

06. Icon Design

Faculty of Art & Design
Chair of Interface Design

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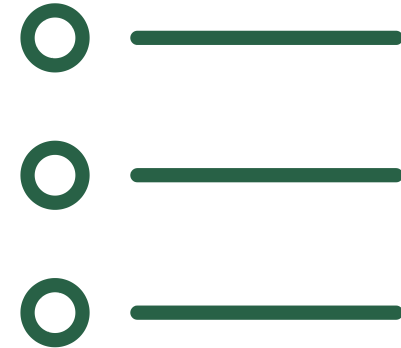


<http://www.uni-weimar.de/medien/wiki/IFD:MobileMediaDesign-SS16>



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Signs & Visual Communication



Signs & Visual Communication

Signs are all around us



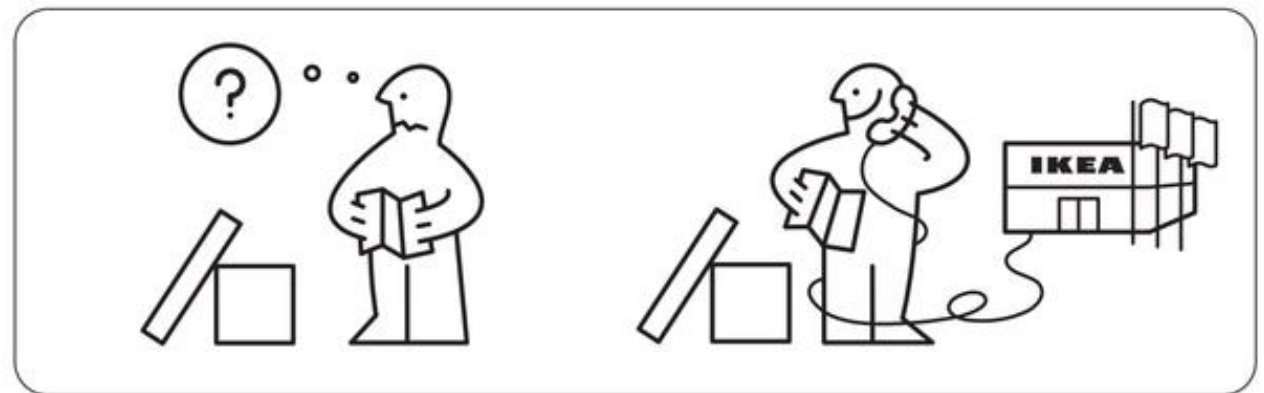
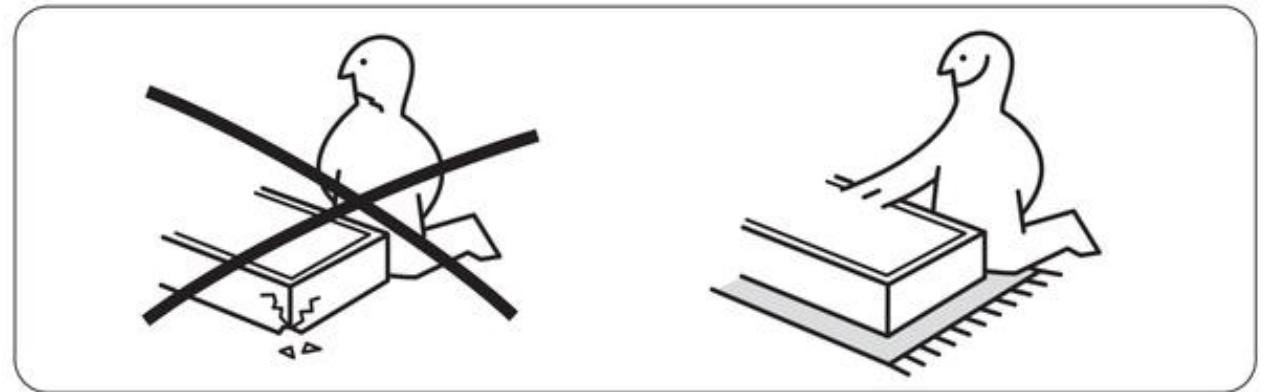
Signs & Visual Communication

Signs communicate faster than text



Signs & Visual Communication

No need for translation



Signs & Visual Communication

Can shape people behavior



Signs & Visual Communication

a sign “is something which stands to somebody
for something in some respect or capacity”

Charles Sanders Peirce

(Margolin & Buchanan, 1995, p. 157)



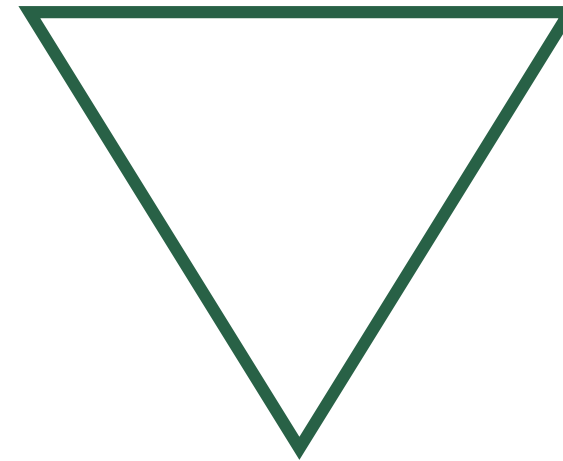
Signs & Visual Communication

Peirce's Triadic Components:

(Everaert-Desmedt, n.d.)

Representamen

Object



Interpretant

Signs & Visual Communication

Peirce's Triadic Components Example: Stop Sign

(Boatman, n.d.)

- **Representamen**
Physical manifestation of medium:
sign shape; colors; text.
- **Object**
Concept Idea: Stopping; holding speed.
- **Interpretant**
Mental realization of message:
knowing that one need to stop.



Signs & Visual Communication

Peirce's Types of Signs

(Lanir, n.d.) (Boatman, n.d.)

- Iconic Sign or Icon
- Indexical Sign or Index
- Symbolic Sign or Symbol

Signs & Visual Communication

Peirce's Types of Signs

(Lanir, n.d.) (Boatman, n.d.)

- **Iconic Sign or Icon**
Physically resembles the object
- Indexical Sign or Index
- Symbolic Sign or Symbol



Signs & Visual Communication

Peirce's Types of Signs

(Lanir, n.d.) (Boatman, n.d.)

- Iconic Sign or Icon
- Indexical Sign or Index
Directly connected to the object.
- Symbolic Sign or Symbol

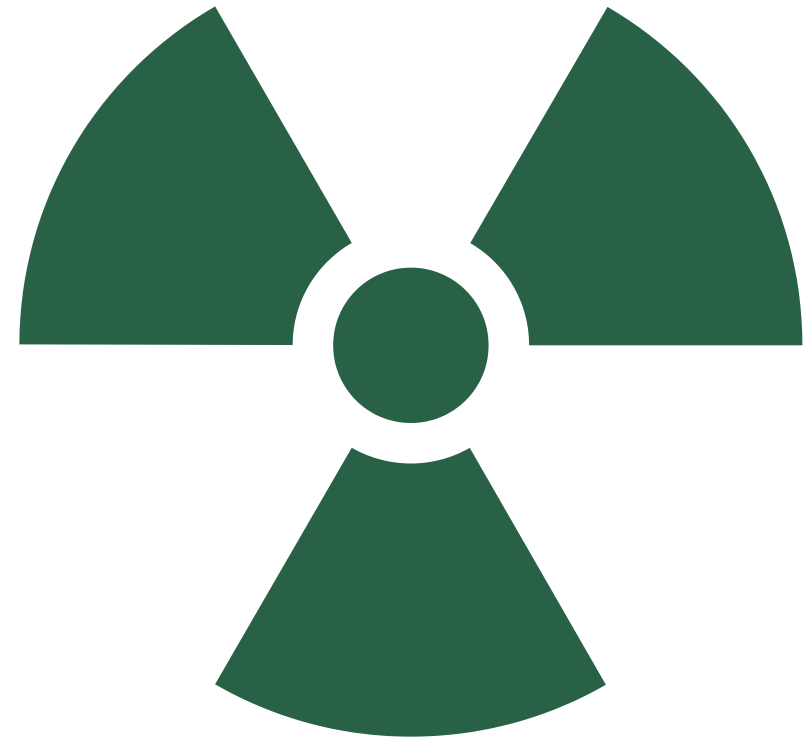


Signs & Visual Communication

Peirce's Types of Signs

(Lanir, n.d.) (Boatman, n.d.)

- Iconic Sign or Icon
- Indexical Sign or Index
- Symbolic Sign or Symbol
Arbitrary relations between representamen and object.
Need to be learn.



Signs & Visual Communication



Signs & Visual Communication

Symbolic & Iconic



Signs & Visual Communication (Haldemann, 2014)

Pictograms

&

Ideogram



Signs & Visual Communication (Haldemann, 2014)

Pictograms



A pictogram is a symbol that conveys meaning through its resemblance to a physical object.

Examples of pictograms include wayfinding signage, such as in airports and other environments where many people may not be familiar with the language of the place they are in.

Signs & Visual Communication (Haldemann, 2014)

Ideogram

Ideograms are graphical symbols that represent an idea or concept.

Good examples of ideogram are the red circle that means “not allowed”, or the orange or yellow triangle that means attention” or “danger”.



Signs & Visual Communication (Haldemann, 2014)

Pictograms & Ideogram

They can be combined:

A good example of a pictogram and ideogram combination



Signs & Visual Communication (Haldemann, 2014)

Pictograms & Ideogram

Today there are thousands of pictograms and ideograms that have been universally accepted and we directly recognize them at a first glance. Popular examples are the email icon, the telephone icon, the play button, the download button, etc. Some of them are pictograms, others are ideograms and some are a mix of both.



Signs & Visual Communication (Haldemann, 2014)

Pictograms & Ideogram

Sometimes a pictogram is also playing the role of an ideogram. For example, the icon that represents the meaning of the idea is represented by a light bulb.

Even if the light bulb is in fact the representation of an object (a pictogram), it conveys the message of the idea, a concept (an ideogram).



Are signs universal?



Are signs universal?



Are signs universal? Context is everything! (Hicks, 2014)



☒ Bank savings

☐ Dirty animal



☒ Positive, Thumbs Up

☐ Screw You



☒ West: Wisdom

☐ East: Stupidity

Are signs universal? Emoji Sample

“Investigating the Potential for Miscommunication Using Emoji”

(by Hannah Miller, 2016 - <http://grouplens.org/blog/investigating-the-potential-for-miscommunication-using-emoji/>)

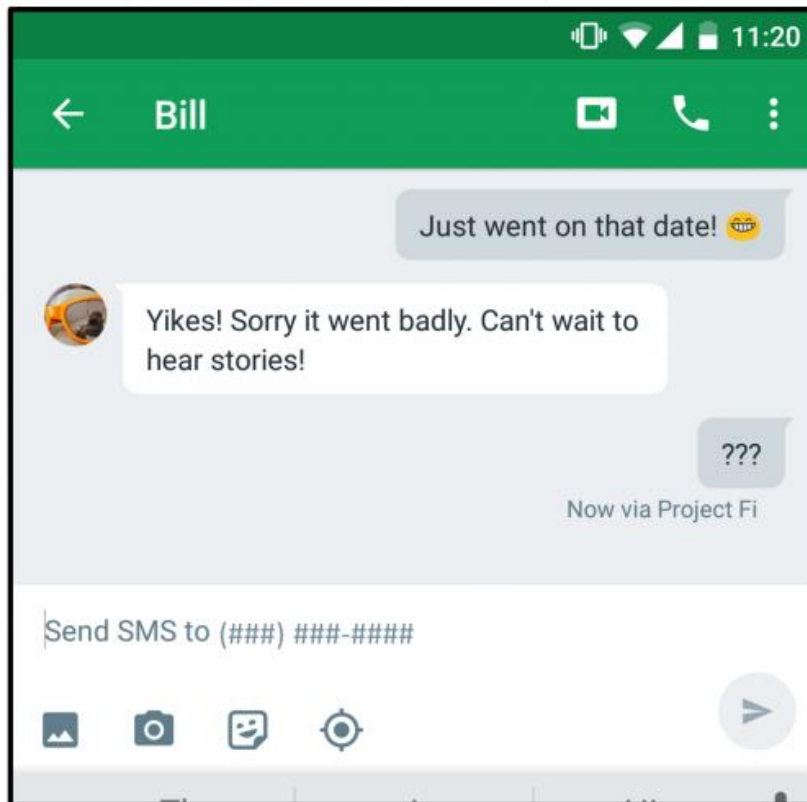
Did you know that when you send your friend  on your Nexus,

They might see  on their iPhone?

Are signs universal? Emoji Sample

“Investigating the Potential for Miscommunication Using Emoji” (Miller, 2016)

Abby using a Google Nexus, texting Bill:



Bill using an iPhone, texting Abby:

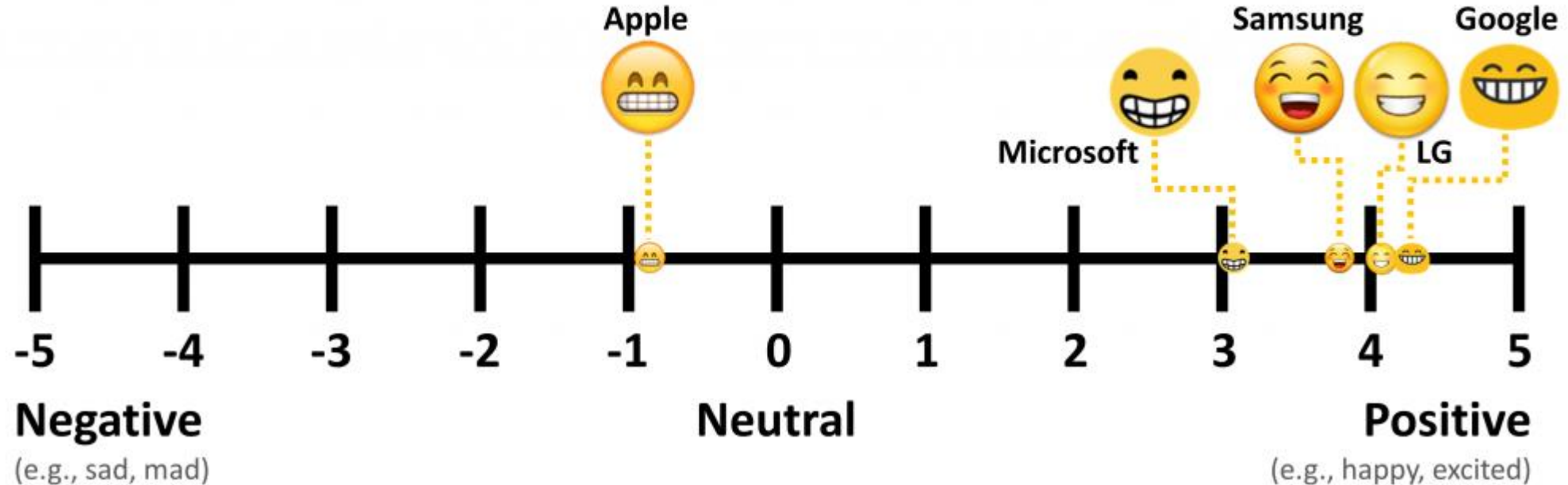


Are signs universal? Emoji Sample

“Investigating the Potential for Miscommunication Using Emoji” (Miller, 2016)

Same Emoji + Different Smartphone Platform = Different Emotion

For example, if you send the Apple emoji to a Google Nexus, they'll see the Google emoji, and vice versa!



Are signs universal? Another Emoji Sample

“Emojis: Helping people express themselves” (DW, 2016)



<http://www.dw.com/en/emojis-helping-people-express-themselves/av-19034602>

Are signs universal? Color meanings (Hicks, 2011, p. 114)

Temperature	Colour	Positive	Negative	Technical
Warm	Red	Importance, warmth, life (blood), love, revolution, celebration and good luck (China)	Stop, problems, danger	Warning, error
	Orange	Warmth, energy	Cheap	RSS
	Yellow	Joy, happiness, light, wisdom	Warning (combined with black), forbidden, cowardice, decay	Secure, highlight
Warm/cool mix	Green	Life, nature, vitality, go, growth	Envy, madness	Sharing, correct
	Purple	Royalty	Cruelty, arrogance	
Cool	Blue	Daytime, calm, information, corporate	Cold, corporate	Selected, on, enabled
	Grey	Luxury	Sadness	Disabled, off
Neutral	Brown	Comfort, nature	Poverty	
	Black	Sophistication, luxury, expensive, prosperity	Death, mourning, evil, mystery, misery	

Consider your audience background and needs, and don't mess up!



Icon History



Icon History

Are Icons a new thing?

Icon History

Petroglyphs



Icon History

Hieroglyphs



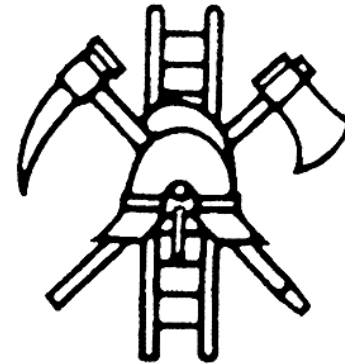
Icon History

Medieval Age



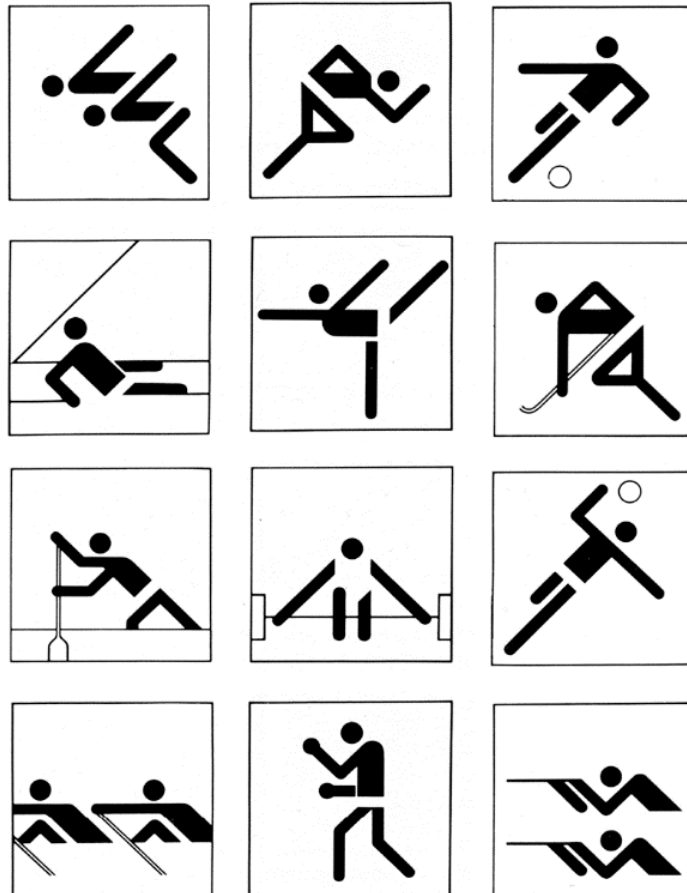
Icon History

Modern Era



Icon History

Olympics



München 1972

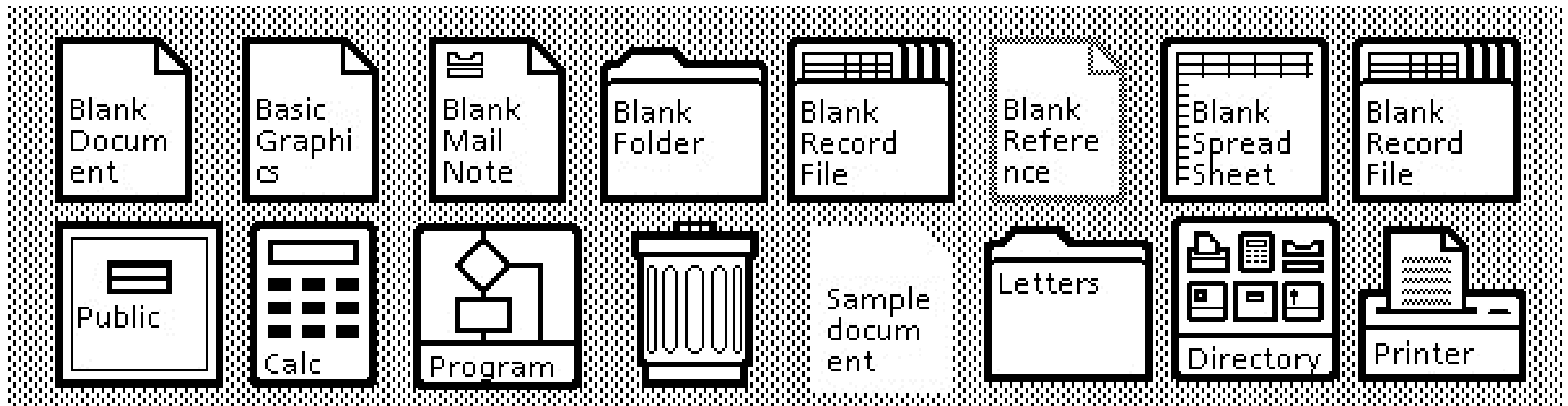


Tokyo 1964

Image retrieved and modified from: (Hicks, 2011, p. 11)

Icon History

Computer Era: 1981 Xerox 8010 Star



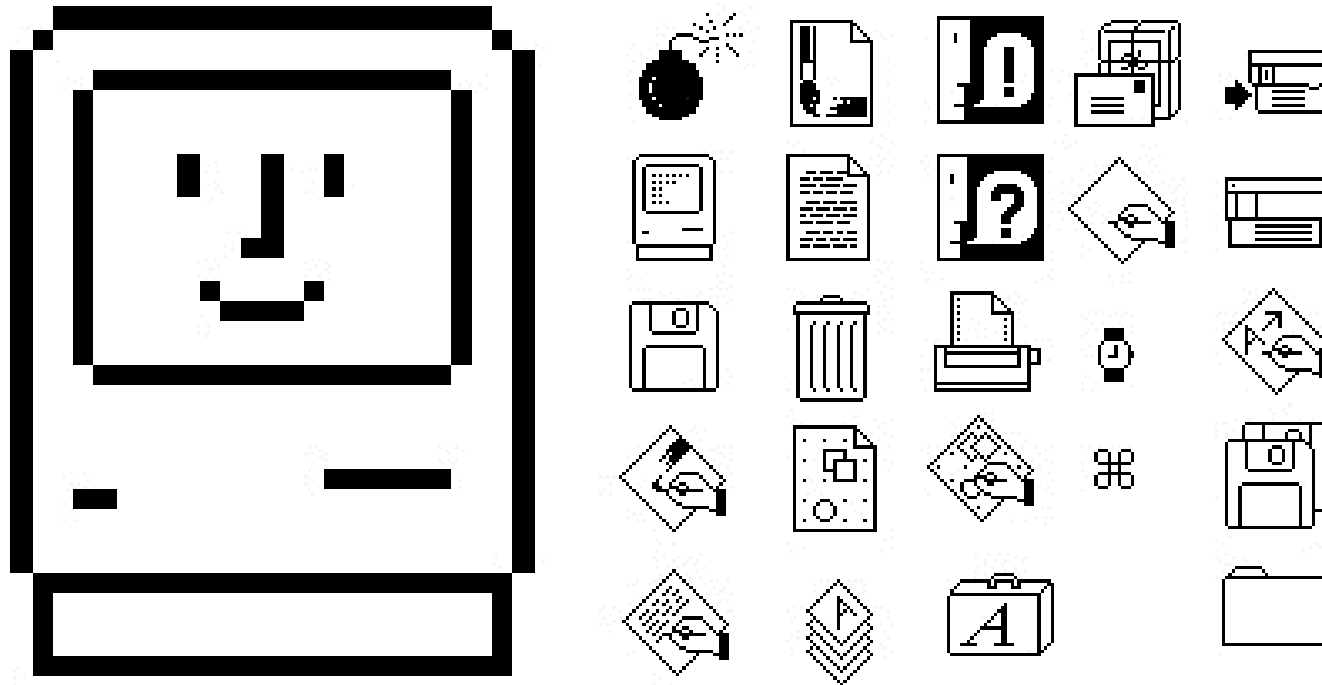
Icon History

Computer Era: 1983 Apple Lisa



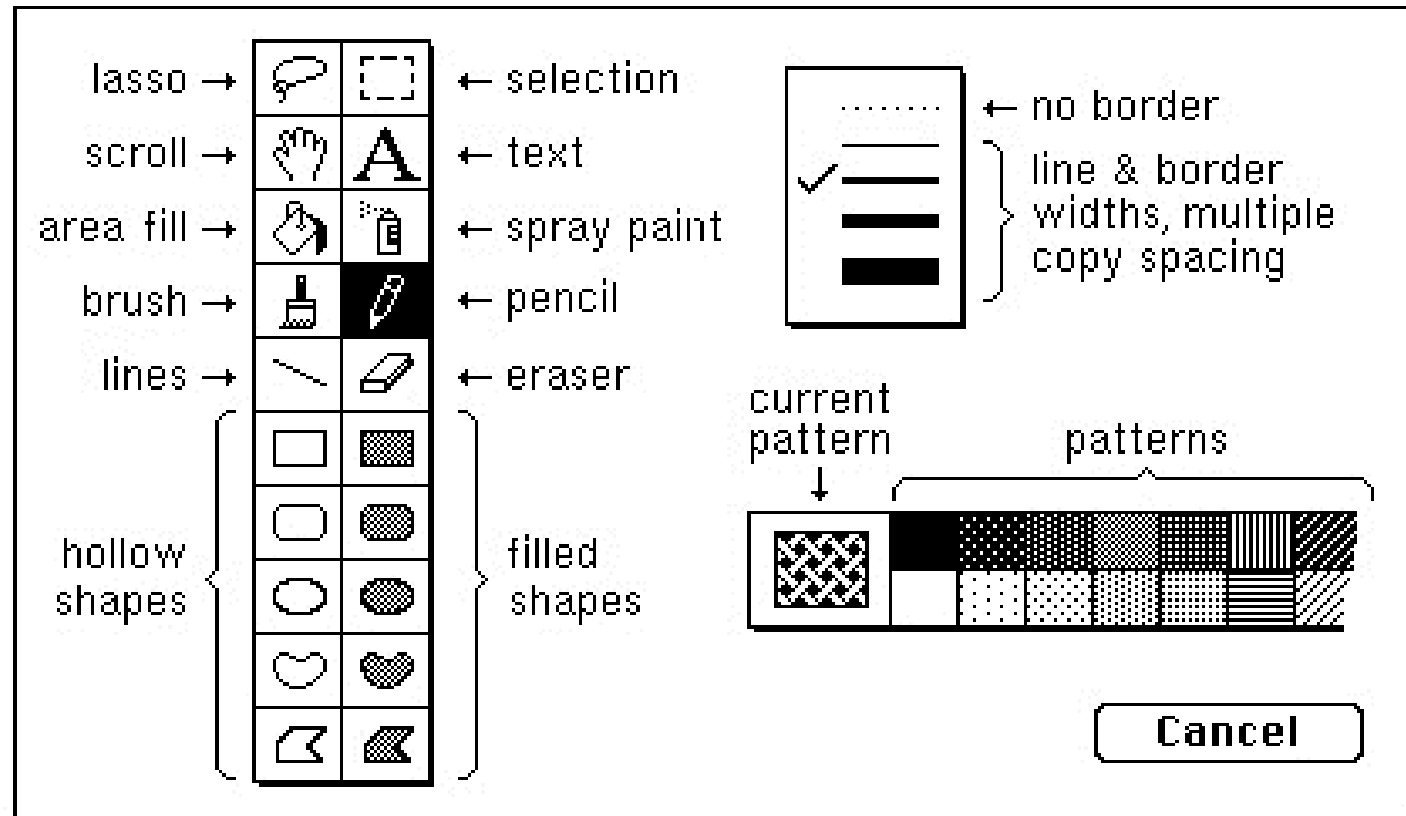
Icon History

Computer Era: 1984 Apple Macintosh 1.0



Icon History

Computer Era: 1984 Apple Macintosh 1.0



Icon History

Computer Era: 1985 Atari TOS



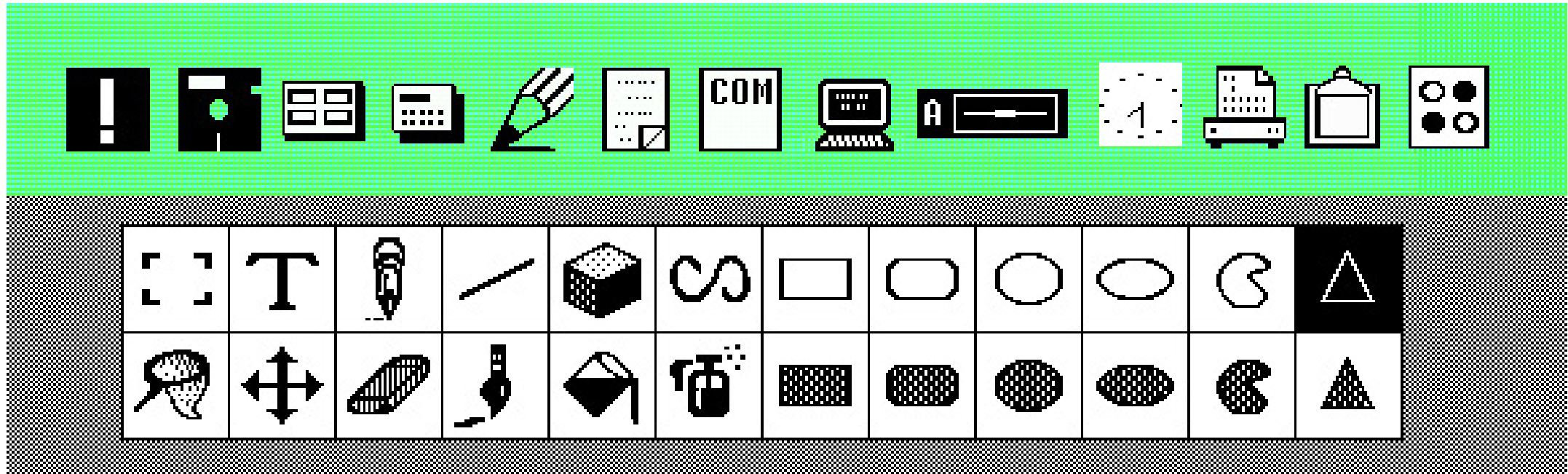
Icon History

Computer Era: 1985 Amiga Workbench



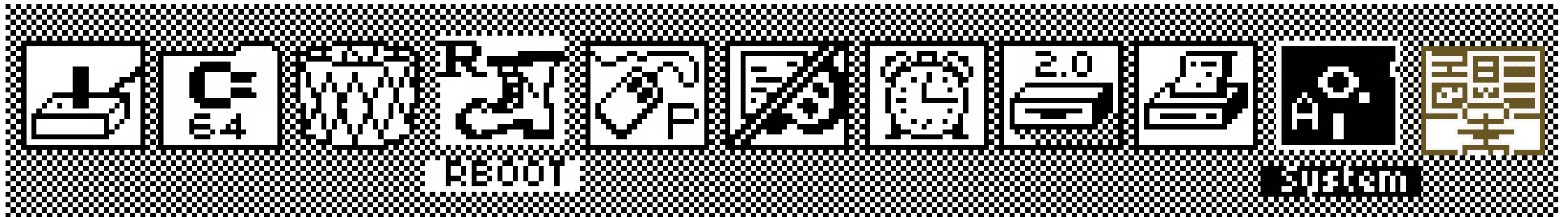
Icon History

Computer Era: 1985 Windows 1.0x



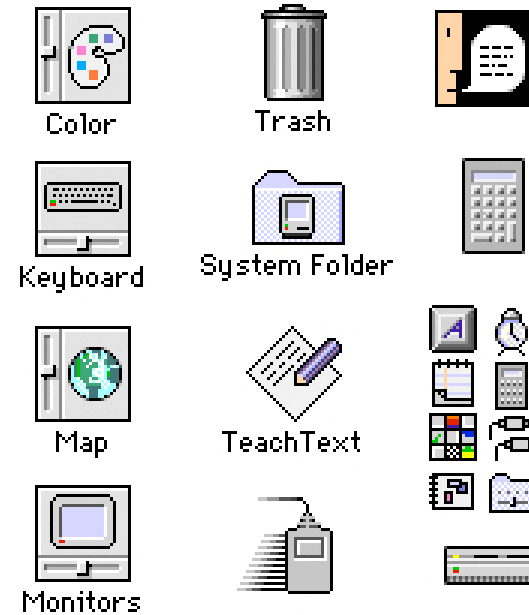
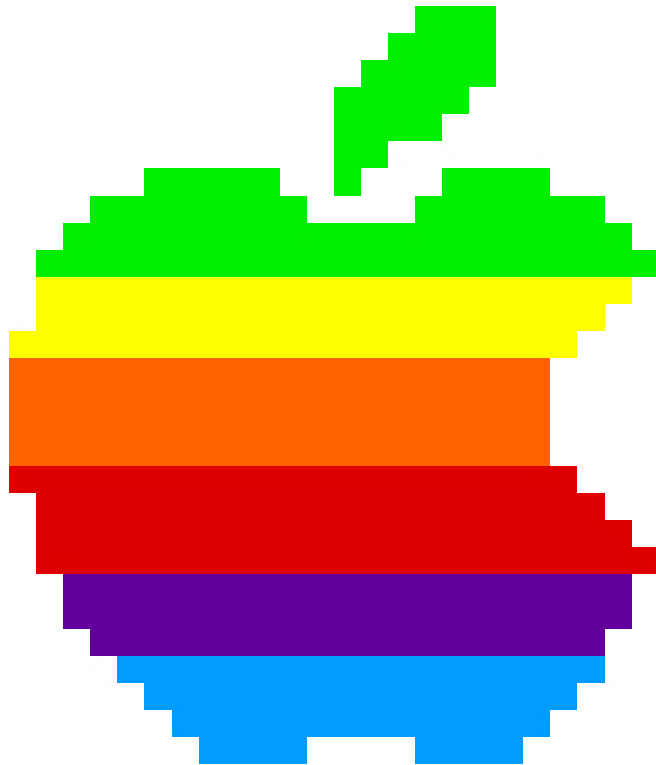
Icon History

Computer Era: 1986 GEOS for Commodore 64



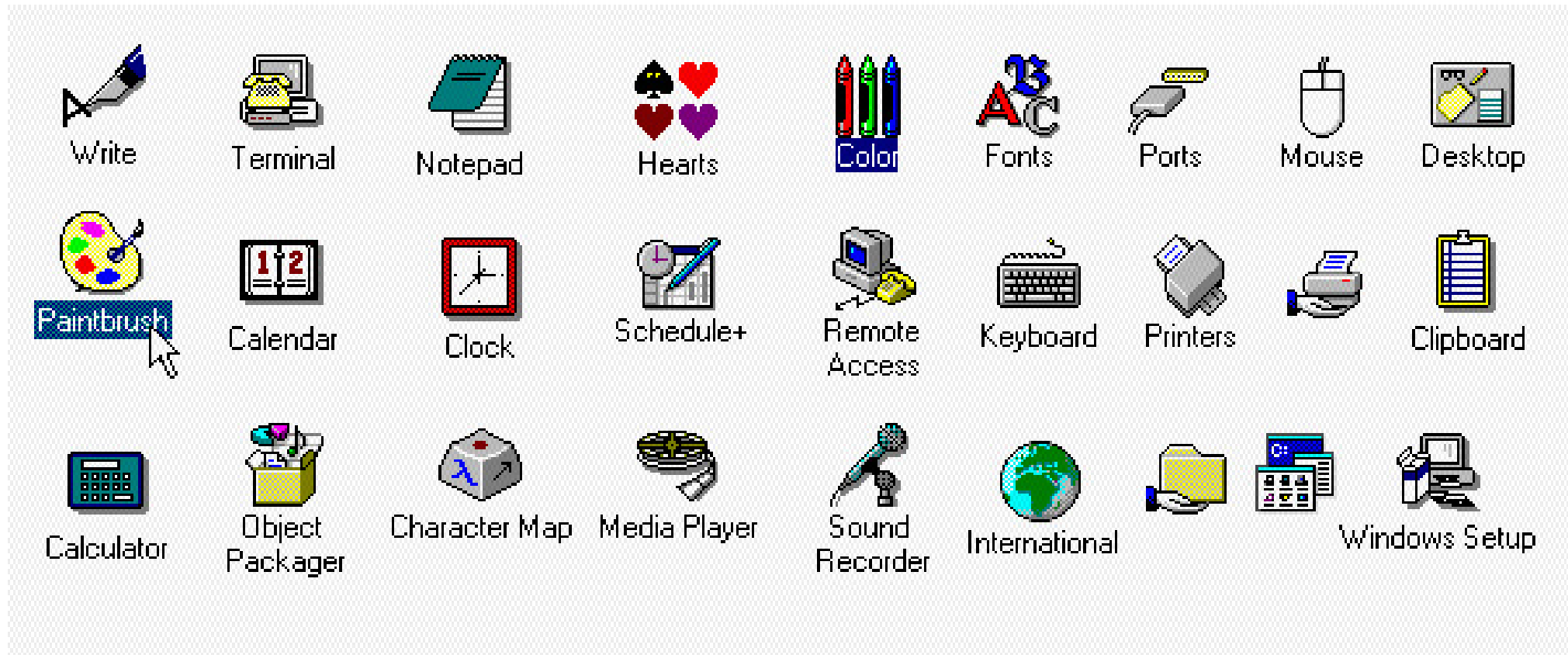
Icon History

Computer Era: 1991 Macintosh System 7



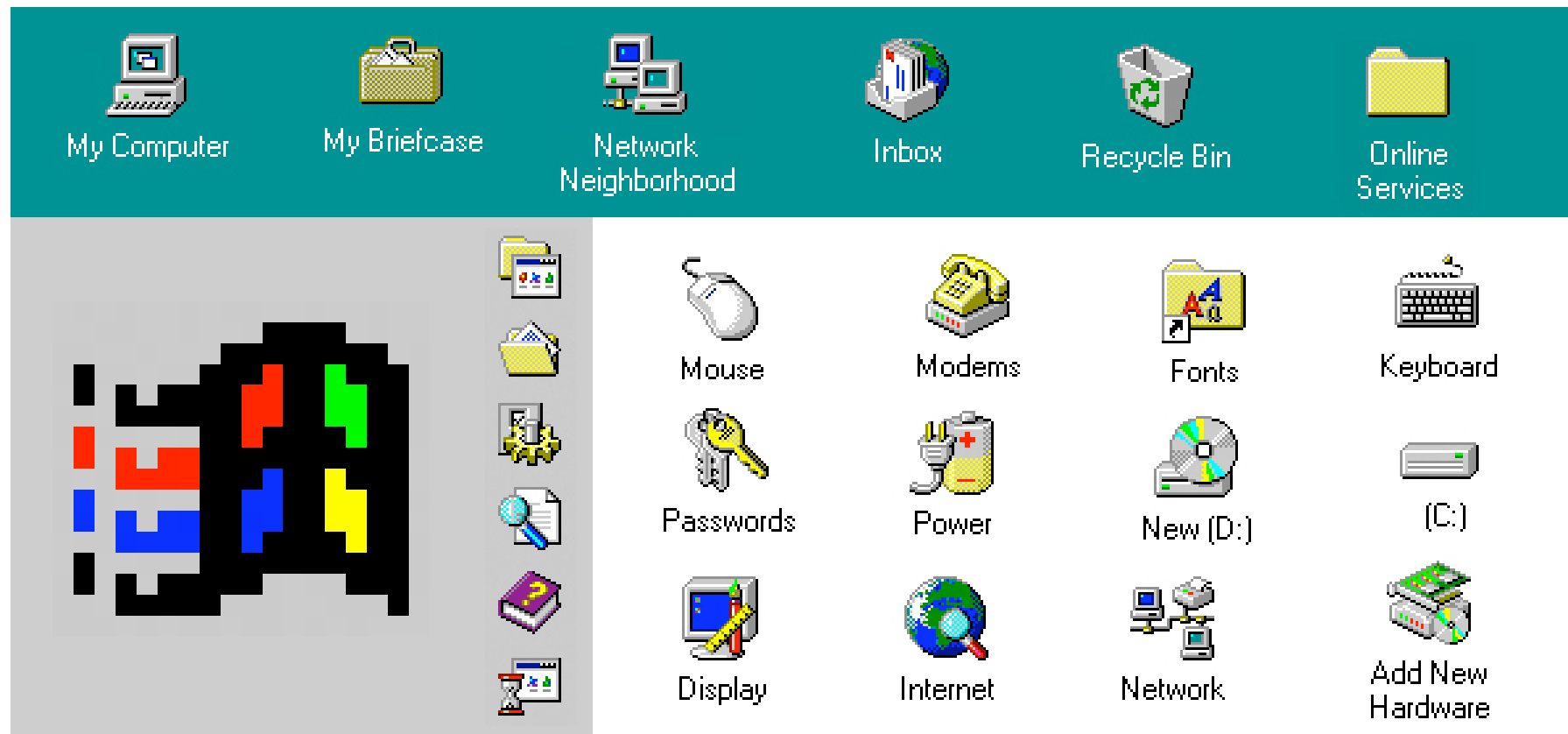
Icon History

Computer Era: 1992 Windows 3.1



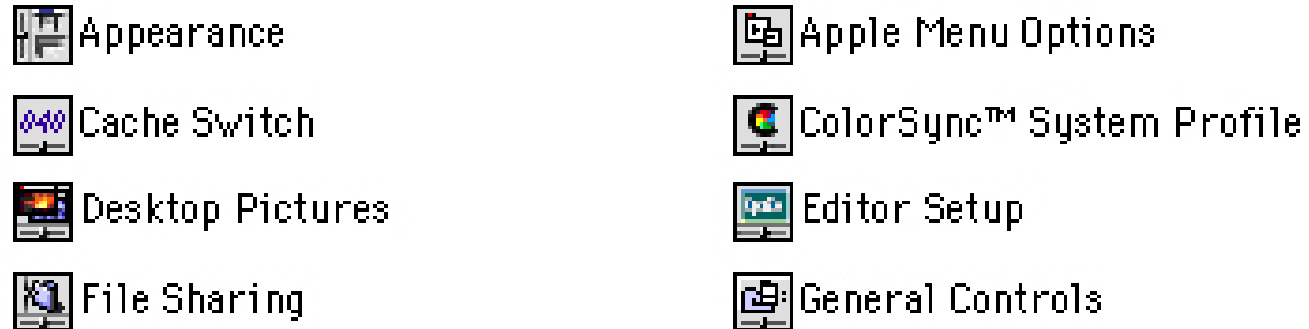
Icon History

Computer Era: 1995 Windows 95



Icon History

Computer Era: 1997 Macintosh OS 8



Icon History

Computer Era: 2001 Mac OS X v10.0



Icon History

Computer Era: 2001 Windows XP



Icon History

Computer Era: 2007 Mac OS X Leopard



Icon History

Computer Era: 2009 Windows 7



Icon History

Computer Era: 2012 Windows 8



Image retrieved from: <https://d3ui957tjb5bqd.cloudfront.net/images/screenshots/products/13/136/136952/windows-f.png?1404201020>

Icon History

Computer Era: 2013 Mac OS X v10.9 - Mavericks



Image retrieved from: http://getpcsoft.wikisend.com/img_howto/0/325/tuk9fdbc.png

Icon History

Computer Era: 2014 Mac OS X v10.10 - Yosemite

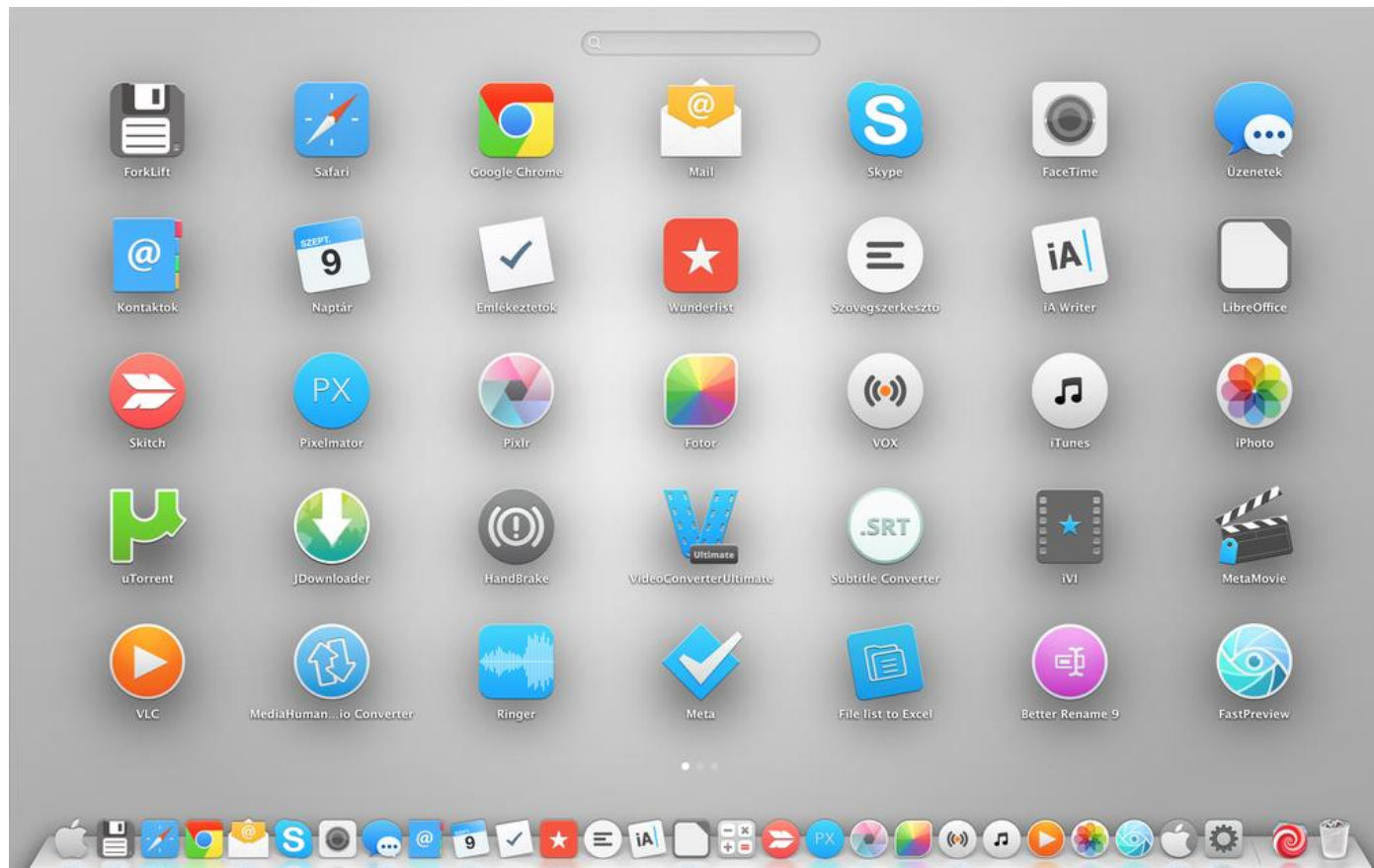


Image retrieved from: http://img14.deviantart.net/a327/i/2014/251/4/8/yosemite_style_os_x_icons_by_tigercat_hu-d7yez9t.png

Icon History

Computer Era: 2015 Windows 10

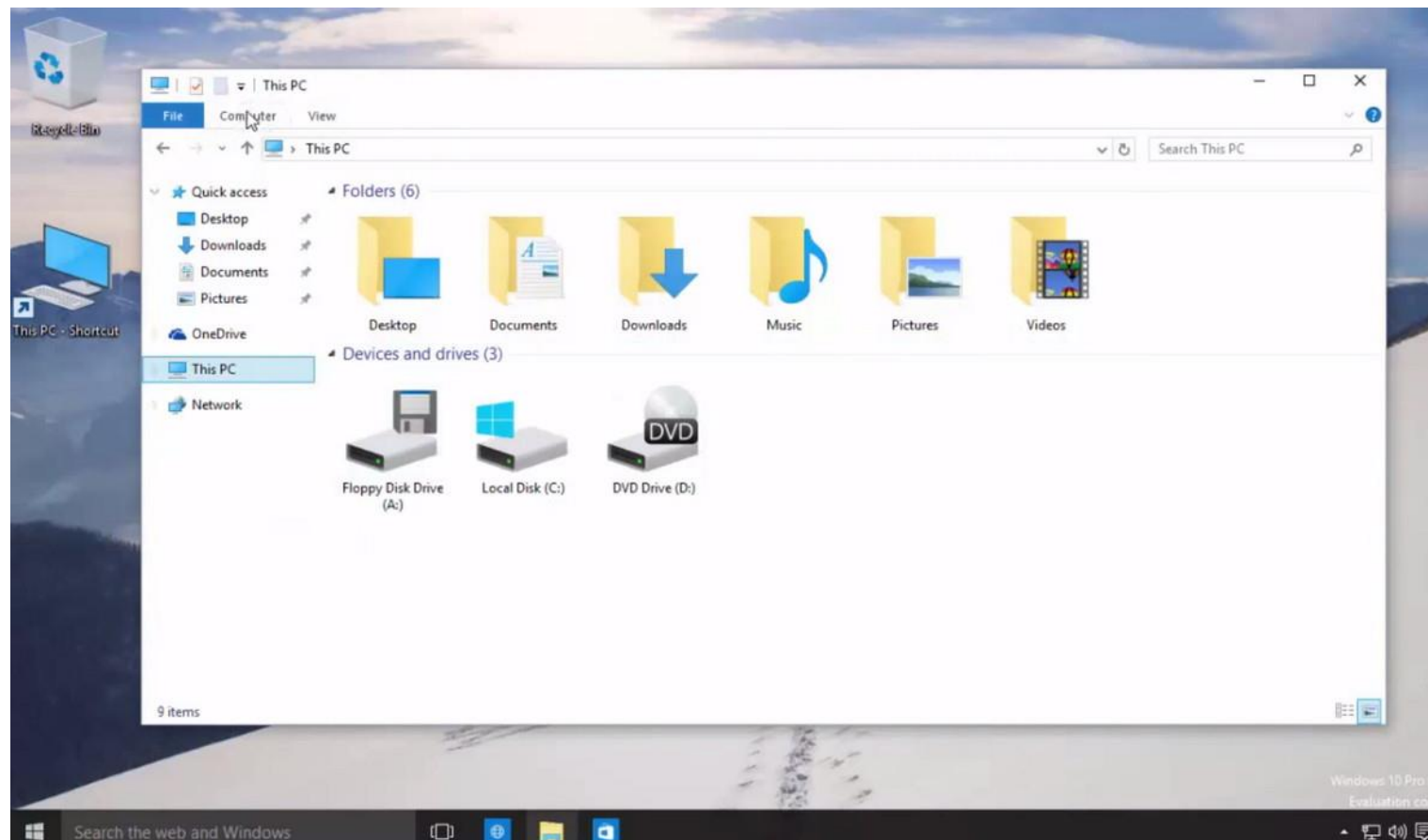


Image retrieved from: <http://www.windowscentral.com/sites/wpcentral.com/files/styles/larger/public/field/image/2015/05/windows-10-10125-new-icons-desktop.jpg?itok=XBm5XhMM>

Icon History

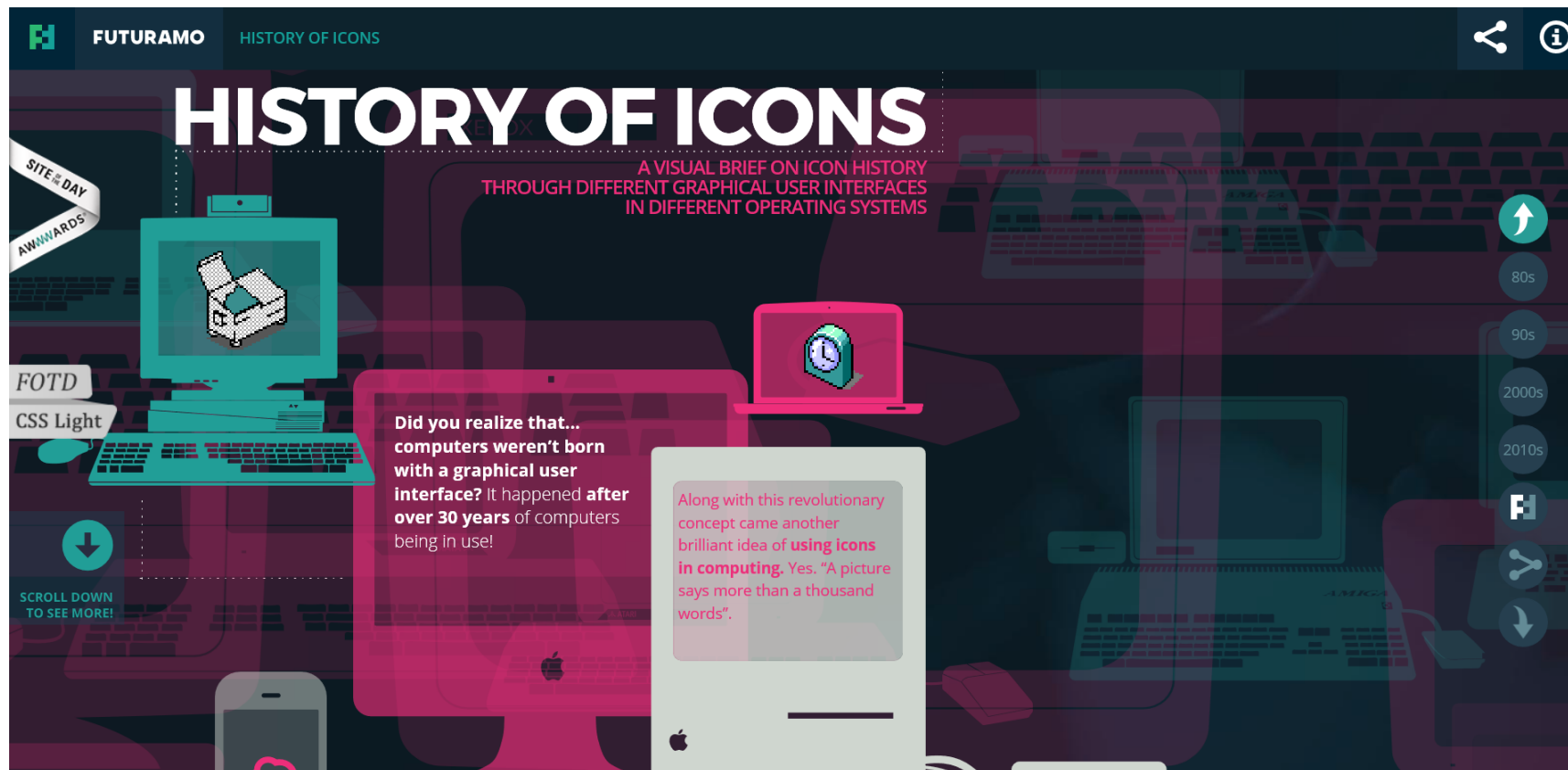
Computer Era: 2015 Mac OS X v10.11 – El Capitan



Image retrieved from: <http://www.laptopmag.com/images/wp/purch-api/incontent/2015/07/ElCapitanInterfaceLauncher.png>

Icon History

More about GUI icons: <https://historyoficons.com/>



Why do we use icons?



Why do we use icons?

- To communicate



Why do we use icons?

Iconspeak World T-Shirt

<https://iconspeak.world/collections/iconspeak-world>



Why do we use icons?

Iconspeak World T-Shirt

<https://iconspeak.world/collections/iconspeak-world>



Why do we use icons?

Children on an Easter egg hunt in Capel, UK **form** a **human arrow** to POINT to where suspected robbers are hiding



<https://www.youtube.com/watch?v=tAyIJMQpGT4>

Why do we use icons?

Children on an Easter egg hunt in Capel, UK **form** a **human arrow** to POINT to where suspected robbers are hiding



Image retrieved from: http://i.dailymail.co.uk/i/pix/2016/04/01/16/32BE65FE00000578-3519201-image-a-1_1459524462404.jpg

Why do we use icons?

- Reinforce message



Why do we use icons?

- Instructions



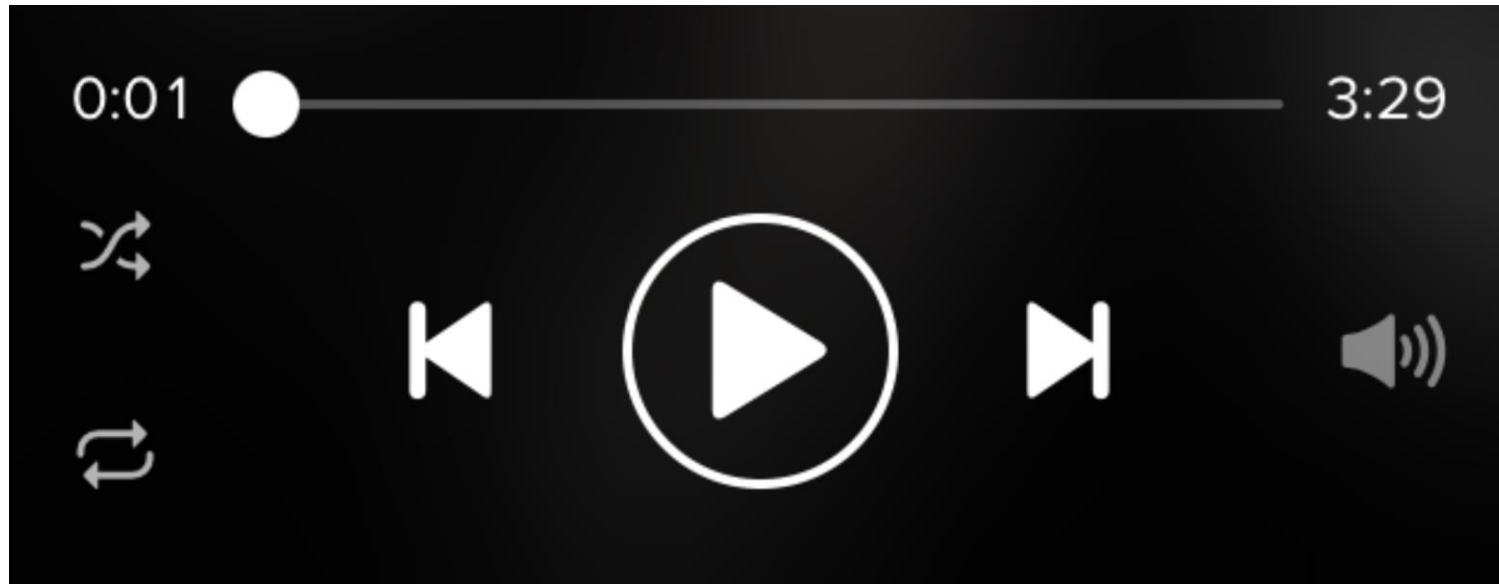
Why do we use icons?

- Instructions



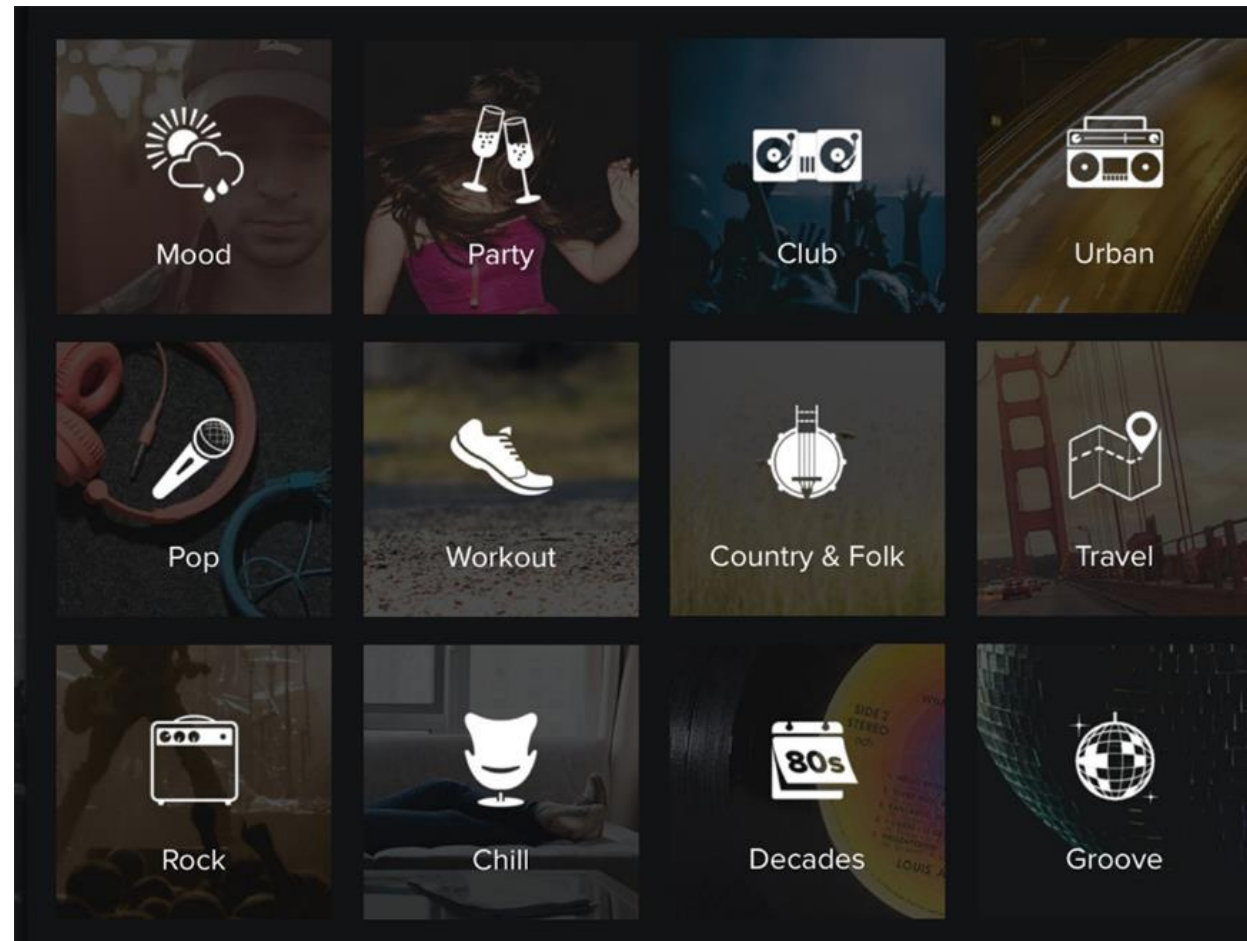
Why do we use icons?

- Play Media



Why do we use icons?

- Navigates easier



Why do we use icons?

- Feedback

The screenshot shows a mobile app registration interface with an orange header and footer. The main content area has a light gray background. At the top, there are three tabs: 'Create Account' (active, blue), 'Connect' (gray), and 'Upgrade' (gray). Below the tabs, there are two input fields for 'Optional Username & Custom URL:'. The first field contains 'http://grooves shark.com/' and 'hicks', with a red 'X' icon indicating an error. The second field contains 'http://grooves shark.com/' and 'hicksdesign', with a green checkmark icon indicating success. Below the input fields, there is a section titled 'I am...' with three buttons: 'A Music Fan' (blue), 'An Artist' (gray), and 'In the Music Business' (gray). At the bottom, there are two buttons: 'Back' (gray) and 'Continue' (gray).

Home Task



Are all signs/icons applied correct?

One image worth thousands words, but how to control the information?



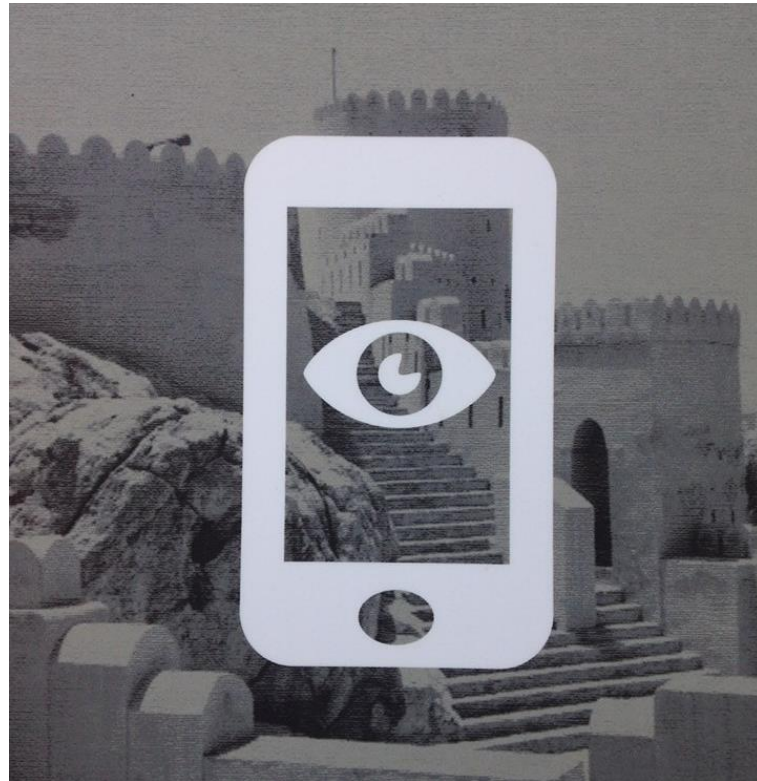
Press Button



Receive Bacon

Home Task

Signs/icons can be confusing or opened for interpretation...



Home Task

...and sometimes not entirely proper

Can you do better?



Home Task: Suggest an icon modification

Find an icon (mobile app) or sign (streets, books, etc.) that could be improved or changed, and propose the solution.

You can create or own icon (preferable) or search online/offline.

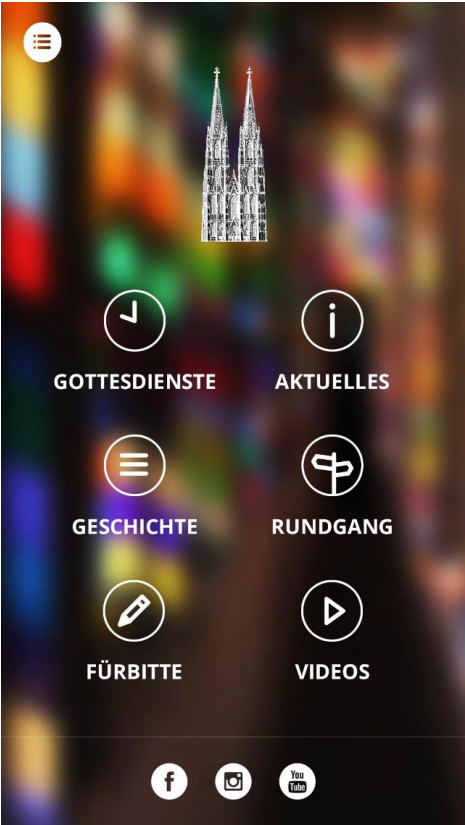
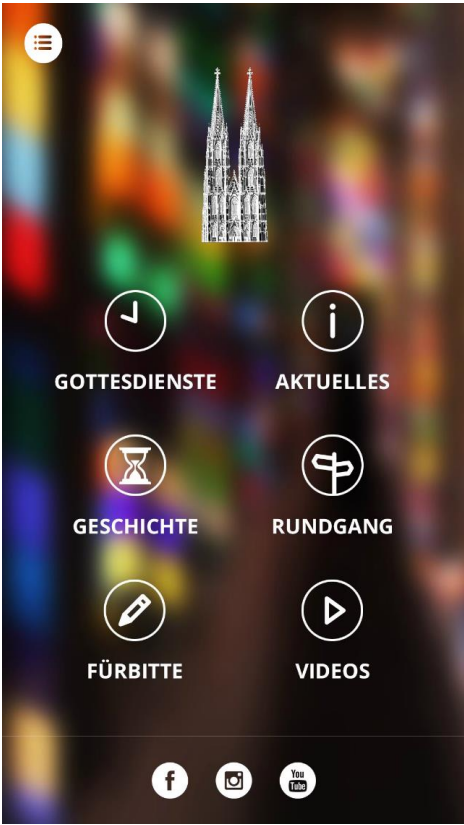
Home Task: Suggest an icon modification

Example 1:

Original	Proposal	Comments
		This sign is a reserved parking spot for elderly. Older adults may be offended by being represented as physically challenged or incapable. This proposal sign would give a clear information about the park spot based on age.

Home Task: Suggest an icon modification

Example 2:

Original	Proposal	Comments
 The original app interface for 'Kölner Dom' features a dark background with a blurred image of the cathedral. At the top is a hamburger menu icon. Below it are two columns of icons: a clock for 'GOTTESDIENSTE', an 'i' for 'AKTUELLES', a hamburger menu for 'GESCHICHTE', a compass for 'RUNDGANG', a pencil for 'FÜRBITTE', and a play button for 'VIDEOS'. At the bottom are social media icons for Facebook, Instagram, and YouTube. To the right of the app is a large circular icon with a hamburger menu symbol.	 The proposed app interface is identical to the original, except for the 'GESCHICHTE' icon, which has been replaced with a sandglass icon. To the right of the app is a large circular icon with a sandglass symbol.	App "Kölner Dom" has a "Geschichte" (History) menu using the "Hamburger Icon". The Hamburger icon is most used as "menu" option. It can mislead the purpose of this section button. The "Geschichte" icon was substituted by a "time" icon that is more related to "History" meaning. Image: https://cdn2.iconfinder.com/data/icons/windows-8-metro-style/512/historical.png

Task: Icon Suggestion

- Send by e-mail, or upload at wiki, a similar scheme/table:

Original	Proposal	Comments

Task: Icon Suggestion

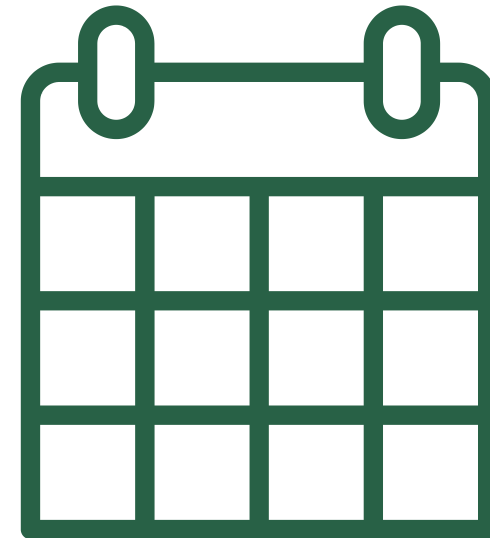
- Topic of the e-mail: **[MMD] Icon Suggestion** or directly on our wiki-page
- File Name: MMD_IconSuggestion_FirstnameFamilyname
- File Format: PDF
- Deadline: 20 May, at 23:59
- URL: http://www.uni-weimar.de/medien/wiki/IFD:MobileMediaDesign-SS16#Home_Task_2:Icon_Suggestion

Task: Icon Suggestion : Prize

- The top 5 icons (IMHO) will be selected from all the proposed submitted works for a quick competition at 23.05.
- A vote round will be applied in the classroom with all participants.
- The most voted will get a secret prize!



Schedule & Assignments





Course Schedule and Details

- **18.04** **MMD 01** - Introduction | **MMD 02** - Media & Mediatization
- **25.04** **MMD 03** - Mobile Media & Apps | **MMD 04** - UNESCO WHS Tourism in Germany / Project Description
- **06.05** *Deadline at 23:59 of App Evaluation*
- **09.05** **MMD 05** - Mobile Guidelines | **MMD 06** - Icon Design / Project Consultation
- **20.05** *Deadline at 23:59 of Icon Suggestion*
- **23.05** **MMD 07** - References & Writing / Project Consultation
- **13.06** Students' Prototype Presentations – **Adults' Group**
- **20.06** Students' Prototype Presentations – **Teenagers' Group**
- **04.07** **MMD 08** - Closing Lecture & Feedback
- **31.07** Deadline for the paper/essay: 23:59

References



References

- Abdullah, R., & Hübner, R. (Eds.). (2005). *Piktogramme und Icons: Pflicht oder Kür?* (1. Aufl). Mainz: Schmidt.
- Boatman, E. (n.d.). Icon Design: Creating Pictograms with Purpose - Skillshare. Retrieved May 5, 2016, from <https://www.skillshare.com/classes/design/Icon-Design-Creating-Pictograms-with-Purpose/2139039143>
- DW. (2016, February 9). Emojis: Helping people express themselves | All media content | DW.COM | 09.02.2016. Retrieved May 6, 2016, from <http://www.dw.com/en/emojis-helping-people-express-themselves/av-19034602>
- Everaert-Desmedt, N. (n.d.). Charles Sanders Peirce: Semiotics / Signo - Applied Semiotics Theories. Retrieved May 5, 2016, from <http://www.signosemio.com/peirce/semiotics.asp>
- Haldemann, J. (2014, November 11). A brief history of pictograms and ideograms - Saffron Interactive. Retrieved May 6, 2016, from <http://saffroninteractive.com/a-brief-history-of-pictograms-and-ideograms/>
- Hicks, J. (2011). *The icon handbook*. Penarth: Five Simple Steps.
- Hicks, J. (2014). Jon Hicks – The Icon Design Process – btconfBER2014 - YouTube. Retrieved May 6, 2016, from <https://www.youtube.com/watch?v=DGtAgmXx-1Q>

References

- Know Your Icons Part 1 - A Brief History of Computer Icons. (n.d.). Retrieved May 6, 2016, from <http://design.tutsplus.com/articles/know-your-icons-part-1-a-brief-history-of-computer-icons--psd-9805>
- Lanir, L. (n.d.). Peirce's Symbolic Iconic and Indexical Signs: Semiotics. Retrieved May 5, 2016, from <http://www.decodedscience.org/charles-sanders-peirce-symbolic-iconic-and-indexical-signs/23013>
- Margolin, V., & Buchanan, R. (Eds.). (1995). *The idea of design*. Cambridge, Mass: MIT Press.
- Miller, H. (2016, April 5). Investigating the Potential for Miscommunication Using Emoji | GroupLens. Retrieved May 5, 2016, from <http://grouplens.org/blog/investigating-the-potential-for-miscommunication-using-emoji/>

References

Images used on the cover:

- <http://41.media.tumblr.com/f3fc3badc8fed9cd04ed1aa56124708e/tumb>
- <http://cliparts.co/cliparts/8Tx/nLR/8TxnLRRpc.png>
- <http://icons.iconarchive.com/icons/sonya/swarm/256/Mona-Lisa-ico>
- http://i.istockimg.com/file_thumbview_approve/66616483/5/stock-i
- <http://www.studiolo.org/Mona/Monalcon.gif>
- <https://d13yacurqjgara.cloudfront.net/users/259025/screenshots/1>
- <https://d13yacurqjgara.cloudfront.net/users/459448/screenshots/1>
- <https://d13yacurqjgara.cloudfront.net/users/56778/screenshots/22>
- <https://d30y9cdsu7xlg0.cloudfront.net/png/84086-200.png>
- https://image.freepik.com/free-icon/mona-lisa_318-97912.jpg
- <https://s-media-cache-ak0.pinimg.com/236x/75/fd/ae/75fdaea2feb6e>

Thank You!



06. Icon Design

Faculty of Art & Design
Chair of Interface Design

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<http://www.uni-weimar.de/medien/wiki/IFD:MobileMediaDesign-SS16>

