

## USABILITY INSPECTION METHODS



Heuristic Analysis

It gives you a comprehensive status of the Ul's usability. 3-5 usability experts will review the product and compare it against pre-defined principles (the heuristics).



Cognitive Walktrough

The cognitive walkthrough (CW) is a task focused heuristic evaluation where one or more usability experts work through a series of tasks and ask a set of questions from the user's perspective.



User testing

User testing refers to evaluating a product or service by testing it with representative users. Typically, during a test, participants will try to complete typical tasks while observers watch, listen and takes notes.

# DESIGN & USER EXPERIENCE TEAM MEMBERS



BEN
UX ARCHITECT
PRODUCT MANAGER

Benjamin is considered a subject matter expert in product strategy, user research, and human factors psychology. His work can be seen through such brands as Polo, Northrop Grumman, and HBO. As an information architect, he developed the global taxonomies for Exxon Mobil and DuPont. Benjamin is a pragmatic advocate of strategies taken from Lean Startup, Design Thinking, and Agile software development. His domains of expertise include artificial intelligence, ecommerce, technology, healthcare, financial services, and pharmaceutical. Benjamin is an alumni of Virginia Tech, where he studied Business, Psychology, and Visual



KAT SENIOR DESIGNER LEAD UX

With more than 12 years of agency experience, Kat brings her award-winning design abilities to each of our clients. She has wide-ranging design capabilities, including photography, video editing, animation, website and landing page design, brand development, user interface design, information architecture, traditional ad design, and so much more. Whether you are looking for out-of-the box ad designs or innovative website architecture, Kat is your go-to guru. Kat earned her Bachelor of Fine Arts from Fort Hays State University, with a concentration in graphic design.



RO
DESIGNER & UX

Roderic is a problem solver who blends appealing visual experiences with effective marketing strategies. In order to produce work that gets results, he believes a good designer must understand human behavior. How they think, how they choose, and how they buy. For some time now, he has had the pleasure of working on digital and print campaigns to optimize conversion and growth for our clients. While working closely with content, marketing, business analysis, and development departments, he helps lead production, modification, and maintenance of website and web app designs.

## TEN USABILITY HEURISTICS

It takes knowledge and experience to apply the heuristics correctly. These ten are considered some of the most critical to graphical user interface design.

Visibility of system status

- Recognition rather than recall
- Match between system and the real world
- Flexibility and efficiency of use

User control and freedom

- Aesthetic and minimalist design
- Consistency and standards
- Helps users recognise, diagnose, and recover from errors

A Error prevention

1 Help and documentation

## VISIBILITY OF SYSTEM STATUS - CHECKLIST

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

| 1 . 1 Does every display provide a title and/or header that describes screen content?   |  |  |
|---|--|--|
| 1.2 Is there some form of system feedback for every operator action?                    |  |  |
| 1.3 Is there a consistent icon design scheme and stylistic treatment across the system? |  |  |
| 1.4 Do menus & error messages appear in the same place(s) on each menu?                 |  |  |

Yes

Νo

NΑ

## VISIBILITY OF SYSTEM STATUS - UI EXAMPLE

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

1 4 Do menus & error messages appear in the same place(s) on each menu? Welcome, Juliette  $\equiv$ **CLOSED Cases** New Case Show 10 Rows \$ Go Search for... Location 1 Status I Closed Date I Days Open Report Date Ethics CLOSED 00000001 06/25/2017 Workplace threats or violence 01/03/2018 Suite 07/02/2017 CLOSED 04/04/2019 00000002 Ethics Suite CLOSED 00000005 07/02/2017 Accounting fraud 07/12/2017 Ethics Suite 04/03/2018 Testing or tra Report - All Cases Displaying 1 to 4 of 4 **Start Date End Date** 04/11/2019 04/11/2019 Generate Report

Inconsistent placement of navigation elements.

# ATCH BETWEEN SYSTEM & REAL WORLD - CHECKLIS

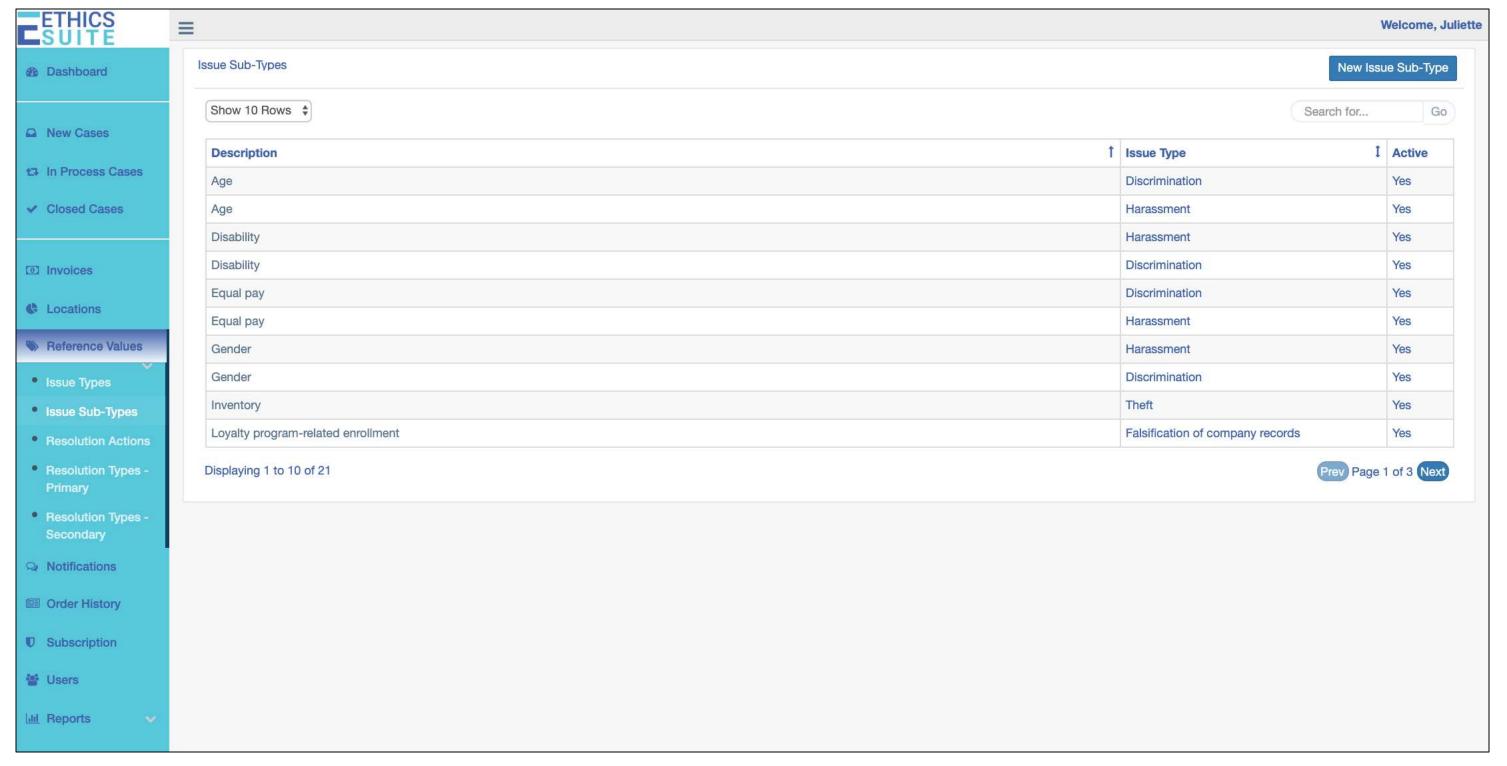
The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions. Make information appear in a natural and logical order.

|  | Yes | No | NA |
|--|-----|----|----|
| 2 . 1 Do the selected colors correspond to common expectations about color codes?        |     |    |    |
| 2.2 Does the command language employ user jargon and not computer jargon?                |     |    |    |
| 2.3 Do menu choices fit logically into categories that have readily understood meanings? |     |    |    |
| 2 . 4 Are icons concrete and familiar?   |     |    |    |

# TCH BETWEEN SYSTEM & REAL WORLD - UI EXAMP

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.

2.2 Does the command language employ user jargon and not computer jargon?



"Reference Values" is not user language but system jargon.

# USER CONTROL AND FREEDOM

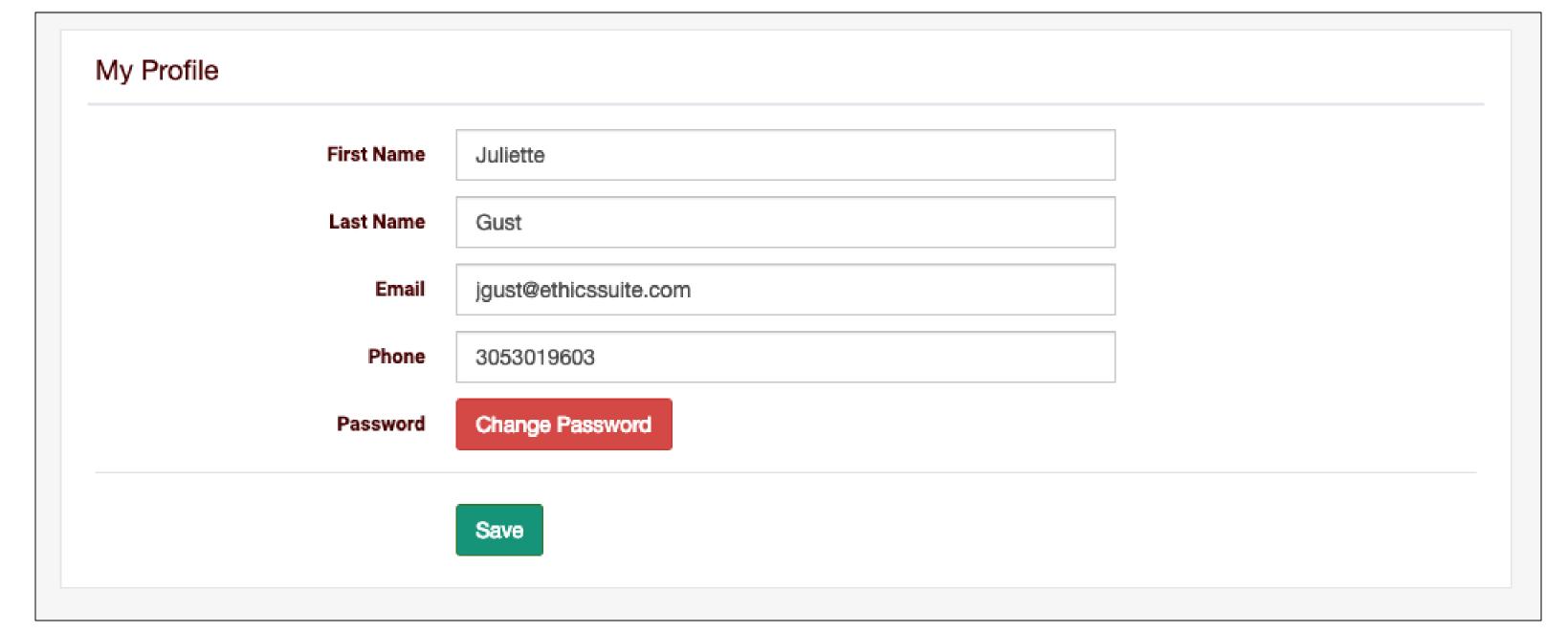
Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo. Support system confirmations.

|   | Yes | No | NA |
|---|-----|----|----|
| 3.1 Are users provided affirmations and confirmations when using a command?               |     |    |    |
| 3.2 Can users reduce data entry time by copying and modifying existing data?              |     |    |    |
| 3.3 Can users move forward and backward between fields or dialog box options?             |     |    |    |
| 3 4 Can users personalize the names of fields and other areas they may want to customize? |     |    |    |

# USER CONTROL AND FREEDOM - UI EXAMPLE

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. Support system confirmations.

3.1 Are user provided affirmation and confirmations when using a command?



No feedback or confirmation that the form was saved.

### CONSISTENCY AND STANDARDS - CHECKLIST

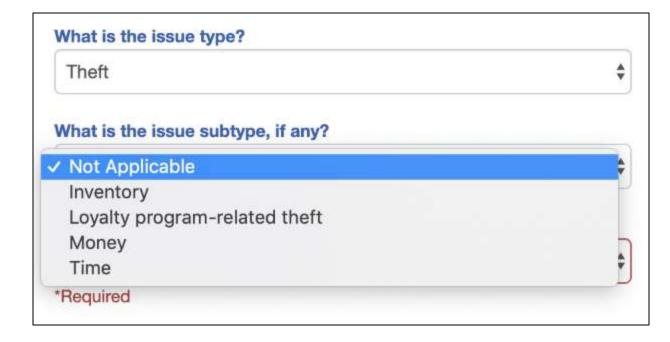
Users should not have to wonder whether different words, situations, or action mean the same thing. Follow platform conventions.

|  | Yes | No | NA |
|--|-----|----|----|
| 4.1 Does the information design facilitate the task structure?                               |     |    |    |
| 4.2 Do forms adhere to best practices around sequencing and progressive disclosure?          |     |    |    |
| 4.3 Are field labels consistent from one data entry screen to another?                       |     |    |    |
| 4 . 4 Are saturated colors – like blue – avoided for text or other small, thin line symbols? |     |    |    |

#### CONSISTENCY AND STANDARDS - UI EXAMPLE

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

4 2 Do forms adhere to best practices around sequencing and progressive disclosure?





Fields should be hidden until qualified fields are selected.

# ERROR PREVENTION - CHECKLIST

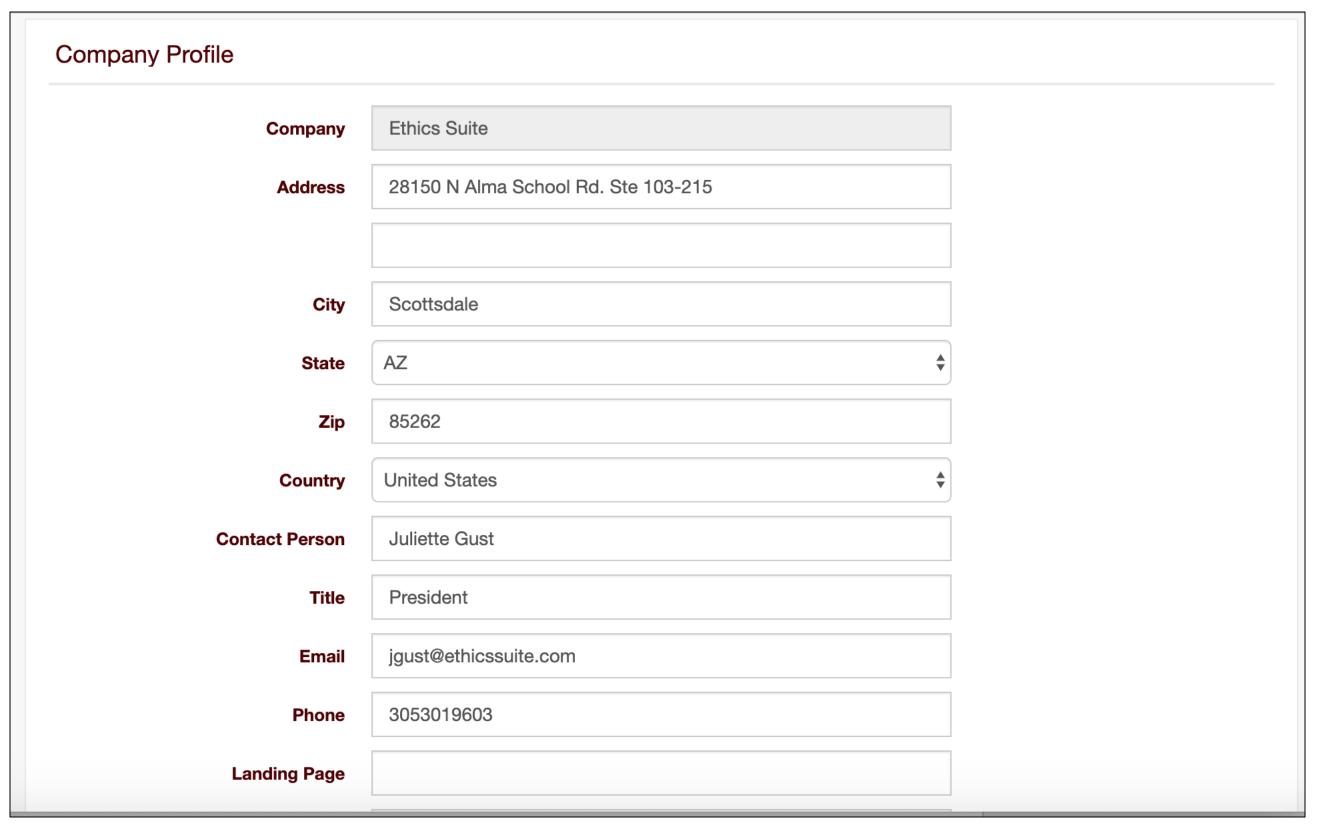
Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before proceeding.

|   | Yes | No | NA |
|---|-----|----|----|
| 5.1 Are prompts brief and unambiguous?  |     |    |    |
| 5.2 Are error messages worded so that the system, not the user, takes the blame?        |     |    |    |
| 5.3 Do error messages indicate what action the user needs to take to correct the error? |     |    |    |
| 5 4 Are error messages in proximity of the error they are trying to correct?            |     |    |    |

# ERROR PREVENTION - UI EXAMPLE

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 proceeding.





Better than correcting errors is a design that prevents errors. Some of the above fields are required. Why not tell the user which ones, prior to submission?

# RECOGNITION RATHER THAN RECALL - CHECKLIST

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 should be visible or easily retrievable.

|    |   | Yes | No | NA |
|----|---|-----|----|----|
| 6. | 1 Are buttons, cues, and messages placed where the eye is likely to be looking on the                     |     |    |    |
| 6. | screen?  2 Is white space space used to create symmetry between interface elements?                       |     |    |    |
| 6. | 3 Have items been grouped into logical zones, and have headings been used to distinguished between zones? |     |    |    |
| 6. | 4 Are required/optional data entry fields clearly marked and titled?                                      |     |    |    |

# RECOGNITION RATHER THAN RECALL - UI EXAMPLE

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 should be visible or easily retrievable.

= Welcome, Juliett What is the reporter's full name? Which location is being reported about? Ethics Suite - AZ, Scottsdale - 28150 N Alma School Rd, Ste 103-215 New Cases What is the reporter's email address? ta In Process Cases What is the issue type? What word best describes the reporter? Closed Cases What is the issue subtype, if any? Not Applicable (iii) Invoices How did the reporter become aware of it? Locations W Reference Values Who is the reporter writing about? How long has it been going on? Notifications Order History What is the estimated amount involved, if applicable? Subscription W Users What is the issue? M Reports Company Profile What is a brief summary of the issue? & My Profile Save

6.4 Are required/optional data entry fields clearly marked and titled?

Required fields aren't indicated until form has been submitted.

### FLEXIBILITY & EFFICIENCY OF USE - CHECKLIST

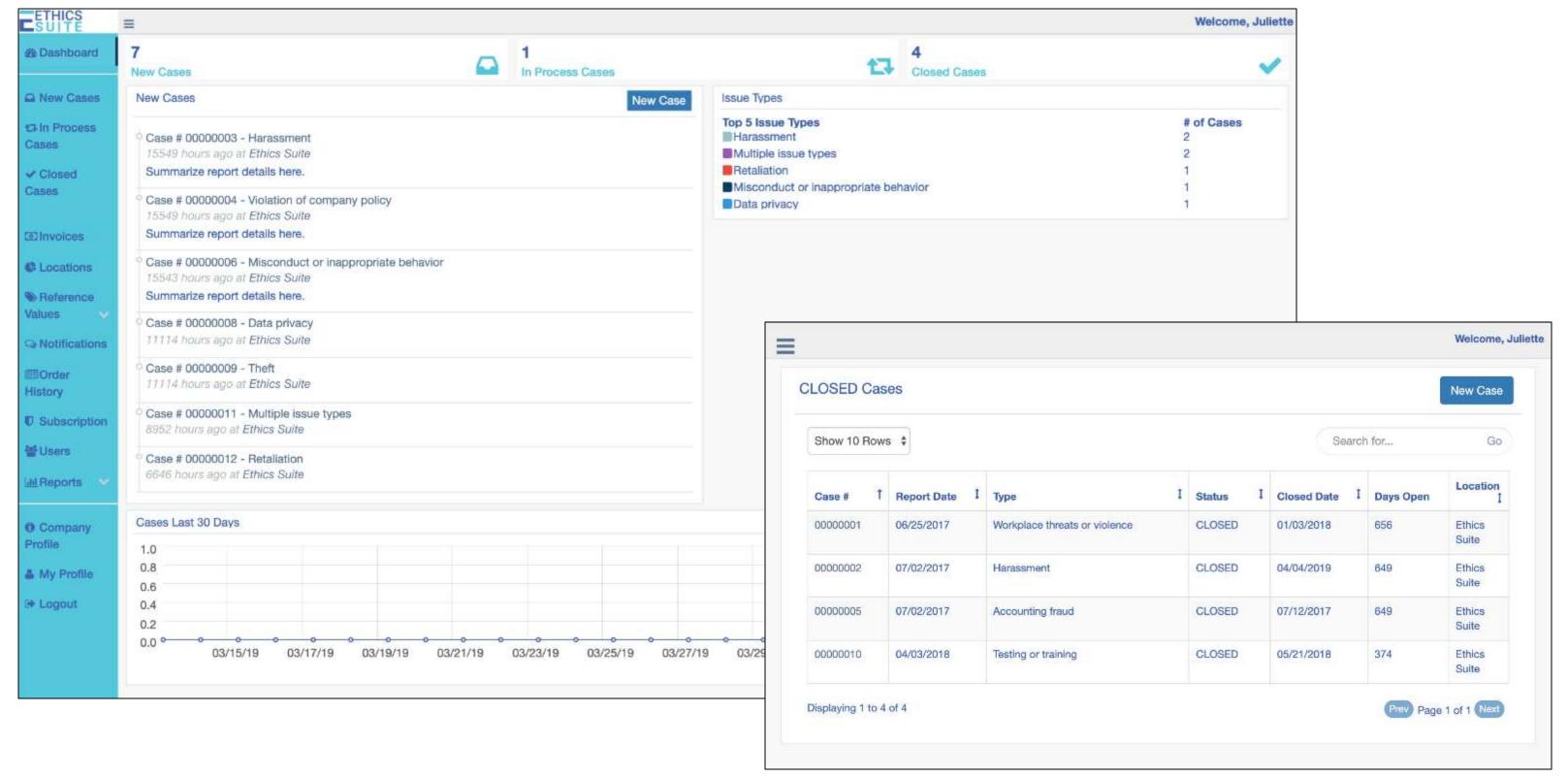
Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

|   | Yes | No | NA |
|---|-----|----|----|
| 7 . 1 Is the interface designed to help novices and experts move fast?              |     |    |    |
| 7.2 Do certain screens – like dashboards – permit customization based on the use of |     |    |    |
| functions?  7.3 Are keys on the keyboard designed to navigate forms?                |     |    |    |
| 7 . 4 Does the application provide filtering, search, and advanced search?          |     |    |    |

# FLEXIBILITY & EFFICIENCY OF USE - CHECKLIST

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.

7.4 Does the application provide filtering, search, and advanced search?



No advance search offered across the platform.

## AESTHETIC & MINIMALIST DESIGN - CHECKLIST

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

| 8 . 1 Are all icons in a set visually and conceptually distinct?        |  |  |
|---|--|--|
| 8.2 Does each icon or navigation options stand out from its background? |  |  |
| 8.3 Are meaningful groups of items separated by white space?            |  |  |
| 8.4 Are menu titles brief, yet long enough to communicate?              |  |  |

Yes

Νo

NΑ

### AESTHETIC & MINIMALIST DESIGN - UI EXAMPLE

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

8.2 Does each icon or navigation options stand out from its background?



Sub-menu choices are not visually distinct. In addition, the menu directional arrow indicates there are more sub-menu choices. There are not.

# ELP USERS RECOGNIZE & RECOVER FROM ERRORS

Buttons, error messages, and message prompts should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution. They should follow best practices.

|   | Yes | No | NA |
|---|-----|----|----|
| 9 . 1 Are error messages consistently placed?   |     |    |    |
| 9.2 Do error messages provide enough information to understand the problem?           |     |    |    |
| 9.3 Are error messages distinct in appearance?  |     |    |    |
| 9 4 Do buttons, error messages, and message prompts follow common design conventions? |     |    |    |

# ELP USERS RECOGNIZE & RECOVER FROM ERRORS

Buttons, error messages, and message prompts should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution. They should follow best practices.

9.4 Do buttons, error messages, and message prompts follow common design conventions?

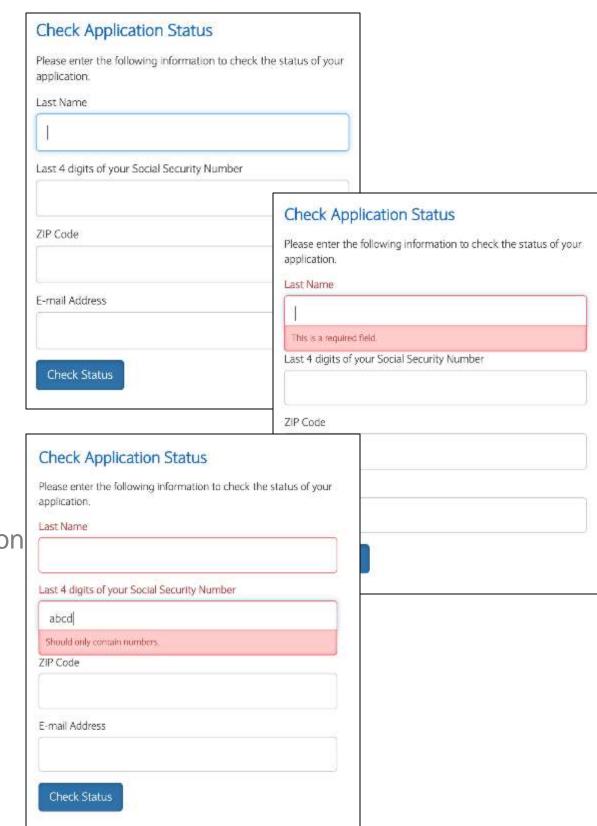
Update Details?

Are you sure you want to update these details?

× Cancel

Confirm

What is the difference between the Cancel button and the Close icon



Example of multiple best practices in error message design, contextual help, and error prevention/recovery.

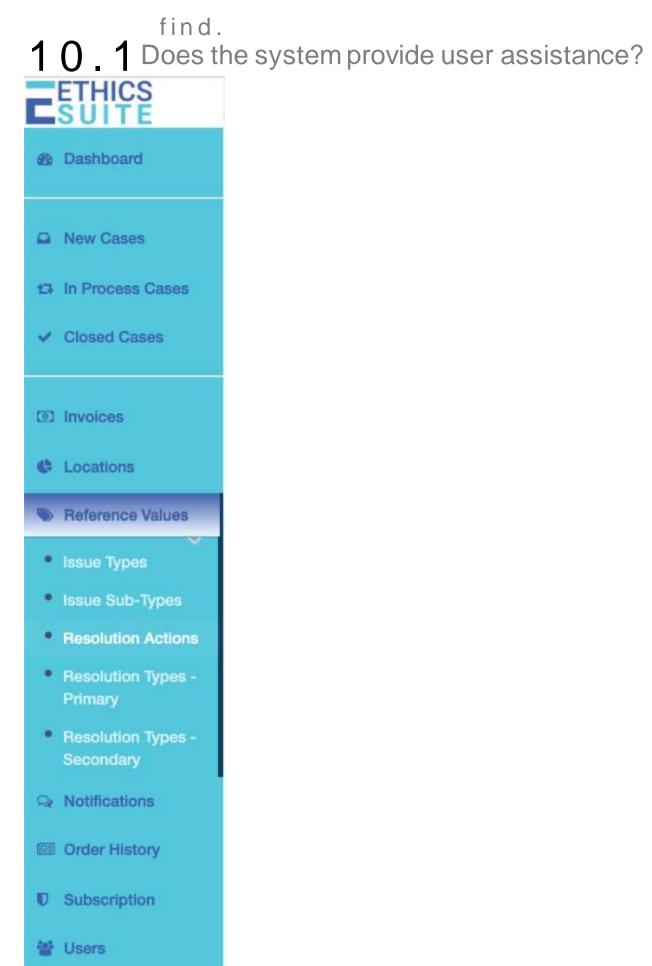
# HELP & ONLINE ASSISTANCE - CHECKLIST

The system should provide contextual help and job aids to assist users. Such information should be easy to search and easy to find.

|  | Yes | No | NA |
|--|-----|----|----|
| 10.1 Does the system provide user assistance?  |     |    |    |
| 10.2 Can the user find online help – through documentation and/or videos – to aid them in their tasks? |     |    |    |
| 10.3 Can users switch easily between assistance and their work?  |     |    |    |
| 1 0 . 4 Are contextual cues provided that provide immediate feedback?                                  |     |    |    |

### HELP & ONLINE ASSISTANCE - UI EXAMPLE

The system should provide contextual help and job aids to assist users. Such information should be easy to search and easy to



No online assistance and/or help can be found or accessed.

Questions?

Action Items?

Next Steps?

