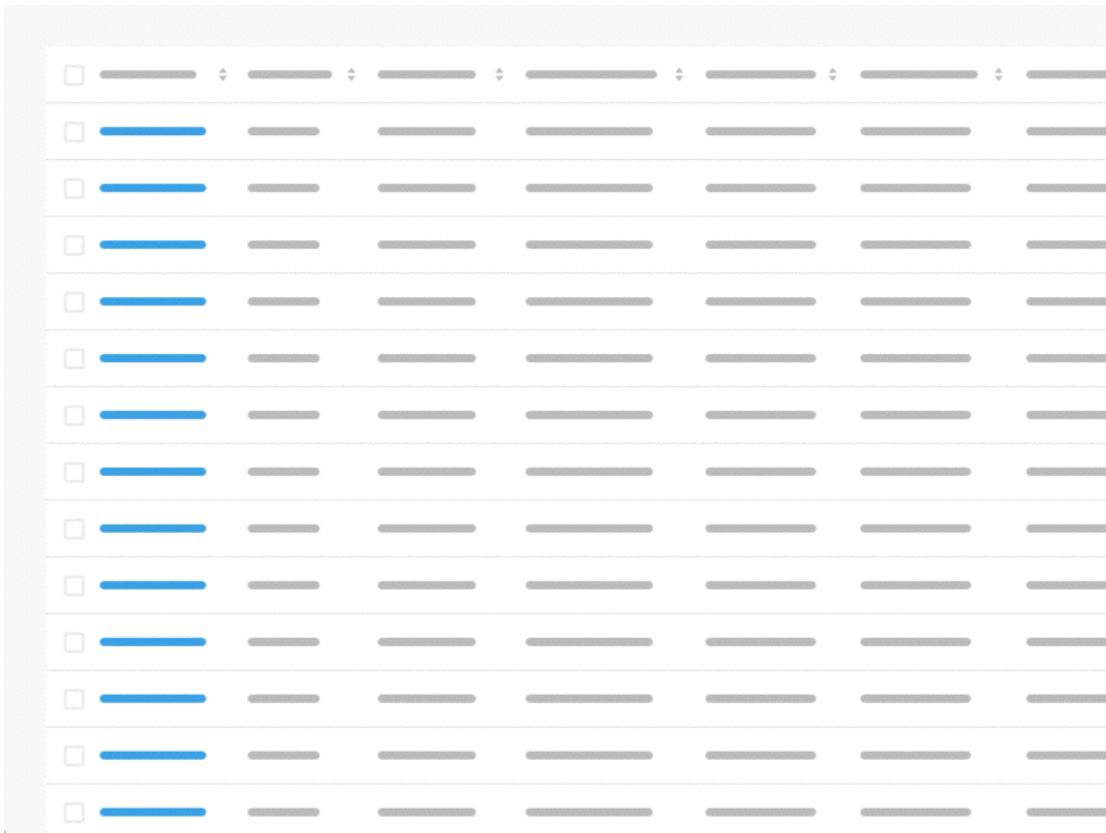


data tables on Accounting – UI & UX case study

Data is useless without the ability to visualize and act on it. The success of future industries will couple advanced data collection with a better user experience, and the data table comprises much of this user experience.

Good data tables allow users to scan, analyze, compare, filter, sort, and manipulate information to derive insights and commit actions. This article presents a list of design structures, interaction patterns, and techniques to help you design better data tables.

Fixed Header



Fixing the row header as a user scrolls provides context on what column the user is on.

Horizontal Scroll

Horizontal scrolling is inevitable when presenting large datasets. It is good practice to place identifier data in the first column. As an advanced feature, enable individual locking of columns so users can compare data with multiple anchoring identifiers.

Resizable columns

Resizing columns allows users to see abbreviated data in full.

Row Style

Zebra Stripes, Line Divisions, Free Form.

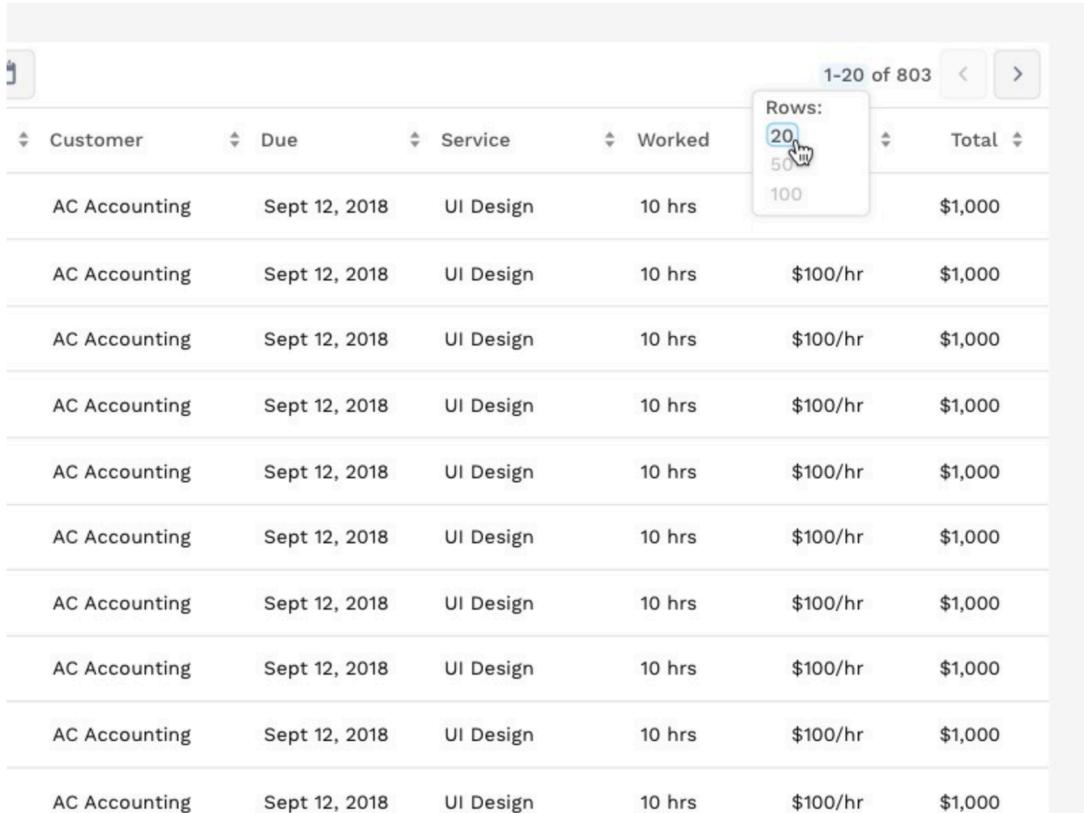
<input type="checkbox"/>	Invoice #	Created	Status	Customer	Due	Service	Worked
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input checked="" type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
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<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
<input type="checkbox"/>	INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs

The row style helps users scan data. Reducing visual noise by removing row lines or zebra stripes works well for small datasets. Users may lose their place when parsing larger datasets. Line divisions help users keep their place. Alternating rows (aka zebra stripes) help users keep their place when scanning long horizontal datasets. Although they cause usability problems when there is a small number of rows because users may ascribe meaning to the highlighted rows.

Display Density

Smaller row height enables the user to view more data without the need for scrolling. However, it effects scannability leading to parsing errors. That is why many successful data table designs incorporate the ability to control display density.

Pagination



A screenshot of a web-based application showing a table of data. The table has columns for Customer, Due Date, Service, Worked Hours, and Total Cost. All rows show 'AC Accounting' as the customer, 'Sept 12, 2018' as the due date, 'UI Design' as the service, '10 hrs' as worked hours, '\$100/hr' as the rate, and '\$1,000' as the total cost. The table is paginated at the top right, showing '1-20 of 803' with navigation arrows. A dropdown menu labeled 'Rows:' is open, showing options 20, 50, and 100, with '20' selected.

Customer	Due	Service	Worked	Total
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$1,000
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr
AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr

Pagination works by presenting a set number of rows in a view, with the ability to navigate to another set. The above example provides the ability to customize the row count per view. Infinite scroll often replaces this pattern. Infinite scroll progressively loads results as a user scrolls. Infinite scroll works well for discovery websites but is usually disastrous for prioritization apps.

Expandable Rows

Invoice #	Created	Status	Customer	Due	Service	Worked	Rate	Total			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
INV-0002	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
ITEM											
Database Configuration			QTY	RATE			TOTAL				
Website Design			100	\$50.00 /hr			\$5,000.00				
Plane Ticket			1	\$350.00			\$350.00				
Website Template			1	\$45.00			\$45.00				
							TOTAL	\$5,470.00			
							PAYMENTS	\$475.00			
							BALANCE DUE	\$5,000.00			
Record Payment	▼										
▼ INV-0003	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			
▼ INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000			

Expandable rows allow the user to evaluate additional information without losing their context

Quick View

Much like expandable rows, quick view enables a user to view additional information while staying in-context.

Modal

Invoice #	Created	Status	Customer	Due	Service	Worked	Rate	Total
INV-0001	INV-0001	Outstanding			Record Payment			\$1,000
INV-0001					ITEM	QTY	RATE	TOTAL
INV-0001	CLIENT	AC Accounting			Database Configuration	1.5	\$50.00/hr	\$75.00
INV-0001	PROJECT	Web Re-Design			Website Design	100	\$50.00/hr	\$5,000.00
INV-0001	INVOICE #	00001			Plane Ticket	1	\$350.00	\$350.00
INV-0001	CREATION	Aug 12, 2016			Website Template	1	\$45.00	\$45.00
INV-0001	DUE	Sept 24, 2016					TOTAL	\$5,470.00
INV-0001	TERMS	Net 30					PAYMENTS	\$475.00
INV-0001	MEMO						BALANCE DUE	\$5,000.00
INV-0001	Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut pretium pretium tempor. Ut egest Imperdiet neque. In ante semper diam molestie, et aliquam erat laoreet. Sed sit amet aliquet, molestie justo at, auctor nunc. Phasellus ligula ipsum, volutpat eget semper id, viverra eget nibh.							
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs	\$100/hr	\$1,000

Modals allow the user to stay within the table view but provides more focus to the additional information and actions.

Basic Filtering

All Statuses ▾		Aug 12, 2015 - Aug 12, 2016 		
<input type="checkbox"/> Invoice #	Created	Status	Customer	Due
<input type="checkbox"/> INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0002	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0003	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12
<input type="checkbox"/> INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12

Basic filtering allows users to manipulate the data presented in the table.

Searchable Columns

Invoice #	Created	Status	Customer	Due	Service	Worked
<input type="checkbox"/> <input type="text" value="Search..."/>	<input type="text" value="Search..."/> <input type="button" value=""/>	<input type="text" value="Search..."/> <input type="button" value=""/>	AC Accounting	<input type="text" value="Search..."/> <input type="button" value=""/>	<input type="text" value="Search..."/>	<input type="text" value="Search..."/>
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
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INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
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INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs
INV-0001	Aug 12, 2018	Outstanding	AC Accounting	Sept 12, 2018	UI Design	10 hrs

This design pattern allows a user to search specific values within each column.

Reference :

<https://uxdesign.cc/design-better-data-tables-4ecc99d23356>

