



W3C “Web on TV” Workshop

Expectations for HTML5 as UI

- Accessibility, Emergency Alert etc. -

2010.09.03

NEC

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Who am I?

Past

- R&D on multimedia educational applications
 - Training simulators for PBX maintenance, fireperson
 - Distance learning using satellite
 - Authoring tools for digital data broadcasting using BML etc.
- One of Key Success Factors is UI , definitely!

Current

- Standardization works on IPTV in ITU-T, especially from the viewpoint of IPTV terminal devices/services
 - There are lots of normative references to W3C standards in ITU-T Recommendations
- Not an expert on HTML5

Today

- Introducing expectations mainly relating to both HTML5 and ITU-T works

Accessibility

HTML5 realizes equal world broadly

Accessibility is one of main topics in ITU-T

It is necessary to consider and explore how persons with hearing, sight or aging disabilities can consume the same broadcasting (television, radio and Internet) services as those without disabilities, to a reasonable extent.

<http://www.itu.int/en/ITU-T/accessibility/Pages/default.aspx>



<http://www.itu.int/themes/accessibility/stories/tish-kerfoot.html>

W3C has already made great contributions to Web world

- Well-known W3C Web Content Accessibility Guideline (WCAG) 1.0, 2.0
- Japan standards “JIS X 8341-3:2010” is created according to WCAG 1.0 and 2.0

HTML5: the Web of Things

- TV: representation
- Remote controller: assign operations of buttons to the intrruption



Accessibility

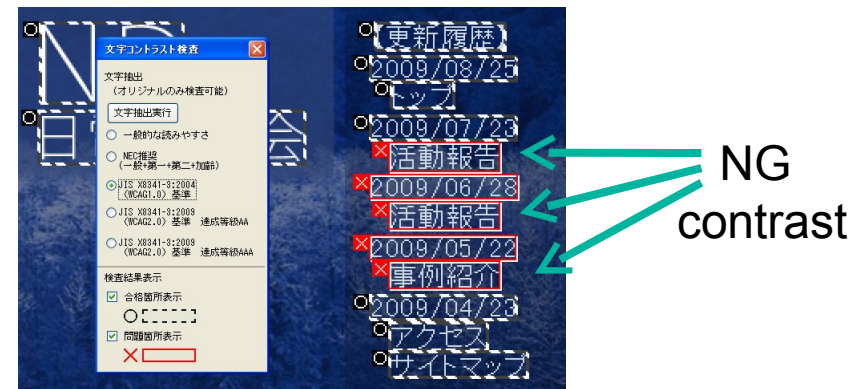
A check tool for Web designer can be refined thanks to CSS new features

(1) Color visual impairment simulator



(2) Auto checking feature of color contrast between text and its background

- This tool shortens the inspection hours by an average of 17%, by up to 66%.



Research planning division, NEC: <http://www.nec.co.jp/rd>

Emergency alerts

HTML5 will be used more for disaster relief/early warning because of WoT

Emergency telecommunications in ITU-T

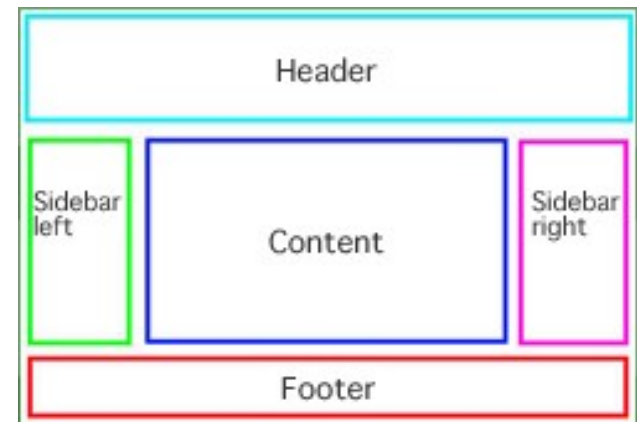
ITU develops technical standards (known as Recommendations) that facilitate the use of public telecommunication services and systems for communications during emergency, disaster relief and mitigation operations.

<http://www.itu.int/en/ITU-T/emergencytelecoms/Pages/default.aspx>



HTML5 provides lots of ways to handle such information

- It is necessary to treat anytime, any where, any device
 - Broadcasting /Archive services, TV/PDA/Mobile
- Web Socket, Web messaging etc.
- How/Where we should show the information on Web?



<http://www.html5-guide.com/strong/layout.html>

Emerging UI

HTML5 offers a good opportunity to create new consumption style on TV

End-users can search information more aggressively

- SVG/Canvas etc. provides variety methods to access information what you really want
- Following an example of a new TV interface

A UI example showing relative strength of TV program

- Relativity strength is shown by the distance and lines, and related information is arranged like the concentric circle
- Related information is near to the central information and each others
- Related keywords are shown to specify the relation
- For flexible design, data structure and user interface is separated.



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Summary: Expectations from telecom worlds

- TV sticks to an ordinary life. So,
 - Enhancement of accessibility
 - Handling emergency information

Realize rich IPTV services

- Emerging UI may show us possibilities of brand-new IPTV services

Thank you!



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