) to access information
- Don't rely on color alone
- Use markup and stylesheets properly
- Clarify natural language usage
- Design for device independence
- Provide context and orientation information
- Provide clear navigation mechanisms
- Ensure that documents are clear and simple

Multimedia

- Link MP3 files to listen to content
- Pictures / Animations (Creative Commons)
- Videos with SAMI subtitels

Education

Flat learning curve

The needs

Generation 60+ wants to:

Find out about health and safety topics

Find out about kitchen safety

Find out about danger zones

Find out about making kitchens safer

Find out about where to get safety products

Find out about companies which do kitchen safety improvements

Find out about what to do in case of an accident

Find out about their kitchen safety situation with a checklist

Find out about bathroom safety

Find out about danger zones

Find out about making bathrooms safer

Find out about where to get safety products

Find out about grab bars

Find out about what to do in case of an accident

Find out about their bathroom safety situation with a checklist

Find out about statistics

Find out about where to get more information about health and safety

Find out about links

Find out about accessibility of this website

Find out about standards used

Find out about the motivation of creating this website

Design Justifications

A = Accessibility, U = Usability, M = Media

U1, A1, M1: Commonly used position, Image with ALT-Text, Logo of Website

U2, A2, M2: Commonly used position – famous icons, Link to MP3 Content

U3: More Information about the content of the Page

U4, U4, M4: Dot indicates current location, hierarchical concept & right side of layout commonly used, sub navigation hidden

U5, A5, M5: Commonly used symbol, same position on every screen, content based, Hints can be links, pictures, etc.

A6, M6: Indicate web standard usage, link to w3c

U7: indicate end of content / page

U8, M8: Quick links from Home to content, buttons with underlined links, colour guided navigation

U9, A9, M9: Content – easy to read font, underline links and use right colour for topic, pictures and animations possible

U10: Content Headline, Keyboard Shortcut

U11, A11, M11: commonly used navigation bar, colour guided, location indication, hover effect

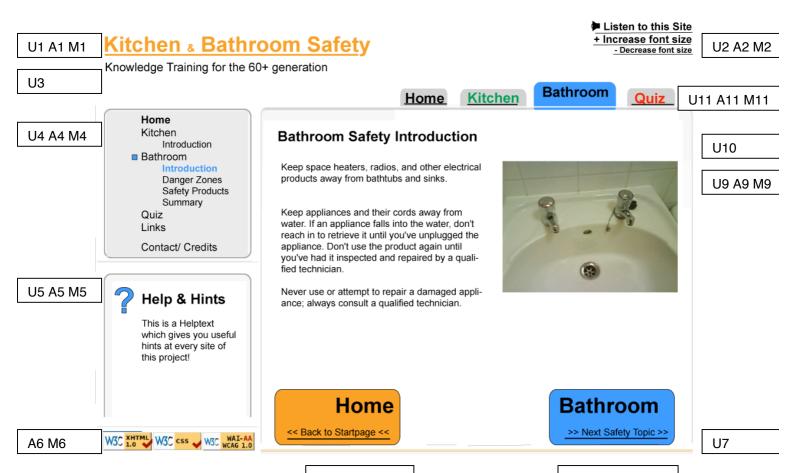
U12, A12, M12: Buttons to step through content

U13, A13: Answers, usable with keyboard and clickable

U14, M14: Feedback

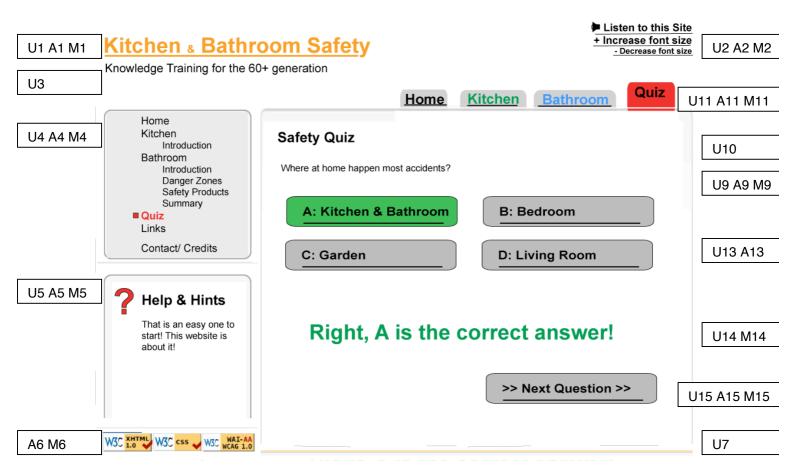
U15, A15. M15: Forward Button to get to next question





U12 A12 M12

U12 A12 M12



References

Paciello, M. G. (2002) Web Accessibility for People with Disabilities, New York

Kurniawan, S. & Zaphiris, P. (2005) Research-Derived Web Design Guidelines for Older People

Fidgeon, T. (2006) Sitepoint http://www.sitepoint.com/article/improve-usability-older-users (accessed 22/10/2007)

World Wide Web Consortium http://www.w3.og/ (accessed 22/10/2007)

Khan, S. (2007) http://www.bathroomsafety.co.uk/bathroom-safety-for-older-people.html (accessed 22/10/2007)