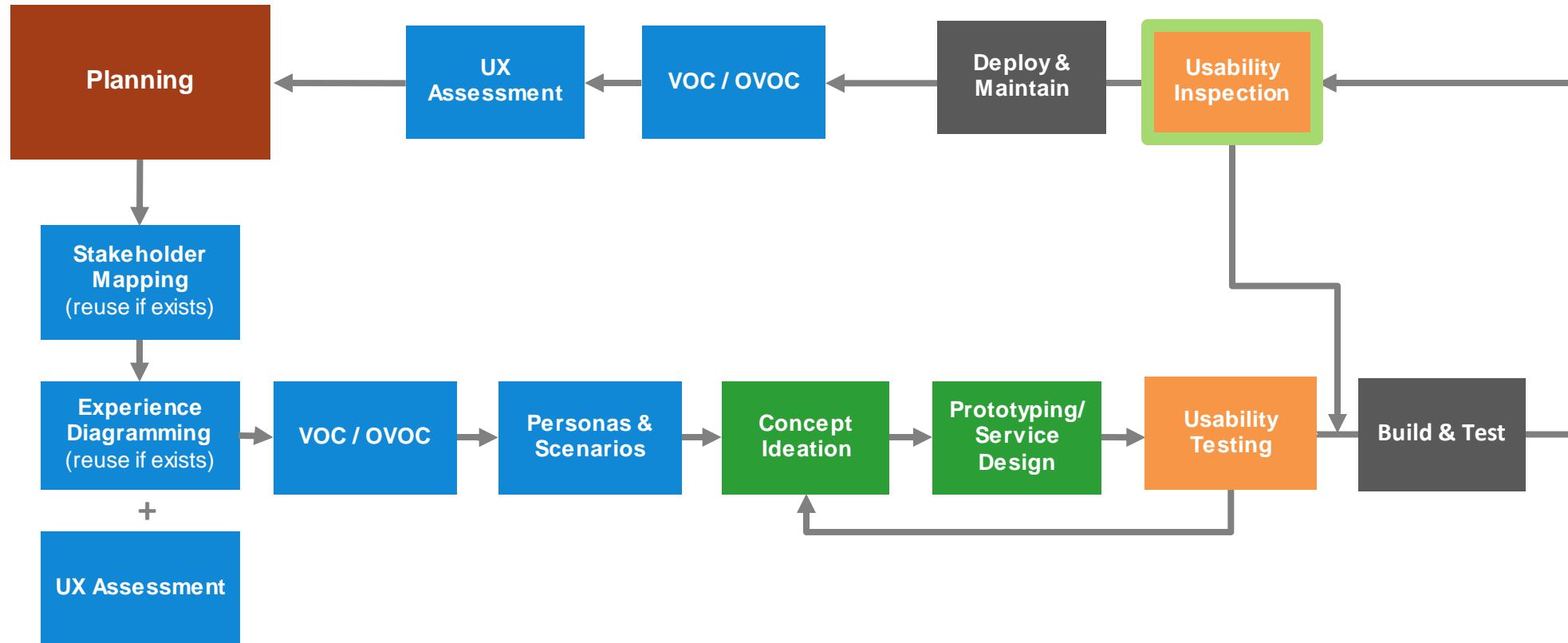


# The IT HUE Process

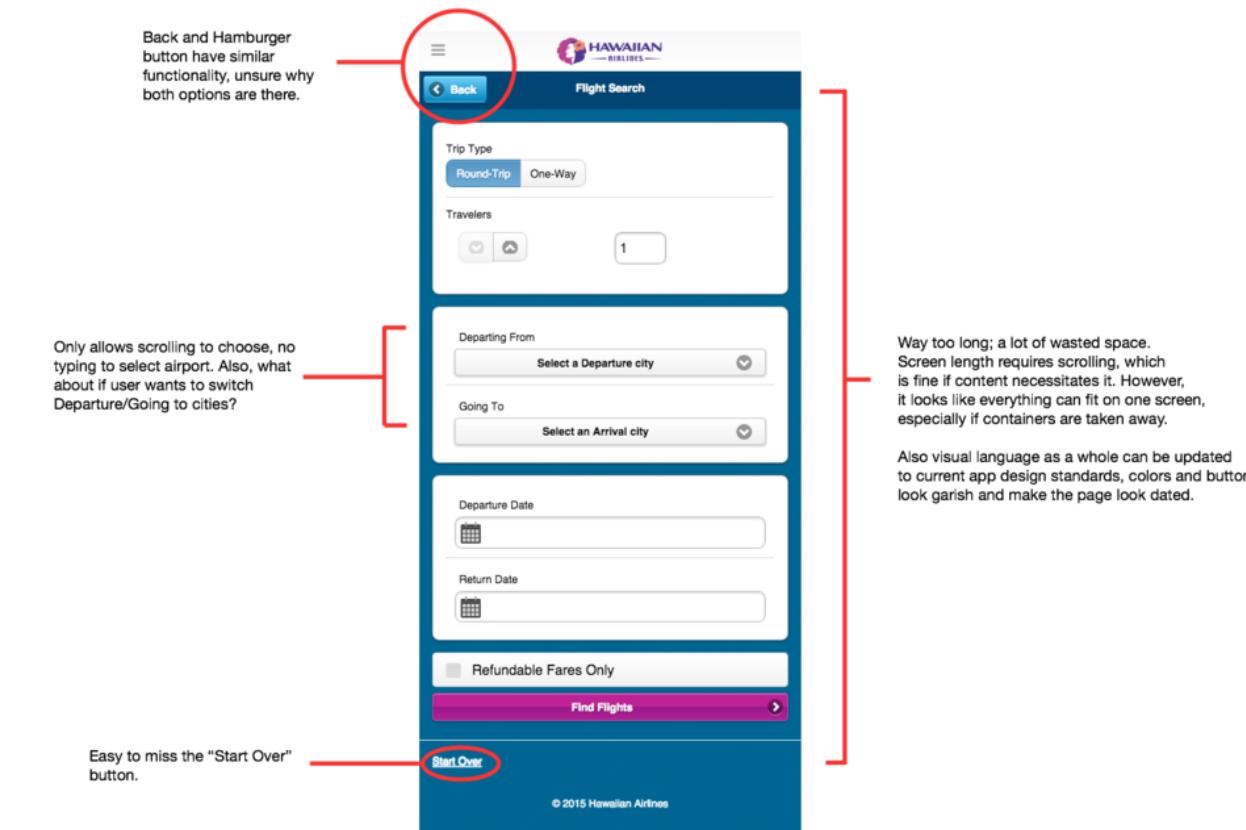


# Heuristic Evaluation | What

A Heuristic Evaluation is a usability inspection technique where one or a number of usability experts evaluate the user interface of a product or website against a set of Heuristic Principles.

It is usually conducted by a group of experts because it is very likely that one person will not be able to find all usability problems.

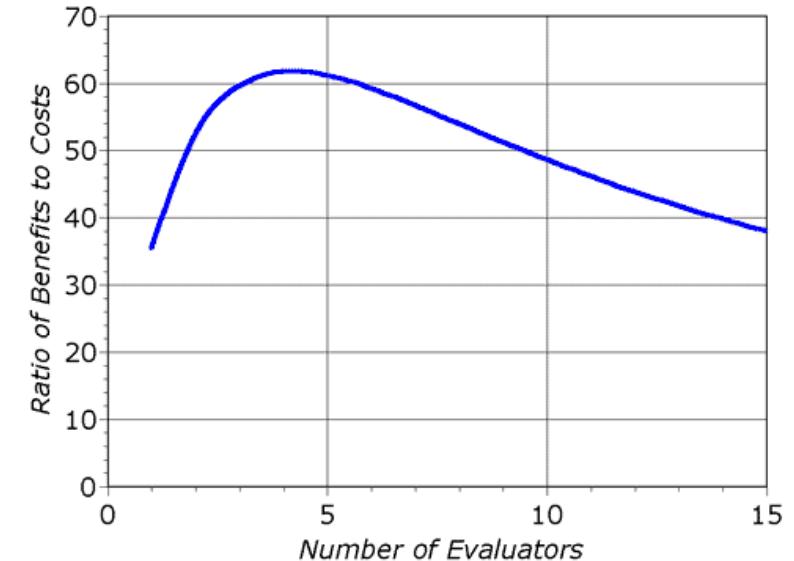
## HAWAIIAN AIRLINES MOBILE UI EVALUATION



# Heuristic Evaluation | What

Heuristic Evaluation = having a small set of evaluators examine the interface and judge its compliance with recognized usability principles (the “heuristics”)\*

It is a usability engineering method for finding the usability problems in a user interface design so that they can be attended to as part of an iterative design process.



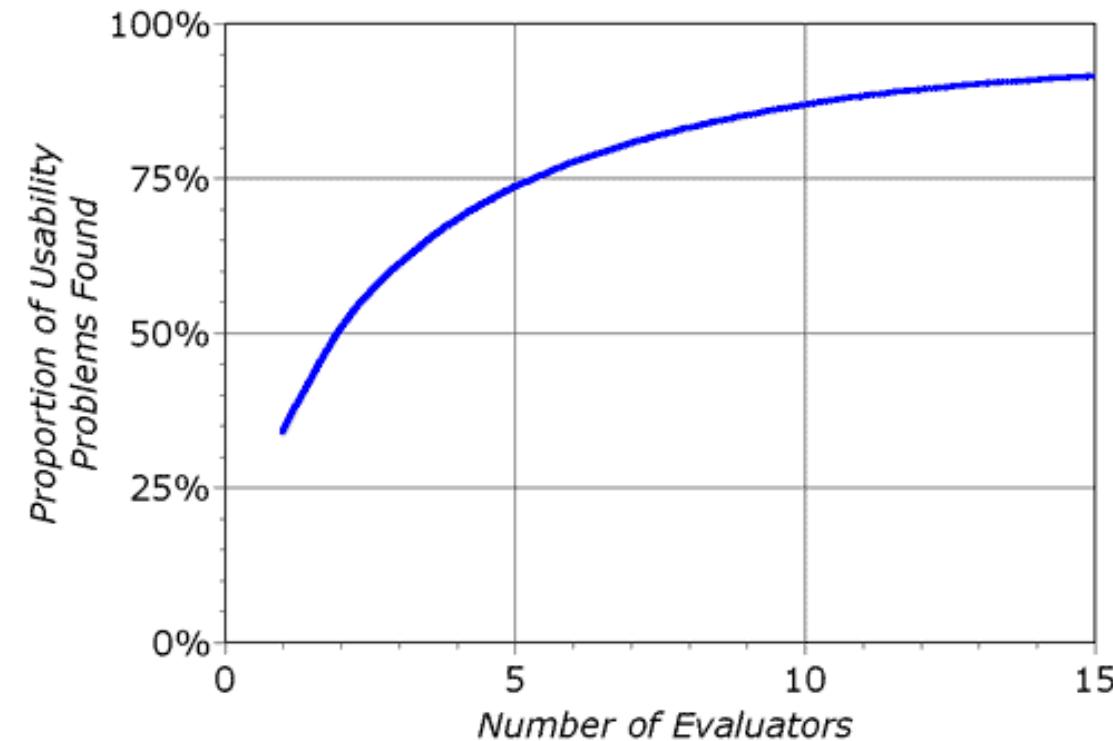
*Curve showing how many times the benefits are greater than the costs for heuristic evaluation of a sample project. The optimal number of evaluators in this example is four, with benefits that are 62 times greater than the costs. Source:*

<http://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation>

\*Nielsen and Molich, 1990; Nielsen 1994

# Heuristic Evaluation | What

- This is a qualitative method – few evaluators work fine
- Curve of diminishing returns



<http://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/>

# Heuristic Evaluation | What

*Heuristic Evaluation is characterized by:*

- Small test scenarios that use paper mock-ups or screen shots, which can easily be changed from one test situation to the next
- An informal basis for assessment that doesn't require psychologists
- A high success rate so only a handful of testers are needed
- A few key guidelines

The guidelines that the interface is being evaluated against are outlined later.

Heuristic Evaluation Handbook  
Version: 1.0  
13<sup>th</sup> May, 2014

(Continued)  
doing on, through appropriate feedback within reasonable

Preparing to back up 01-BABE0001-Q2PA-0B4D9B00

Stop Backup Close

Status Your account has been updated successfully.

OK

(Continued)  
The 'Shopping Cart' link is in this location

ORDER ONLINE OR CALL (847) 771-0300

(Continued)  
Form labels and fields are aligned consistently

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

4.2 Make each interactive feature behave and appear in the same manner in all screens

4.2.1 Similar tasks should be achieved via similar interactions with common UI elements.

4.2.2 Arrange forms consistently by placing labels and each type of call-to-action in the same area across all forms, and using the same kind of control for similar requests for input.

4.2.3 Ensure menu instructions, prompts and error messages appear in the same place(s) in all screens.

Figure 4: Message indicating a progress of events with an option to cancel

Figure 5: System message confirming a successful update

Figure 6: Next steps and clear instructions indicate what the user should expect and what is expected of the user

Figure 20: The 'Shopping Cart' link is in this location

Figure 21: Form labels and fields are aligned consistently

# Heuristic Evaluation | Why

## The Challenge

Usability Testing is the single-best method for UX evaluation



But what if you don't have representative test users available?

You can test with colleagues

You can model the user-system interaction

You can use heuristic evaluation

# Heuristic Evaluation | Why

## Heuristic Evaluation vs. Usability Testing

### Heuristic Evaluation

*Experts assess the offering based on design principles*

Evaluators are NOT the end users; important problems may get missed

### Usability Testing

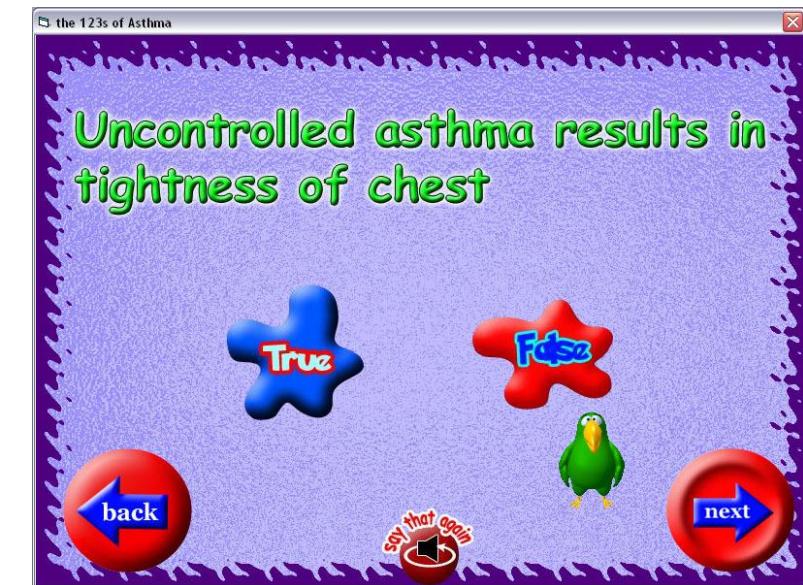
*A small sample of target users are observed as they interact with the offering*

The single best thing you can do for HUE!

# Heuristic Evaluation | Why

## Advantages

- Few practical issues to consider, e.g., how long to run tests with participants?
- Few ethical issues to consider, e.g., need to have women running studies with women in walkthroughs because of culture rules separating sexes
- Heuristics have been shown to find a significant number of problems
- Heuristics cover a wide range of the types of problems that can occur
- **Biggest advantage**
  - Almost always cheaper than usability testing



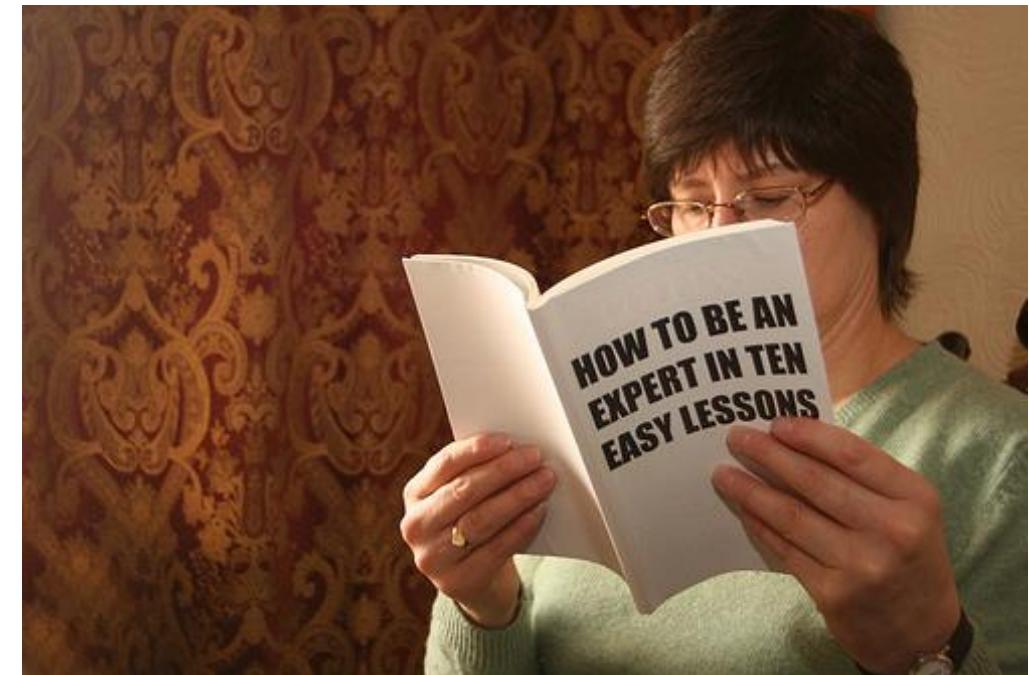
After HE

The screenshot shows a quiz interface titled "What is Influenza?". On the left is a "Navigation Panel" with a table of contents. The first section, "I. Quiz 1", is highlighted in yellow. The second section, "II. Influenza Education", contains numbered items from 1 to 8. The main area displays a multiple-choice question: "A contagious respiratory illness" (option A), "A non-contagious respiratory illness" (option B), "A bacterial infection" (option C), and "A cardiovascular related illness" (option D). A yellow callout bubble at the bottom right says: "Answer the question by clicking on the appropriate option". A red circular "play" button is located at the bottom right. The status bar at the bottom indicates "Question 1 of 4".

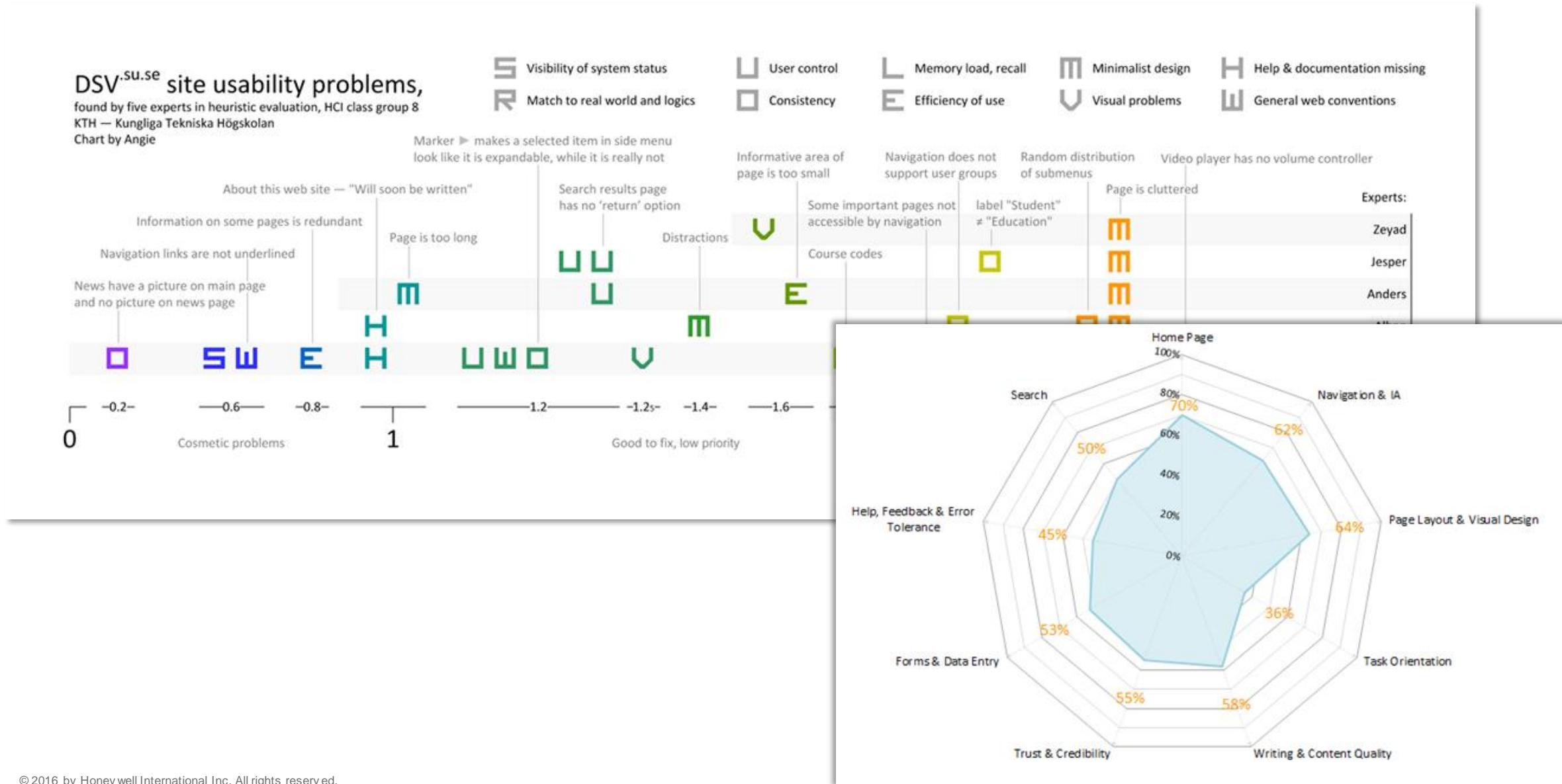
# Heuristic Evaluation | Why

## Disadvantages

- There is no established way of running an heuristics study
- No good definition of what defines an expert. Wide range of differences in amount of problems found by different experts
- Heuristics do not cover domain specific issues
- Domain specific experts may be required
- Sufficient experts may be difficult to find
- **Biggest disadvantage**
  - Validity – evaluators are NOT the end users
  - Important problems may get missed
  - Many trivial problems are often identified



# No standard way to conduct or present HEs

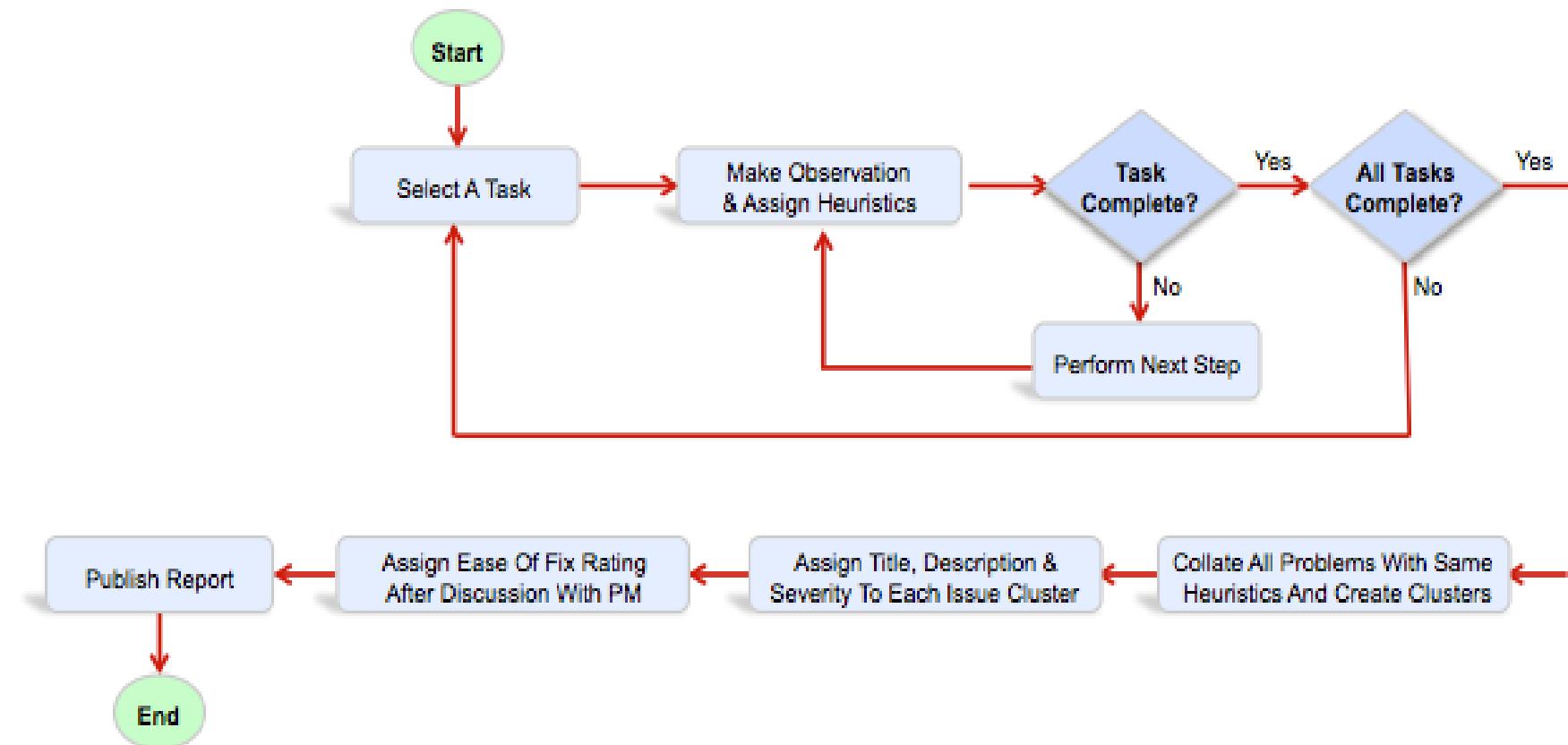


# The Heuristic Evaluation Process

# Heuristic Evaluation Process

## Remember:

- You have user profiles and user tasks from earlier in process
- Use your best judgment when determining issues and recommendations



# Heuristic Evaluation | How – The Process

The HE Data Capture spreadsheet will guide you through all the information you need to identify in your evaluation.

#	Heuristics	Description	Severity Rankings	Rating Definition
1	<u>Visibility of system status</u>	The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.	0	Violates a heuristic but doesn't seem to be a usability problem.
2	<u>Match between system and the real world</u>	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.	1	Superficial usability problem: may be easily overcome by user or occurs extremely infrequently. Does not need to be fixed for next release unless extra time is available.
3	<u>User control and freedom</u>	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.	2	Minor usability problem: may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.
4	<u>Consistency and standards</u>	Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.	3	Major usability problem: occurs frequently and persistently or users may be unable or unaware of how to fix the problem. Important to fix, so should be given high priority.
5	<u>Error prevention</u>	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.	4	Usability catastrophe: Seriously impairs use of product and cannot be overcome by users. Imperative to fix this before product can be released.
6	<u>Recognition rather than recall</u>	Minimize the user's memory load by making objects, actions, and options visible. The 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.	Ease of Fixing Rankings	Rating Definition

# Heuristic Evaluation | How - Process

When conducting the Heuristic Evaluation, you will use the data capture template (Excel) that will be made available to you.

S.No	Task	Step #	Step	Issue Description	Issue title	Heuristics Violated
1	1 a		View dashboard	The initial screen does not show any information about my past requests. It does not tell how to raise a request. It shows a list of links which are not relevant to the task in hand.	There are no standard information architecture of this tool.	visibility, match
6 8	2 b		Review and submit to BSC	The are multiple action buttons and the order in which they needs to be clicked is not clear It is not clear how to hold the work packet. There are no specific button to hold the request. User needs to click on close and save changes to change the status of the request	The taskflow and guidance to user is unclear	visibility, recognition
9	2 d 2 e		Hold the work packet Submit to BSC	It is not clear on how to Submit to BSC because it is available only when the user enters the business function page and button is enabled after certain rules are fulfilled. Ideally the flow should have been sequential without moving back and forth. In order to reject the user is expected to click on BSC administrator button. The button CF administrator is confusing. By mistake if it is opened then there is no way to come back	The taskflow and guidance to user is unclear	recognition, recognit visibility, flexibility
10	3 a		Review	The labeling of tabs, links and button does not match users expectations The page is clearly un optimized with one single button. It adds to the number clicks to complete the task.	The taskflow and guidance to user is unclear	recognition, recover,
2	1 b		Click on QMS in draft	The type field is same as the Activity field filled in the parent view. In that case it should have been prefilled and non editable. It is not clear what needs to be entered in ADEPT link? The box should have given clear indication of the expected data. As soon as the close and save changes button was pressed both the forms got closed. This was unexpected. Some messages confirming the submission should have been given. In case the user pressed the work packet info, it is not clear if the entry was saved or not. Now there are three buttons enabled creating confusion on what needs to be pressed. Ideally two buttons should have been present. Save as draft and Submit. On press of submit button a confirmation should have come.	There are no standard information architecture of this tool. There are no error recovery mechanism built in the interface	match, flexibility
4 11	1 d b		Edit the business specific form Reject	Once in the BSC Administrator screen, the instructions and actions to approve, reject and put on hold are all spread out. There is one clear button specific only to hold which is confusing. Clear option should be available throughout the form	Categorization and organization of page level information is unoptimized	recognition,match, re
	3			The review information is now part of the BSC administrator screen however there are no clear indication between content that needs to be reviewed versus content that needs to be edited to change the status.	Categorization and organization of page level information is unoptimized	Consistency, match
12 3	4 a 1 c		Review View and edit the form	Related items are not placed together. It is not clear how many pages of data needs to be entered. Work packet name and draft type value should be part of the header. Draft ID Number and Draft Last Modified by should be part of the right hand side of second section instead of area and cancellation reason. It is not clear that in order to complete the process the Save as Draft button needs to be pressed and then the buttons under work packet have needs to be selected. The close & save changes is also	Categorization and organization of page level information is unoptimized	recognition, visibility visibility, match, contr

# Heuristic Evaluation | How

## Heuristic Guidelines:

Note: The guidelines are somewhat ambiguous and interpretive.

There will be **OVERLAP**

There will be **SUBJECTIVITY**

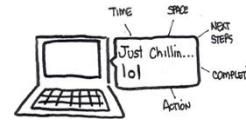
There will be **CONFLICTS**

As the Heuristic Evaluation experts, you should be able to get to the core intent of the guidelines.

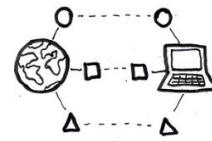
# Heuristic Evaluation | How

## Heuristic Guidelines: The 10 most general principles for interaction design.

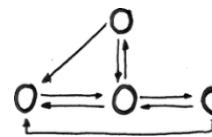
Developed in 1990 by Jakob Nielsen and Rolf Molich these heuristics have been refined by Nielson based on a factor analysis of 249 usability problems to derive a set of heuristics with maximum explanatory power.



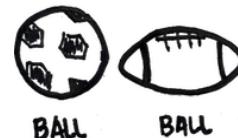
- 1. Visibility of System Status**  
Give the users appropriate feedback about what's going on.



- 2. Match System & Real World**  
Use real-world words, concepts, and conventions familiar to users in a natural, logical, order.



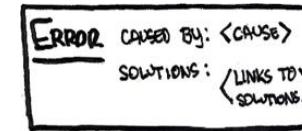
- 3. User Control & Freedom**  
Support, undo, redo, and exit points to help users leave an unwanted state caused by mistakes.



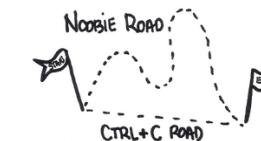
- 4. Consistency & Standards**  
Use consistent words, situations, and actions throughout.



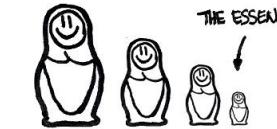
- 5. Error Prevention**  
Eliminate error-prone conditions or check for them before users commit to an action.



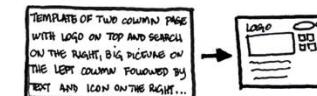
- 6. Recognition Not Recall**  
Make objects, actions, and options visible at the appropriate time to minimize users' memory load.



- 7. Flexibility & Efficiency of Use**  
Make the system efficient for different experience levels through shortcuts, advanced tools, and frequent actions.



- 8. Aesthetic & Minimalist Design**  
Don't show irrelevant or rarely needed information. Extraneous elements diminish the relevance of the others.

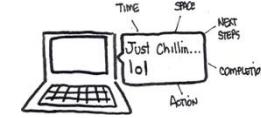


- 9. Help Users Recognize, Diagnose, & Recover**  
Express error messages in plain language and suggest solutions.

- 10. Help & Documentation**  
Make necessary help and documentation easy to find.

# 1. Visibility of System Status

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

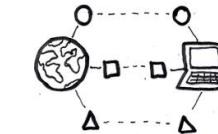


The screenshot shows the Honeywell website's header with links for PRODUCTS & SERVICES, SOLUTIONS & TECHNOLOGIES, ABOUT US, INVESTORS, NEWSROOM, and SEARCH. A red box highlights the 'PRODUCTS & SERVICES' link. Below the header, the page title is 'Home > Products & Services > Aerospace & Defense'. A sidebar on the left lists categories like Consumer & Home, Aerospace & Defense (which is expanded), Aviation & Air Transport, Space & Defense, Safety & Security, Building, Construction and Maintenance, and Scanning & Mobile Productivity (ADC). The main content area shows 'Aerospace & Defense' selected, with sub-categories: Aviation & Air Transport (Business Aviation, General Aviation, Helicopters, Airlines), Sensors & Switches, Honeywell Green Jet Fuel™, and Test & Measurement Sensors. An image of an airplane is displayed under the 'Aviation & Air Transport' section.

Clearly mark the user's current location

Password		
<input type="text"/>	⇒ 6 characters or more (be tricky!)	
<input type="text"/> ..	⇒ Too short	
<input type="text"/> .....	⇒ Too obvious	
<input type="text"/> .....	✗ Weak	
<input type="text"/> .....	✓ Good	
<input type="text"/> .....	✓ Strong	
<input type="text"/> .....	✓ Very Strong	

## 2. Match System & Real World

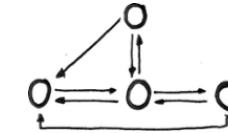


The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

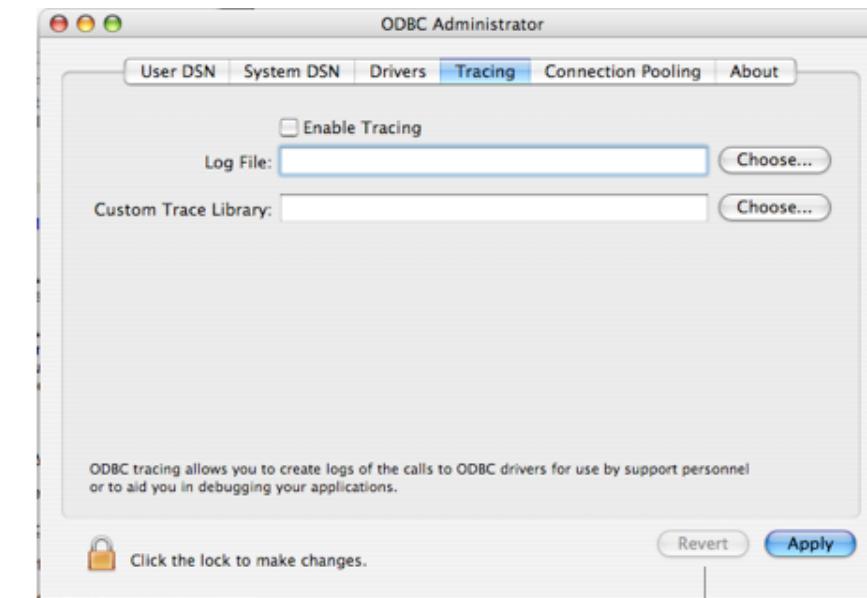
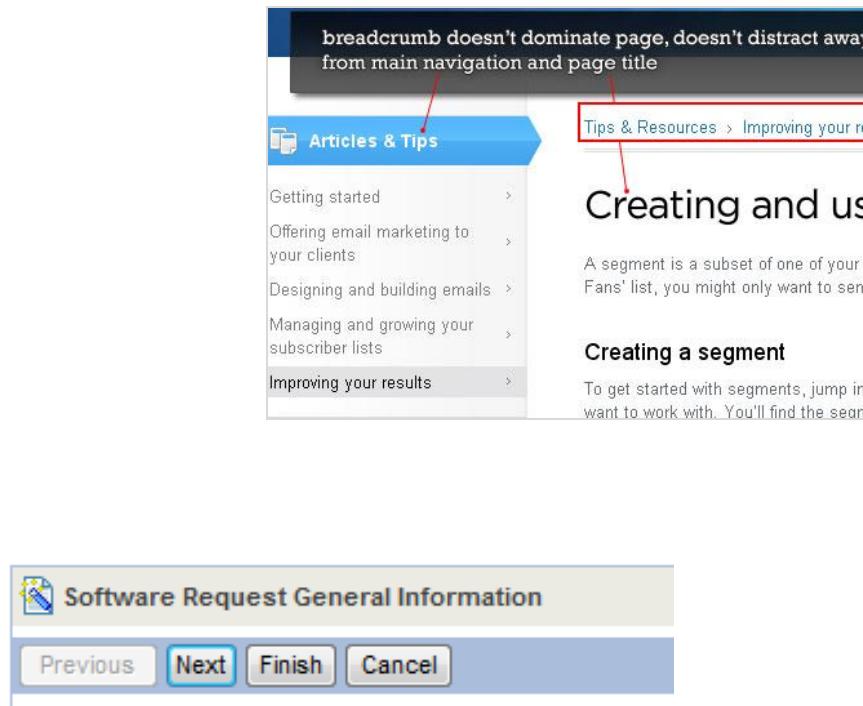
PRODUCTS	PROBLEMS WE SOLVE	SUPPORT	IN THE NEWS	ABOUT US
<b>Thermostats</b>	<b>Accessories</b>	<b>Air Cleaning</b>	<b>Humidifiers</b>	<b>Dehumidifiers</b>
<b>Programmable</b>	Entry/Exit Remote Indoor Temperature Sensor 7 Day 5-1-1 Day 5-2 Day 1 Week	Whole-House HEPA Whole-House Enhanced Wireless AquaReset Outdoor Reset Kit Wireless Outdoor Air Sensor	Whole-House Steam Whole-House Evaporative	Whole-House (120 pint) Whole-House (90 pint)
<b>Non Programmable</b>	Digital Manual	Whole-House Electronic Portable Comfort Control	Whole-House Fan-Powered Whole-House Drum Replacement Parts	Whole-House (65 pint) <b>Ventilation</b> Energy-Efficient

Use terminology in menus and content with words, phrases and concepts familiar to the user

### 3. User Control & 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.

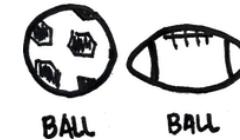


The secondary action button is inactive due to its transparent look.

Clearly indicate the affordances available to the user.

# 4. Consistency & Standards

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



The screenshot shows the homepage of SlideShop.com. At the top, there is a blue header bar with the website name 'SlideShop.com' and a shopping cart icon. Below the header is a search bar with placeholder text 'Search - e.g. cubes, arrows' and a magnifying glass icon. To the right of the search bar are several navigation links: 'Diagrams', 'Charts', 'Shapes', 'Templates', 'Animations', 'Maps', and 'Free'. A red box highlights the 'Diagrams' link. Further down the page, there is a sidebar with categories like 'Business Models', 'Icons', 'Process Diagrams', etc., each with a small icon next to it. Another red box highlights the 'Diagrams' category in the sidebar. The main content area features a section titled 'PowerPoint Diagrams' with a sub-section for 'FREE DOWNLOADS'. It includes a search bar and a list of filters: 'Top rated diagrams', 'Most downloaded diagrams', and 'Recently added diagrams'. Below this is a section titled 'Download PowerPoint Diagrams' showing three sample diagrams: 'Timeline Project Planning' (12 slides), 'Cause and Effect' (17 slides), and 'SWOT Analysis' (15 slides). Each sample has a price (29.00 USD, 29.00 USD, 37.00 USD) and a rating (4 stars, 4 stars, 5 stars). A red box highlights the 'Live Help: Offline' button at the bottom right of the main content area.

Follow naming convention and design themes consistently





## 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.

**Name \***  
First  Last   
**Time \***  
HH : MM AM/PM  
**Email \***  
Please use your office email address.  
  
**Date \***  
MM / DD / YYYY

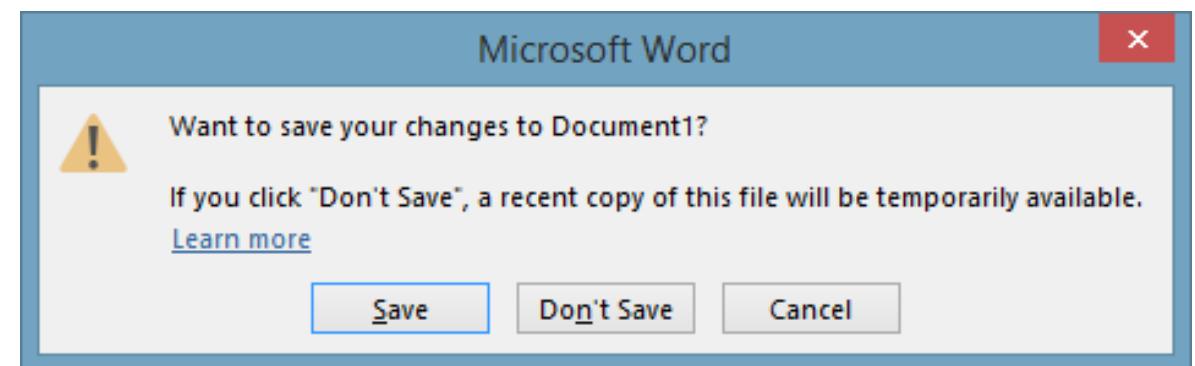
**Address \***  
  
Street Address   
Street Address Line 2   
City  Region

**Attachments**

**Browse...**

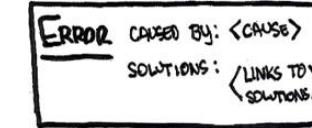
- Maximum file size : 5MB.
- Supported file types : Word, PowerPoint, Excel, Text and PDF.

Reduce opportunities for errors by educating users affront



# 6. Recognition rather than recall

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



PRODUCTS SUPPORT AND RESOURCES TRAINING NEWS CONTACT US HELP

Home > Support and Resources

In This Section

- Commercial
- Residential

## Support and Resources

Building your business with Honeywell

Honeywell Environmental Combustion and Controls (ECC) is committed to helping distributors, contractors and builder channel partners be successful. From technical support to marketing and promotional tools, to applications that streamline sales and specifications processes, we offer resources that help build business and grow sales.



**Commercial**

Support and resources for distributors and contractors selling and installing Honeywell ECC products for commercial buildings.



**Residential**

Support and resources for professionals selling, installing and maintaining Honeywell products for residential environments.

Example.scala x

```
package org.example

class CompilationSettings

class EvaluationSettings

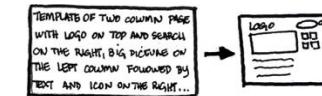
class Example {
  def compile(settings: CompilationSettings)
  def compile(settings: EvaluationSettings)
}
```

Did you know that Quick Documentation View (F1) works in completion tool

Use unique styles for each level of hierarchy on an interface.

# 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.



**Answer Rules**

Each security answer must satisfy the following rules:

- Must be between 3 and 20 characters long
- Cannot contain any word in the question
- Cannot be the same as any other security answer

**Note:** Security answers are not case sensitive.

Give contextual, informative and concise error messages as soon as possible.

**Error: The date is not in the correct format.**  
Enter a date in the same format as this example: 29/Nov/1998  
**Example: 29/Nov/1998**

\* HireDate

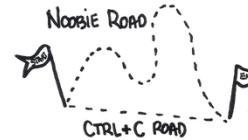
\* JobId

Salary

**Submit**



## **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.

**A-Z Index**

Text Size: +

---

**FILTER BY KEYWORD**  >

---

Select [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#) - [All](#)

2D Barcode Scanners  
A/C Refrigerants  
A-C® Performance Additives

▲ ▼

## Related Products & Solutions

- UOP Strategic Optimization Solutions
  - UOP Process Optimization
  - Honeywell Energy and Emissions Management Solutions

# Photoshop CS Keyboard Shortcuts

Tools	File	Type	Layer	Edit	
Add Shape	*	Add Alt	Ctrl+Shift+F4	Select (Clear) Delete / Backspace	
Subtract Shape	-	Add Alt / Right	Ctrl+Shift+F5	Color Settings Ctrl+Shift+K	
Intersection Transparency (toggle)	[	Add Shift	Ctrl+Shift+F6	Copy Ctrl+C	
Decrease Brush Size	]	Center Text	Ctrl+Shift+F7	Copy Merged Ctrl+Shift+C	
Increase Brush Size	[	Change Kerney by 100% (zoom)	Ctrl+Shift+F8	Cut Ctrl+C	
Decrease Brush Softness by 25%	Shift+[	Change Kerney by 200% (zoom)	Ctrl+Shift+F9	Duplicate Free Transform Ctrl+Alt+T	
Increase Brush Hardness by 25%	Shift+]	Decrease / Increase Baseline by 10%	Ctrl+Shift+F10	Duplicate Layer (Set) (no dialog) Ctrl+Alt+S	
Paint Brush	-	Decrease / Increase Baseline by 100%	Ctrl+Shift+F11	Duplicate Layer (Set) Ctrl+Shift+Q	
New Brush	*	Open	Ctrl+O	Flatten Image Ctrl+Shift+F12	
First Brush	Shift+<	Decrease / Increase Leading by 2pt	Alt+T ↴	Layer Opacity 10% - 100% 1 → 0	
Last Brush	Shift+>	Decrease / Increase Type Size by 1pt	Ctrl+Shift+G	Layer Properties Ctrl+Alt+I	
Tool Opacity (Type: 10% - 100%)	1 → 0	Decrease / Increase Type Size by 2pt	Ctrl+Shift+H	LAYER	
Tool Opacity (Speed: 10% - 100%)	Shift+1 → 0	Image (Image) (logistic)	Ctrl+Shift+I	LAYER (with dialog) Ctrl+Shift+J	
Print	*	Italic (Image)	Ctrl+Shift+J	LAYER CUT	
Print One Copy	C	Justify Paragraph (Left Align / Last Line)	Ctrl+Shift+K	LAYER CUT (with dialog) Ctrl+Alt+Shift+J	
Print Preview	P	Justify Paragraph (Left Align / Last Line)	Ctrl+Shift+L	Merge Down (Linked / Grouped) Ctrl+E	
Print Selection Tool	A	Move Cursor One Word Left or Right	Ctrl+← →	Merge Visible Ctrl+Shift+E	
Brush / Pencil Tool	B	Move Cursor To End of Line	Ctrl+Shift+← →	New Layer Ctrl+K	
Crop Tool	C	Move Cursor To Start of Line	Ctrl+End	New Layer (no dialog) Ctrl+Shift+N	
Eraser Tool	D	Move Cursor To Start of Story	Ctrl+Home	New Layer Set Ctrl+Shift+H	
Color Picker / Mode	E	Move Previous / Next Paragraph	Ctrl+↑ ↓	New Layer Set (no dialog) Ctrl+Alt+Shift+H	
Gradient / Paint Bucket Tool	F	Next Layer	Alt+↑ ↓	Next Layer Alt+I	
Hand Tool	H	Normal (Image) (logistic)	Ctrl+Shift+Y	Normal Alt+Shift+Y	
Eyedropper / Sampler / Measure Tool	I	Open	Ctrl+R	Normal (with dialog) Ctrl+Shift+Z	
Healing / Patch / Color Replacement	J	Open (Image)	Ctrl+Shift+B	Normal (with dialog) Ctrl+Shift+Z	
Image Selection	K	Open (Text)	Ctrl+Shift+A	Open (Text) (logistic)	Normal (with dialog) Ctrl+Shift+Z
Lasers Tool	L	Open (Text) (with dialog)	Ctrl+Shift+D	Open (Text) (with dialog) Ctrl+Shift+Z	
Marquee Tool	M	Open (Text) (with dialog)	Ctrl+Shift+I	Open (Text) (with dialog) Ctrl+Shift+Z	
Note / Audio Annotation Tool	N	Open (Text) (with dialog)	Ctrl+Shift+L	Open (Text) (with dialog) Ctrl+Shift+Z	
Knife / Burn / Sponge Tool	O	Open (Text) (with dialog)	Ctrl+Shift+R	Open (Text) (with dialog) Ctrl+Shift+Z	
Paint Bucket Tool	P	Open (Text) (with dialog)	Ctrl+Shift+T	Open (Text) (with dialog) Ctrl+Shift+Z	
Standard / Quick Mask Mode	Q	Open (Text) (with dialog)	Ctrl+Shift+V	Open (Text) (with dialog) Ctrl+Shift+Z	
Blur / Sharpen / Smudge Tool	R	Open (Text) (with dialog)	Ctrl+Shift+W	Open (Text) (with dialog) Ctrl+Shift+Z	
Clone / Pattern Stamp Tool	S	Open (Text) (with dialog)	Ctrl+Shift+X	Open (Text) (with dialog) Ctrl+Shift+Z	
Type Tool	T	Open (Text) (with dialog)	Ctrl+Shift+Y	Open (Text) (with dialog) Ctrl+Shift+Z	
Shape Tool	U	Open (Text) (with dialog)	Ctrl+Shift+Z	Open (Text) (with dialog) Ctrl+Shift+Z	
Move Tool	V	Open (Text) (with dialog)	Ctrl+Shift+1 → 9	Open (Text) (with dialog) Ctrl+Shift+Z	
Magick Wand Tool	W	Open (Text) (with dialog)	Ctrl+Shift+D	Open (Text) (with dialog) Ctrl+Shift+Z	
Switch Colors	X	Open (Text) (with dialog)	Ctrl+Shift+H	Open (Text) (with dialog) Ctrl+Shift+Z	
History / Art History Brush	Y	Open (Text) (with dialog)	Ctrl+Shift+I	Open (Text) (with dialog) Ctrl+Shift+Z	
Zoom Tool	Z	Open (Text) (with dialog)	Ctrl+Shift+L	Open (Text) (with dialog) Ctrl+Shift+Z	
Zoom Tool (logistic)	Space	Open (Text) (with dialog)	Ctrl+Shift+R	Open (Text) (with dialog) Ctrl+Shift+Z	
Zoom In (logistic)	Ctrl+Space	Open (Text) (with dialog)	Ctrl+Shift+T	Open (Text) (with dialog) Ctrl+Shift+Z	
Zoom Out (logistic)	Alt+Space	Open (Text) (with dialog)	Ctrl+Shift+U	Open (Text) (with dialog) Ctrl+Shift+Z	
Circle Path / Direct Selection Tools	Shift+H	Open (Text) (with dialog)	Ctrl+Shift+V	Open (Text) (with dialog) Ctrl+Shift+Z	
Type Brush / Pen Tools	Shift+B	Open (Text) (with dialog)	Ctrl+Shift+W	Open (Text) (with dialog) Ctrl+Shift+Z	
Image / Text / Selection Tools	Shift+A	Open (Text) (with dialog)	Ctrl+Shift+X	Open (Text) (with dialog) Ctrl+Shift+Z	
Measure (lock / hide)	Shift+F	Open (Text) (with dialog)	Ctrl+Shift+Y	Open (Text) (with dialog) Ctrl+Shift+Z	
Type Gradient / Paint Bucket Tool	Shift+G	Open (Text) (with dialog)	Ctrl+Shift+Z	Open (Text) (with dialog) Ctrl+Shift+Z	
Circle Eyedropper / Sampler / Measure	Shift+I	Open (Text) (with dialog)	Ctrl+Shift+1 → 9	Open (Text) (with dialog) Ctrl+Shift+Z	
Cycle Healing / Patch, Color, Retouch Tools	Shift+J	Open (Text) (with dialog)	Ctrl+Shift+D	Open (Text) (with dialog) Ctrl+Shift+Z	
Type / Stroke / Shape Selected Tools	Shift+K	Open (Text) (with dialog)	Ctrl+Shift+H	Open (Text) (with dialog) Ctrl+Shift+Z	
Blur / Smudge / Smudge Tools	Shift+L	Open (Text) (with dialog)	Ctrl+Shift+I	Open (Text) (with dialog) Ctrl+Shift+Z	
Toggle Red / Electrical Marquee	Shift+M	Open (Text) (with dialog)	Ctrl+Shift+L	Open (Text) (with dialog) Ctrl+Shift+Z	
Type Notes / Annotation Tools	Shift+N	Open (Text) (with dialog)	Ctrl+Shift+U	Open (Text) (with dialog) Ctrl+Shift+Z	
Gamma Brush / Pen Tools	Shift+B	Open (Text) (with dialog)	Ctrl+Shift+V	Open (Text) (with dialog) Ctrl+Shift+Z	
Image / Text / Selection Tools	Shift+A	Open (Text) (with dialog)	Ctrl+Shift+W	Open (Text) (with dialog) Ctrl+Shift+Z	
Measure (lock / hide)	Shift+F	Open (Text) (with dialog)	Ctrl+Shift+X	Open (Text) (with dialog) Ctrl+Shift+Z	
Type Gradient / Paint Stamp Tools	Shift+G	Open (Text) (with dialog)	Ctrl+Shift+Y	Open (Text) (with dialog) Ctrl+Shift+Z	
Circle Type Tools	Shift+I	Open (Text) (with dialog)	Ctrl+Shift+Z	Open (Text) (with dialog) Ctrl+Shift+Z	
Cycle Shape / Line Tools	Shift+U	Move View to Bottom Right	End	Select (Clear) Delete / Backspace	
Cycle Art / History Brush	Shift+Y	Move View to Top Left	Home	Color Settings Ctrl+Shift+K	
Airbrush (Brush Tool)	Alt+Shift+P	Move View to Top	Ctrl+Tab	Copy Ctrl+C	
Wacom	*	Move View to Top Left	Shift+Ctrl+Tab	Copy Merged Ctrl+Shift+C	
All Paintbrushes (Show / hide)	Tab	Previous Document	Ctrl+Shift+Tab	Cut Ctrl+C	
All Paintbrushes (Show / hide)	Shift+Tab	Scroll View Down 10px	Shift+PageDown	Duplicate Free Transform Ctrl+Alt+T	
Adobe Paintbrush (Show / hide)	F1	Scroll View Down One Page	PageDown	Duplicate Layer (Set) (no dialog) Ctrl+Alt+S	
Brushes Palette (Show / hide)	F2	Scroll View Left 10px	Shift+PageUp	Duplicate Layer (Set) Ctrl+Shift+Q	
Cobr Paintbrush (Show / hide)	F6	Scroll View Right 10px	Shift+PageDown	Flatten Image Ctrl+Shift+F12	
History (show / hide)	F10	Scroll View Right One Page	PageDown	Fill Dialog Ctrl+Shift+Space	
Paintbrush (Show / hide)	F11	Scroll View Up 10px	Shift+PageUp	Fill From History Ctrl+Alt+Space	
Logitech Paintbrush (Show / hide)	F7	Scroll View Up One Page	PageUp	Fill From History & Preserve Trans. Ctrl+Alt+Shift+Space	
Options (show / hide)	F1	Select View (Mask)	Ctrl+Shift+M	Fit With Background Preserves Trans. Ctrl+Shift+H	
Options (Brushes Palette (Show / hide))	F4	Select View (Mask) (logistic)	Ctrl+Shift+I	Fit With Background Color Ctrl+Shift+K	
Return / Enter	Return / Enter	Select View (Ripple View) (logistic)	Ctrl+Shift+L	Fit With Foreground Color Ctrl+Shift+J	
Cancel Operation	Esc / Ctrl+Shift+P	Show Composite Channel (logistic)	Ctrl+Shift+R	Free Transforms Ctrl+T	
Apply Zoom & Keep Zoom Field Active	Shift+Return	Swap Channels Ctrl+Shift+Y	Ctrl+Shift+V	Keyboard Shortcuts Ctrl+Shift+K	
Macros	*	Trim	Ctrl+Y	Paste Ctrl+V	
Help	F1				
About Photoshop	Shift+F1				
Accept Operation	Return / Enter				
Cancel Operation	Esc / Ctrl+Shift+P				
Apply Zoom & Keep Zoom Field Active	Shift+Return				

Allow experienced users to have access to information quickly

## 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.

Size and arrange screens for optimal viewing

## 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

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.



1 2 3 4 5 Next

Web results for **cable television seattle**

[Office of Cable Communications Home Page](#)  
[www.seattle.gov/cable](http://www.seattle.gov/cable) ▾  
 Oversees cable-television service for the City of Seattle.

[Seattle Cable television | Cable television in Seattle, WA - ...](#)  
[www.yellowpages.com/seattle-wa/cable-television](http://www.yellowpages.com/seattle-wa/cable-television) ▾  
 197 listings of Cable & Satellite Television in Seattle on YP.com. Find reviews, directions & phone numbers for the best **cable television** in Seattle, WA.

[Seattle Cable tv | Cable tv in Seattle, WA - YP.com](#)  
[www.yellowpages.com/seattle-wa/cable-tv](http://www.yellowpages.com/seattle-wa/cable-tv) ▾  
 194 listings of Cable & Satellite Television in Seattle on YP.com. Find reviews, directions & phone numbers for the best **cable tv** in Seattle, WA.

[See all web results](#)

## Search Results

Searched for **diesel** found approximately 217 matches

[Honeywell Green Diesel | Honeywell UOP](#)

UOP's refining technology makes real alternative fuels from various biofeedstocks. Chemically similar to traditional **diesel**, **Green Diesel** is a drop-in **diesel** fuel for ...

Provide search as an effective navigation method.

# Heuristic Evaluation | How – Severity Ratings

**Severity Ratings** (from Nielsen & Mack '94)

- 0 - don't agree that this is a usability problem
- 1 - cosmetic problem
- 2 - minor usability problem
- 3 - major usability problem; important to fix
- 4 - usability catastrophe; imperative to fix

## Example

[Heuristic 4 – Consistency] [Severity 3]

The product uses the string "Save" on the first screen for saving the user's file, but used the string "Write file" on the second screen. Users may be confused by this different terminology for the same function.

# Heuristic Evaluation | How

## *Severity Ratings Example*

[Heuristic 5 - Error Prevention]

[Severity 1]

The redundancy of the notification is confusing. It should have been the second notification only. There is no need for the first one. This is a minor issue since it appears only once when opening app, it is not a persistence problem where it pops up each time you open the app.



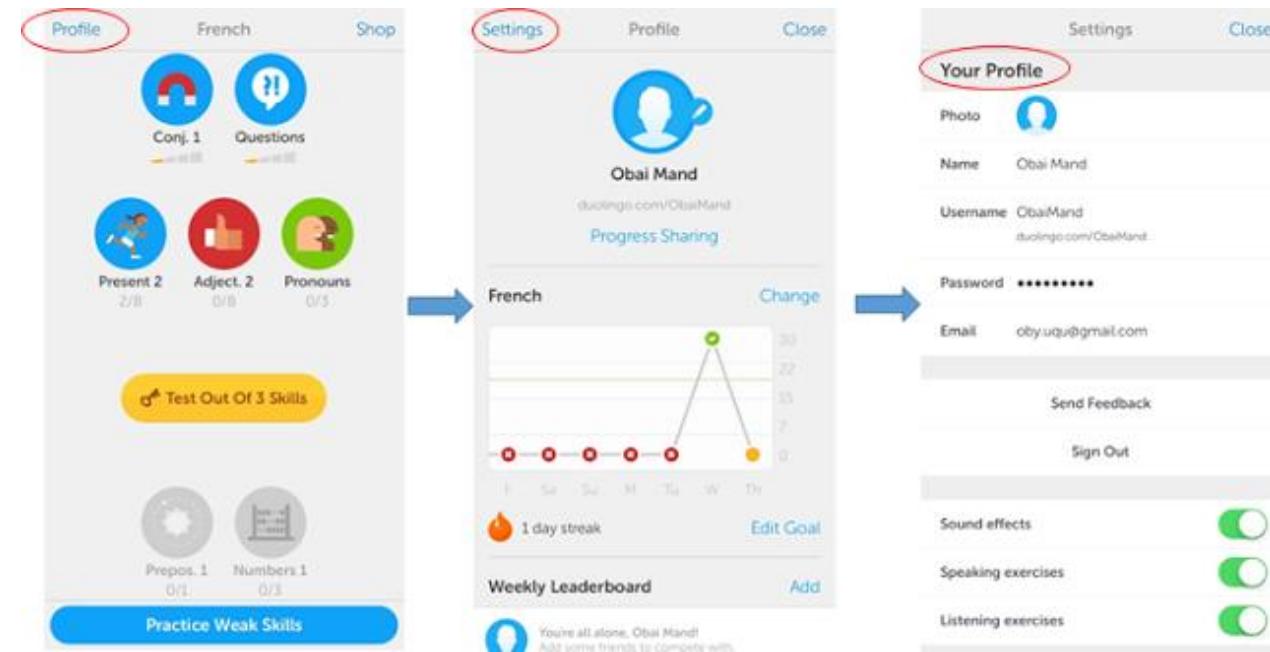
# Heuristic Evaluation | How

## *Severity Ratings Example*

[Heuristic 4 - Consistency]

[Severity 2]

When a user wants to go to the settings, he must go through the profile page first then go to settings page. This conflicts with common sense. If a user need to change some of the app settings, there should be a clear button in the main page, not hidden under another page.



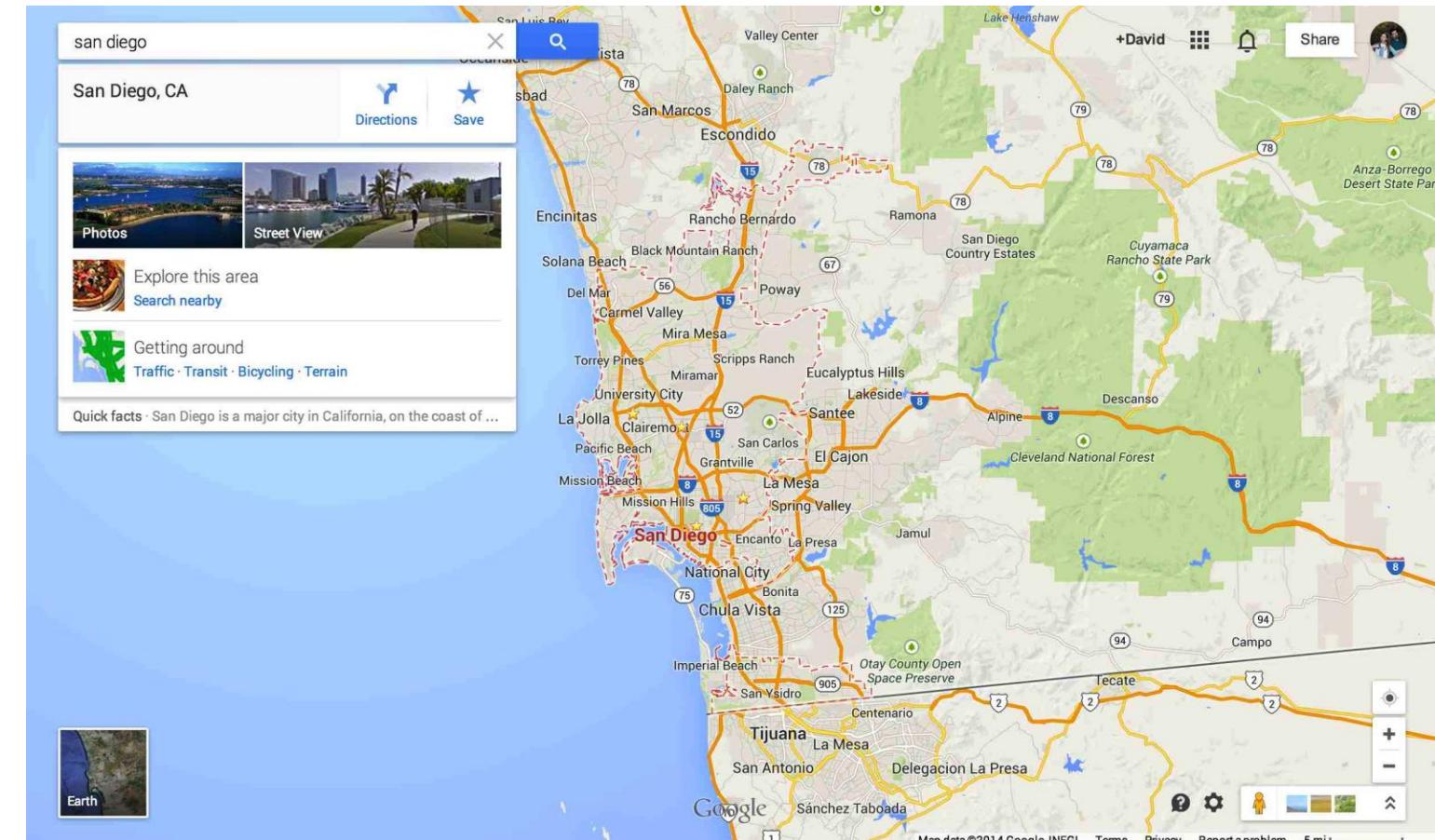
# ACTIVITY: Spot the Violation

## Scenario:

Let's evaluate Google Maps:  
[www.google.com/maps](http://www.google.com/maps)

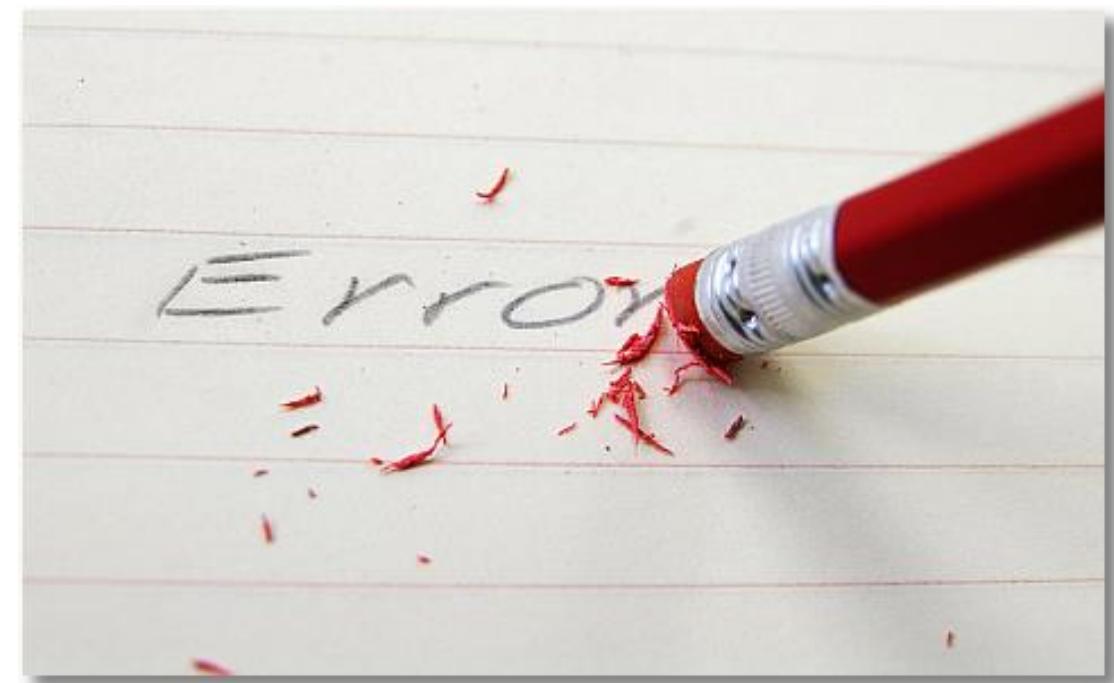
## Instructions:

1. Think about a task scenario
2. Go through the scenario step by step, make UX observations and assign to heuristics
3. Observations can be good and bad!
4. For those that are bad, think of ways to mitigate!



## ACTIVITY: Spot the Violation

- What issues did you find?
  - Demonstrate the issue
  - Explain why it's an issue (positive or negative) – what heuristic(s) are affected?
  - What severity rating is it?
  - If it's negative, do you have an idea how to improve on it?



# ACTIVITY: Make a Recommendation

On the next 10 slides, let's evaluate each heuristic example but propose a possible solution:

1. Think about a task scenario
2. Go through the scenario step by step, make UX observations and think of a solution
3. Does your recommendation violate another heuristic?

## The 10 HUE Heuristics

1. Visibility of System Status  
Give the users appropriate feedback about what's going on.
2. Match System & Real World  
Use real-world words, concepts, and conventions familiar to users in a natural, logical, order.
3. User Control & Freedom  
Support, undo, redo, and exit points to help users leave an unwanted state caused by mistakes.
4. Consistency & Standards  
Use consistent words, situations, and actions throughout.
5. Error Prevention  
Eliminate error-prone conditions or check for them before users commit to an action.
6. Recognition Not Recall  
Make objects, actions, and options visible at the appropriate time to minimize users' memory load.
7. Flexibility & Efficiency of Use  
Make the system efficient for different experience levels through shortcuts, advanced tools, and frequent actions.
8. Aesthetic & Minimalist Design  
Don't show irrelevant or rarely needed information. Extraneous elements diminish the relevance of the others.
9. Help Users Recognize, Diagnose, & Recover  
Express error messages in plain language and suggest solutions.
10. Help & Documentation  
Make necessary help and documentation easy to find.

# Examples

# Example 1

- Consistency & Standards

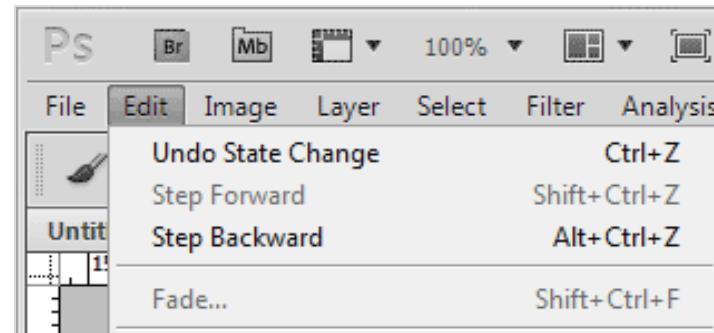
Email	<input type="text"/>	<span>● Email is required</span>
First name	<input type="text" value="Ray"/>	<span>●</span>
Last name	<input type="text" value="Cheng"/>	<span>●</span>
Password should be atleast 6 characters and contain both lowercase and uppercase letters as well as numbers.		
Password	<input type="password" value="*****"/>	<span>● Please use numbers and lower and uppercase letters</span>
Confirm	<input type="password" value="*****"/>	<span>● Please enter the exact same password</span>
Country	<input type="text" value="Norway"/>	<span>●</span>
Street address	<input type="text" value="15 High Street"/>	<span>●</span>
Home phone	<input type="text"/>	
Office phone	<input type="text"/>	
Cell phone	<input type="text"/>	



Make each interactive feature behave and appear in the same manner in all screens

# Example 2

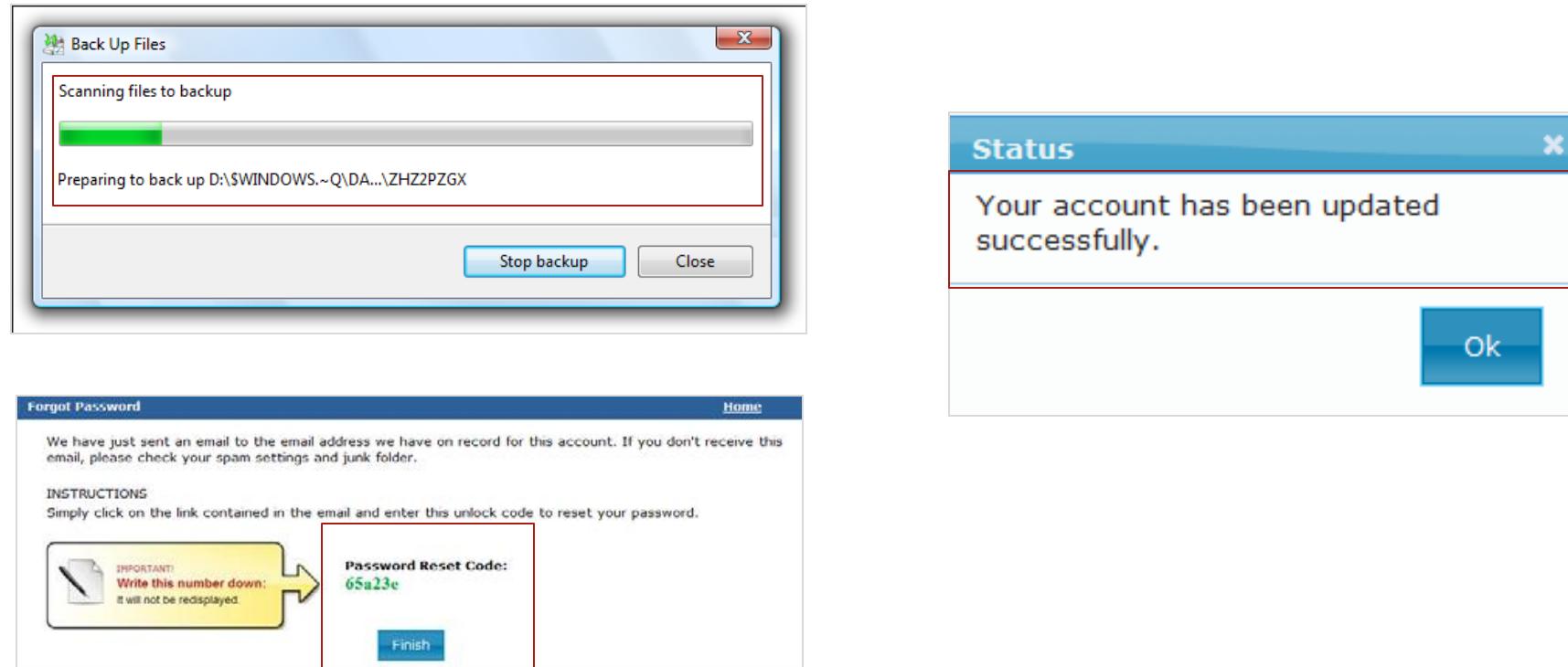
- User Control & Freedom



Offer user access to relevant content at relevant time

# Example 3

- Visibility of System Status



Acknowledge Users' Actions & Communicate System Status

# Example 4

- Error Prevention

Please sign in using your EID and LDAP Password.  
Click [here](#) to add this page to your favorites.

**Digital Forms will be unavailable on Saturday, 22nd June from 06:00 AM to 10:00 AM MST for Monthly OS Patching**

**Sign In** **Help**

User ID: e819008  
Password:  
[Forgot Password?](#)

**3. Submit Evidence of U.S. Citizenship**

When applying for a U.S. passport in person, evidence of U.S. citizenship must be submitted **with** Form DS-11. All documentation submitted as citizenship evidence will be **returned** to you. These documents will be delivered with your newly issued U.S. passport or in a separate mailing.

**Primary Evidence of U.S. Citizenship (One of the following):**

- Previously issued, undamaged U.S. Passport
- Certified birth certificate issued by the city, county or state\*
- Consular Report of Birth Abroad or Certification of Birth
- Naturalization Certificate
- Certificate of Citizenship

**Automatic alias**  
An alias will be generated for you. If you wish to create your own alias below, untick this option. To control the format of the generated aliases, see the [Pathauto settings](#).

Honeywell and Manipal Institute of Technology Launch "Good Engineering" ...  
Push beyond the first no to make the right product at the right time for HGR ...  
\*Reduce time lapse between technology adoption and business model formulations ...  
Kate Adams, Senior Vice President, General Counsel, Honeywell visits HTS India

Minimize disruptions and indicate them to users before they happen

# Example 5

- Flexibility and efficiency of use

Item 1 Of 50 | Next

**PUB6438S-ILC-US/U**  
Spyder BACnet ILC Programmable Controller, 6 Universal/4 Digital Inputs, 3 Analog/8 Digital Outputs, Made in USA

Product Info Literature Accessories & Replacement Parts

**Overview**  
The Spyder Family of controllers are for use in VAV (Variable Air Volume) and Unitary HVAC control applications. Each controller communicates via either LONWORKS® or BACnet MS/TP network communications. Each controller provides flexible, universal inputs (UI) for external sensors, digital inputs (DI), and a combination of analog outputs (AO) and digital Triac outputs (DO). The Sylk Bus is included in each controller which enables connection to other Sylk enabled devices. These controllers provide many options and advanced system features that allow state-of-the-art commercial building control. Each controller is programmable and configurable using the NIAGARA AX FRAMEWORK® software.

**Product Specifications**

Application	Unitary
Dimensions (in.)	5.45 in. high x 6.85 in. wide x 2.26 in. deep

New Client Setup

1 Step Name 1 2 Step Name 2 3 Step Name 3 4 Step Name 4 5 Step Name 5 6 Step Name 6

General

Company Name:

Username:

Password:

Password (again):

Terms & Conditions

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Nam fermentum, nulla luctus pharetra vulputate, felis tellus mollis orci, sed rhoncus sapien nunc eget odio. Lorum ipsum dolor sit amet, consectetur adipiscing elit. Aenean euismod bibendum laoreet. Proin gravida dolor sit amet lacus accumsan et viverra justo commodo. Proin sodales pulvinar tempor. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nam fermentum,

I agree to the Terms & Conditions of the Client Portal

< Back Continue >

Display commonly used features and content by default, while still allowing advanced users to access less common features or secondary content

# Example 6

- Help users recognize, diagnose, and recover from errors

The image displays two screenshots of a "Password Activation" form. The left screenshot shows a red box highlighting the "New Password" field, which contains several dots, indicating it is empty or incorrect. The right screenshot shows a red box highlighting a large green button labeled "Save".

**Left Screenshot: Password Activation Form**

Fields marked with an asterisk \* are required.

User ID: e819008

\*New Password:  ✓ ✖ ✖ ✖

\*Confirm Password:

Select checkbox to change security questions and answers

**Question 1**

Select Question:

\*Edit Question:

\*Answer:

\*Repeat Answer:

**Question 2**

Select Question:

\*Edit Question:

\*Answer:

\*Repeat Answer:

**Question 3**

Select Question:

\*Edit Question:

\*Answer:

\*Repeat Answer:

**Right Screenshot: Action Buttons**

Save Submit Cancel Return without saving

Save as Draft Draft PDF Save as Final Intake Form Generate Final PDF

Give users the ability to reverse, undo, or pause their actions .

# Example 7

- Match System & Real World

The image displays two screenshots side-by-side. The left screenshot is from the Honeywell Brand Management website, showing stock information for HON (Common Stock) with a red box highlighting the quote details. The right screenshot is from a GSP (Global Security Policy) site, showing policy management options like Exceptions and Compliance.

**Honeywell | Brand Management**

**HOME BRAND PRINT DIGITAL SIGNAGE EVENTS**

**HON (Common Stock)**

Exchange	NYSE
Price	\$92.89
Change (%)	-0.86 (0.92%)
Volume	2,379,400

03/19/14 4:00 p.m. ET  
Minimum 20 minute delay  
[Refresh quote](#)

**GSP (Global Standards & Functional Policy) site**

Global Standards & Functional Policy (GSP) site

Use Security, Application, Infrastructure and IT Operational Standards. We have now one site to allow you to easily find all related standards for one subject.

**Policies (GSP)**

**Exceptions** Create Exceptions & Check Status **Compliance** Search and view reports

**Most Searched**

- » Desktop Laundry
- » Workstation Security
- » Account Type
- » Password Conversion
- » Security Component - Web Browser

**Quick Links**

- » Corporate Policy
- » HITS Standards and Compliance
- » HITS PROGov
- » ASOC Standards Quick Summary
- » ISOC Standards Quick Summary

Organize content in the most logical and natural order e.g by type, topics, tasks etc.

# Example 8

- Help and documentation

Savings Interest Calculator

\*Required Field

\*Type of savings account

Please enter the interest rate that your savings is currently earning.

\*Interest rate (APY)

Monthly deposit

Live Help Settings / Configuration Center

Live Help Control Center helps you configure Live Help to allow you to provide an optimal customer support and sales service. It is not required to configure Live Help prior to logging into your installation.

General  
Appearance  
Alerts  
**Images**  
HTML Code  
Privacy  
Connection  
Advanced

Images / Campaign Link

Live Help Logo:   
Campaign Image:   
Campaign Link:   
Status Image Preview: Live Help - Online  
click for live support

Online  
 Offline (Hidden)  
 Offline w/o Email  
 Be Right Back  
 Away

Address:  Preview

Clarify complex tasks with contextual, helpful information.

# Example 9

- Aesthetic and minimalist design



Add images only for clarification and emotional impact.

# Example 10

- Recognition rather than recall



Provide visual cues to help users take decisions effectively.

# Heuristic Evaluation Steps

# Heuristic Evaluation Steps Overview

Evaluate	1	Select Items to Test	Select set of user tasks to use for the heuristic evaluation.
	2	Step through Task	Go through each task, make observation and map to heuristic(s).
Analyze	3	Strengths & Weaknesses	Collate all UX strengths and weaknesses applying to the same heuristics and create clusters
	4	Detail Clusters	Assign title, short description and severity rating to each cluster
Share	5	Create Report	Create report (refer to template)
	6	Review Results with Team	Review results with project team and determine action items
	7	Store & Share	Store report as project artefact on project share drive

# Step 1: Select Items to Test

- Select set of user tasks to use for the heuristic evaluation.
- Identify and test the tasks that are critical to your site's success – you'll want all visitors to be able to perform these – and any elements expected to cause difficulty for your site visitors.
- An example might be “users should be able to find out how much product x costs.” You can then break this down into appropriate tasks, and test each in turn.

## User Task: Set up a printer

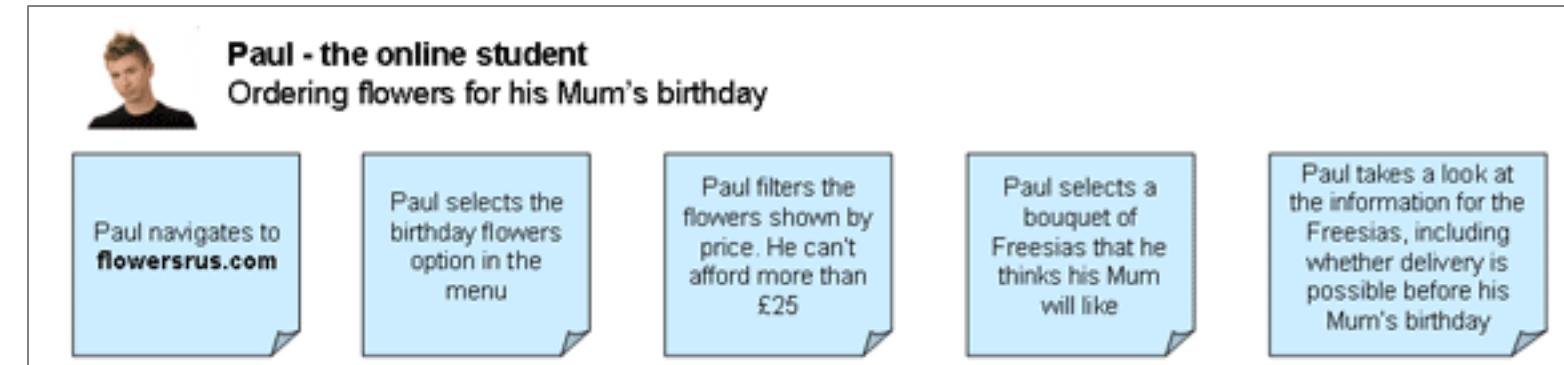
**ACTION 1:** Pull down the apple menu.

**ACTION 2:** Select "Chooser" from the menu.

**ACTION 3:** Click on current printer type, which is Laser.

**ACTION 4:** Click the On button under background printing.

**ACTION 5:** Click the Close Box in the upper left window.



## Step 2: Select Items to Test

- Go through each task, make observation and map to heuristic(s).

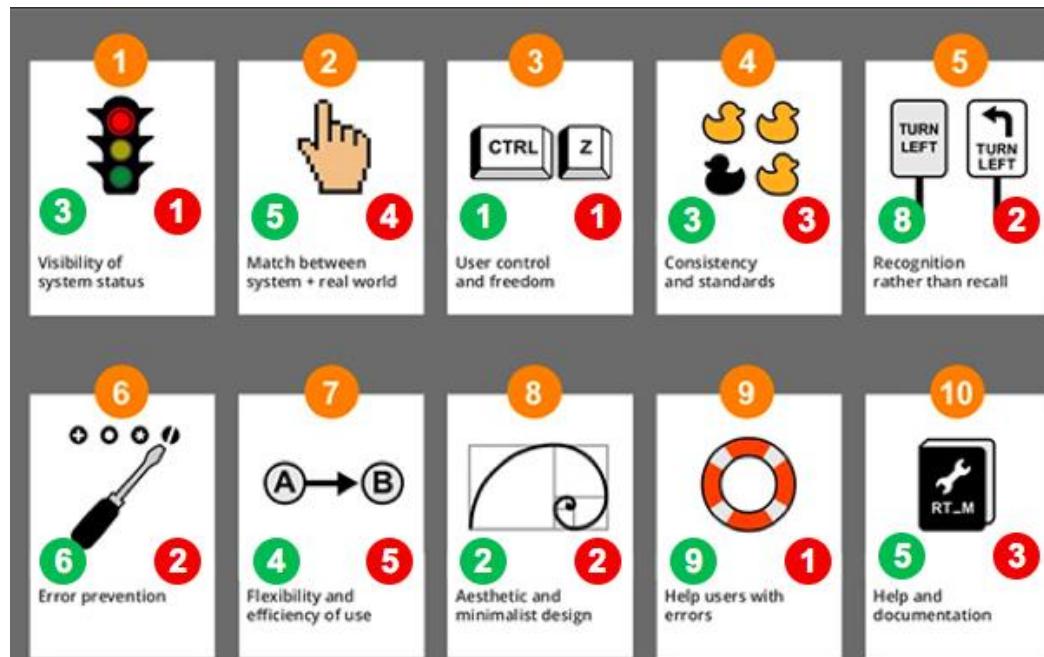
S.No	Task	Step #	Step	Issue Description	Issue title	Heuristics Violated
1	1 a		View dashboard	The initial screen does not show any information about my past requests. It does not tell how to raise a request. It shows a list of links which are not relevant to the task in hand.	There are no standard information architecture of this tool.	visibility, match
6 8	2 b		Review and submit to BSC	There are multiple action buttons and the order in which they needs to be clicked is not clear It is not clear how to hold the work packet. There are no specific button to hold the request. User needs to click on close and save changes to change the status of the request	The taskflow and guidance to user is unclear	visibility, recognition
9	2 d 2 e		Hold the work packet Submit to BSC	It is not clear on how to Submit to BSC because it is available only when the user enters the business function page and button is enabled after certain rules are fulfilled. Ideally the flow should have been sequential without moving back and forth. In order to reject the user is expected to click on BSC administrator button. The button CF administrator is confusing. By mistake if it is opened then there is no way to come back	The taskflow and guidance to user is unclear	recognition, recognit visibility, flexibility
10	3 a		Review	The labeling of tabs, links and button does not match users expectations The page is clearly un optimized with one single button. It adds to the number clicks to complete the task.	The taskflow and guidance to user is unclear	recognition, recover,
2	1 b		Click on QMS in draft	The type field is same as the Activity field filled in the parent view. In that case it should have been prefilled and non editable. It is not clear what needs to be entered in ADEPT link? The box should have given clear indication of the expected data. As soon as the close and save changes button was pressed both the forms got closed. This was unexpected. Some messages confirming the submission should have been given. In case the user pressed the work packet info, it is not clear if the entry was saved or not. Now there are three buttons enabled creating confusion on what needs to be pressed. Ideally two buttons should have been present. Save as draft and Submit. On press of submit button a confirmation should have come.	There are no standard information architecture of this tool.	match, flexibility
4	1 d		Edit the business specific form	Once in the BSC Admiltrator screen, the instructions and actions to approve, reject and put on hold are all spread out. There is one clear button specific only to hold which is confusing. Clear option should be available throughout the form	There are no error recovery mechanism built in the interface	
11	b		Reject	Once in the BSC Admiltrator screen, the instructions and actions to approve, reject and put on hold are all spread out. There is one clear button specific only to hold which is confusing. Clear option should be available throughout the form	Categorization and organization of page level information is unoptimized	recognition,match, re
	3			The review information is now part of the BSC administrator screen however there are no clear indication between content that needs to be reviewed versus content that needs to edited to change the status.	Categorization and organization of page level information is unoptimized	Consistency, match
12 3	4 a 1 c		Review View and edit the form	Related items are not placed together. It is not clear how many pages of data needs to be entered. Work packet name and draft type value should be part of the header. Draft ID Number and Draft Last Modified by should be part of the right hand side of second section instead of area and cancellation reason. It is not clear that in order to complete the process the Save as Draft button needs to be pressed and then the buttons under work packet type needs to be selected. The close & save changes is also	Categorization and organization of page level information is unoptimized	recognition, visibility visibility, match, contr

# Step 3: Strengths & Weaknesses

- Collate all UX strengths and weaknesses applying to the same heuristics and create clusters

## The 10 HUE Heuristics

### Strength & Weakness Clustering



#### 1. Visibility of System Status

Give the users appropriate feedback about what's going on.

#### 2. Match System & Real World

Use real-world words, concepts, and conventions familiar to users in a natural, logical, order.

#### 3. User Control & Freedom

Support, undo, redo, and exit points to help users leave an unwanted state caused by mistakes.

#### 4. Consistency & Standards

Use consistent words, situations, and actions throughout.

#### 5. Error Prevention

Eliminate error-prone conditions or check for them before users commit to an action.

#### 6. Recognition Not Recall

Make objects, actions, and options visible at the appropriate time to minimize users' memory load.

#### 7. Flexibility & Efficiency of Use

Make the system efficient for different experience levels through shortcuts, advanced tools, and frequent actions.

#### 8. Aesthetic & Minimalist Design

Don't show irrelevant or rarely needed information. Extraneous elements diminish the relevance of the others.

#### 9. Help Users Recognize, Diagnose, & Recover

Express error messages in plain language and suggest solutions.

#### 10. Help & Documentation

Make necessary help and documentation easy to find.

## Step 4: Detail Clusters

Assign title, short description and severity rating to each cluster

### Severity Rating Scheme:

- 0 - no usability problem; is a strength
- 1 - cosmetic problem
- 2 - minor usability problem
- 3 - major usability problem; important to fix
- 4 - usability catastrophe; imperative to fix

Scenario #	Task #	Step #	Step Name	Issue Title	Issue Description	Heuristics Violated	Severity Rating	Rating Definition
1	1	a	View dashboard	There is no standard IA for the tool	The initiat screen does not show any information abou my past requests. It does no tell how to raise a request. It shows a list of links which are not relevant to the task in hand.	Visibility od systems status, match system & realworld	2	Minor usability problem; may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.

## Step 5: Create Report

- Create report (refer to template), include:
  - Key areas of issues/violations against the design principles
  - Key areas of compliance with the design principles
  - Recommendations for issue mitigation

Heuristics Violated	Severity Rating	Rating Definition	Strengths	Weakness	Recommendations
Visibility of systems status, match system & realworld	2	Minor usability problem; may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.	6	5	Add instructions on how to raise request and also display about prior request.

# Step 6: Review Results with Team

- Review results with project team and determine action items

Scenario #	Task #	Step #	Step Name	Issue Title	Issue Description	Heuristics Violated	Severity Rating	Rating Definition	Strengths	Weakness	Recommendations
1	1	a	View dashboard	There is no standard IA for the tool	The initial screen does not show any information about my past requests. It does not tell how to raise a request. It shows a list of links which are not relevant to the task in hand.	Visibility of systems status, match system & realworld	2	Minor usability problem; may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.	6	5	Add instructions on how to raise request and also display about prior request.

# Step 7: Store and Share

Store report as project artefact on project share drive.

The screenshot shows the OneDrive web interface. At the top, there are navigation links for 'Office 365' and 'OneDrive'. A blue banner at the top right contains the text 'EXPORT CONTROL DATA PROHIBITED', 'RESTRICTED INFORMATION LIMITED', and 'Click for Acceptable Use Policies'. The main area displays a file list under the path 'Files > IT HUE Team S... > 2 Projects > Project A'. The columns for the file list are 'Name', 'Modified', 'Modified By', 'File Size', and 'Sharing'. There are six files listed:

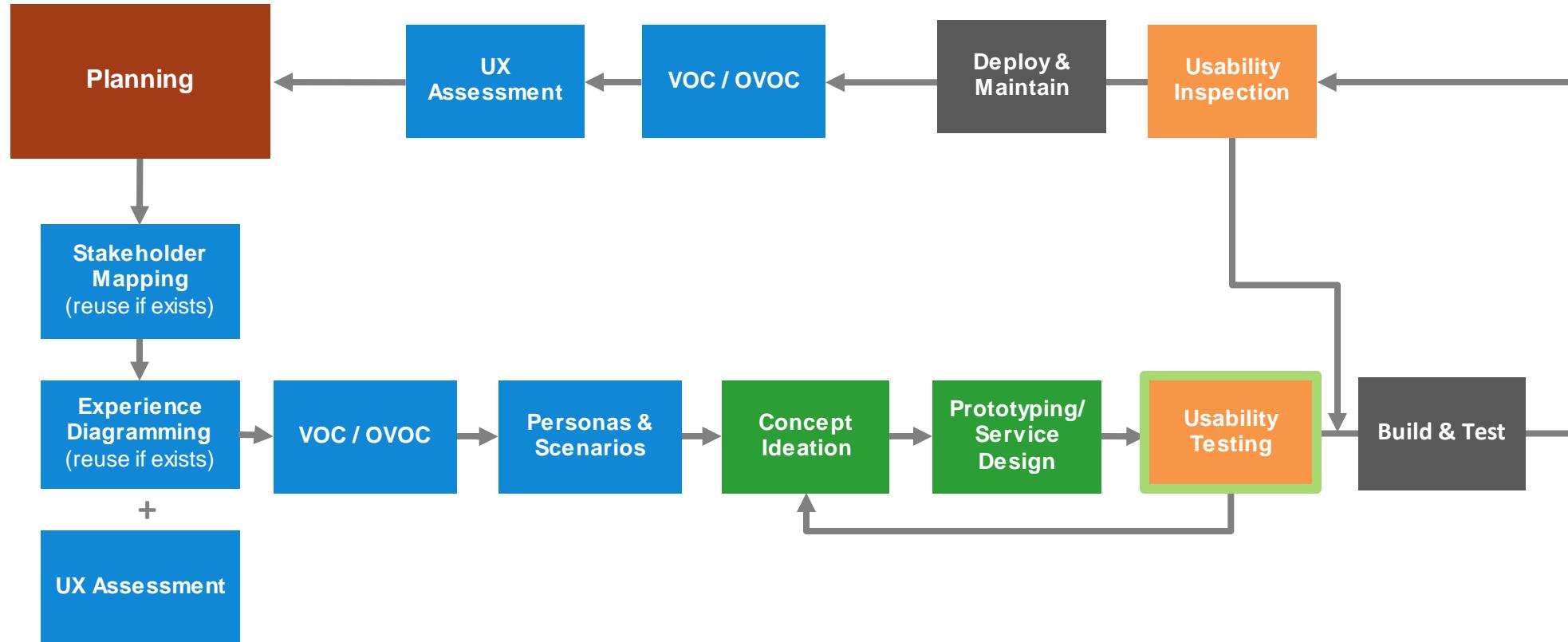
Name	Modified	Modified By	File Size	Sharing
0 Project Intake	July 21	Callahan, Donald		Shared
1 Project Management	January 5	Komischke, Tobias		Shared
2 Work in progress	January 5	Komischke, Tobias		Shared
3 Results	January 5	Komischke, Tobias		Shared
4 Hero Summary Slides	January 5	Komischke, Tobias		Shared
5 Post Mortem	January 5	Komischke, Tobias		Shared

A message at the bottom of the list says 'Drag files here to upload'.

# Heuristic Evaluation Templates

- Heuristic Evaluation Handbook.doc
- Heuristic Evaluation Results.pptx (Includes examples)

# Next Steps



# Feedback

- Have your expectations been satisfied?
- What did you like?
- What can we do better?



# The End