

APEX UX: treat your users as you like to be treated

KScope 2024

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17-JUL-2024 | Nashville



\$whoami



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Blog:

hartenfeller.dev/blog

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Agenda

- Introduction to UX
- App Structure
- Style and Color
- Data display
- Uncategorized Tips
- Q&A

Introduction to UX

What is bad UX?

Advertisement

Breaking News: Important Story Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.

Anything that gets in
the way of the user
achieving their goal.

Recommended Video



What is bad UX?

Are you sure you want to delete this post?

This is permanent! No backups, no restores, no magic undo button.
We warned you, ok?

YES

NO

Anything that makes the user fearful or uncertain.

Definition

“User experience (UX) is how a user interacts with and experiences a product, system or service. It includes a person's perceptions of utility, ease of use, and efficiency.”

[Wikipedia](#)

Easier said than done

- Humans are individuals
- Users have different needs
- Hard to measure → good UX is invisible
- Constraints: Time, Budget, APEX, Design Skills, etc.

Step1: understand your audience

Deep user understanding is the foundation
of exceptional experiences.

App purpose and tone

U.S. INTERNATIONAL CANADA ESPAÑOL 中文

Friday, September 6, 2024
Today's Paper

The New York Times

S&P 500 -0.3%

U.S. World Business Arts Lifestyle Opinion Audio Games Cooking Wirecutter The Athletic

Father of Teen Suspect Charged in Georgia School Shooting
The father of the 14-year-old suspect was charged with four counts of involuntary manslaughter, two counts of second-degree murder and eight counts of cruelty to children.
See more updates

A report by the sheriff's office reveals details about the suspect's interview with the F.B.I. and his online activity.
3 MIN READ

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5 MIN READ

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4 MIN READ

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His parents are Susan Sarandon and Tim Robbins. That's the joke.
4 MIN READ

LEGO SHOP DISCOVER HELP NEW

Harry Potter | BACK TO HOGWARTS

Back to Hogwarts™ is here
The annual celebration of all things Harry Potter™ runs from 01/09 to 10/09.
Shop now > Learn more >

New Exclusives Offers The Legend of Zelda™ Ideas Botanical collection LEGO® Magazine Unlock Rewards

Just-launched exclusives

Both good UX, but users visit for completely different things

App purpose and tone

NYT	Lego
Black and white	Colorful
Serif fonts	Sans-serif fonts
Clean and professional	Playful and engaging
Text heavy / few images	Huge images / not much text
→ "Anything I should read?"	→ "So much to explore!"

User demographics

- Age range
- Cultural background
- Education level

Device and platform

- Small vs. large screen
- Multiple monitors?
- Touchscreen / Mouse / Keyboard
- Wired internet connection / mobile

Usage context

- How much time do users spend with the app?
- What tasks do they perform?
- How critical are the tasks?

There is no golden standard

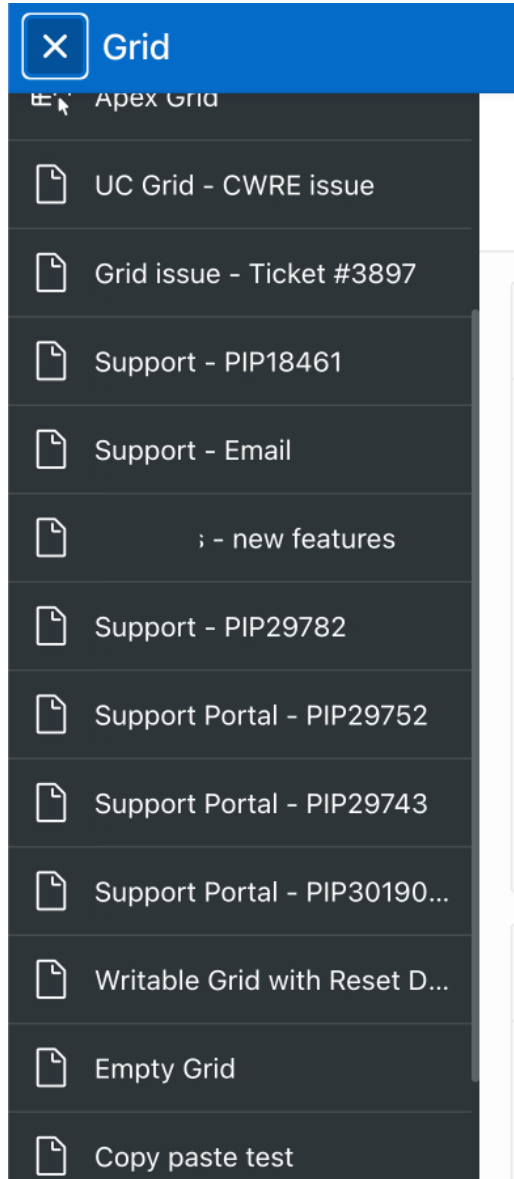
- Good UX is affected by all these criteria
- Understand your audience to know how to fulfil their needs
- **This talk:** typical data-driven apps for company internal use
- Adapt the tips to your cases
- Ask questions and share your opinion during this talk!

App Structure

Why structure is important

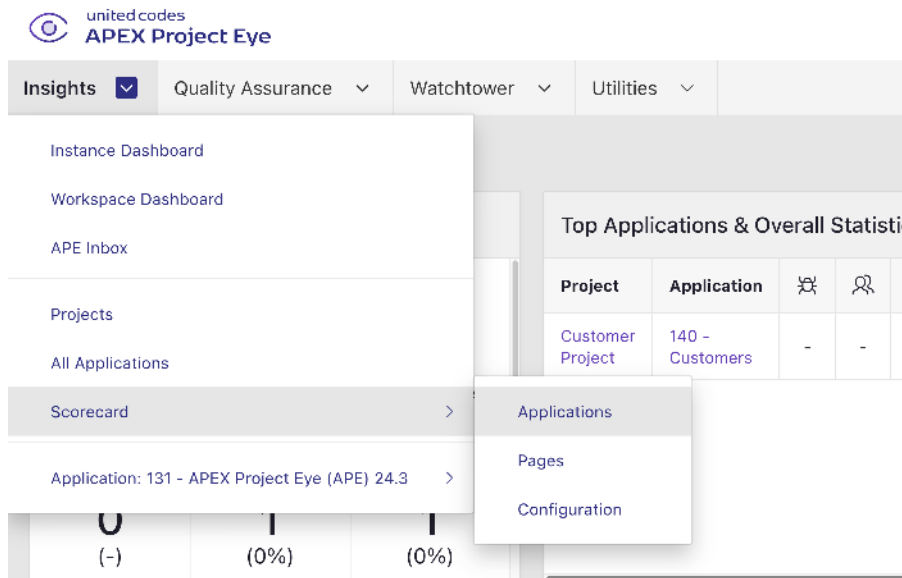
- Users don't like to get lost
- Users like to easily find things
- Users don't like to get overwhelmed by too many options
- Users value predictable navigation patterns
- Users appreciate logical grouping of related features
- Users want quick access to frequently used functions

Don't: new page → add to navigation



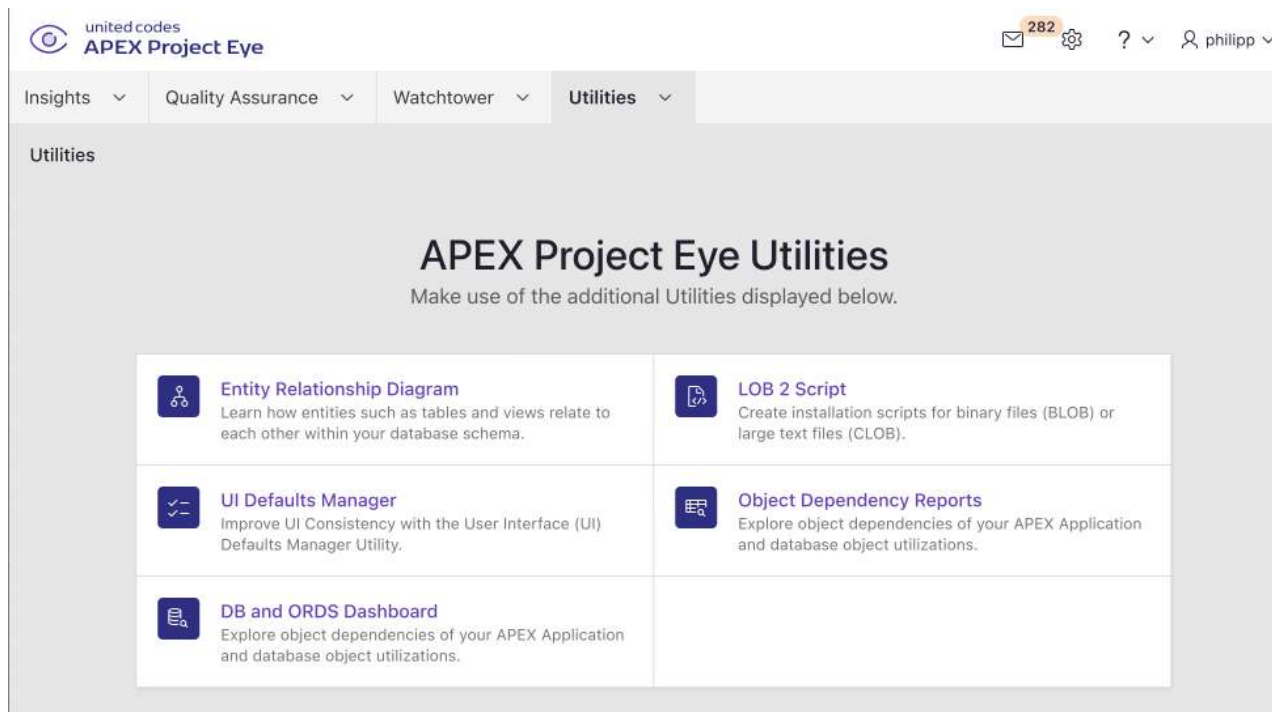
- This is just overwhelming, users will scroll this a lot during the day
- New users need to find their way around
- Existing users want to access things quickly

Do: structured menu



- Grouped in logical sections
- Level of details hidden by default
- (Not every page has to be directly accessible from nav menu)

Do: nav pages



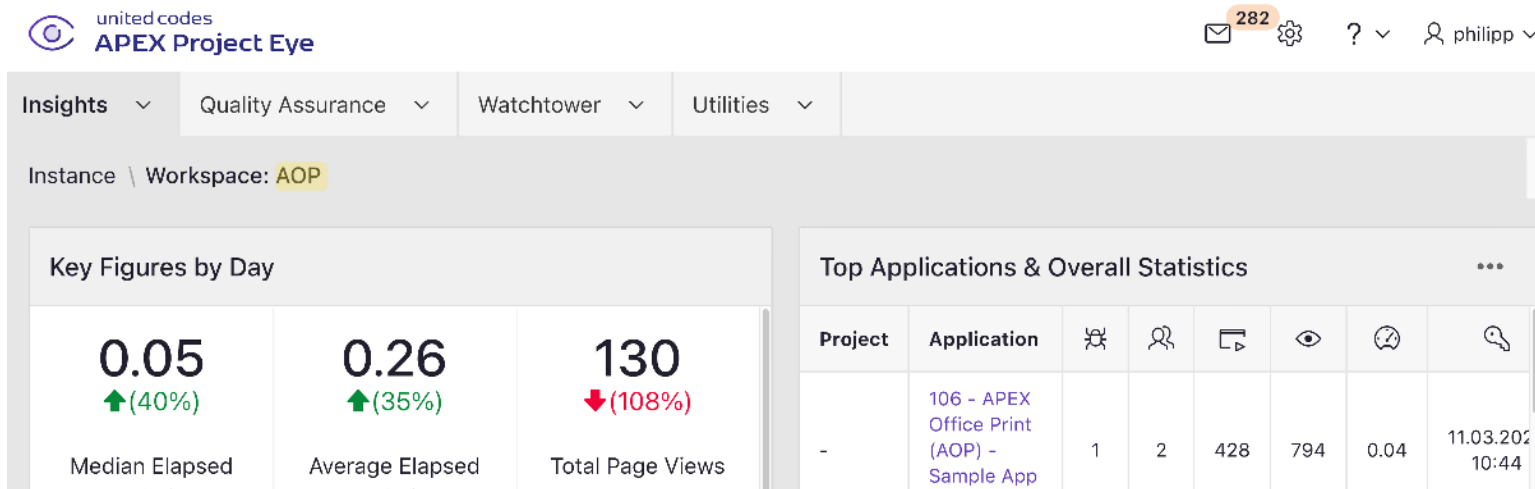
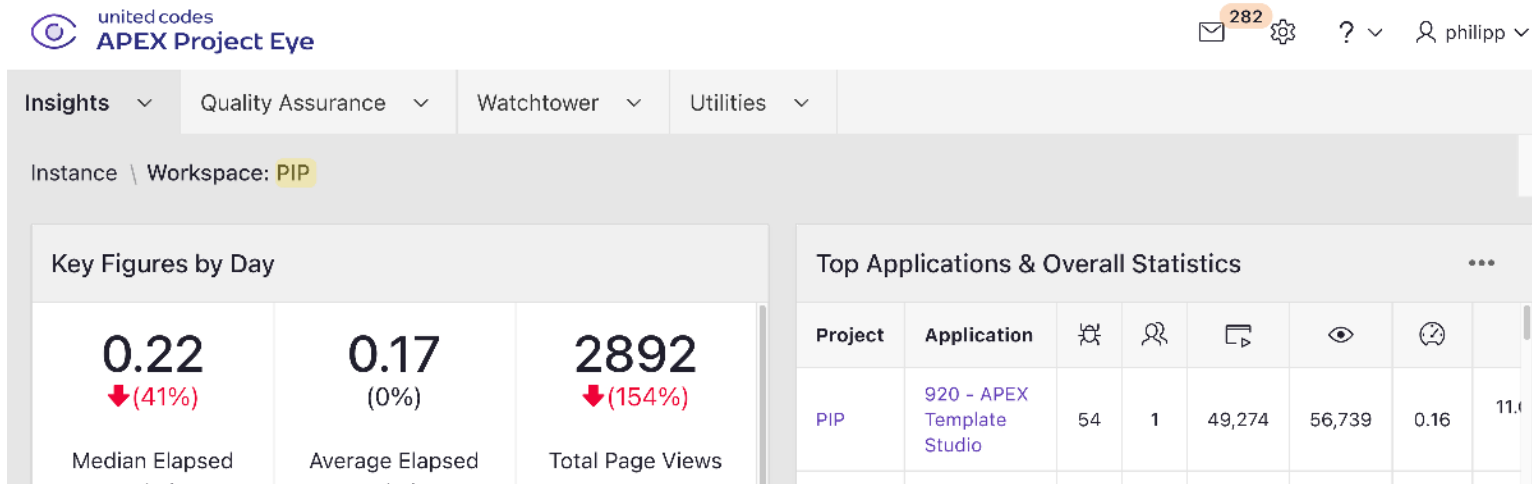
- Get an overview
- Additional description
- What else to do on navigation entry click?

Do: Breadcrumbs



- Know where you are
- Links to get up some levels

Do: Make page parameters obvious



What do these have in common? (Google)

The image shows a Google search interface for the query "united codes". The search bar at the top contains the text "united codes" and includes icons for voice search, image search, and a magnifying glass. Below the search bar, there are tabs for "Alle", "Bilder", "Videos", "News", "Kurze Videos", "Web", "Bücher", and "Mehr". The "Alle" tab is selected. The search results are displayed in two columns. On the left, the first result is for "United Codes" with the URL "https://www.united-codes.com". Below this, there are links for "Plug-ins Pro" and "Log In". The second result is for "United Codes" on GitHub, with the URL "https://github.com/united-codes". Below this, there is a section for "Videos" featuring a video titled "United Codes | Product Overview | #orclapex" from YouTube, dated 01.10.2024. On the right, a knowledge panel for "United Codes" is displayed. It includes a photo of the team, a world map, and the text "United Codes", "5,0 ★★★★★ 1 Rezension", and "Softwareentwickler in Löwen, Belgien". Below this, there are buttons for "Website", "Route", "Speichern", and "Teilen". The panel also lists the address "Waversebaan 276, 3001 Leuven, Belgien" and provides options to "Fehlende Informationen hinzufügen" (Add missing information) for phone number, opening hours, and services.

Google united codes

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United Codes
https://www.united-codes.com · Diese Seite übersetzen

United Codes: Home
United Codes provides experienced team members to get you where you need to go. We are available to answer any of your questions, demonstrate solutions and ...

Plug-ins Pro
Professional, Native and Supported Oracle APEX Plug ...

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united codes. Username, Password, Log In Forgot ...

Weitere Ergebnisse von united-codes.com »

GitHub
https://github.com/united-codes · Diese Seite übersetzen

United Codes
United Codes has 21 repositories available. Follow their code on GitHub.

Videos

United Codes | Product Overview | #orclapex
YouTube · United Codes
01.10.2024

9 wichtige Momente in diesem Video

United Codes
5,0 ★★★★★ 1 Rezension
Softwareentwickler in Löwen, Belgien

Website Route Speichern Teilen

Adresse: Waversebaan 276, 3001 Leuven, Belgien

Änderung vorschlagen
Inhaber dieses Unternehmens?

Fehlende Informationen hinzufügen
Telefonnummer hinzufügen
Öffnungszeiten hinzufügen

Termine: united-codes.com Dienstleister

What do these have in common?

(Wikipedia)

WIKIPEDIA

The Free Encyclopedia

Search Wikipedia

Search

Donate

Create account

Log in

...

Contents

hide

(Top)

[Early life](#)

[Local contractor](#)

[Architect](#)

[London townhouses](#)

[Kedleston Hall](#)

[Legacy](#)

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Matthew Brettingham

Article

Talk

Read

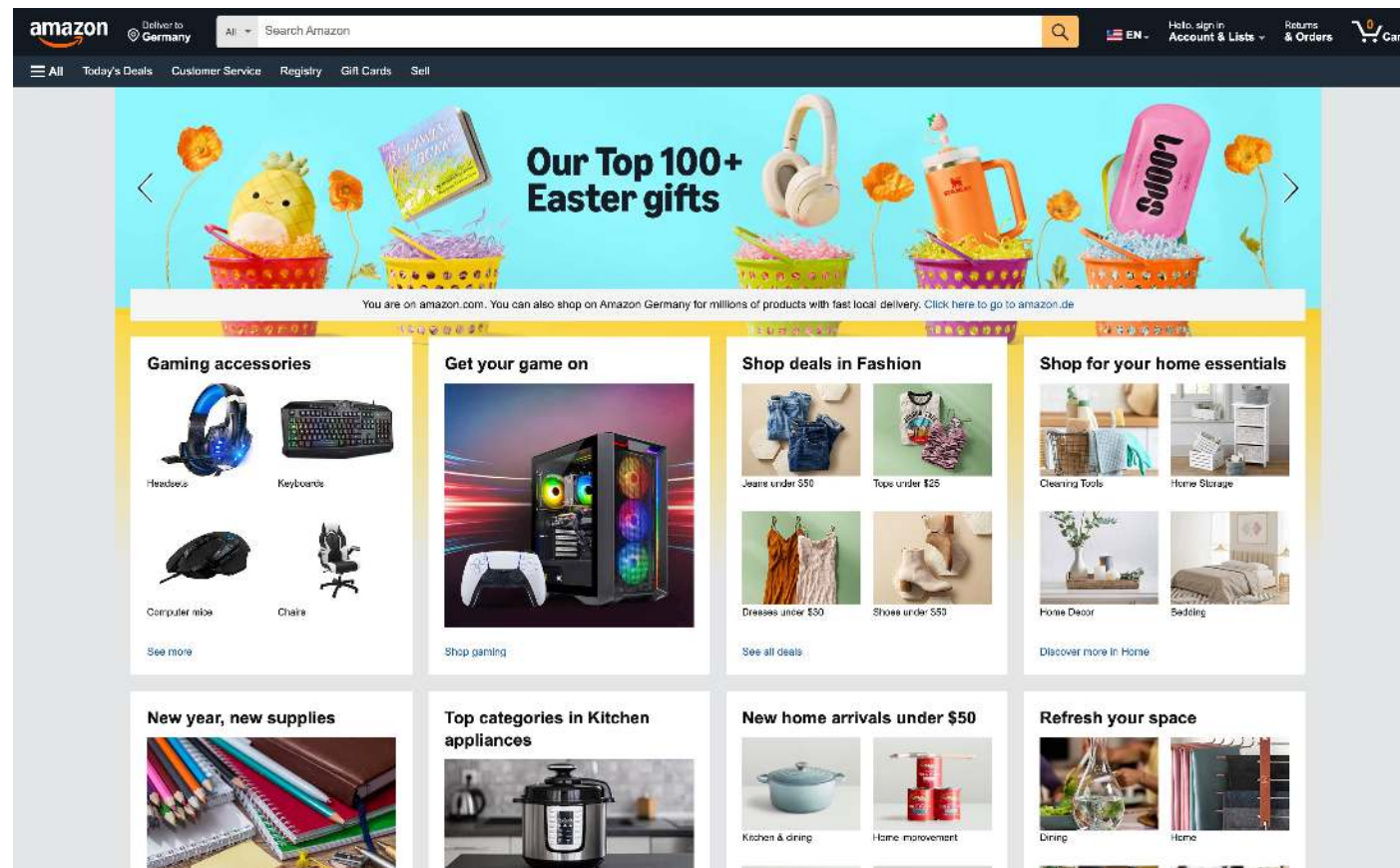
View source

View history

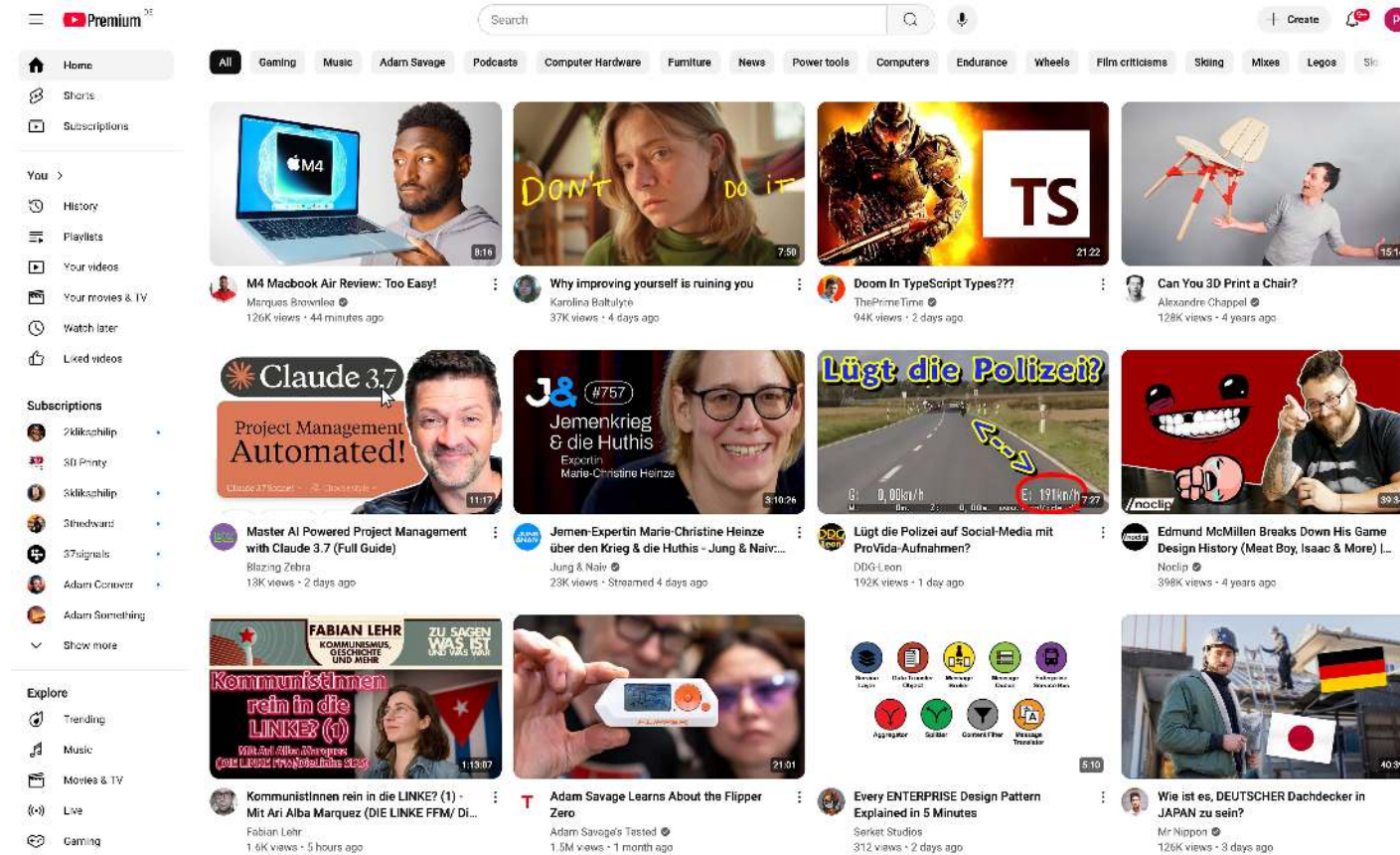
Tools

From Wikipedia, the free encyclopedia

What do these have in common? (Amazon)



What do these have in common? (YouTube)



What do these have in common? (New York Times)

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5 MIN READ



Aronda Kallioer Greene for The New York Times



Scott Gertler for The New York Times

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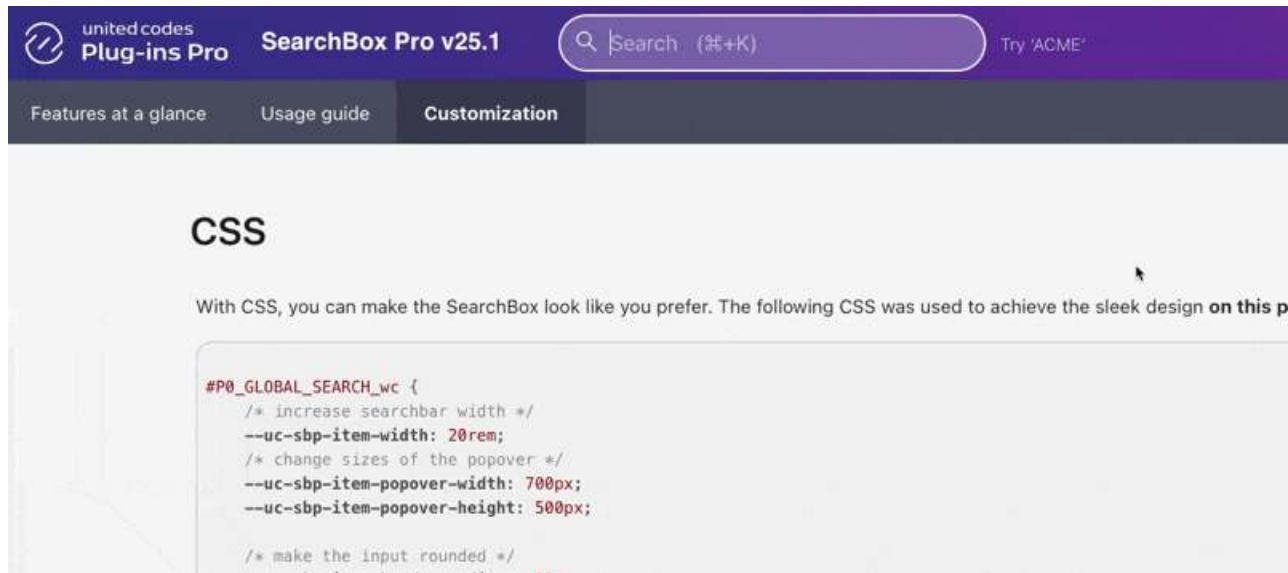


His parents are Susan Sarandon and Tim Robbins. That's the joke.

4 MIN READ



Do: Search



- Search configurations
- Search Page
- Better: global search

Style and Color

Aim for simple, boring



- Content matters
- The app is not your canvas
- This is not about taste
- Remember the pages I showed before?
- See how these slides look?

Photo by Dannie Jing on Unsplash

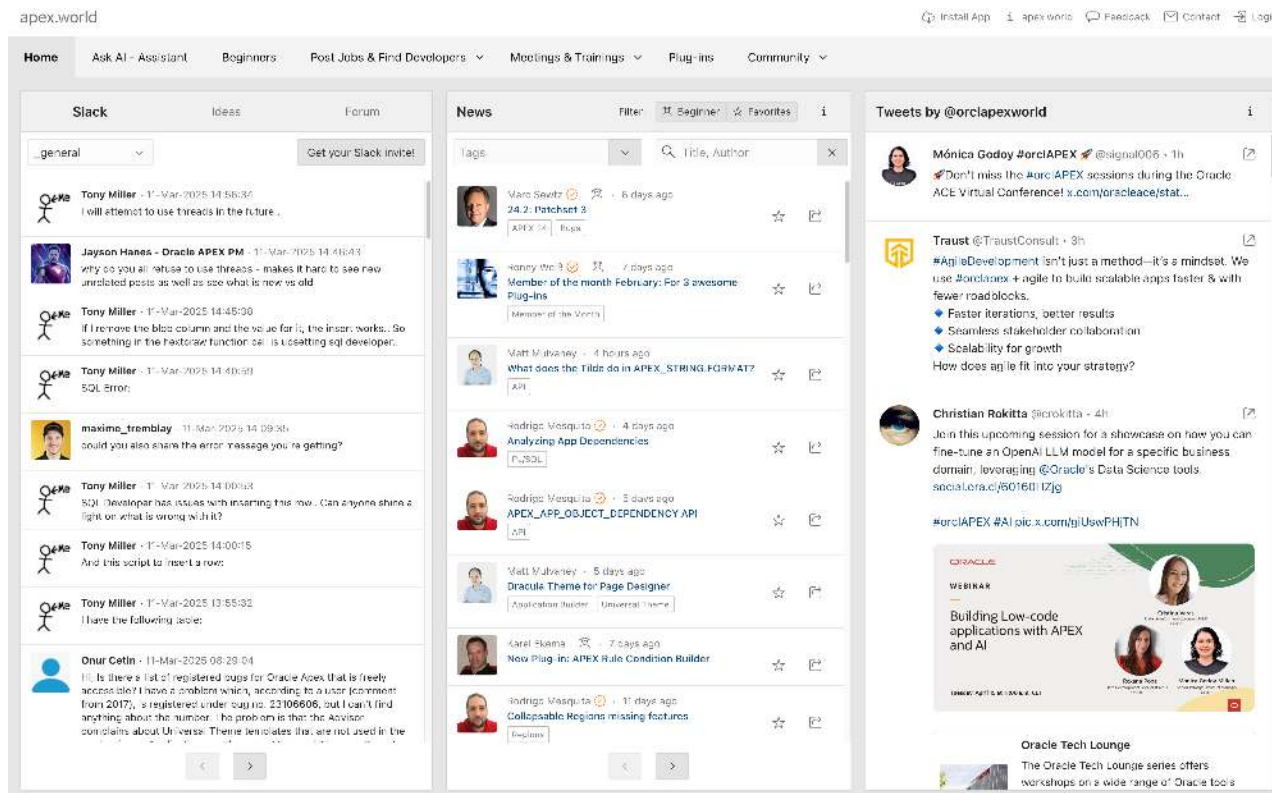
It's not (only) about Web Design



- NYT from 1918
- Black and white
- Simple
- Well structured

Photo by Charles Ransom Miller on Wikipedia

Example: apex.world



- Mostly black, white greys
- Colors reserved for content, links and highlights

Don't: color buttons

Colored Buttons							Delete Multiple	Send Email	Duplicate	Create
Employee Name ↑≡	Job	Manager	Hired	Salary	Commission	Deptno				
ADAMS	CLERK	SCOTT	1/12/1983	1,100		RESEARCH				
ALLEN	SALESMAN	BLAKE	2/20/1981	1,600	300	SALES				
BLAKE	MANAGER	KING	5/1/1981	2,850		SALES				
CLARK	MANAGER	KING	6/9/1981	2,450		ACCOUNTING				
FORD	ANALYST	JONES	12/3/1981	3,000		RESEARCH				
JAMES	CLERK	BLAKE	12/3/1981	950		SALES				
JONES	MANAGER	KING	4/2/1981	2,975		RESEARCH				

- Buttons are perfectly visible without highlighting them
- If you squint the buttons will take all your attention

Do: highlight primary action


Primary Button							Delete Multiple	Send Email	Duplicate	Create
Employee Name ↑≡	Job	Manager	Hired	Salary	Commission	Deptno				
ADAMS	CLERK	SCOTT	1/12/1983	1,100		RESEARCH				
ALLEN	SALESMAN	BLAKE	2/20/1981	1,600	300	SALES				
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JAMES	CLERK	BLAKE	12/3/1981	950		SALES				
JONES	MANAGER	KING	4/2/1981	2,975		RESEARCH				

- Action people want to use **most** of the time
- There can't be 2 primary actions
- Primary actions are **optional**

Colors and semantical meaning

- `u-hot-text` for highlighting
- `u-success-text` for good/safe/success
- `u-warning-text` for caution/warning
- `u-danger-text` for bad/destructive/danger


In action



Order Created Successfully


A confirmation email has been sent to you. This order will be delivered in one week.

[View Order >](#)



Alert Region

Region Body



Warning!

Are you sure you wish to delete this record?

[No](#)[I'm sure](#)

Hot buttons shouldn't be red,yellow,green

If You Eat Meat You Should Know This



Kurzgesagt – In a Nutshell ✓
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- Even if your company branding has that color
- Clashes with semantic meaning

Data display

Tables

- Structured and analytical data display
- Mostly for big screens
- **Interactive Report:** sort, filter, saved reports, highlights, etc.

Adam Wathan & Steve Schoger - Refactoring UI

*“Visual hierarchy refers to how important the elements in an interface appear in relation to one another, and it's the most effective tool you have for making something feel **designed**.”*

When everything in an interface is competing for attention, it feels noisy and chaotic, like one big wall of content where it's not clear what actually matters.”

Hierarchy in Tables is hard

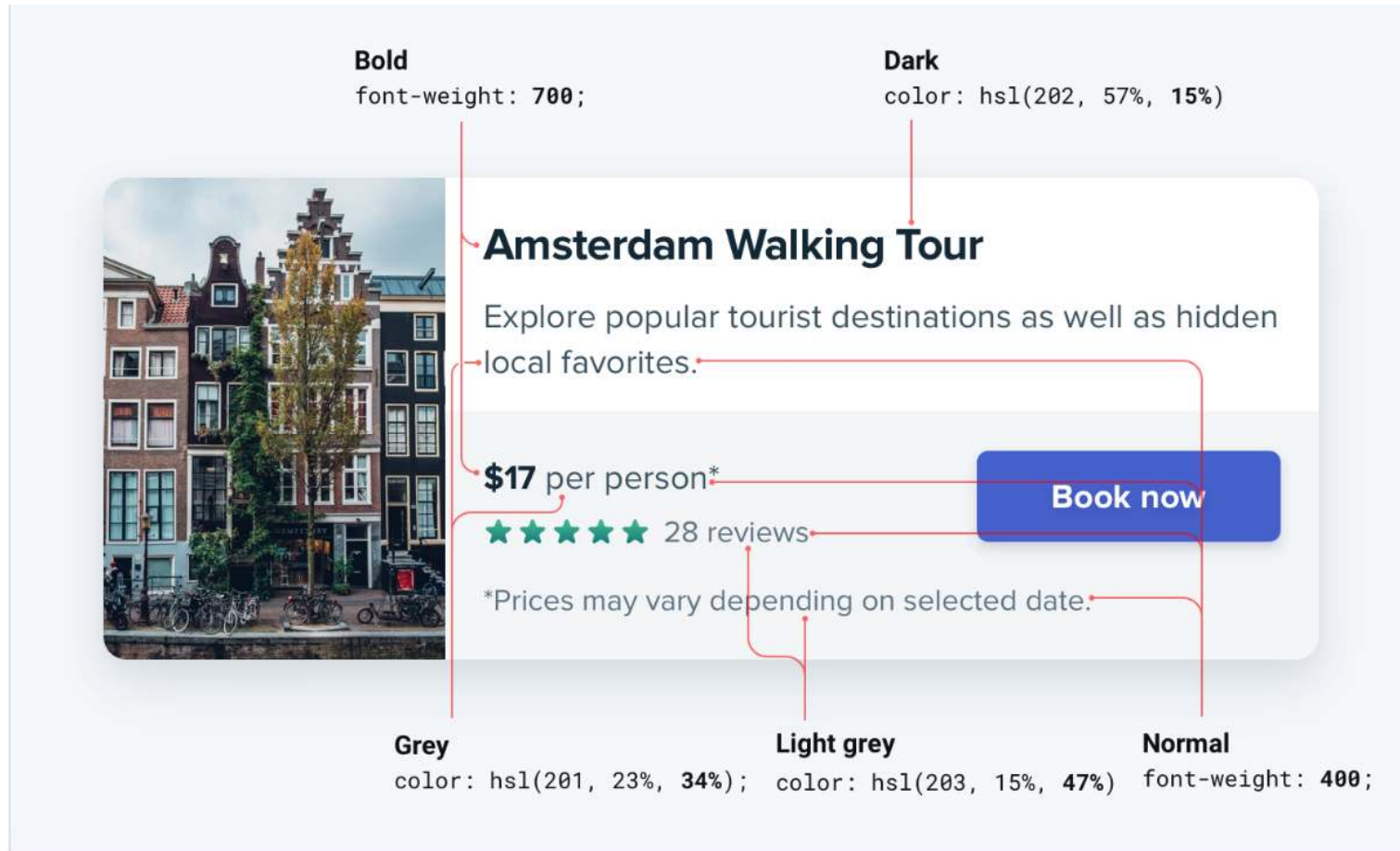
- Too structured
- Row-by-row, left to right
- So what to use instead?

Custom views

Status Open ×		40 ideas
↑ 88	Improving Pivot Functionality FR-2532 Closed · Last activity 28 minutes ago	41
↑ 2	Sort/order columns in IG/IR report Action Menu dialogue FR-3315 Roadmap · Last activity 2 hours ago	0
↑ 4	Interactive Report - PIVOT - Missing TOTAL option for the columns across FR-4153 Roadmap · Last activity 2 hours ago	0
↑ 55	If Page Template is "Left side column" then please give an option to collapse and expand FR-3109 Roadmap · Last activity 41 hours ago	7

- Easy to scan
- Responsiveness for mobile
- Doable with Template Components

Hierarchy through typography



Example from
Refactoring UI

Which types of charts to use?

- This is complicated
- Charts are not an end in themselves. What question should a chart answer?
- Use this From Data to Viz [decision tree](#) to pick a type
- Also take a look at the listed [Caveats](#) like [don't use Pie charts](#)

Uncategorized

Tips

Offer keyboard shortcuts

```
apex.actions.add({  
  name: "send-email",  
  label: "Send Email",  
  action: (event, focusElement) ⇒ { ... }  
});
```

```
apex.actions.addShortcut(  
  "Ctrl+Shift+E",  
  "send-email");
```

For power
users

Offer predictable values

Country

Netherlands, Germany, USA

Developer

None

★ Anton Nielsen

★ Hayden Hudson

★ Winfred Sohn

Adeline Iannotti

Alex Binette

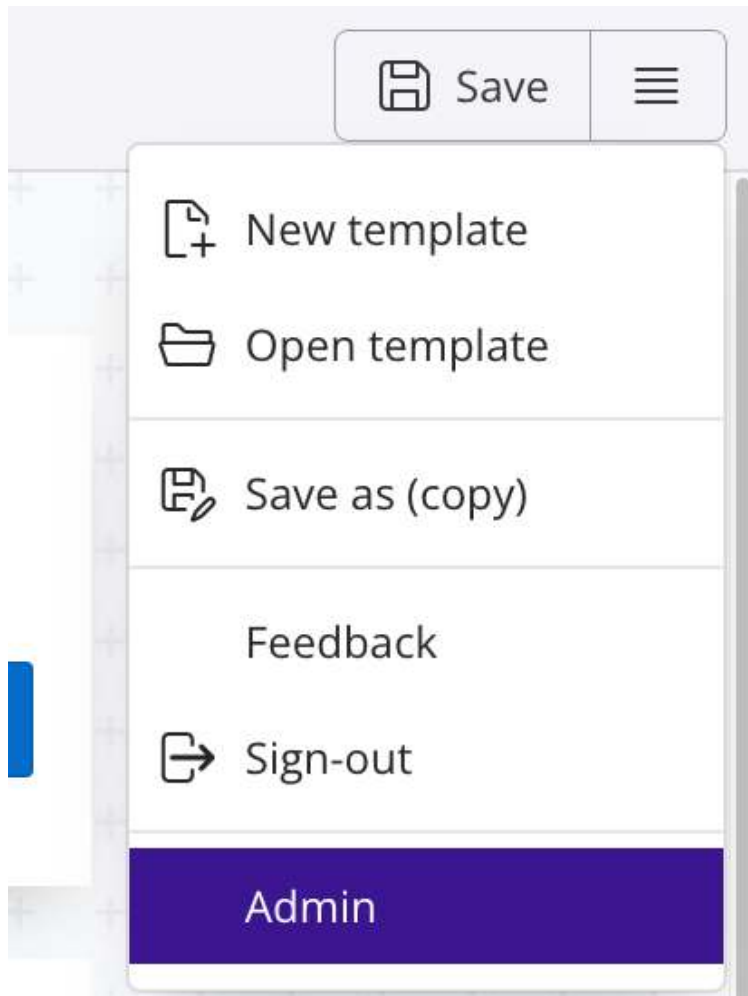
- When values are predictable don't let users go through long lists of options
- Offer quick picks (static)
- From [Insum Instant Tips #50](#) with Mike Hichwa: top matching options with icons and sorted in popup lov

Label style

Text Field	<input type="text"/>	Text Field With Autocomplete	<input type="text"/>	Number Field	<input type="text"/>
Textarea	<div></div>	Password	<input type="password"/>	Display Only	Display Only Item
Radio Group	<input type="radio"/> Display1 <input type="radio"/> Display2	Radio Group As Buttons	<input type="button" value="Display1"/> <input type="button" value="Display2"/>	Switch	<input checked="" type="checkbox"/>
	<input type="checkbox"/> Single Checkbox	Checkbox Group	<input type="checkbox"/> Display1 <input type="checkbox"/> Display2		
Select One	<input type="text"/>	Select One	<input type="text"/>		
Combobox	<input type="text"/>	Select List	<input type="text"/>		
Popup Lov	<input type="text"/>				
Date Picker	<input type="text"/>	Native HTML Date Picker	<input type="text"/>		

- Floating labels are especially designed for mobile users
- If your app is desktop only, your users might prefer traditional labels

Only use icons when their meanings is obvious



- Omit icons if they don't add value
- Check: would you get what an action does only with the icon and without the label?

Uncertainty causes fear

- You know the app as you have built it
- Users don't know what's behind the UI
- Give consistent and good naming
- Offer **help texts** almost everywhere
- Use language everybody understands
- Add "are you sure" dialogs for destructive actions

Don't overwhelm users

- Sub pages if one page gets too big / wizards
- Different pages for different actions
- Don't show too many buttons, hide actions behind action menus
- Rarely used information in collapsed regions

Don't frustrate users

- Huge forms? Let users save the progress as a draft
- Use appropriate session timeout lengths
- Validate early
- Give clear error information
- Keep pages fast (lazy loading, optimize your DB)
- Move long running tasks to the background (+ notification when done)

Be in contact with your users

- Watch how they use the app
- Let them give you feedback
- Consider evaluating usage metrics

If you take away one thing from this talk

Simple boring UIs that serve the content to
not overwhelm the users

Extend APEX like a PRO



APEX Office Print
Printing & Reporting
built for APEX



APEX Media Extension
Image processing for the
Oracle Database.



APEX Office Edit
Document management
for APEX



Plug-ins Pro
Highly request features
and functionality to
extend APEX

APEX Message Service
Real-time communication
for Oracle APEX



APEX Project Eye
Productivity, Quality Assurance,
and Security tool for APEX



Thank you!

Contact: phartenfeller at
united-codes.com

Slides at: hartenfeller.dev

Evaluate this talk

