NAVIGATION DESIGN GUIDELINES II

- **10 Principles Of Navigation Design**

  Why Quality Navigation Is So Critical

- Content is the heart of every website ;then navigation is its brain

- fundamental pillar of information architecture design.

- large quantities of content, importance of navigation

- **Content that can't be found can't be read.**

- means that there's a lot of cost but zero value.

- Navigation website's "table of contents". page numbering to help you navigate.

NAVIGATION DESIGN GUIDELINES II

- Book can be in your hands & flicked through it. If it's a large publication, an index at the back that can be used.   Both ToC and Index is not possible in a website! – better Navigation Design

- Websites are navigated one screen at a time. can't get an immediate sense of its size or complexity. very disorientating.

- easy to get confused and get lost.

- A reader who gets lost or confused in this attention-deficit age is likely to hit the "*Back*" button. creating

- navigation system that makes the **reader feel comfortable**,

- allows them to find the content they want quickly,

- critical to the success of any website.

- Designing navigation is like designing a road-sign system.

- over-riding design principle is functionality, not style.

- A reader on the Web, like a driver in a car, moves quickly.

- Navigation is never the end objective for the reader. It is there to help them get somewhere.

- Most people don't stand around admiring road signs.

- Navigation works best -- **reader hardly notices it's there**.

- Navigation design should **always be simple, direct**

- **unadorned**, overriding objective of helping reader get to where they want to go.

- Navigation and search are intertwined. Search is a **form of navigation**.

- Reader will use a combination of the "content gatherers".

- Search to bring them to the subject area or product type they are interested in.

- navigation should kick in, giving them **the context for their search.**
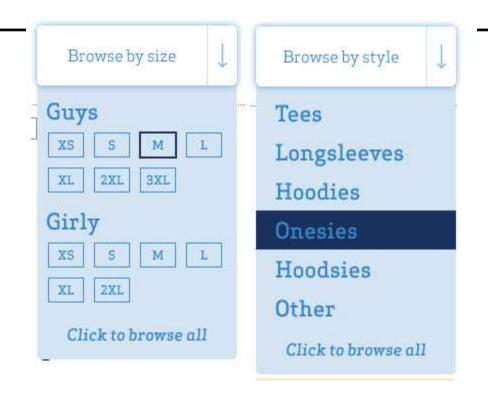
- Navigation design requires **detailed planning**.

- Wesbite once launched shud not be changed (design) frequently!

- navigation as if they are "written in stone" - risk of confusing regular readers

- People are by nature, habitual and conservative.

- Every few months changing structure - navigation of website,

- Risk of alienating regular visitors who have got used to

(Mental Models!!)

- **THE 10 PRINCIPLES OF NAVIGATION DESIGN**
  - **1. Design for the reader**

- you should design for the reader – the person who uses the website. Avoid designing navigation simply for it to look good.

- Avoid designing navigation from the orgn view point, like using internal, obscure classification names that aren't commonly understood.

- navigation is an aid for the reader. Unless you've engaged them and found out how they like to navigate, difficult to design navigation that will meet needs.

- Involve readers from day one by surveying or interviewing them about how they would like to navigate the content.

- Create mock-ups of the navigation as early as possible and show them to a sample of readers to get feedback.

- **2. Provide a variety of navigation options**

- If everyone were to navigate through content in the same way, the job of the navigation designer would be a lot easier.

- Unfortunately, different readers have different preferences on how they like to navigate around a website.

- accommodate a variety of readers and their navigation requirements, **a range of navigation options** should be offered.

- Some readers like to navigate geographically.

- Others navigate by subject matter.

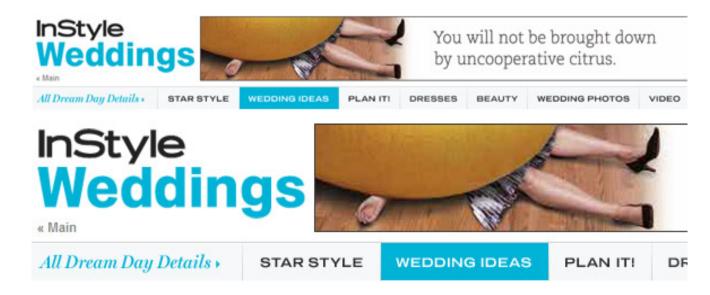- And some want to read the most recent documents similar to those they have just read.

- **3. Let readers know where they are**

- Navigation should give readers a clear unambiguous indication of what page of the website they are on.

- A Tourist Guide Map - If the map is well designed, one of the most prominent features will tell you – "You are here."

- CNN supports the reader very well in this. On CNN's entertainment page, you will see the masthead in bold capitals, the word "ENTERTAINMENT".

- Navigation should be presented as hypertext. where it is in graphical form – which is recommended only for global navigation – the classification name that describes the page the reader is on, should be a different design form the other classifications in the navigation.

- To let readers know where they are:

- **have prominent titles for every page** to tell readers immediately what section of the website they are on;

- make sure, if part of the navigation is in graphical form, that the **link describing the page the reader is on is a different design to the other links in that navigation**

- **4. Let readers know where they've been**

- let readers know where they've been on the site.

- This is a key reason to have as much of the navigation as possible in hypertext,   rather than graphical form.

- With hypertext, when a link is clicked its colour changes.

- hypertext are blue for unclicked links, and purple for those that have been clicked.

- **To let reader know where they've been:**

- keep as much navigation as possible in hypertext;

- use blue for unclicked and purple for clicked.

- **5. Let readers know where they are going**

- readers know where they are going.

- The way to achieve this is to create classifications that are as self-explanatory as possible.

- Number of ways to achieve greater clarity:

- When readers click on a link they expect to go to an HTML page. **If you intend them to go to a non-HTML page (PDF, Microsoft Word, etc.), inform them in advance.**

- If readers click on a link they expect to stay within the browser window they are currently operating within, unless you specifically tell them otherwise.

- **Open new browser windows for a reader only when there is a compelling reason.**

• If the navigation element is an image, such as a company logo, and is linked to the homepage, **insert ALT text** that says something like "Company Homepage."

•Change the colour of the link when the mouse rolls over it.

helpful when there are many links placed close together- reader knows exactly which link they are about to select.

•Consider drop-down navigation, showing lower levels classification, when the mouse rolls over a particular link. reader knows to navigate further into the website if they wish.

6. Provide context

- homepage is to provide context for the reader.

- Home page navigation is not simply about functional navigation such as hypertext and search.

- content highlights from the content archive, presenting them as summaries and or features.

- ensure that all content is properly classified;

- allow for a variety of product/selection homepages that publish the most relevant

- positive content for that particular product or section;

- use related navigation at the end of a document that gives links to similar documents or websites.

COMPLETE THE LOOK

£59.00

£25.00

£13.00
NOW £8.00

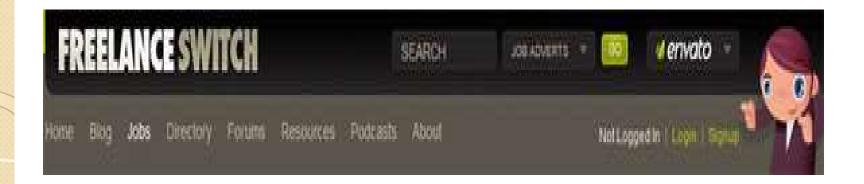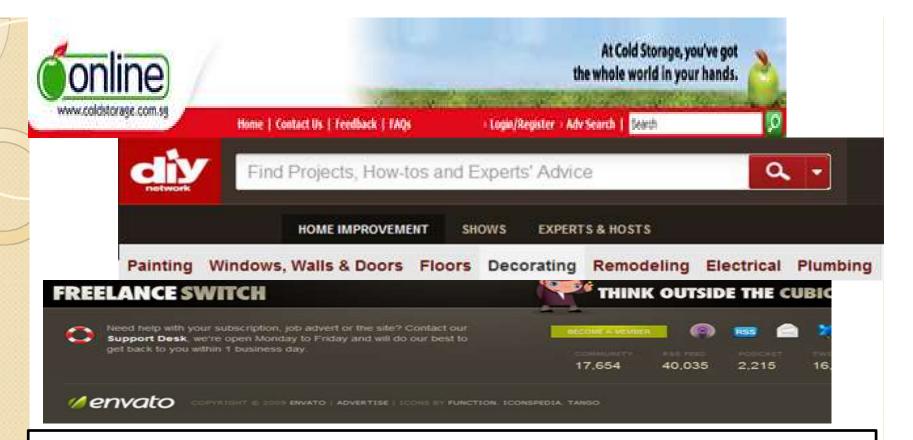
£15.00

7. Be Consistent

▪Readers turn to navigation when they're confused or lost.

▪Don't confuse them further by displaying inconsistent or

unfamiliar navigation design.

▪Consistency for classification is critical for successful navigation.

▪Navigation design requires:

❖consistent classification;

❖consistent graphical navigation design;

❖consistent hypertext colors.

8. Follow Web Convention

- Many people instinctively see the Web as a single medium.

- Navigation skills that they acquire on one website to other websites because it makes life easier for them.

- Number of navigation conventions have emerged on the Web.

- Designer who deliberately avoids these conventions, just to be different, achieves nothing except to confuse the reader.

- Go to the biggest and best websites. See how they design their navigation.

- Don't feel ashamed to imitate the best practice you find.

- **Follow the navigation and classification conventions that have emerged on the Web.**

- Global Navigation –navigation that runs across the top and bottom of every page, containing links to the major sections of that website.
- Home - convention for the name of the overall homepage.
- About -- content describing history, financial performance, goals, mission statement etc. of the organization. "About Sony".
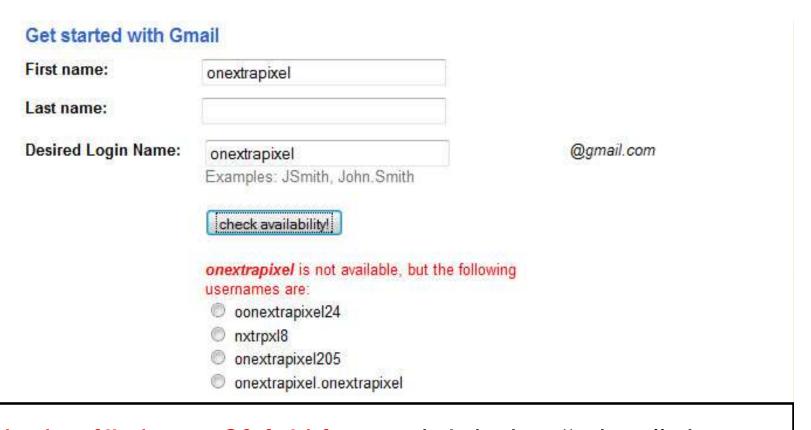- "Contact" or "Contact Us" - contact details such as email, telephone, address, or location details.

- Organisation's logo should appear on the top left of every page. It should also be linked back to the homepage.

- Search box should be available on every page of the site. It should be placed on the **far right of the masthead**.

- Every page should have a footer, containing global navigation as hypertext.

- **9. Don't surprise or mislead the reader**

- Never ask the reader to do something it is impossible or difficult for them to do.

- forcing all users to fill in a "ZIP code" regardless of whether they exist in that user's country.

- Never offer the reader contact options they can't use.

- To avoid surprises for your readers:

- don't lead them down false navigation paths;

- clearly inform them of exceptions.

- don't ask them to do things they can't do.

- On any website, the reader should be only a click away from being able to contact the organisation.
- Contact facilities may involve email, telephone, call-back, or customer chat support.
- "Help" link - reader is faced with a complex task.
- constant feedback based on user actions. only viable and immediate feedback is through text.
- Text -- comprehensive way to inform the reader the result of their action.

Get started with Gmail

First name: `onextrapixel`

Last name: `[                    ]`

Desired Login Name: `onextrapixel`   @gmail.com

Examples: JSmith, John.Smith

`[check availability!]`

onextrapixel is not available, but the following usernames are:

- ○ oonextrapixel24
- ○ nxtrpxl8
- ○ onextrapixel205
- ○ onextrapixel.onextrapixel

- reader has filled out a 30 field form and clicked on "submit", the website should provide feedback –
- "Thank You. Your form has been completed successfully."
- ✓ If the form was not completed successfully, "Your email address has not been entered correctly."

Reader support and feedback should:

- provide a contact link on every page;

- provide subject-sensitive help for complex tasks;

- ensure that the reader avoids making obvious errors;

- isolate errors the reader has made;

- provide progress chart navigation where processes are involved;

- provide options that allow reader to give feedback.

USABILITY HEURISTICS for UID

- **#1: Visibility of system status**

❖ System should always keep users informed about what is going on, through appropriate feedback within reasonable time.

- **#2: Match between system and the real world**

❖ System should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms.

❖ Follow real-world conventions, making information appear in a natural and logical order.

- **#3: User control and freedom**

- Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. **Support undo and redo.**

#4: Consistency and standards

•Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

#5: Error prevention

•Even better than good error messages is a careful design which prevents a problem from occurring in the first place.

•Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

USABILITY HEURISTICS for UID

❖**#6: Recognition rather than recall**

❖Minimize the user's memory load by making objects, actions, and options visible.

❖User should not have to remember information from one part of the dialogue to another.

❖Instructions for use of the system should be visible or easily retrievable whenever appropriate.

#7: Flexibility and efficiency of use

Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

USABILITY HEURISTICS for UID

#8: Aesthetic and minimalist design

•Dialogues should not contain information which is irrelevant or rarely needed.

•Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

#9: Help users recognize, diagnose, and recover from errors

•Error messages should be expressed in plain language (no codes),

•precisely indicate the problem, and constructively suggest a solution.

#10: Help and documentation

•Better if the system can be used without documentation, it may be necessary to provide help and documentation.

•Should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

1. Visibility of system status (Feedback)

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

1.0 BaseCamp by 37signals

The upload button is enabled, until clicked. Then it is replaced with a progress indicator until the file has finished uploading

1.1 Picnik

Progress message and indicator shows while the application loads

1.2 Tick

A feedback message is displayed when an action is performed

Upload the file or Cancel

picnik

Fluffing clouds....

Your password has been emailed.

Theresa Neil sign in

1.3 Windows Live Account

Password strength is shown as the password is entered

2. Match between system and the real world (METAPHOR)

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms.

Follow real-world conventions, making information appear in a natural and logical order.

Type new password: ******************

Six-characters minimum; case sensitive

Password strength: Strong

LIBRARY
- Music
- Movies
- TV Shows
- Podcasts
- Audiobooks
- Applications
- Radio

STORE
- iTunes Store
- Purchased

2.0 iTunes

Organized as a library that contains your media library: music, movies, shows, audibooks. Beneath the Library is the Store where you can buy more media to put in your Library.

2.1 Mindomo

The branches and hierarchy of a mind map can be easily reorganized visually in a non-linear manner.

An outline would never work, but this matches the paradigm exactly.

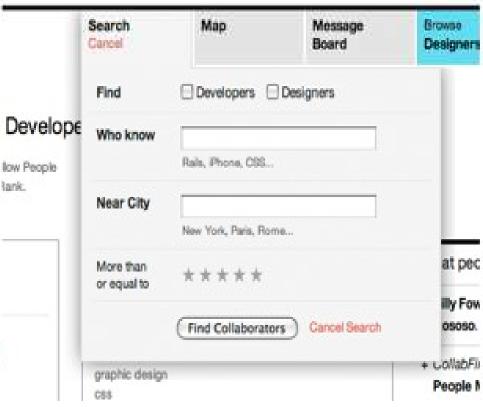## 3. User control and freedom (NAVIGATION)

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Supports undo and redo and a clear way to navigate.

3.0 CollabFinder

Search is easy to open, enter info, execute or cancel.
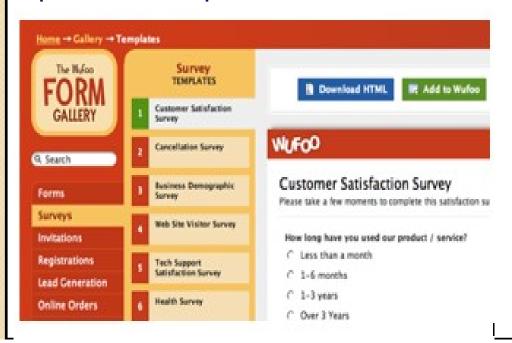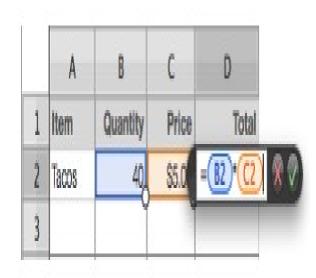
3.1 Wufoo

Clearly marks where the person is and where they can go by showing the selection in each menu

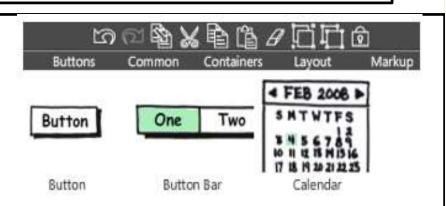## 3.2 Pages (Apple's Word Processing Product)

Cell editing shows row and column ids, and the cells used in the equation. The equation can be saved or canceled.

3.3 Balsamiq

Undo and Redo buttons in the

toolbar, and can also be accessed

Via standard keyboard shortcuts

4. Consistency and standards (CONSISTENCY)

Users should not have to wonder whether different words, situations,

or actions mean the same thing.

Follow platform conventions

4.0 Gmail

Gmail organizational folders on the same ones

client email applications: Inbox, Drafts, Sent Mail.

4.1 Microsoft Office

Word, Excel, and PowerPoint all use the same style toolbar with the same primary menu options: Home, Insert, Page Layout…

Consistency results in efficiency and perceived intuitiveness.

5. Error prevention (PREVENTION)

Even better than good error messages is a careful design, which prevents a problem from occurring in the first place.

5.0 Yammer

Disables the update button after it is clicked, so the person cannot update the post twice by accident
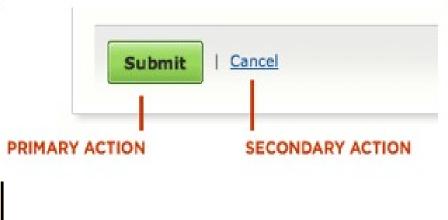
Share something with Usabilitypost:

Update

Attach file

5.1 Example from "Web form Design:Filling in the Blanks"

by Luke W.

Make the primary action prominent with a larger click area. Cancel

and secondary actions are just shown as links

5.2 Google Auto Recommend
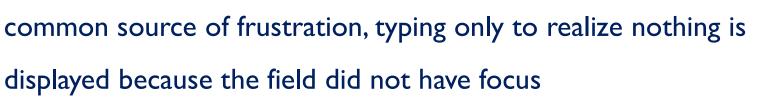
The auto recommend feature cuts down on mis-spellings

5.2 Wikpedia

Auto focus on input prevents a common source of frustration, typing only to realize nothing is displayed because the field did not have focus

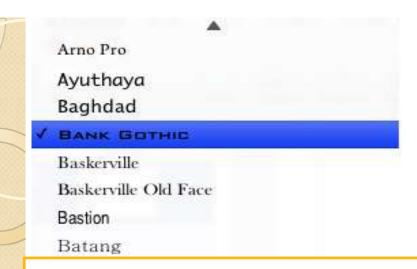## 6. Recognition rather than recall (MEMORY)

Minimize the user's memory load. Make objects, actions, and options visible. user should not have to remember information from one part of the dialogue to another.

Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Arno Pro
Ayuthaya
Baghdad
✓ BANK GOTHIC
Baskerville
Baskerville Old Face
Bastion
Batang

6.1 Keynote

Previews the fonts you can pick from, instead of just the font name

7. Flexibility and efficiency of use (EFFICIENCY)

Accelerators — unseen by the novice user —

may often speed up the interaction for the expert

user such that the system can cater to

both inexperienced and experienced

users. Allow users to tailor frequent

Common Shortcuts

Add Action	Return
New Window	⌘N
Synchronize with Server	^⌘S
Clean Up	⌘K
Planning Mode	⌘1
Context Mode	⌘2
Inbox	⌥⌘1
Quick Entry	^⌥Space

Quick Entry's shortcut can be customized in Preferences

- **7.1 Numbers- Apple's Spreadsheet product**

  Previews common function results on the left when a column is selected, more efficient that clicking on an action in the toolbar

- **8. Aesthetic and minimalist design (DESIGN)**

- Dialogues should not contain information, which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

- Visual layout should respect the principles of contrast, repetition, alignment, and proximity.

Styles		
Basic		
Basic (No Grid)		
Gray		
Gray Headers		
Gray Fill		
Beige		
Ledger		
Blue		
Blue Headers		
Blue Fill		
Gravity		

sum	23.2264292787289	
avg	1.78664840605607	
min	0.00086222222222...	
max	10	
count	13	

	A	B	C
3	Mean	1.81	1.85
4	Median	1.81	1.85
5	Standard deviation	0.03	0.04
6	Variance	0.00086	0.00138
7	Alpha	0.05	0.05
8	T-value	2.26	2.26
9	Confidence interval	0.01820	0.02304
10	Upper limit	1.82620	1.87704
11	Lower limit	1.78980	1.83096
12	T-interval	0.02100	0.02659
13	Upper limit	1.82900	1.88059
14	Lower limit	1.78700	1.82741

- **8.0 Kontain**

  Kontain' search menu exemplifies the four principles of visual design:
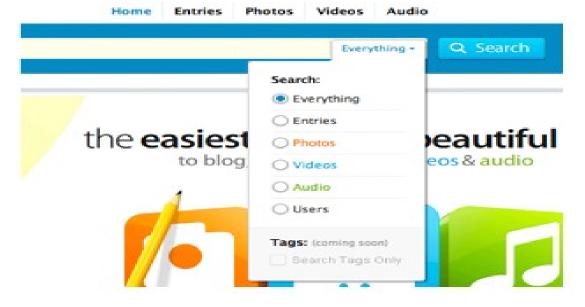
  Contrast: bold text is used for the two labels in the search

  Repetition: the orange, blue, and green text match the media types

  Alignment : strong left alignment of text, right aligned drop down

  Proximity: a light rule is used to separate tags from the other options

- **9. Help users recognize, diagnose, and recover from errors (RECOVERY)**

- Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

- **9.0 Digg**

  Provides immediate feedback with specific instructions
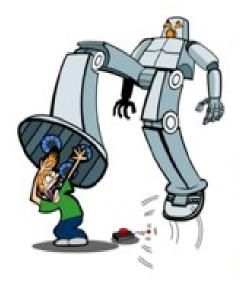
Or start a new account

Choose a username (no spaces)

bert

⚠ bert is already taken. Please choose a different username.

Choose a password

•••

⚠ Passwords must be at least 6 characters and can only contain letters and numbers.

Retype password

Email address (must be real!)

not an email

⚠ The email provided does not appear to be valid

☑ Send me occasional Digg updates.

- **9.1 Humorous ' Page Not Found' Error**

  Uses a funny image and copy, but provides viable alternatives

  (article listings and blog link) and a course of action (report it)

- **9.1 Humorous ' Page Not Found' Error**

  Uses a funny image and copy, but provides viable alternatives

  (article listings and blog link) and a course of action (report it)

- 10. Help and dcumentation (Help)

- Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

- **10.0 Picnik**

  Contextual help (tips in Picnik are clear and easy to navigate
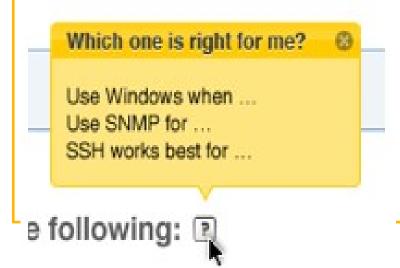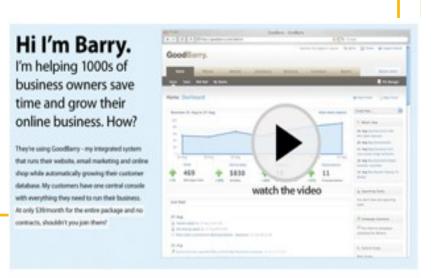
- **10.1 GoodBarry**

  Embedded videos can be used to showcase features as well as get people started using the product

- **10.2 Zenoss**

  Help tips are displayed on hover, answering the most likely questions about a field or instructions

Which one is right for me?

Use Windows when …
Use SNMP for …
SSH works best for …

e following:

Hi I'm Barry.
I'm helping 1000s of business owners save time and grow their online business. How?

They're using GoodBarry - my integrated system that runs their website, email marketing and online shop while automatically growing their customer database. My customers have one central console with everything they need to run their business. At only $39/month for the entire package and no contracts, shouldn't you join them?

watch the video

Universal Design Principles

- Universal Design is the design of products & environments to be usable by all people, to the greatest extent possible, without the need of adaptation or specialized design.

- wide range of design disciplines including the design of environments, products and communications

- seven universal design principles for use in evaluating existing designs, guiding the design process, and educating both designers and consumers about characteristics of more usable products and environments.

- **Every principle characterised by** name of principle- concise and easily remembered statement of key concept in the principle; definition of the principle, a brief of principle's primary directive for design; guidelines- key elements that should be present in a design which adheres to the principles

Universal Design Principles

- **Principle One: Equitable Use**

- The design is useful and marketable to any group of users.

- **Guidelines:**

- Provide the same means of use for all users:

- identical whenever possible; equivalent when not.

- Avoid segregating or stigmatizing any users.

- Provisions for privacy, security, and safety should be equally available to all users.

Universal Design Principles

- **Principle Two: Flexibility in Use The design** accommodates a wide range of individual preferences and abilities.

- Guidelines:

- Provide choice in methods of use.

- Accommodate right - or left-handed access and use.

- Facilitate the user's accuracy and precision.

- Provide adaptability to the user's pace..

Universal Design Principles

- **Principle Three: Simple and Intuitive Use**

- Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

- Guidelines:

- Eliminate unnecessary complexity.

- Be consistent with user expectations and intuition.

- Accommodate a wide range of literacy and language skills.

- Arrange information consistent with its importance.

- Provide effective prompting for sequential actions

- **Principle Four: Perceptible Information**

- Design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

- Guidelines: Use different modes (pictorial, verbal, tactile) - - redundant presentation of essential information.

- adequate contrast b/w essential information & its surroundings.

- Maximize "legibility" of essential information in all sensory modalities.

- Differentiate elements in ways that can be described i.e. make it easy to give instructions or directions

- Provide compatibility - a variety of techniques or devices used by people with sensory limitations

- Principle Five: Tolerance for Error

- The design minimizes hazards and the adverse consequences of accidental or unintended actions.

  Guidelines:

- Arrange elements to minimize hazards and errors;

- most used elements, most accessible;

- hazardous elements eliminated, isolated, or shielded. ! Provide warnings of hazards and errors. !

- Provide fail safe features. !

- Discourage unconscious action in tasks that require vigilance

- **Principle Six: Low Physical Effort**

- The design can be used effectively and comfortably and with minimum of fatigue.

- Guidelines:

- Allow user to maintain a neutral body position.

- Use reasonable operating forces.

- Minimize repetitive actions.

- Minimize sustained physical effort.

- **Principle Seven: Size and Space for Approach and Use**

  Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

- **Guidelines**:

- Provide a clear line of sight to important elements for any seated or standing user.

- Make reach to all components comfortable for any seated or standing user.

- Accommodate variation in hand and grip size.

- Provide adequate space for the use of assistive devices or personal assistance.

- The principles of universal design in no way compromise all criteria for good design, only universally usable design.

- Certainly, other factors are important, such as aesthetics, cost, safety, gender, and cultural appropriateness, and these aspects should be taken into consideration as well.

- Principles on universal design courtesy of the **Center of Universal Design in North Carolina.**

- **Whatever you buildin your community... make it accessible for everyone** *(examples sep slide)*

✓ Blindness

Challenges	Solutions
Images, photos, graphics are unusable	Provide text descriptions, in the alt attribute and, if necessary, longer explanations (either on the same page or with a link to another page).
Users often listen to the web pages	Create links that allow users to skip over navigational menus, long lists of items, ASCII art, and other things that might be difficult or tedious to listen to.
Users often jump from link to link using the Tab key	Make sure that links make sense out of context ("click here" is problematic).

UNIVERSAL DESIGN - SPECIFICS

Users generally do not use a mouse	Don't write scripts that require mouse usage. Supply keyboard alternatives (e.g. use onFocus instead of onMouseover).
It may be difficult for users to tell where they are when listening to data table cell contents	Provide column and row headers (<th>) for data tables. Avoid spanned rows or columns in data tables, if at all possible.
Complex data tables and graphs that are usually interpreted visually are unusable	Provide summaries and/or text descriptions, preferably on the same page, or link to another page as an alternative.

Frames cannot be "seen" all at once. They must be accessed separately, leading to disorientation.	Don't use frames unless you have to. If you use them, provide frame titles that communicate their purpose (e.g. "navigational frame", "main content").
Colors are unusable	Do not rely on color alone to convey meaning
Users expect links to take them somewhere	Don't write scripts in links that don't have true destinations associated with them (e.g. href="javascript: function(this)")
Screen readers read web content in the literal order that it appears in the code	Ensure that complex CSS or table layouts read correctly visually AND in the code.
Individuals cannot see the events in videos	Provide audio descriptions of events in videos that cannot be interpreted by audio alone (e.g. have a narrator describe actions in videos for which there is no dialogue).

Color Blindness

Challenges	Solutions
Colors of similar contrast are often indistinguishable	Make sure that there is sufficient contrast

Don't use color alone to convey meaning (supplement the color with text, for example). |

Low Vision

Challenges	Solutions
Users often use screen enlargers	To reduce that amount of horizontal scrolling, use relative rather than absolute units (e.g., use percentages for table widths, instead of pixels)
Text in graphics does not enlarge without special software, and looks pixilated when enlarged	Limit or eliminate text within graphics.
Use anti-aliasing to make text crisp and readable.

Deafness

Challenges	Solutions
Audio is unusable	Provide transcripts for audio clips. Provide synchronous captioning for video clips

Challenges **Motor Disabilities**	Solutions
Users may not be able to use the mouse	Make sure that all functions are available from the keyboard (try tabbing from link to link). Make sure that the tab order is logical
Users may become fatigued when using "puff-and-sip" or similar adaptive technologies.	Provide a method for skipping over long lists of redundant links or other lengthy content.
Users may be using voice activated software	Voice activated software generally cannot replicate mouse movement as effectively as it can replicate keyboard usage; KB support

COGNITIVE DISABILITIES

Challenges	Solutions
Users may become confused at complex layouts or inconsistent navigational schemes.	Simplify the layout as much as possible. Keep the navigational schemes as consistent as possible
Users may have difficulty focusing on or comprehending lengthy sections of text	Where appropriate, group textual information under logical headings. Organize information in manageable "chunks."
One method of input may not be sufficient	Where appropriate, supplement text with illustrations or other media, and vice versa.