Summary of the Assistive Technology Localisation Framework

(http://localisation.atbar.org/)

Cultural Nuances	Addressing Design	Language Layout	Individual Needs	Translation Options	Technical Issues
Use polite terms and avoid slang or casual statements Describe any words that may have a double meaning Understand the use of gender as in many languages objects can be female or male rather than neuter as in the use of 'it' Avoid using images if you are not sure they explain your text clearly and beware of the map that is out of date which is linked to an address. Be aware of the symbols that may have to be changed to suit, religion currency and prices and may not render correctly when you are writing in another language. Question why you might include a video to explain text if you are concerned that some images may not	Think carefully about image sizes that incorporate text – text may cover more of the picture than required when translated or change the shape of a menu item or even become truncated. If an image can be used cross culturally, keep the text separate to avoid extra work and enhance accessibility. Use universal icons for controlling interactions (with text 'alt tags') so for example 'play and rewind' have the same shape button whatever the language. Allow text to reflow – offer the chance to read more elsewhere if the text when translated takes up more space than is available in a set area. Be aware of the implications of zoom and magnification. Allow flexible space for titles and headings in	Choose a font for your work that has an extended character set to include the accents and if possible the diacritics. Font size 12 and above works best for Arabic and other cursive scripts as this increases readability. It can help those with reading difficulties to left justify text so when viewed overall there is a jagged edge to the content and users can see where they have reached in their reading. This may not be the case in cursive script languages where there are specific elongating characters which act as connectors and justified text is easier In languages where there are both spaces between characters or letters within words and between words (such as in Arabic) it helps to increase the space between the words.	Good contrast levels of text on background colours and avoiding busy backgrounds for important text is often mentioned under accessibility, but it helps readability for all. Avoid the need for users to travel through many web pages, links or menu items to get to their goal. Keep navigation clear, quick and easy and make buttons and links clearly visible by shape, colour and consistent style. Offer the ability for someone to search for items not just browse lists etc. It is possible to use the browser search when working on the web but only for that page and not all individuals know this is possible. Include headings and making them relevant in the local language	Automatic translation engines are improving but are not perfect. Crowdsourcing can reduce costs but standards need to be high. Volunteering can be a very useful way of gathering free translations that are of interest to the translator but maintenance may be an issue. Professional agencies may have more quality controls but at a cost. Translations of assistive technology menus and other digitised text for those using screen readers, text to speech need to be extremely accurate and for those who have cognitive difficulties there may be more localisation as well as clarity issues arising.	Separate resources (prompts, icons, sounds, etc) used in the software from the actual code which makes the software complete its task. Use the Unicode and UTF-8 standards for all text input and output These standards support nearly all languages known. Support string tables for each language. Do not reuse the same string in several places, always create a new string. Support separate icons and images for each language. The interpretation of colours and symbols vary between cultures, Support localised keyboard shortcuts. Make sure keyboards and on-screen keyboards are supported for the

be acceptable. Take care when showing hand gestures or other body parts such as the feet that may be considered rude when shown in certain positions.

Watch out for time zones and how you describe time, always offering alternatives when thinking of the world's time clock.

Check legal, privacy, copyright and accessibility statements.

particular if these are part of the menu system.

Try to avoid having narrow columns or too many columns and do not use tables just to layout text as this will not help screen readers and will be lost in a text only view. Only use tables for content data when really necessary.

Choose font sets and styles carefully as some may not be recognised by certain languages and not all are designed for screen reading rather than paper based reading. For example angular and serif fonts may look good on paper but reduce readability when seen on small low resolution screens such as the mobile phone.

Icons and symbols will need to be localised, in particular those related to currency using the correct positioning. Some symbols used such as checks in check boxes may have different meanings. Never hard code date, time or currency formats

Don't forget that different short cut keys may be used in the different languages so if you wish vour users to have access to text edit forms and they are keyboard only users you may find that 'ctrl+b' or 'command+b' does not make the text bold - in German for example it may be 'strg+f' namely 'steuerungstaste-fett' which would be ctrl+f or 'command+f' which is 'find'!

Spaces are used after a word in English and hyphens may be used between words -Chinese. Korean and Japanese character breaks occur at any time and care is needed no to impact on meaning spaces are not linked to words necessarily - the same may be true with Arabic sentences. Punctuation in these languages and Arabic vary in the amount used so careful proof reading is required.

Don't forget bidirectional languages – Hebrew and Arabic letters go right to left and numbers left to right or a mix which impacts on menus as as well as easy to see alongside other text with good spacing.

Avoid anything that moves or blinks on a page as this can be a distractor and it is important to avoid bright and conspicuous advertisements that can be distracting. It is important to check the type of advertisements that are appropriate at a local level.

Test to see how quickly a page loads and the impact it might have on older computers and poor connection speeds as well as checking individual frustration levels!

Letter spacing and easy to read text which has been discussed in language impact on layout_

Clear information on the first page of the online service or web page or instruction manual to tell the user what to expect.

Check for how many windows are going to open with the use of intended languages on the target platform.

Make sure appropriate fonts are supported to represent the languages you wish to support in a complete and clear manner.

Allow the user to easily change the locale of the software.

	well as content especially for technical terms when coding. Some texts are still written vertically for particular elements, which means a complete change of layout.	extraneous links and plugins – too many not only cause confusion but they can be slow to open and hard to use with some assistive technologies. During testing times check broken links or pop-up dialog boxes that return a message that is not easy to understand or appears in another language such as a '404 error page' on a website. Make it easy for users to reach contact information with an address in the correct international layout and an international telephone number – preferably in addition to any free number, as this may not work from outside the country. Links to a map can also help in some circumstances.		
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