**AC32005 – Human Computer Interaction**

**Travel Explorers**

**Interim Report**

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## Travel Explorer – Requirements Analysis

Functional Requirements

#### Usability / User Experience Design

The usability section is often neglected entirely, as evidenced by the enormous volume of websites in the fashion industry, ecommerce and manufacturing with websites that are frustrating to use. This section is not only vital for your designers, but also for performance testing and software QA testing. Again, adding this area to requirements lets management hire out for help if it’s not available in-house.

Test cases are fun to make for this section because it’s easy to check and validate what was done or not. Look for usability heuristics on the web and use them as guides for requirements. Remember browser and web standards compliance here, as well as target audience research to help with color, information architecture and leading tasks.

#### Mobile Device Requirements

Mobile devices are hard to keep up with but if your web site is the kind where your target users may want to access it while on the go, this section of requirements is a must.

News and ecommerce sites should pay attention to mobile variations. Sites designed in all Flash would fail this requirement. Local sites are good candidates for mobile design and of course, any site that offers an added “app”.

#### Content Writing & Style Guides

Some companies may put content writing in with either usability or search engine marketing. That’s fine. The important points for nailing down guidelines for content are consistency, embedded link placement, anchor text rules, video transcripts, how to structure headings and sub-headings, and more. Be specific if different departments participate with their own content. This is when style sheets and guidelines are really helpful.

#### Accessibility & Compliance Standards

This is not just for blind people. It’s a huge oversight to neglect this area. This section forces your team to learn if you must follow Section 508 or PAS 78 (UK) guidelines.

Use this section to document requirements for alt attributes, title attributes, and accessibility techniques for forms. Remember to include guidelines for Attention Deficit Syndrome, contrasts, readability, users who use JAWS and those with an unsteady hand (MS, Parkinson’s).

#### Alternative Text for Images

If alt text isn't provided for images, the image information is inaccessible, for example, to people who cannot see and use a screen reader that reads aloud the information on a page, including the alt text for the visual image.

***Rationale****:* When equivalent alt text is provided, the information is available to everyone to people who are blind, as well as to people who turned off images on their mobile phone to lower bandwidth charges, people in a rural area with low bandwidth who turned off images to speed download, and others. It's also available to technologies that cannot see the image, such as search engines.

#### Keyboard Input

Some people cannot use a mouse, including many older users with limited fine motor control. An accessible website does not rely on the mouse; it provides [all functionality via a keyboard](http://www.w3.org/TR/UNDERSTANDING-WCAG20/keyboard-operation.html). Then people with disabilities can use assistive technologies that mimic the keyboard, such as speech input.

#### Transcripts for Podcasts

Just as images aren't available to people who can't see, audio files aren't available to people who can't hear. Providing a text transcript makes the audio information accessible to people who are deaf or hard of hearing, as well as to search engines and other technologies that can't hear.

***Rationale:*** It's easy and relatively inexpensive for website developers to provide transcripts for podcasts and audio files. There are also [transcription services](http://www.uiaccess.com/transcripts/transcript_services.html) that create text transcripts in HTML format.

#### ****Reduce User’s Cognitive Effort****

Make the webpage obvious. It should not require detailed explanations for it to work. Keep the navigation structure of the website intuitive and visible.

#### ****Don’t Waste User’s Time With Trifles****

When you need a user to sign up for a service, keep the process as simple as possible. 3-4 steps on a single page is usually the limit in terms of the number of steps a user is willing to put up with to sign up for your service. In case more steps are required, arrange them sequentially in one page itself.

#### ****Attempt to Focus a Visitor’s Attention****

If your website is selling a product on sale for a limited period, use the design of the webpage to focus the user’s attention to it. Do not use a pop-up style banner to convey the message.

#### ****Showcase the Website’s Features Effectively****

If your site offers 9 divisions that provide access to other pages, make sure that all 9 major headers are easily visible. By doing this you will be able to effectively showcase all that you have to offer.

#### ****Write Effective Content****

Try to write the content on your website in simple language that is broken down category-wise and which has headers that are easy for a user to scan through.

#### ****Don’t Complicate Things****

Users typically visit a website to access information and not for the design. In fact they search for the information despite the design. Try to simplify this process by keeping things as simple as possible.

#### ****Use Your White Space Effectively****

Making use of the space on your website doesn’t mean cluttering it with things. In most cases it is a battle to keep things as simple as possible. Using the white space in your website to differentiate categories is an effective design strategy.

#### ****Communicate Effectively****

When using your website as a visual communication tool, remember to check the content and design for the essentials that need to be communicated and the clarity with which it is communicated. Further, keep the visual cues to the point to enhance distinctiveness and to provide emphasis.

#### ****Use Familiar Formats****

Little things like placing the search box in places where users would expect it, using familiar terms like sign-up and log-in and placing the major links in familiar places will help in reducing the user’s learning curve for your website.

#### ****TETO****

This stands for Test Early, Test Often. This is an oft overlooked aspect of the website development lifecycle. Testing early with users makes the difference in sticking to schedule and delivering the product that satisfies your client’s requirements.

Non Functional Requirements

# Different browsing technologies

Lynx browser

Text-only browser with no support for tables, CSS, images, JavaScript, Flash or audio and video content. Download the Lynx browser and see if you can successfully access every part of your website

WebTV

560px in width with horizontal scrolling not available

Screen reader

Page content read aloud in the order it appears in the HTML document

#### Handheld device

Very small screen with limited support for JavaScript and large images

Screen magnifier

As few as three to four words may be able to appear on the screen at any one time

Slow connection (below 56kb)

Users may turn off images to enable a faster download time

1600px screen width

Very wide screen

# ****Provide alternatives**** to:

Images

in the form of ALT text

JavaScript

through the <noscript> tag

Flash

with HTML equivalents

Audio & video

by using subtitles or written transcripts

# Enhanced website accessibility

For enhanced website accessibility you must also be careful how your pages look when support for CSS and/or tables has been removed.

#### Opera Browser

for checking web accessibility

#### Lynx Browser

### to see if each part of the site is accessible