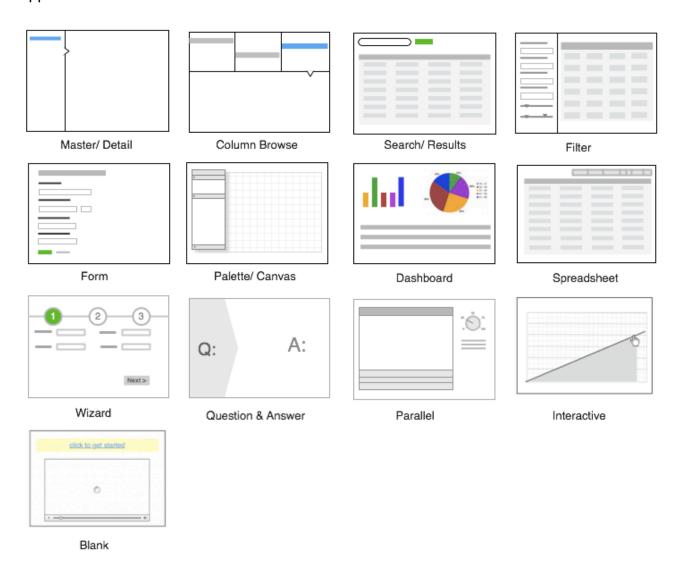
Standard Screen Patterns v3.0 January 17, 2009 by Theresa Neil

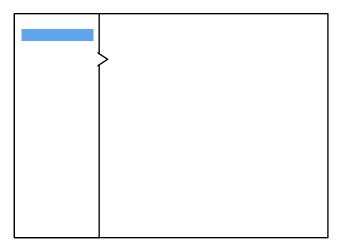
Patterns are broadly applicable solutions for general problems. Contrast this with:

- Guidelines: specific rules
- o Principles: underlying conceptual framework for guidelines

Patterns aid in the application of abstract solutions to concrete problems. Think of them as solution templates. Standard screen patterns for enterprise software and productivity web applications:



Master/Detail



Vertical

Master/Detail screen pattern can be vertical or horizontal. Ideal for creating an efficient user experience by allowing the user to stay in the same screen while navigating items.

The master pane is typically comprised of:

- List on left
- Tree on left
- Accordion on left
- Table on left

The detail pane can include a:

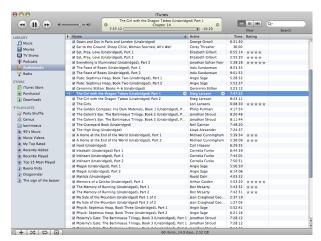
- Text description
- Thumbnails
- Table
- List
- Graphs or charts
- A form

Best practices

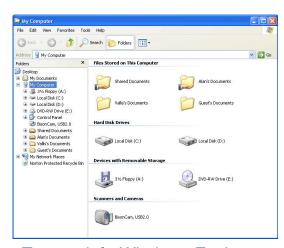
Include quantity in the master pane, ex. Inbox (34).

Use standard list, tree or table actions if using these components on the left (add, remove, rename, drag/drop...).

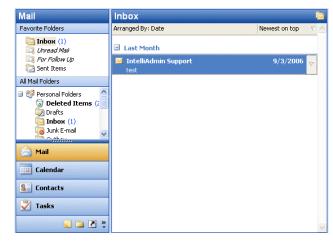
Don't use tabs in the master or detail pane.



List on left- iTunes

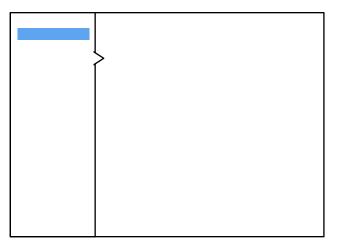


Tree on left- Windows Explorer



Accordion on left- Outlook

Master/Detail (cont.)



Vertical

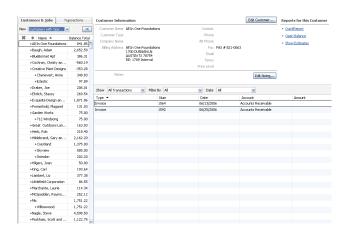
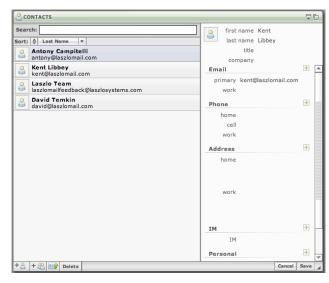


Table on left- Quick Books

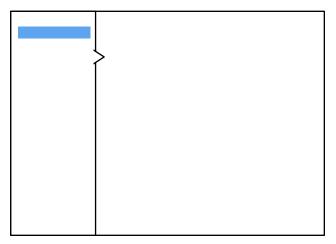


List on left, graphs on right- Trail Runner

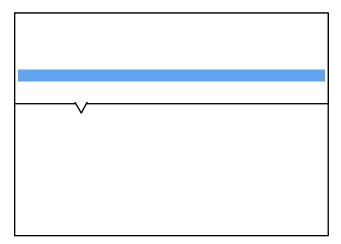


Master list on left, editable form on right- Laszlo WebTop beta

Master/Detail (cont.)



Vertical

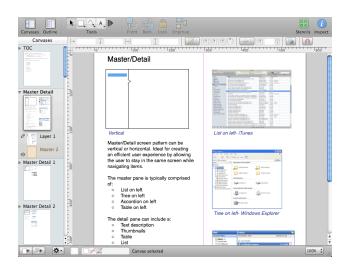


Horizontal

Horizontal layout is a good choice when the user needs to see more information in the master list than just a few identifiers, ex. subject or description

Best Practices

Don't use the bottom pane as an extended area for editing table fields. Use the Spreadsheet pattern or a light weight layer for editing.



Thumbnails on left- selected screens details on right- OmniGraffle

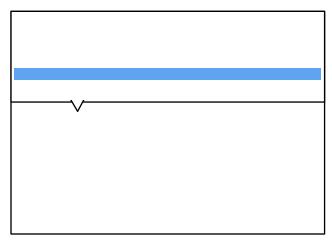


Table on top- Mac Mail



Objects on top, hover to see details below- Firebug

Master/Detail (cont.)



Horizontal



Thumbnails on top, selected thumbnail's detail below- iPhoto

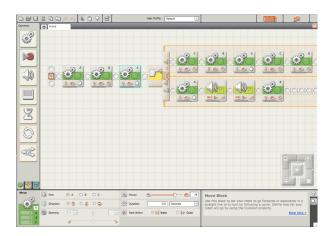
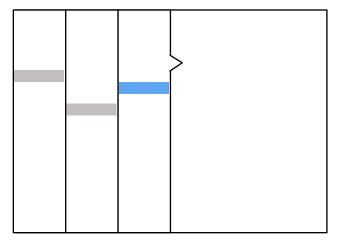


Diagram on top, selected object's properties below- Lego Mindstorm



List of messages on top, selected message's details below- goWebTop beta by Laszlo

Browse



Vertical

The Browse screen pattern can be vertical or horizontal. Ideal for creating an custom user experience by allowing the user to start from various entry points and navigate to the item(s) they are interested in.

Vertical variations typically offer a:

- List on left
- Divided list on left
- Tree on left
- Accordion on left

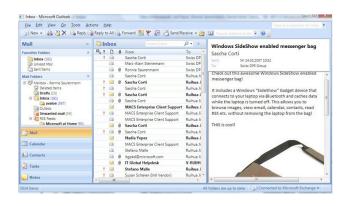
Typically 3-4 columns. Should always include a Search at the global level.

Best practices

Only show items in the first column that have children.

Include quantity with the labels if it provides value for browsing.

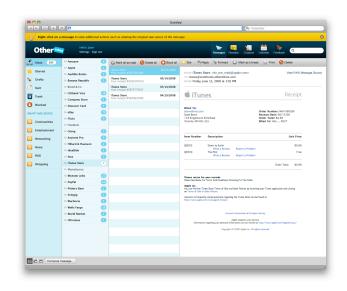
Many products that use this pattern provide an alternate interface for navigating, like a tree, thumbnail or table view.



Accordion with two additional fixed vertical columns- Outlook

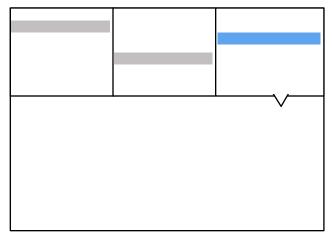


Unlimited vertical columns- Apple



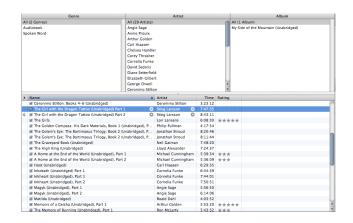
Four fixed vertical columns- OtherInbox

Browse (cont.)

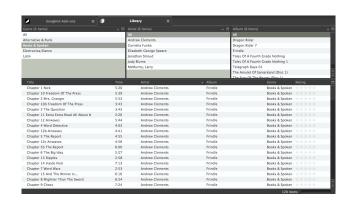


Horizontal

The horizontal layout is a good choice when there are few items in each refine column (less than 20) and the detail pane has tabular or graphical content.



Refine across the three columnsiTunes



Same as iTunes, but each column can be customized- Songbird



Four columns for browsing from different starting points- FiveRuns

Search/Results



Simple

The Search screen pattern can range from very simple to quite advanced. Ideal for creating an efficient user experience by allowing the user to navigate directly to an item or set of items meeting specific criteria.

Results are typically displayed as a:

- List
- Table (editable or read-only)
- Thumbnails
- Map

Search will return the data either:

- Sorted by default
- Grouped by default

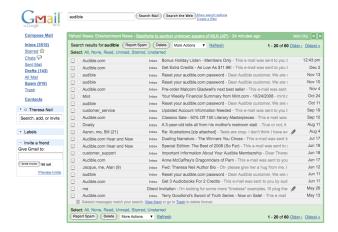
Additional search criteria/refine functionality is typically offered after the initial search results are displayed.

Best practices

Offer a single search field that, by default, includes "key words".

Allow an easy (one-click) way to clear the search field.

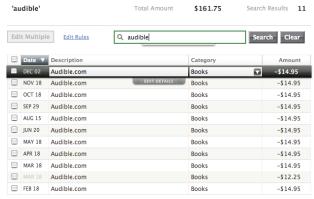
Show the results in the same screen.



Simple search, default sort by date-Gmail



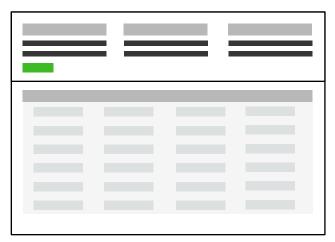
Pre-grouped search results- Mac Spotlight



Showing 25 **50** 100 transactions

Simple search, tabular results- Mint

Search/Results (cont.)



Advanced

Advanced search is typically required in enterprise applications.

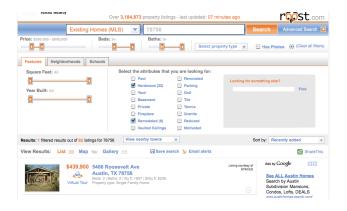
Advanced search usually includes the functionality to do one or more of these:

- Specify more criteria
- Build a custom search (and save it)
- Scope the search
- Save the search criteria
- Save the search results
- Build a list from multiple search results

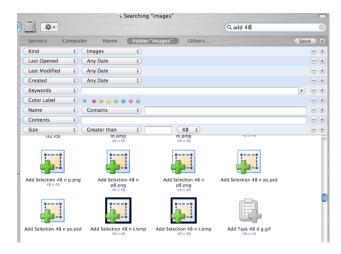
Best practices

Provide advanced search criteria in the same screen, not a pop-up or separate screen.

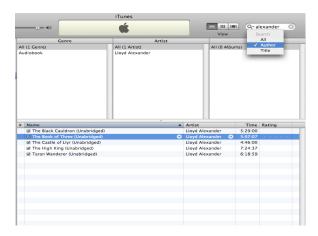
Don't force the user to pre-scope the search, but offer it as an optional feature if it's a requirement, ideally a drop down in the search field (like iTunes) instead of a listbox next to the field.



Simple search with advanced criteria in collapsible panel- Roost

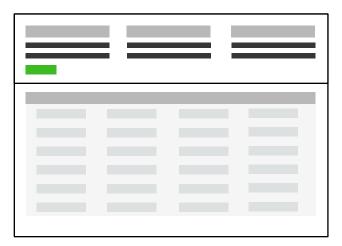


Advanced search by adding criteria - Mac OSX

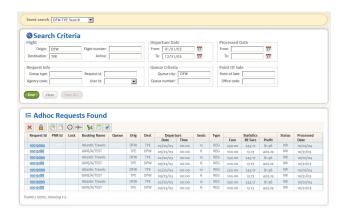


Scope search- iTunes

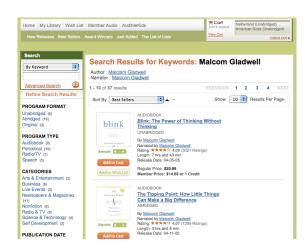
Search/Results (cont.)



Advanced



Saved search criteria- Sabre

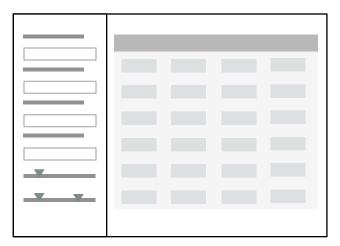


Search and save one or more of the **results**- Audible



Search and build a list from results (of multiple searches)-Songza

Refine Dataset



Vertical

The Refine Dataset screen pattern can be vertical or horizontal. Ideal for creating an efficient user experience by allowing the user to refine a set of known data, or further refine search results.

Refine panels typically utilize one or more of the following components:

- text field
- slider
- checkboxes
- listbox
- alternate listbox UI
- date range picker

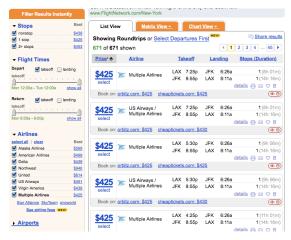
Best practices

Ideally the filters dynamically refine the result set (no submit button). An inactivity timer can be used.

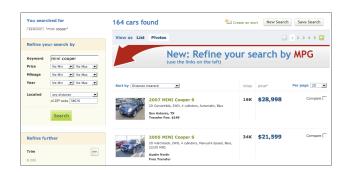
"Clear all filters" button should be prominent.

Multiple collapsible panels on the left should be avoided.

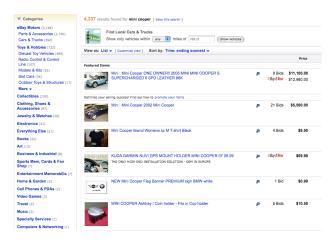
http://looksgoodworkswell.blogspot.com/ 2008/02/pattern-refining-search.html



Live filter- Kayak

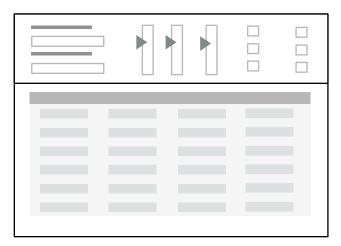


Submit to refine search- Carmax



Filtering by category- eBay

Refine Dataset (cont.)



Horizontal

The horizontal layout provides the advantage of more horizontal space for wide result sets. This works nicely for expanding an advanced search below a simple search field, yet above the result set.

Roost and Omio are experimenting with tabbed sections for different types of criteria. However, this makes it impossible to see all the filters currently applied.

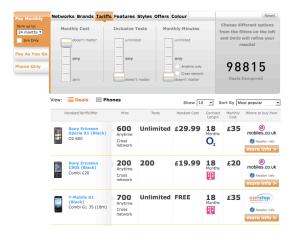
Best practices

If the user has refined the data to the point of no matching results, clearly provide feedback and recovery options.

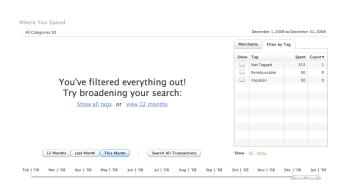
Don't provide a feature for saving a set of refinement filters. This can be taken care of with the Search (advanced search) pattern.



Refine options above, results below-Gmail

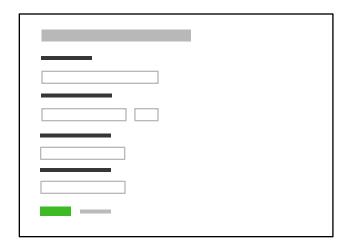


Tab top filter options- Omio



Provide feedback and recovery message when no results are found-Mint

Forms



Any Form screens should be approached with a solid understanding of usability and design best practices. Refer to "Web Form Design: Filling in the Blanks" by Luke Wroblewski for reference.

Best practices

Use a one-column left aligned layout (always!)

Place labels on the top or left; be consistent through the entire product.

Left align the command button.

Group related fields with subtle shading.

Clearly mark required fields.

Provide clear feedback for actions.

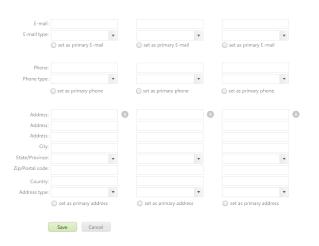
Provide clear error messages and help. Refer to "Defensive Design for the Web" by 37signals.



Single column layout- eBay

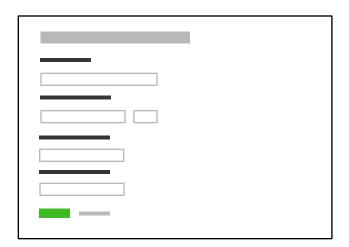


Grouped fields w/ thin rule, light background

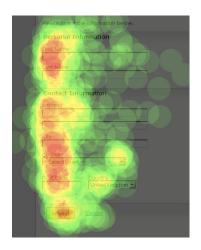


Single form for entering an viewing multiple sets of contact information-Leukemia & Lymphoma Society

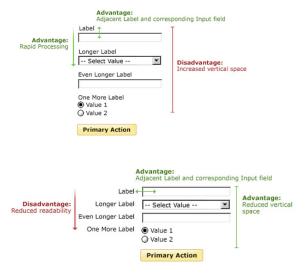
Forms (cont.)



Research



Eye-tracking image, heat map. Use left aligned command button.



Billing Address:

First Name

Last Name

Address

Town/City

State Zip Code

Country

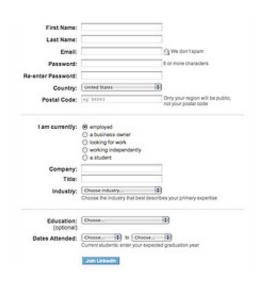
US

Daytime Phone

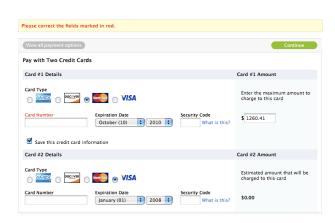
Ext.

Evening Phone

Top labels- Apple

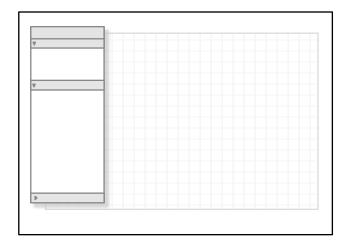


Side labels, right aligned- Linked In



Good error message- Apple

Palette/ Canvas



The Palette/ Canvas screen pattern is seldom the right pattern to apply, but it is the only pattern for documenting or creating:

- linear or non-liner processes
- flow diagrams
- screen layouts
- any design/diagram with physical size constraints

Best practices

Provide a clear "blank state" message for getting started.

Include templates.

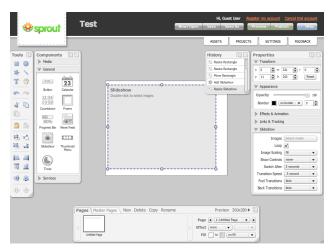
Create a dock-able object palette.

Organize objects in the palette by type, most used should be always visible.

Offer a grid option visible and for "snap to".

Provide undo and redo functionality.

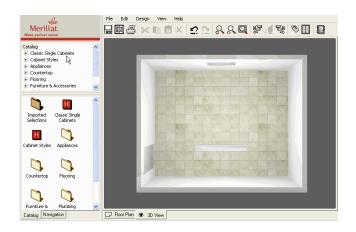
Provide a project management space for canvases (so canvases can be grouped, copied, edited, deleted..).



Floating palettes and toolbars- Sprout

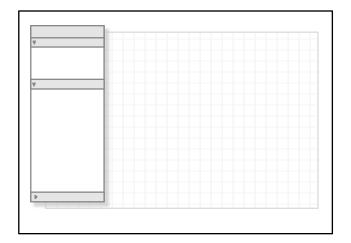


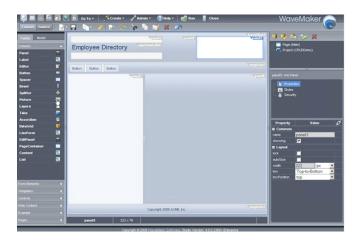
Fixed palette- Wufoo



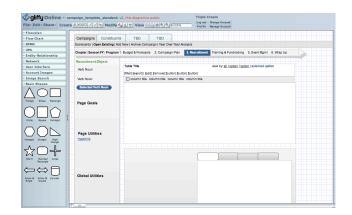
Catalog selection (top) drives palette options (below) - Merillat

Palette/ Canvas (cont.)

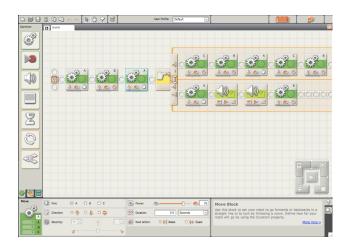




Complex palette/canvas application-Wavemaker

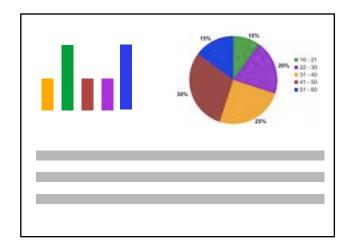


Accordion palette, resizable- Gliffy



Simple palette with fly-out options-Lego Mindstorms

Dashboard



Dashboards are a grossly abused screen pattern. A good dashboard will provide:

- key information at a glance
- real time data
- easy to read graphics
- clear entry points for exploration

This is typically not achieved by displaying a single screen of metrics (either in a big table, or just a bunch of graphs).

Providing a high degree of customization is no substitute for user research and testing.

Design Best Practices

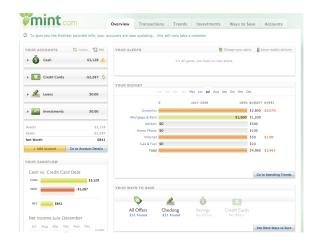
- 1. Chose data to be displayed
- 2. Confirm with actual users
- 3. Get rid of half of it
- 4. Reconfirm remaining elements with users
- 5. Chose components and layout, create 3-4 variations to test
- Revise completely- nothing is sacred but the data



Succinct display of key metrics - Clearspace

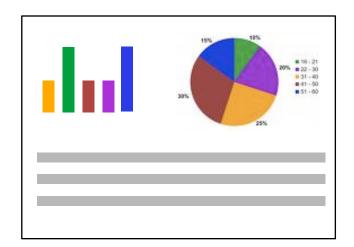


Fully evolved dashboard for showing how tax dollars are used-Washington State Transportation Improvement Board



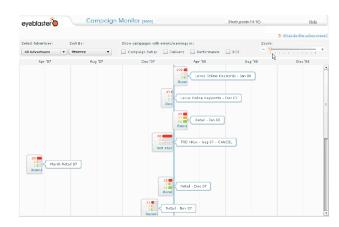
Key metrics, as well as high level goals clearly displayed- Mint

Dashboard (cont.)

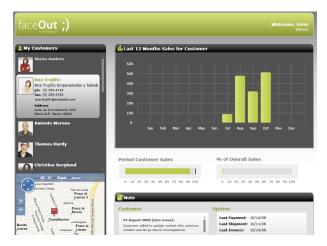




Red, yellow and green shows system administrators exactly where the problems are- FiveRuns

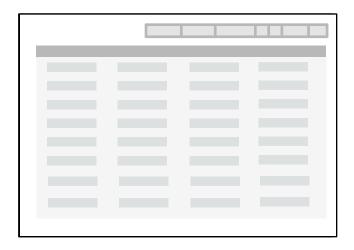


Red highlights the account managers to the underperforming campaigns-Campaign Monitor



Customer specific dashboard- would be even better with a roll-up view-FaceOut

Spreadsheet



The Spreadsheet screen pattern is ideal for creating an efficient user experience by allowing the user to easily scan, edit and enter information (in bulk).

The Spreadsheet should provide the following functionality:

- standard table features like sort, hide/show columns, rearrange columns, group by (if applicable)
- global level undo/redo
- add, insert, delete row
- keyboard navigation
- import and export

Best practices

Visually differentiate between editable tables (no zebra stripes) and read-only tables (use zebra stripes) in the product.

Indicate which columns are editable, calculated, and/or required.

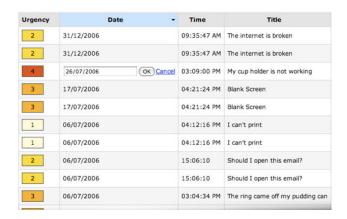
Don't overload rows or cells with interaction- one click for edit is all you get.

Hide the cell editors until the row or cell is selected.

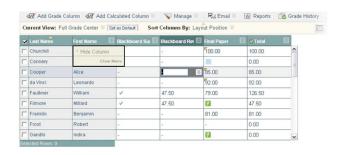
Provide error messages upon saving, not at a cell level.



Inline editing- Audible

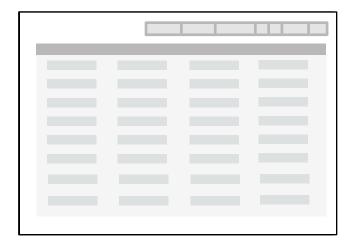


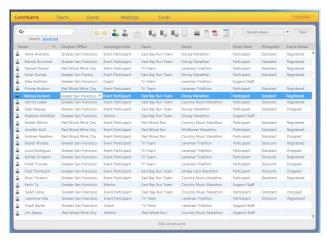
Cell level inline editing, good for tweaking, not heavy data entry-TableKit



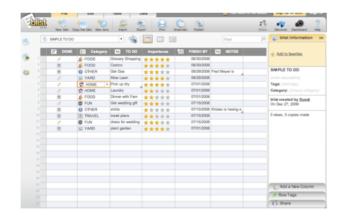
Row editing, custom editors-Blackboard Sciences

Spreadsheet (cont.)

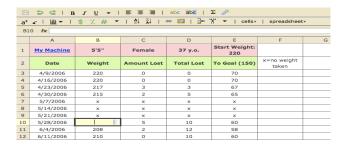




Editable table provides easy data entry, tab for a new row- Leukemia & Lymphoma Society

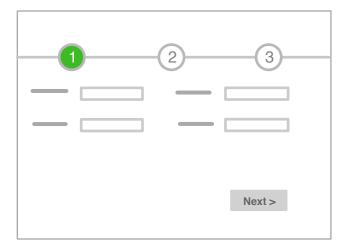


Ultra rich cell editing, simple and advanced- Blist



Excel style interface for building a fully functional spreadsheet- NumSum

Wizard/ Quick Start



The Wizard/Quick Start screen pattern is ideal for creating an efficient user experience by guiding the user through a complex or infrequent workflow.

Best practices

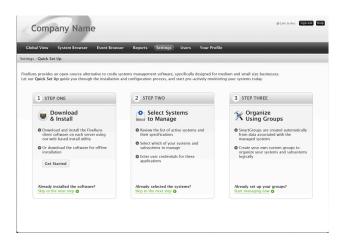
Keep the number of steps to a minimum.

If there are more than 5 steps, group them at a task level and don't number them (like Amazon's shopping cart).

Label the steps clearly, in the vernacular.

Only use this pattern for infrequent workflows: set-up, installation, troubleshooting, filing an application or complex forms, or provide an opt-out for experienced users.

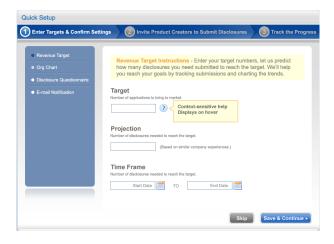
Show what step the user is currently on, allow for "back".



Quick Set Up, a one time process-FiveRuns

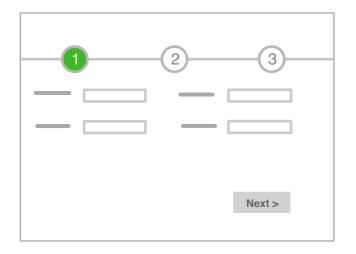


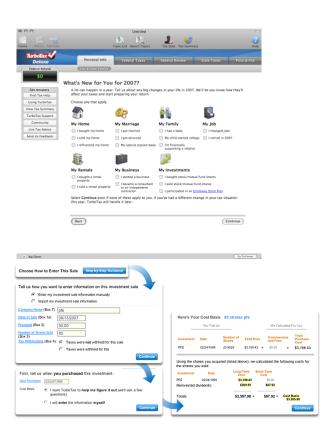
Guided wizard grouped by business functionality



Steps with sub-steps- Fluid Innovation

Wizard/ Quick Start (cont.)





Step by step guidance- TurboTax



High level tasks- no step numbers provided- Amazon



Installation wizard- Mac OS

Question & Answer



The Q&A screen pattern is ideal for creating an efficient user experience by allowing the user to enter known information and receive a solution.

Q & A differs from Search in that this pattern should be used to assist users in identifying possible options or a single recommendation in an arena they are lacking expertise (health insurance, mortgages, planning, purchases)

For example, "I need to find the right mortgage." Unlike booking a flight from AUS to JFK next Friday, when I look at the results of the mortgage search, I don't how the expertise to compare the different types of mortgages. The Q & A pattern would elevate the best options based on the information I provided in the Question section.

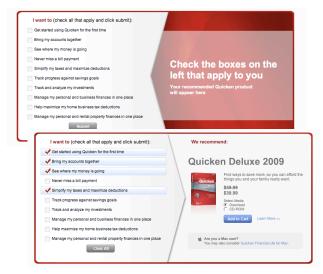
Best practices

Allow the user to specify their goals in the Question section (live in the house for 10+years, low deductible with a high co-pay).

Provide prioritized options with pros and cons outlined in the Answer section.



Formulate a question, see the best solutions- Fidelity Mortgage

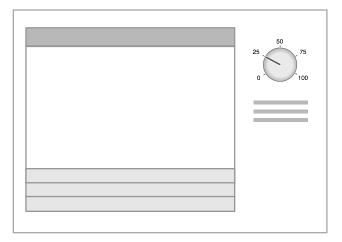


Q: "I want..." A: "you need..." - Quicken



Enter your goal, get a plan- Discover Paydown Planner

Parallel Panels



Stacked

The Parallel Panels screen pattern can be stacked (showing one at a time) or unstacked (showing all at once). This pattern is ideal for organizing chunks of information that are similar or have interdependent tendencies. Efficiency is gained by keeping the user in one screen.

Ideal candidates for the stacked variation of this pattern are simple work-flows with:

- a high level, visible goal that is fed by multiple inputs
- o multiple, non-sequential steps

Best practices

Run the stacked panels down the left; show the goal at the top, bottom or right of the screen.

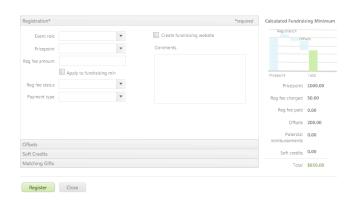
Use contrast and padding to clearly display the stacked panels, keep them off the bottom edge of the screen.

Make the whole panel clickable, not just the label.

Three to five panels work best.



Stacked panels keeps the user in the same screen. The price is impacted by entries in each panel- The Train.com

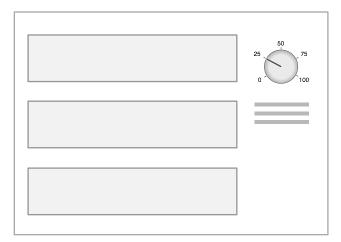


Registration with multiple sections-Team in Training



Stacked panels displayed as tabsiTunes iPod summary

Parallel Panels (cont.)



Unstacked

The unstacked version is appropriate in:

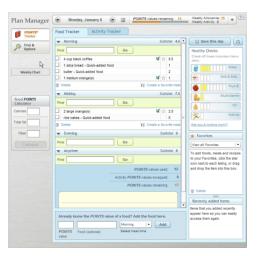
- tools (one screen apps) that need to show all the components comprising the whole
- dialogs- collapsible panels are often more efficient for users to navigate than tabs

Best practices

If the panels have a hierarchal or sequential relationship, this is probably the wrong pattern. Try Master/Detail or Wizard.

Don't nest panels.

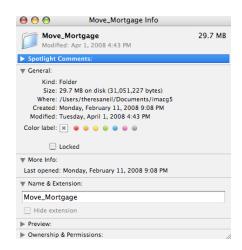
Tidwell, Jennifer. 2007. Designing Interfaces: Patterns for Effective Interaction Design. O'Reilly.



Morning, Midday, Evening, and Anytime panels all feed into the days total points-Weight Watchers eTools

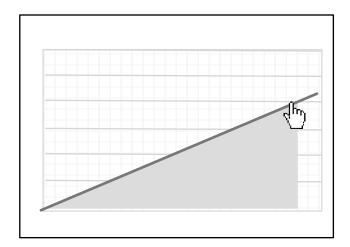


Each panel impacts the price, shown in the top right- Apple Store



Collapsible panels can be used to save space- Get Info on Mac OS

Interactive Model



The Interactive Model screen pattern is characterized by many interactive elements associated with the key object (a calendar, map, graph, chart, canvas). It is ideal for creating a user experience that is closely aligned with the user's mental model (a natural fit).

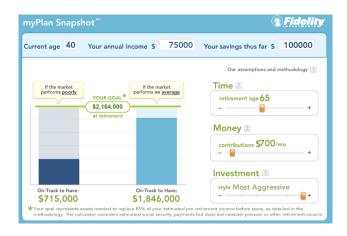
Excellent candidates for this pattern are:

- calendars
- maps
- gantt charts
- what-if scenarios (including calculators)
- WYSIWYG editors (including photo editing)

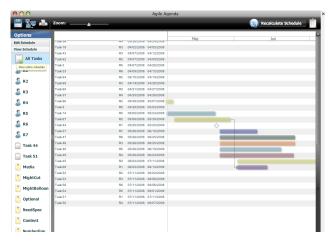
Best practices

Allow the user to quickly get at the interactive object (bulk load, a few quick questions, templates, or reasonable defaults).

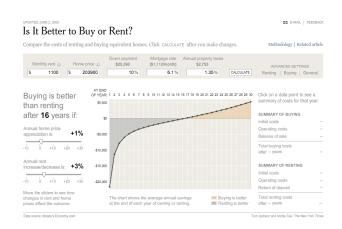
Avoid pop-ups, allow for direct interaction as much as possible, dragging, resizing, dropping, double click to create...



Retirement calculator- Fidelity MyPlan

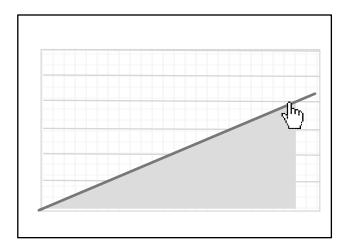


Project planning- Agile Agenda



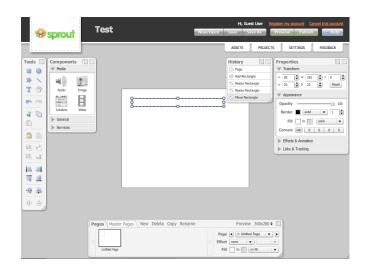
Comparison calculator- New York Times

Interactive Model (cont.)

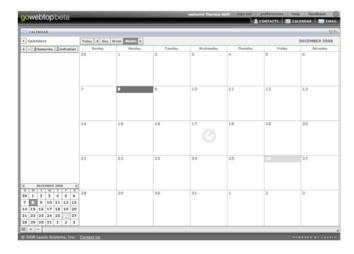




Editable calendar, click to edit, drag and drop- Google Calendar



This WYSIWYG editor fits the Palette/ Canvas pattern as well as the Interactive Model- Sprout



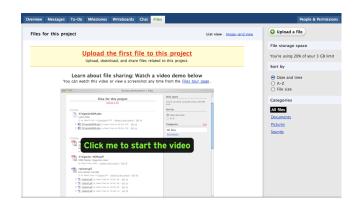
Editable calendar with filteringgoWebTop beta by Laszlo

Blank State

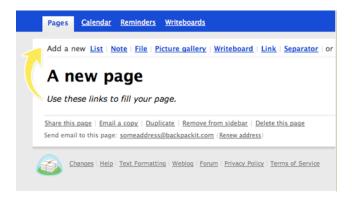




Form manager is easy to start using with an engaging blank state- Wufoo



Message and hyperlink helps users get started using the features in Bascamp by 37signals



An arrow directs the eye to the starting spot- Whiteboard by 37signals