
Breaking down barriers: Design for Accessibility

Jan Eric Hellbusch and Martin Stehle

The power of the Web ...

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect."

(Sir Tim Berners-Lee)

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1. A few examples ...
2. The range of Web accessibility
3. Quality assurance with a testing scheme (BAFIN)

A few examples ...

Although there uncountable issues concerning Web accessibility, there are a few major problems in Web 2.0:

- Keyboard navigation
- Dynamic content and no JavaScript
- Compatibility problems with user agents
- Images with no alternate text

Keyboard navigation



The screenshot shows the Yahoo! Finance homepage. At the top, there is a blue banner with the text "Welcome to the new Yahoo! Finance Home Page." and a yellow button labeled "Go to Yahoo! Finance". Below this, a white box contains the text "Roll over the tips to learn more." and a mouse cursor icon. The main content area features a navigation bar with tabs for "HOME", "INVESTING", "NEWS & OPINION", "PERSONAL FINANCE", and "MY PORTFOLIOS". A search bar is located on the right. A yellow tooltip with the text "New Global Market Summary ..." is positioned over a link in the "MARKET SUMMARY" section. The "MARKET SUMMARY" section includes a line graph for the Dow Jones Industrial Average and a table of market indices. The "VIDEOS" section on the right features a video player for "FOX Biz Flash" and a list of video thumbnails.

YAHOO! FINANCE

Welcome to the new Yahoo! Finance Home Page.
We have made it easier for you to find the information that is most important to you.
We have also added some new features to help you keep on top of what's happening on Wall Street and all around the world.

[Go to Yahoo! Finance](#)

Roll over the tips to learn more.

Yahoo! My Yahoo! Mail More Make Y! your home page Welcome: newteacher2887 Sign Out Help

YAHOO! FINANCE Search: [Web Search](#)
Provide your feedback | Page Four
streaming audio. ON

HOME INVESTING NEWS & OPINION PERSONAL FINANCE MY PORTFOLIOS

Enter [Go](#) Tue, Sep 4, 2007, 7:11PM ET - U.S. Markets closed.

New Global Market Summary ...

MARKET SUMMARY

| | US | EUROPE | ASA |
|-----|-----------|--------|--------|
| Dow | 13,448.86 | +91.12 | +0.68% |

13500
13450
13400
13350
13300
10am 12pm 2pm 4pm

Nasdaq 2,630.24 +33.88 +1.20%
S&P 500 1,480.42 +45.43 +3.15%

Yahoo Acquires BlueLithium for \$300 Million Reuters
Yahoo Inc. has struck a definitive deal to acquire BlueLithium, the fifth-largest U.S. advertising network, for \$300 million, in the latest move to consolidate the behavioral ad targeting market.

- Dow Drops on Economic Concerns - AP
- Intel to Announce 3rd China For Recall - AP
- GM's Aug Sales Rise, Ford, Toyota Drop - AP
- Stocks Rise After Manufacturing Data - AP

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VIDEOS

FOX Biz Flash
Provided by FOX

Food insurance price rise - BBC News

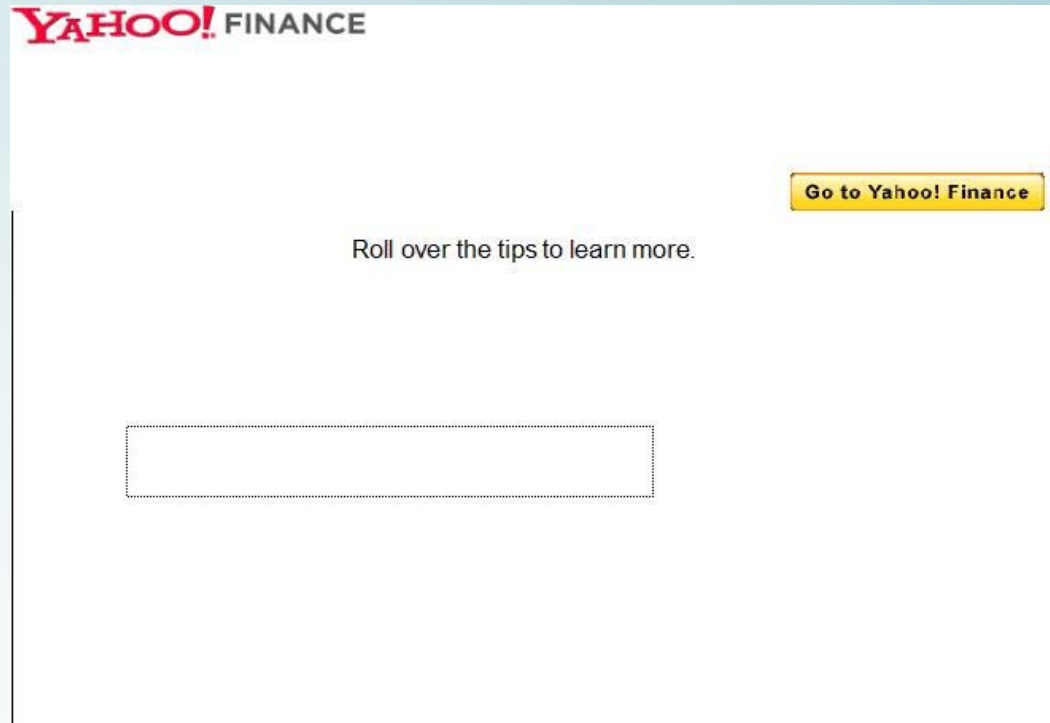
Hiring A Realtor - Money Talks

CFD Spotlight: Virgin America - Reuters.com

[View all videos](#)

At Yahoo! Finance someone forgot to consider keyboard navigation.

And it can go worse ...



The same page with user color settings.

JavaScript

The screenshot shows a Flickr page for a user named 'Herr Hellbusch'. The page header includes the Flickr logo, navigation links (Home, The Tour, Sign Up, Explore), a search bar, and a sign-in prompt. The main content area features a large photo of a presentation slide with the text: 'Zitat zum Abschluss', '"Es wurde Zeit, dass Webdeveloper mal nachdenken dürfen."', and 'Jörn Hofer'. Below the photo is a 'browse' button. To the right, there is a 'Tomas Caspers' photostream' with 1,213 photos and a 'BOA 2007 (Set)' with 13 photos, both with 'browse' buttons. The page layout is cluttered and lacks clear keyboard navigation cues.

On Flickr we see, that people try, but there usability issues concerning keyboard navigation.

Compatibility

A simple feature ...



In Google Suggest keyboard navigation is possible, but there are compatibility problems with screenreaders.

Images and alternate text

The screenshot shows the Google Maps interface in German. At the top, there are navigation links for Web, Bilder, News, Maps, Produkte, Groups, and mehr. A search bar contains "Berlin Messe" and a "Maps-Suche" button. Below the search bar are buttons for "Karte durchsuchen", "Branchen suchen", and "Route berechnen". The main heading is "Karten". Below it, there is a "Startadresse:" field and a "Route berechnen" button. The map itself shows a route highlighted in yellow, starting from a red pin on Messedamm and passing through Nordschleife, Halensee, and Messedamm. A yellow label "10 Dreieck Funkturm" is visible on the map. On the right side, there is a zoom menu with options from 0 to 19, and a "Vergrößern" button. Below the zoom menu is a compass and a "Verkleinern" button. The bottom left corner of the map area shows "©2007 Google" and the bottom right corner shows "Map data ©2007 Tele Atlas".

There are limitations to accessibility, or how would you transcribe a Google Map?

The range of Web accessibility

- User needs
- Legal issues
- Workflow
 1. Concepts and experiments
 2. Technical implementation
 3. Visuals and graphical design
 4. Web Content

User needs

From a users point of view, content providers will have to focus on the following seven aspects to comprehend accessibility:

1. Text orientation
2. Contrast and colours
3. Resizeability
4. Linearisation
5. Device-independence and dynamic content
6. Understandibility
7. Structured contents

Legal issues

W3C has published recommendations on:

- Web Content Accessibility
- Authoring Tool Accessibility
- User Agent Accessibility

The Web Content Accessibility Guidelines are the basis for legislation, including most European countries.

Workflow

Web accessibility is often a technical issue - at first. To be successful, though, project managers and designers will need to relate to technical ideas such as:

- standards compliance
- web page prototyping
- progressive enhancement

Concepts and experiments

- accessibility and semantics
- cascading style sheets - art in web design
- navigation - a site's backbone
- text-only? For whom or for what?

Technical implementation

- layout techniques - writing letters with MS Excel
- forms
- flexibility, not optimisation
- device-independence
 1. Input devices
 2. Formats (PDF, Flash ...)
 3. Dynamic content

Visuals and graphical design

Accessibility refers basically to content, not to design. There are a few checkpoints to be reflected, and art directors should ideally be able to develop their designs with Cascading Style Sheets. The accessibility issues for the graphic designer:

- contrast and colour are always subjective
- multiple formatting

Web Content

The next step is the day-to-day work, which is often in different hands. In a way, keeping accessibility up to par in a growing system is the hardest bit, not because of its complexity, but because there might be more people involved.

- orientation
- images (contrast, alternative text)
- technical accessibility (tables, abbreviations ...)

Contact

Jan Eric Hellbusch

Wittekindstr. 21c
D – 44536 Lünen

Tel.: +49 (0) 2 31 / 2 25 15 73