



Tools Development at Ubisoft

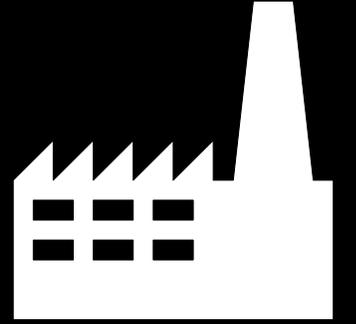
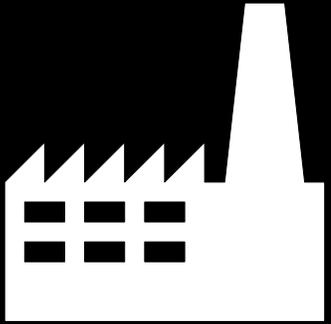
**Building a Shared Vision
to improve the
User Experience**



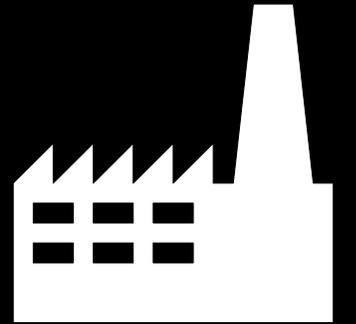
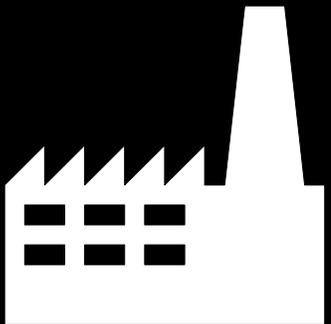
UBISOFT®

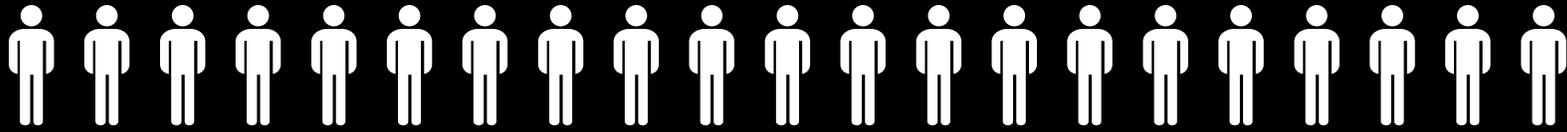
Net income ▼ €-66 million (2013)^[2]
Employees 9,200 (2013)^[1]
Divisions Ubisoft Motion Pictures





UBISOFT®

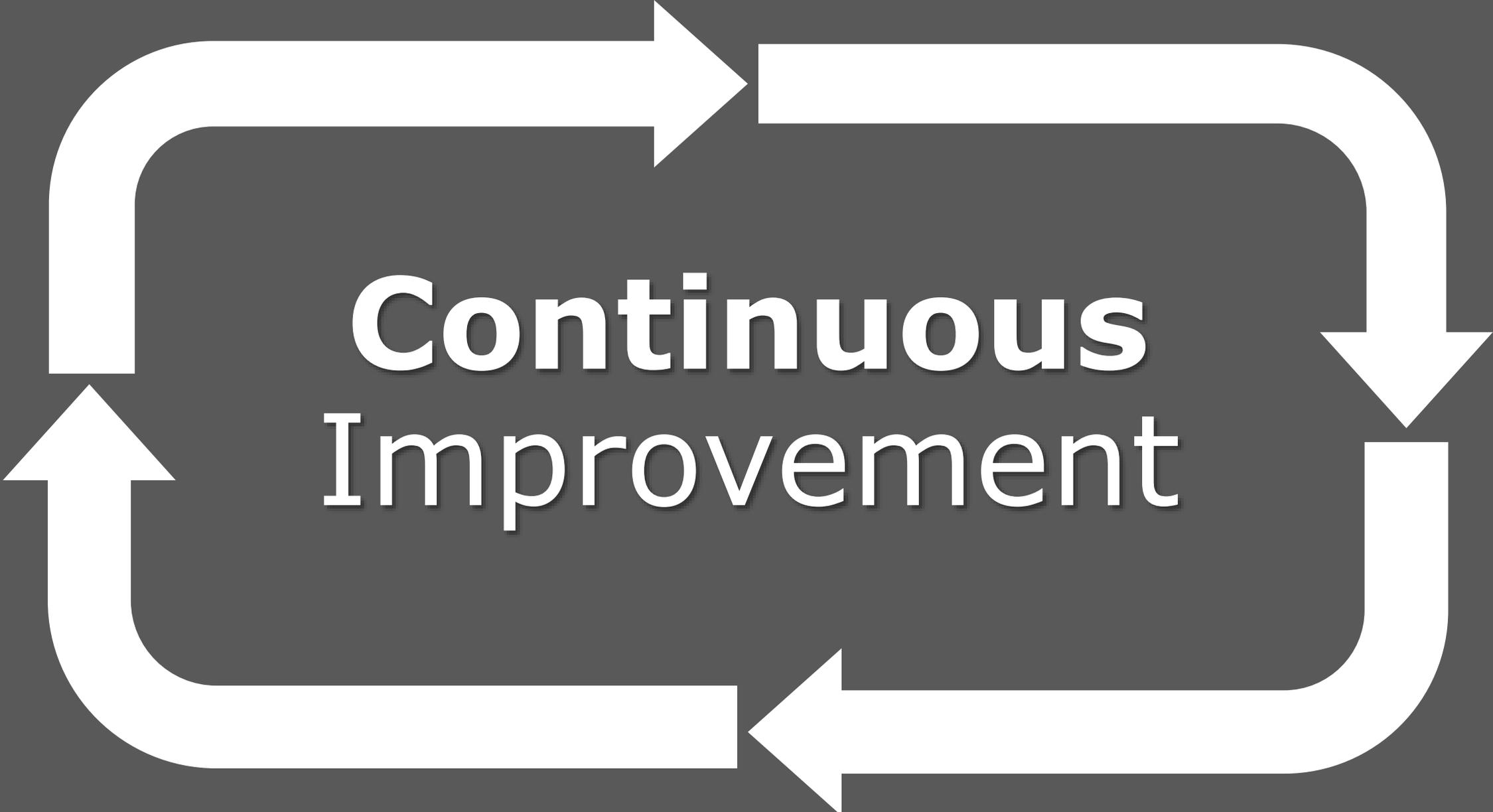




The User Experience of Game Development Tools



GDC
EUROPE

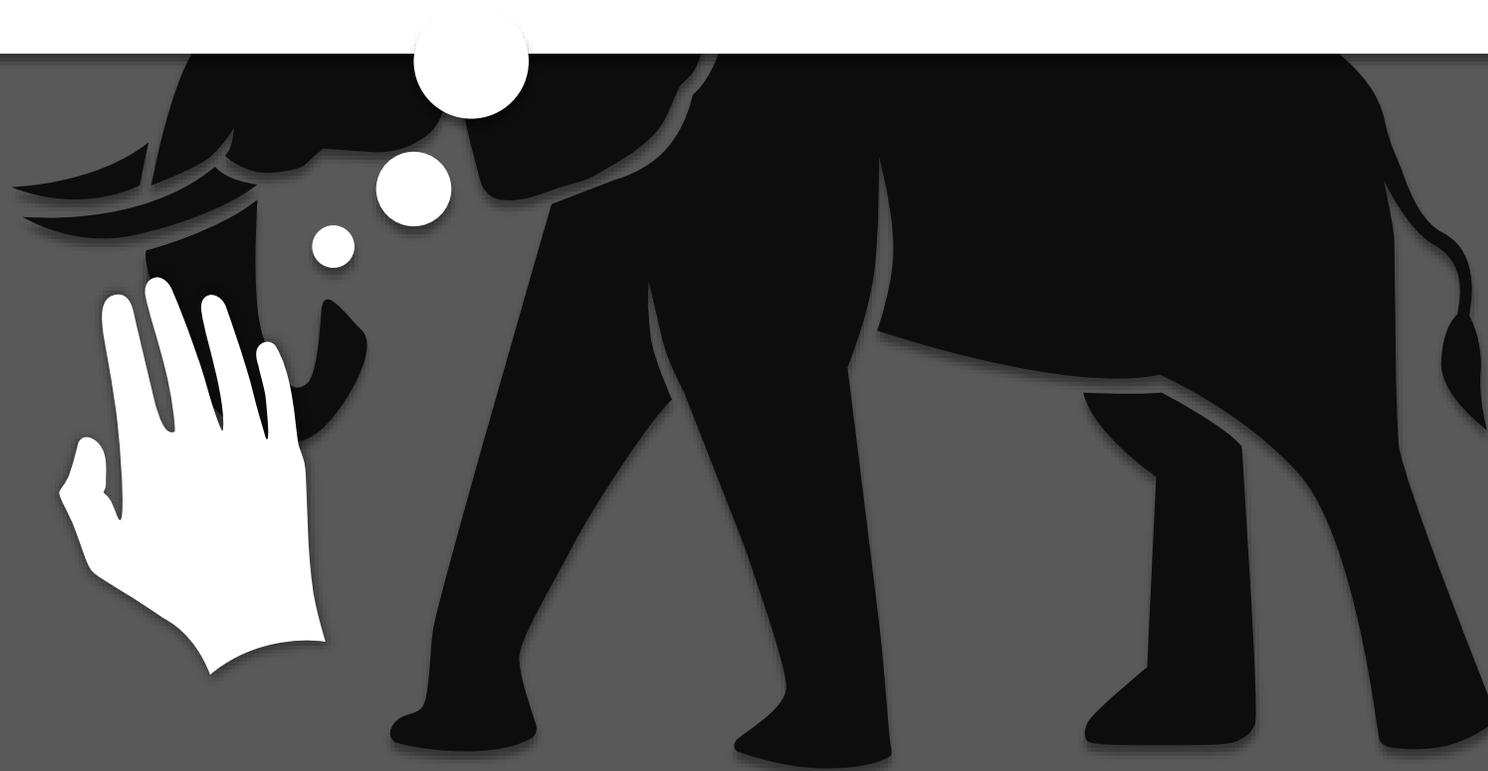


**Continuous
Improvement**

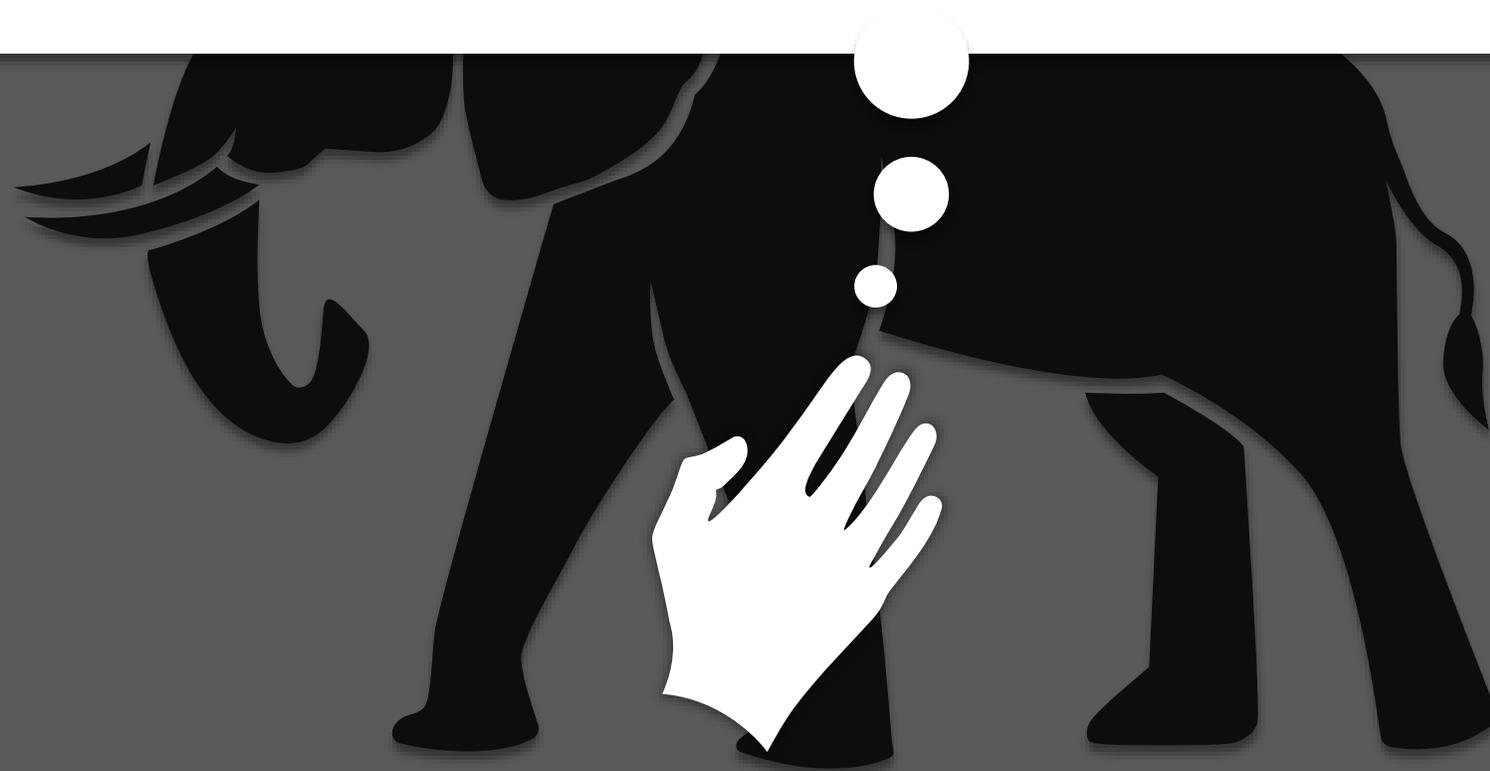
衆瞽
摸象之圖



Snake



Tree



Rope





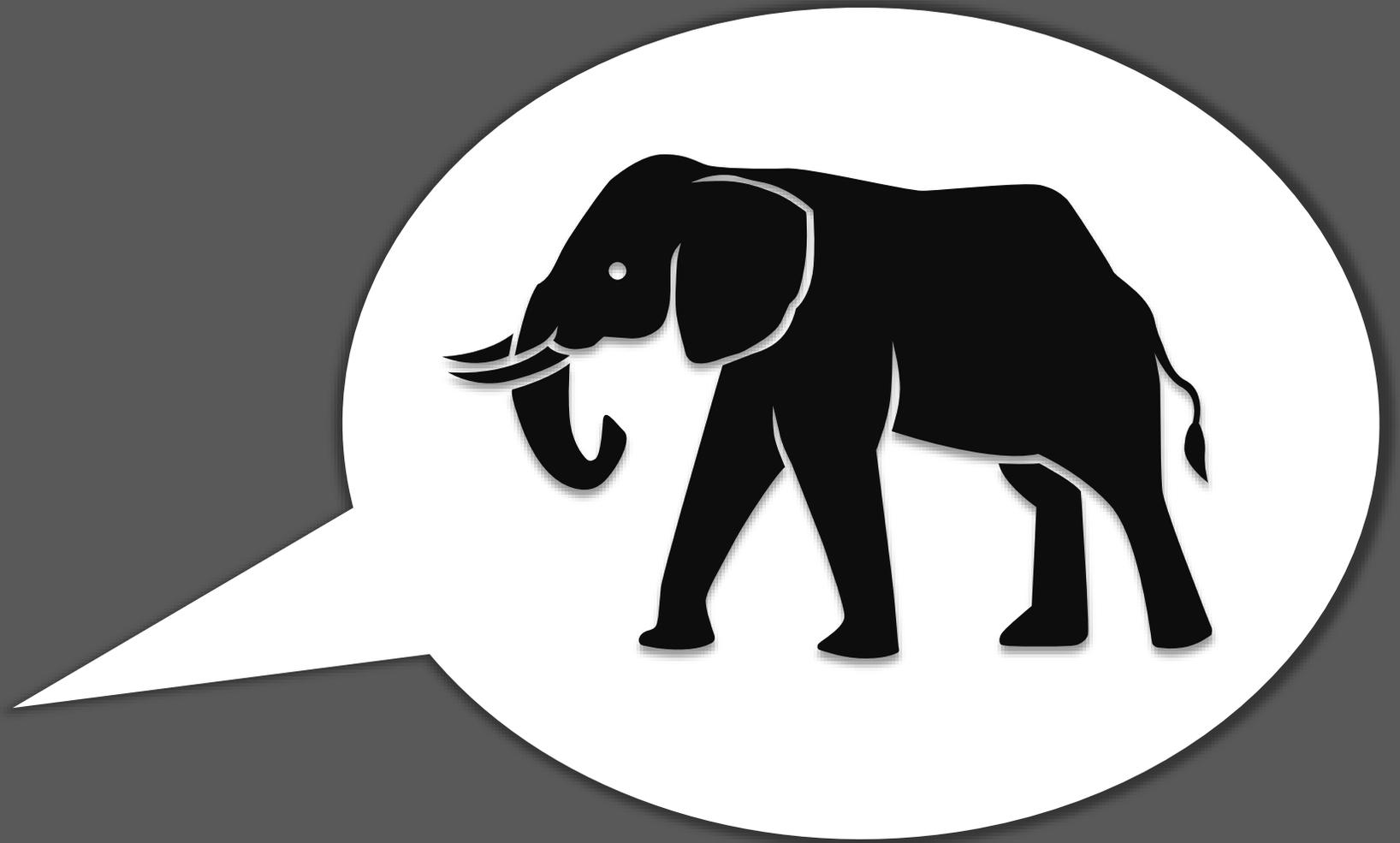
Snake!

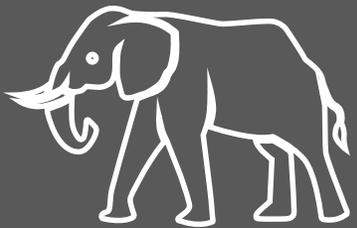
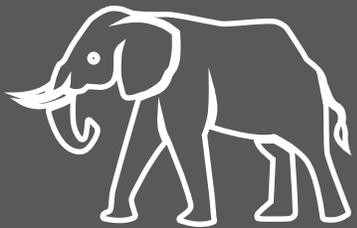
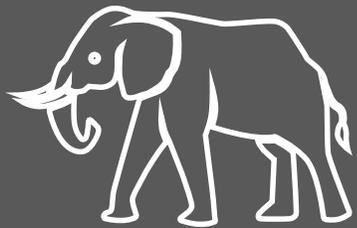


Tree!

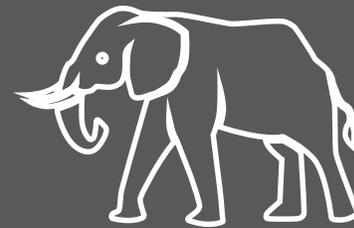
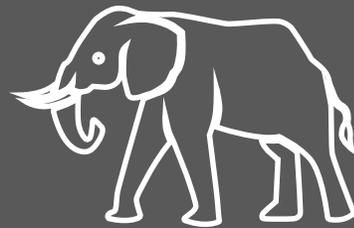
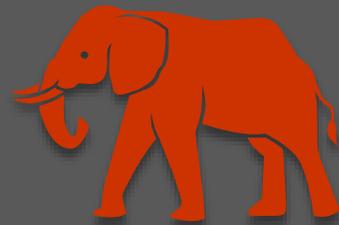


Rope!

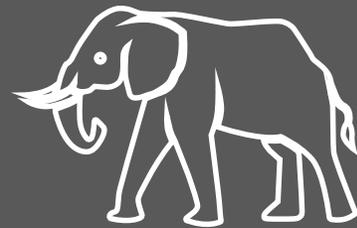
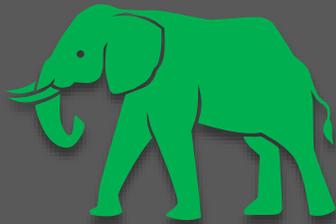
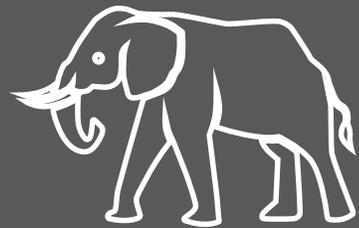




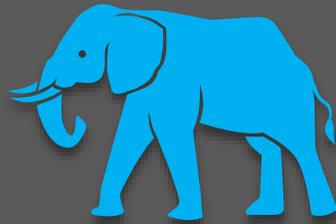
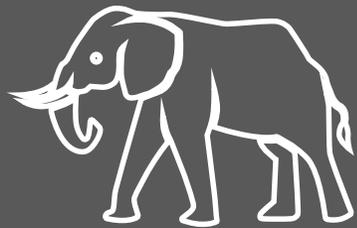
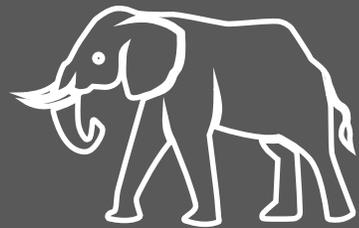
Who are we building
this for?

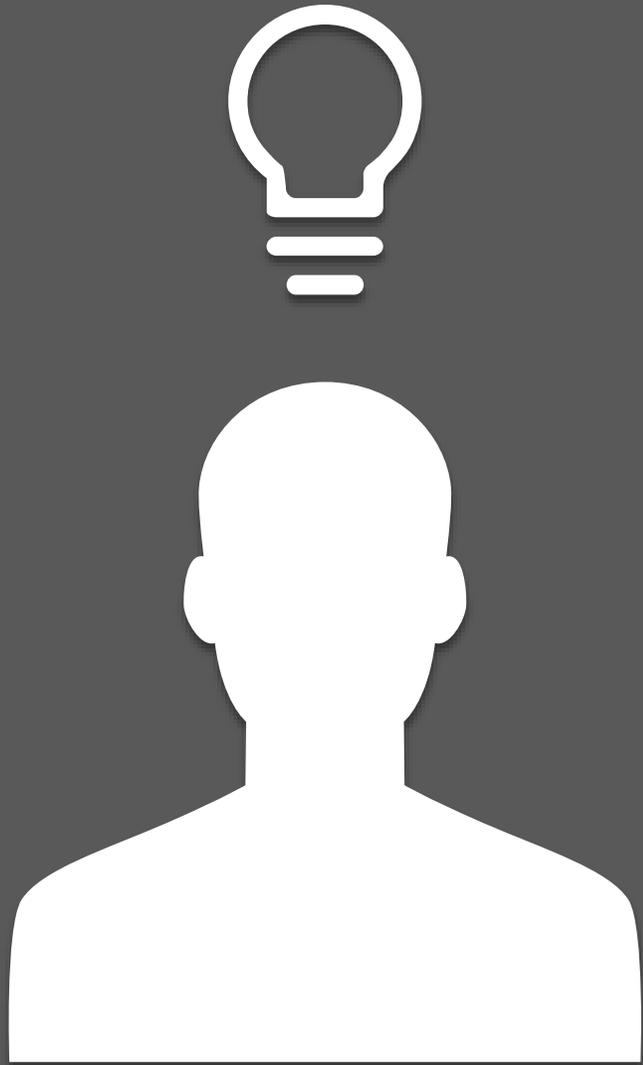


How does the interface work?

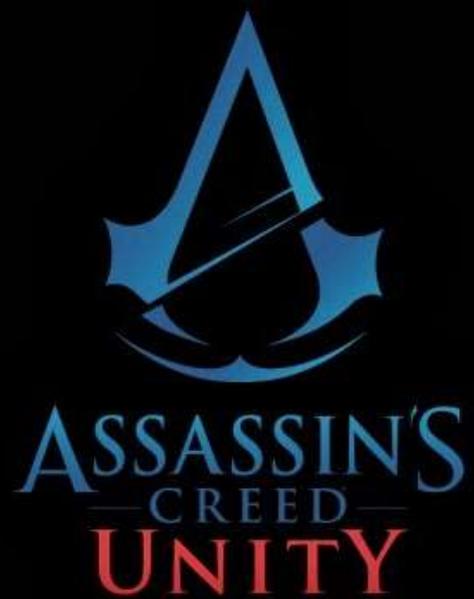


What is it like to use?





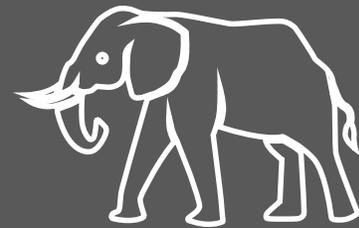
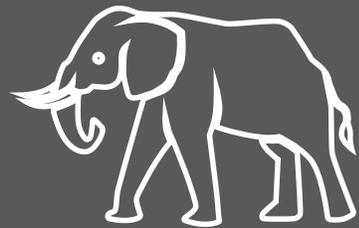
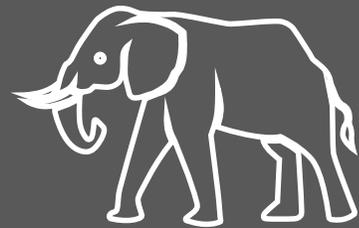
**Tips that
anyone
can use**



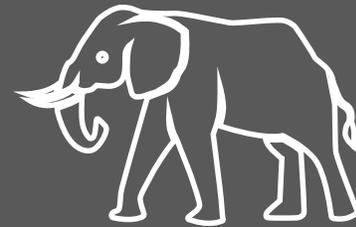
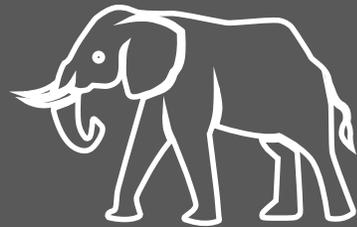
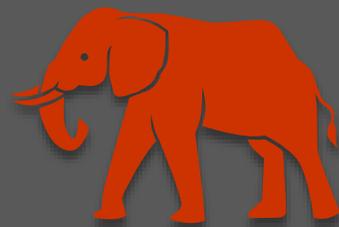


**UX
Experts
&
Tools
Team**

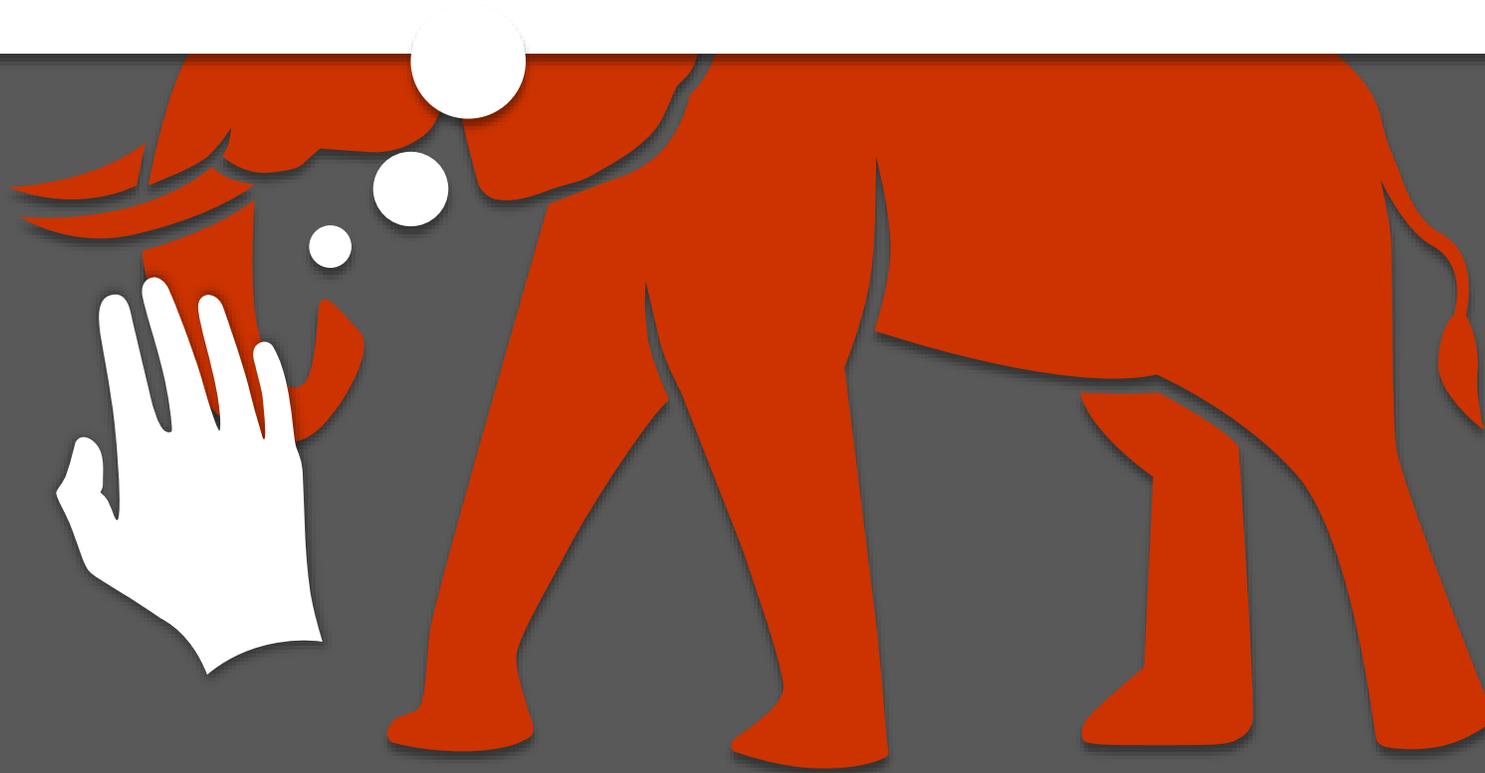
Let's begin...



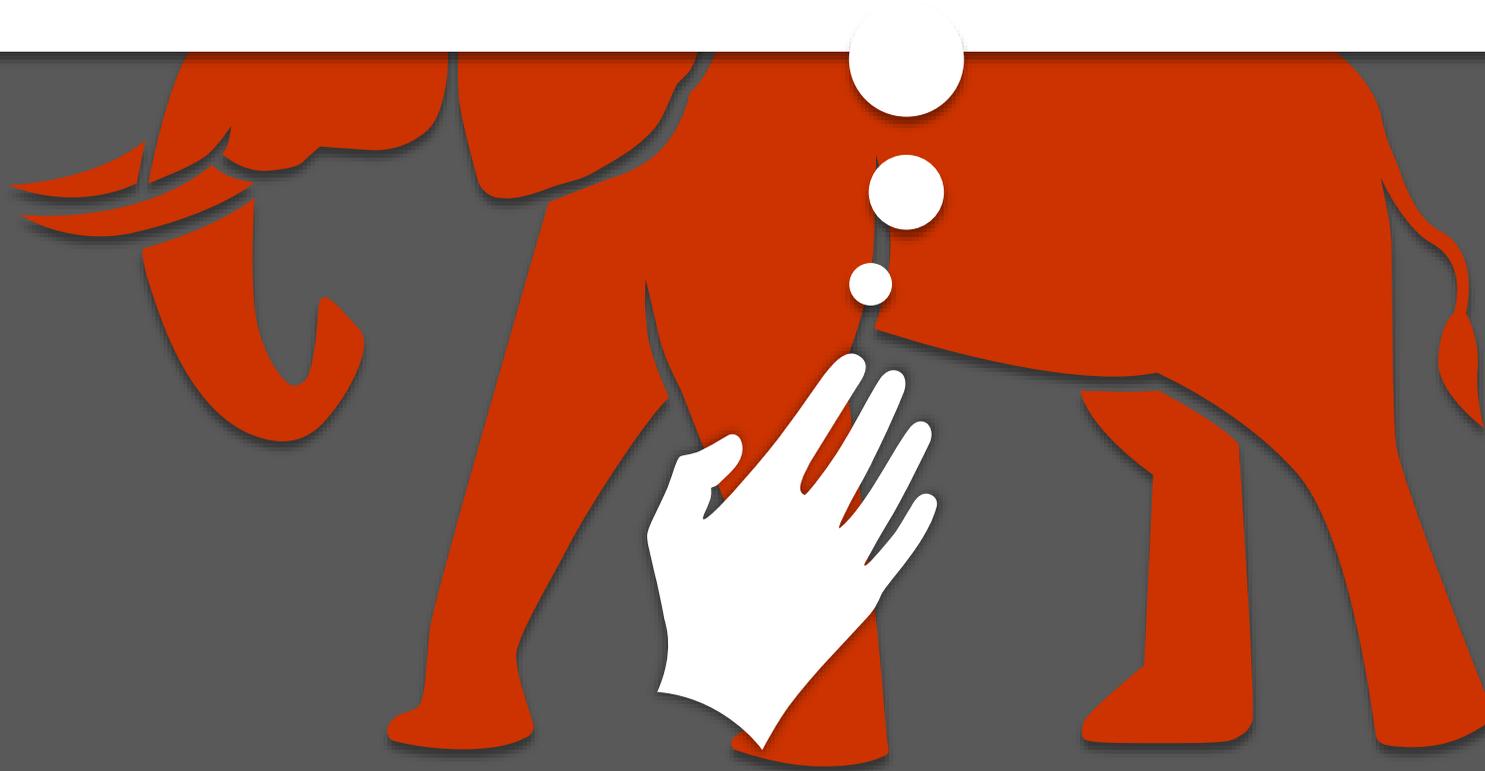
Who are we building
this for?



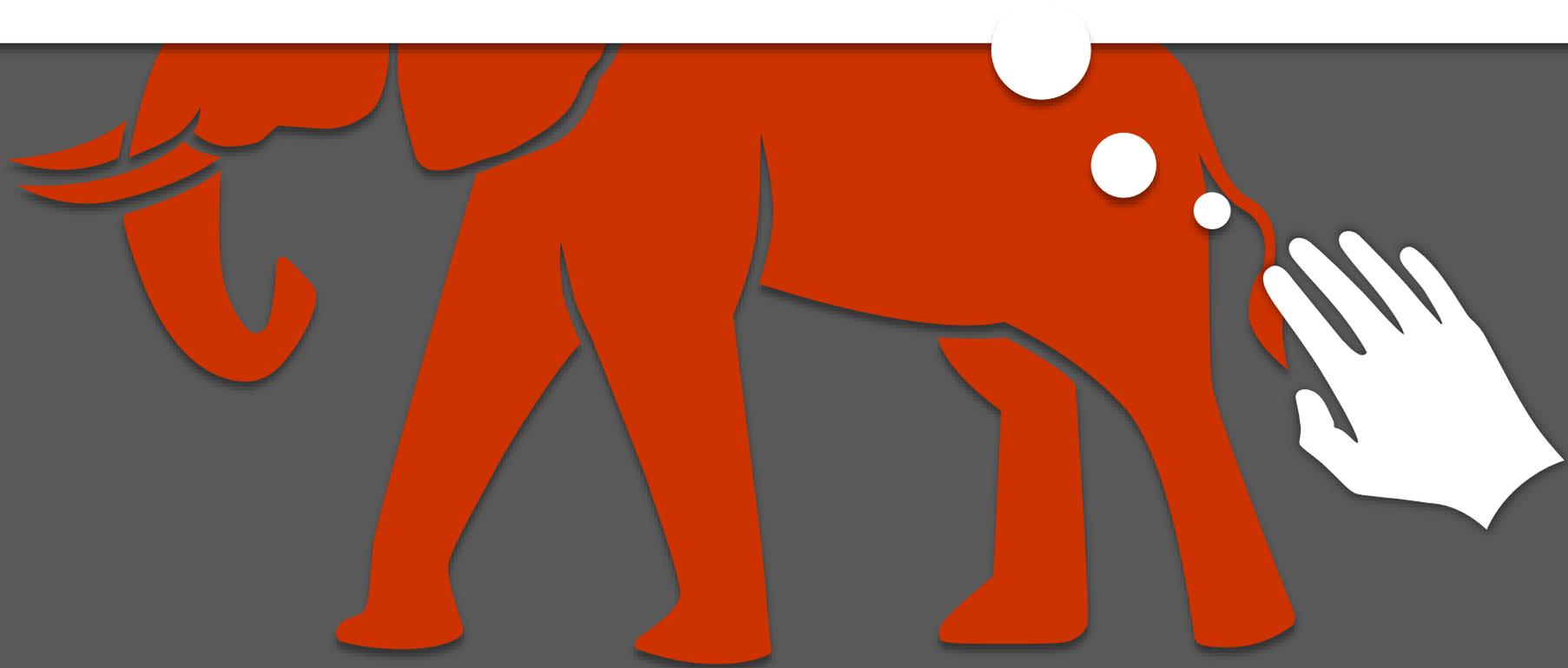
Beginner & Artistic



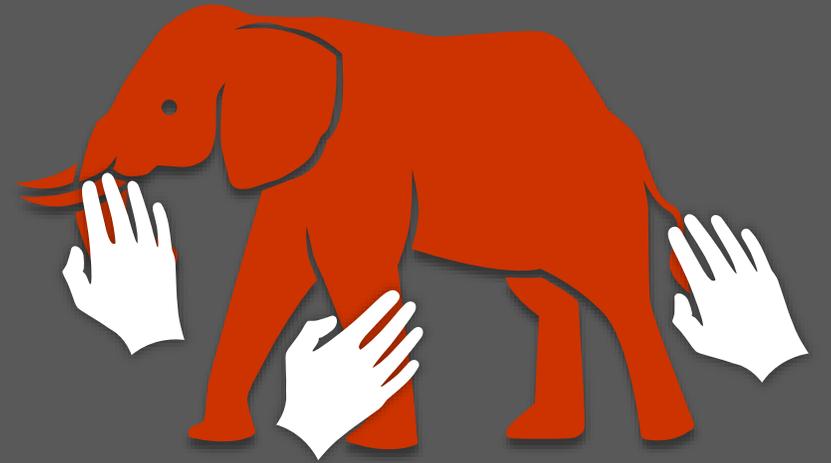
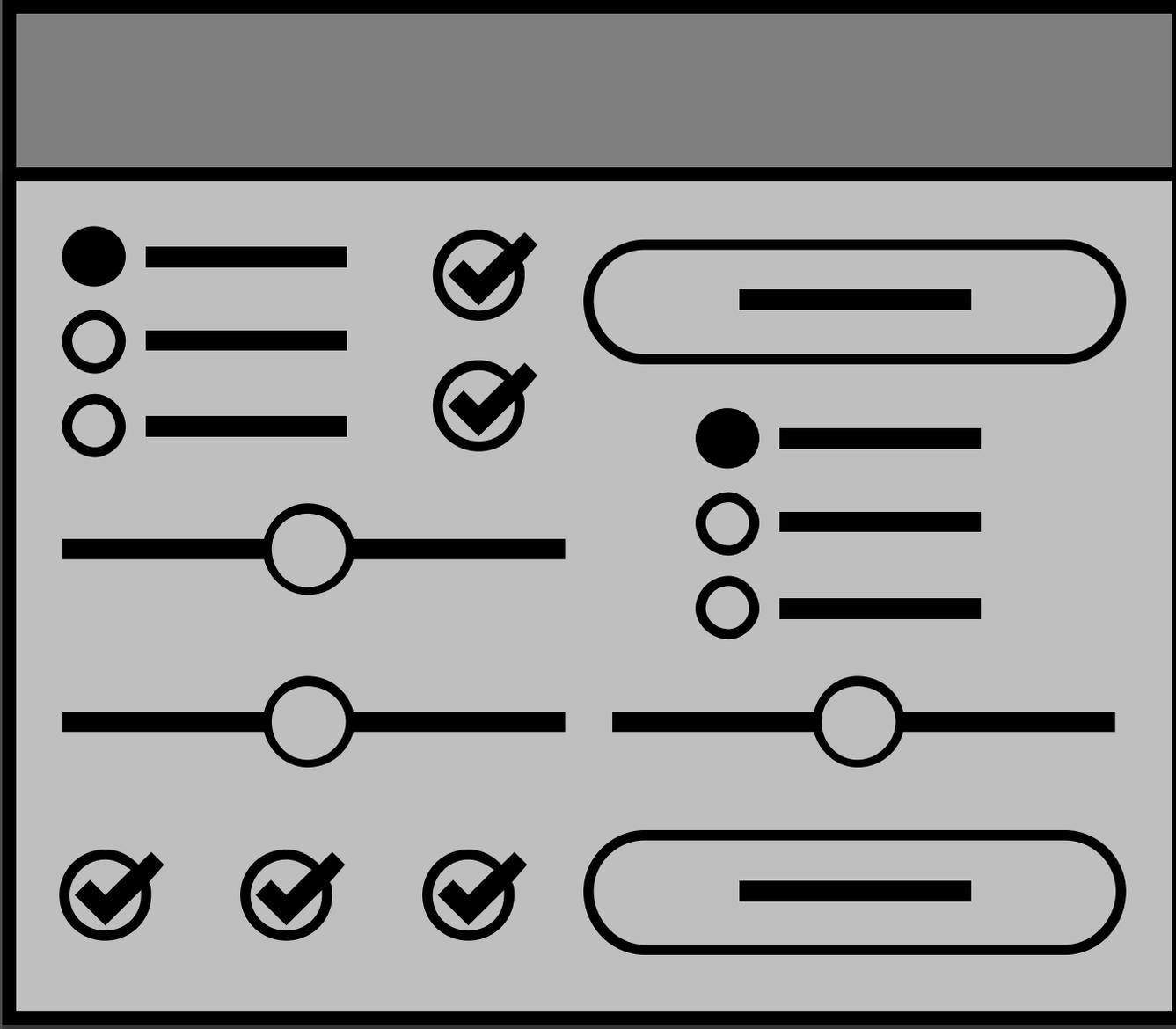
Intermediate & Multi- disciplined



Power User & Technical



“When we design
for **everyone**”



Do one thing
really well

More features



better

iRiver H300

Apple iPod

Media Formats

FM Tuner

USB On-The-Go

A-B Loop Button

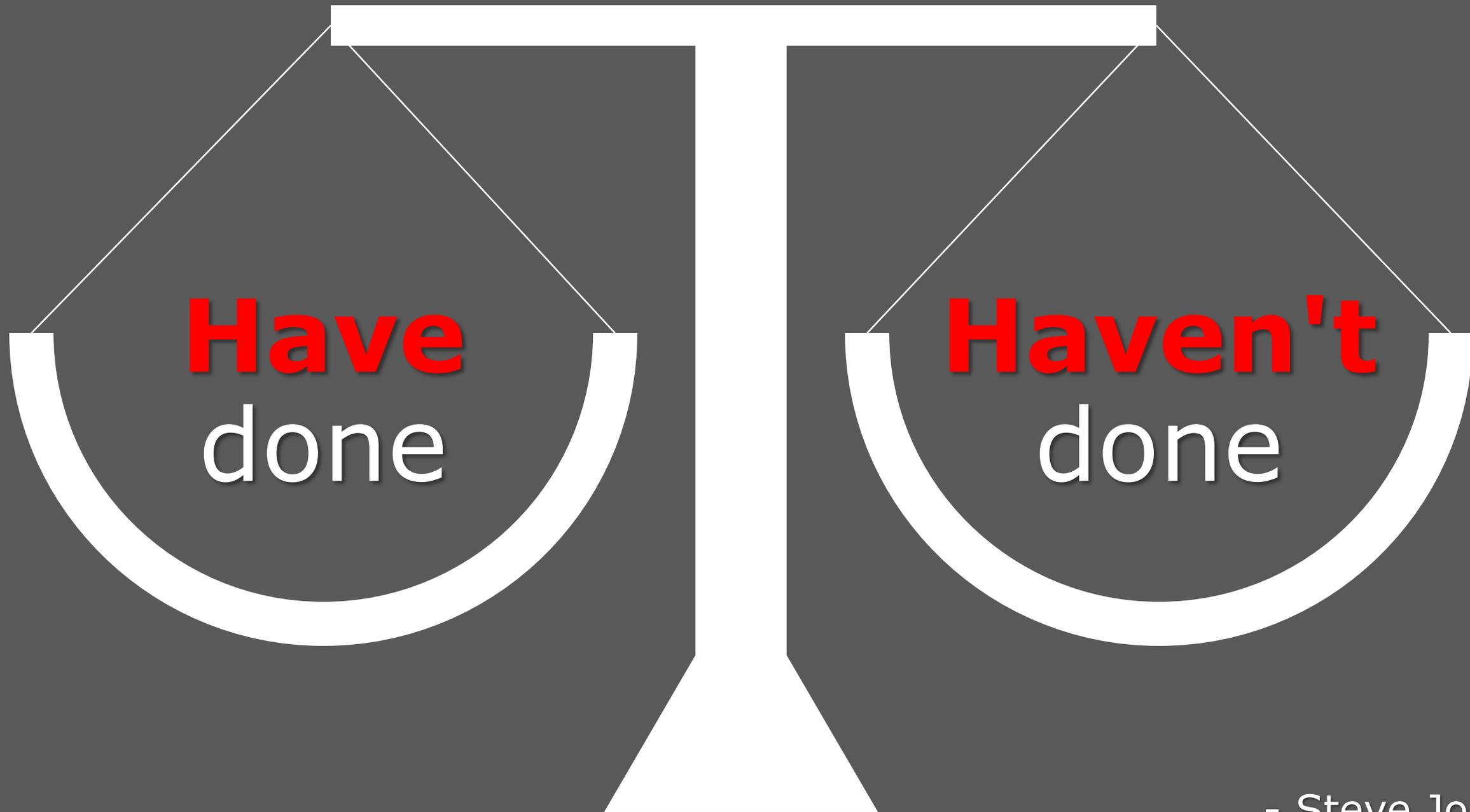
Two Headphone Jacks

Voice Recording

View Text Files

Display



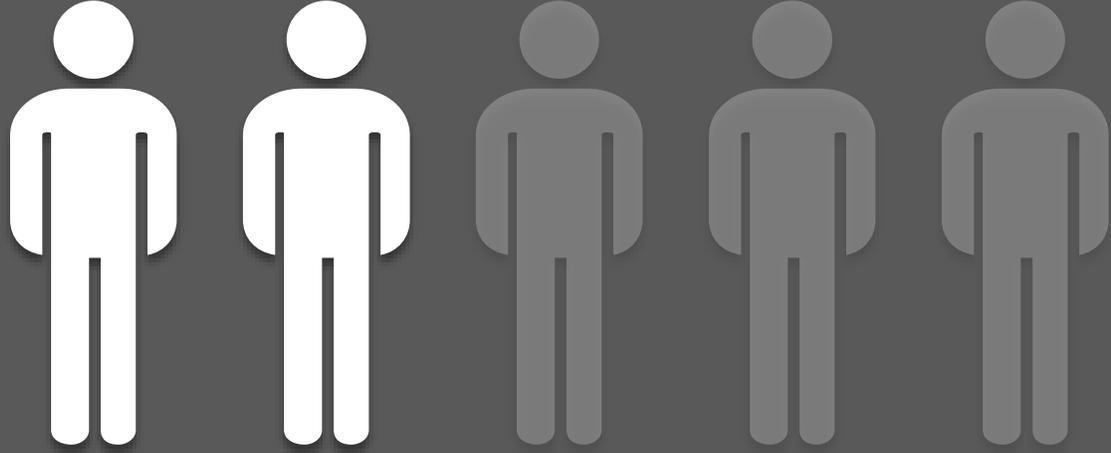


- Steve Jobs

“How am I
going to fit
all of these
features?”

Asking the
wrong question

“Are these
the right
features?”

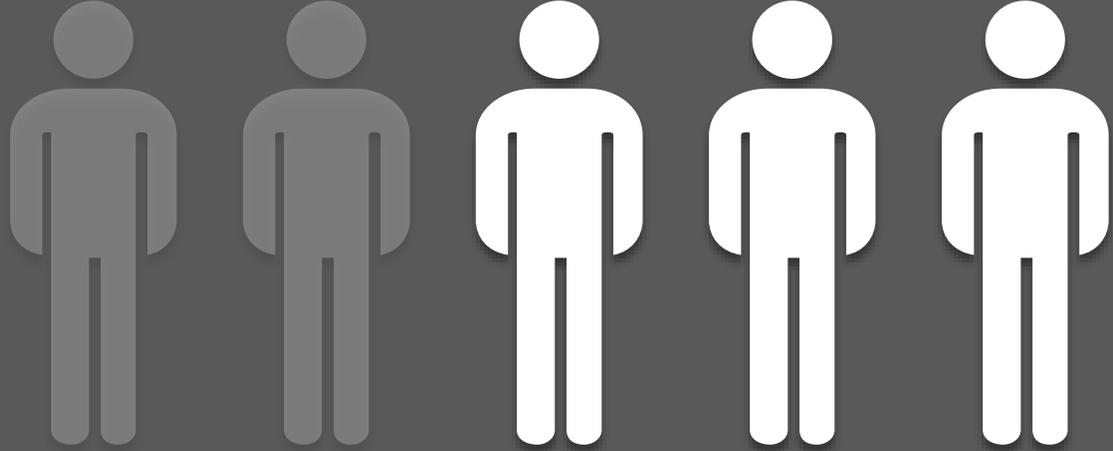


10 minutes per
hour

2 users

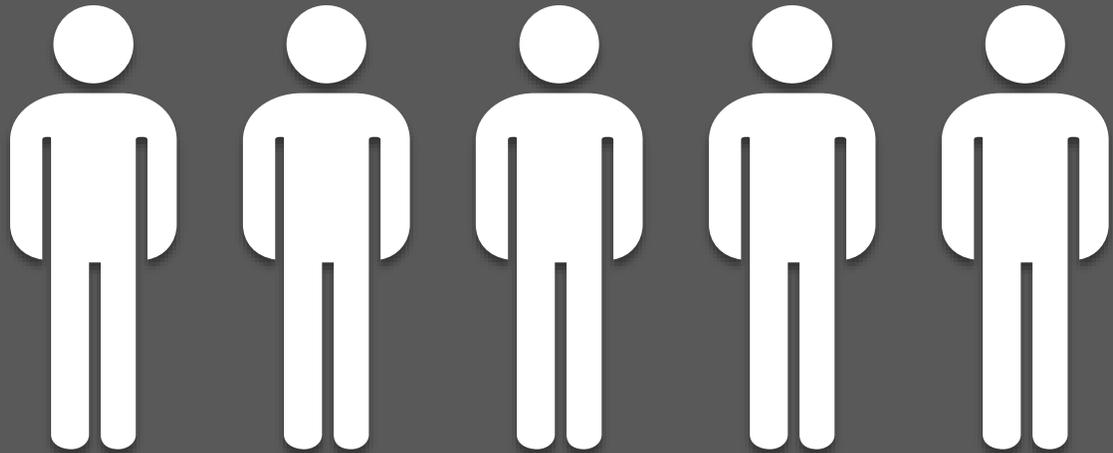


**160 minutes
per day**



5 minutes per
hour

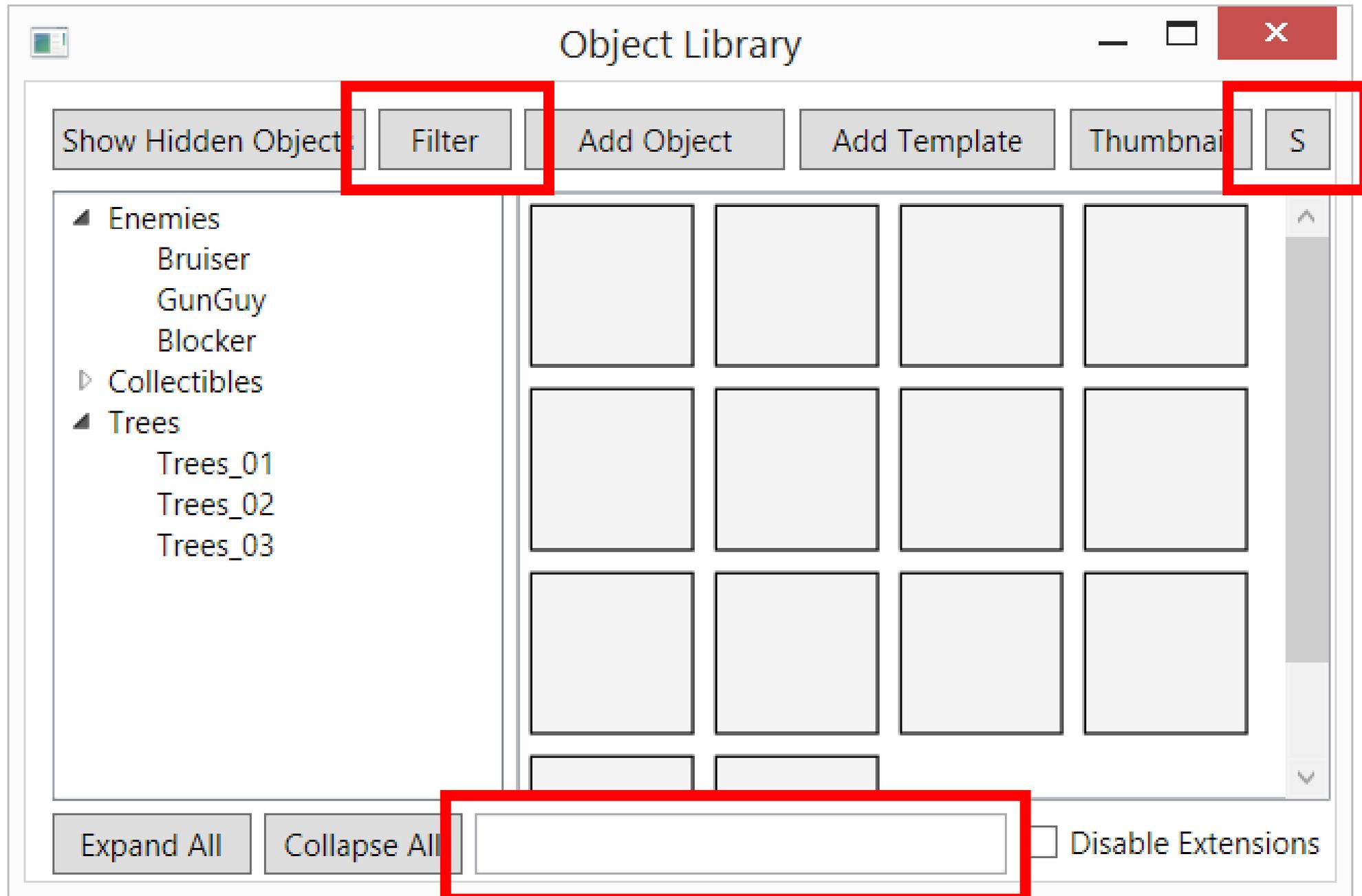
8 users

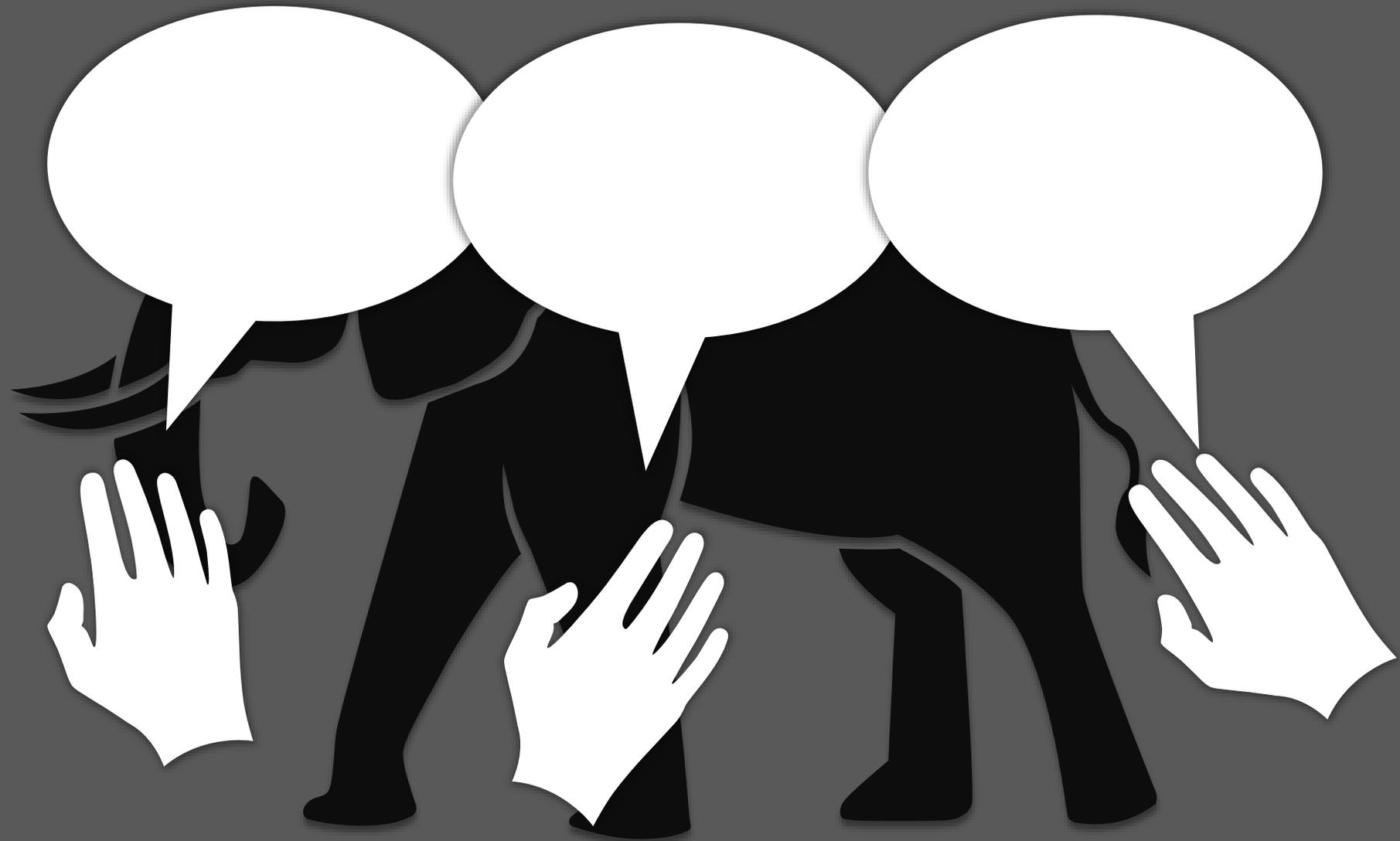


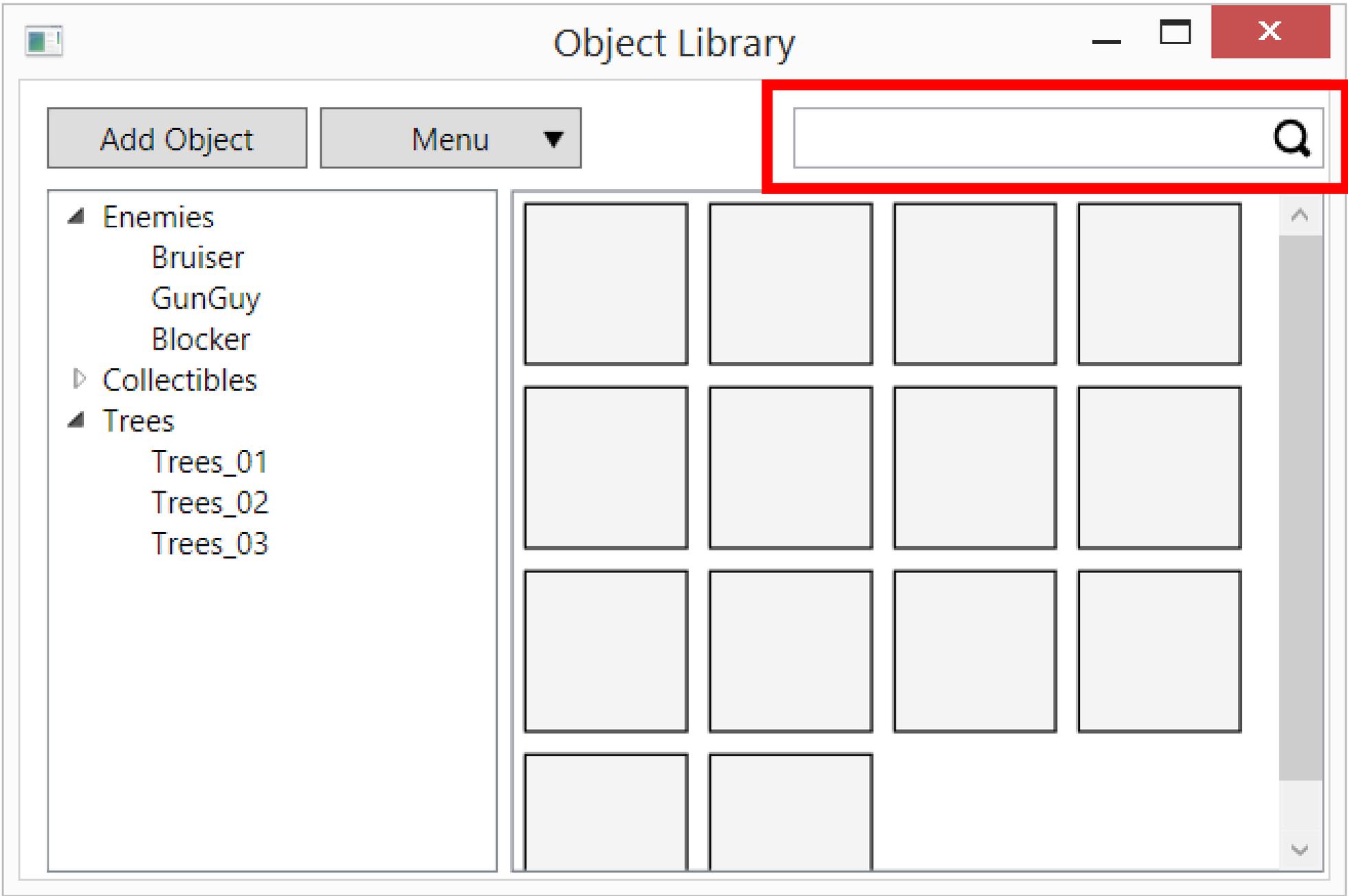
**320 minutes
per day**

Audience Participation









Add Object

Disable Extensions

Collapse All

Expand All

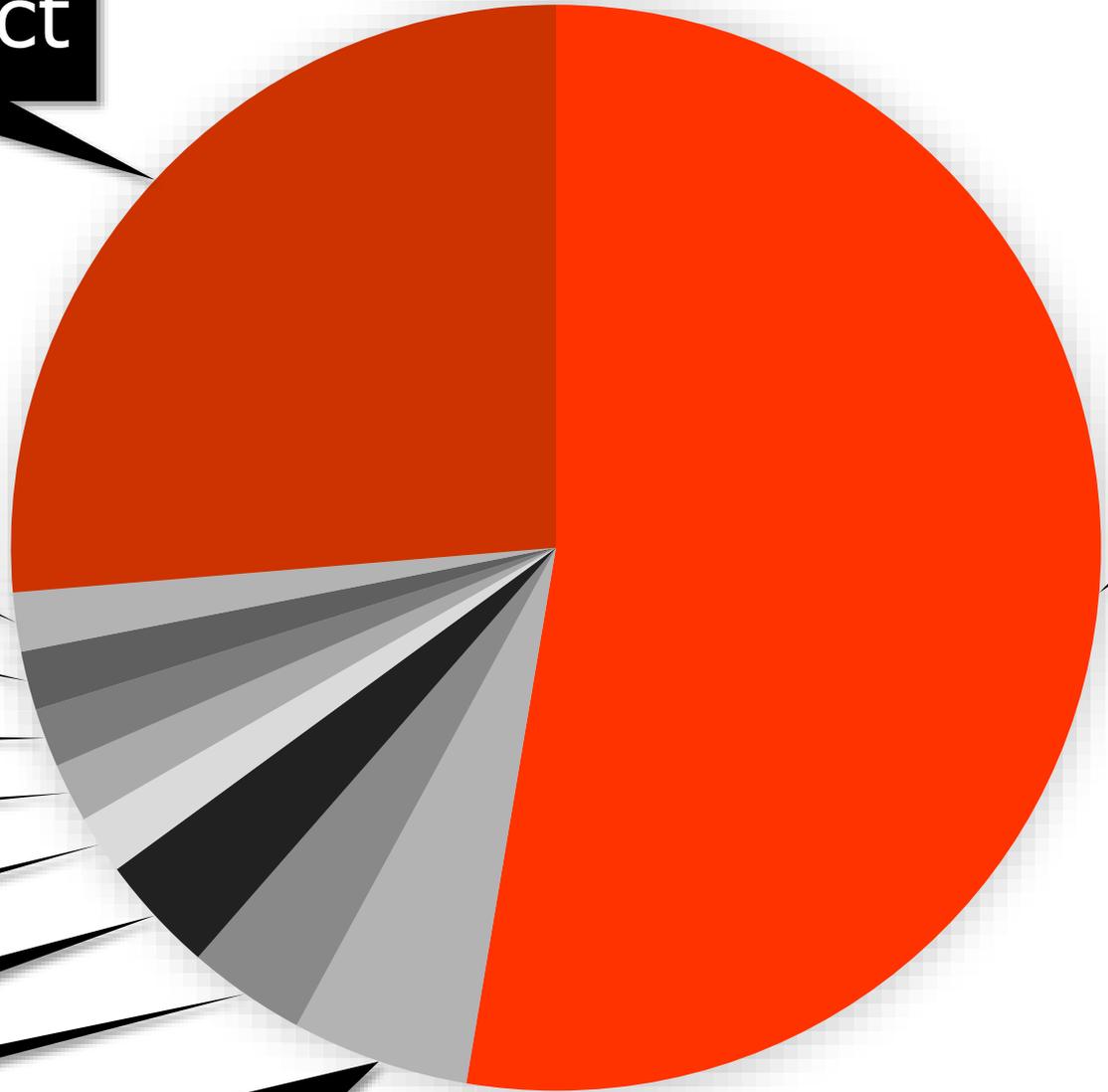
Small

Thumbnail

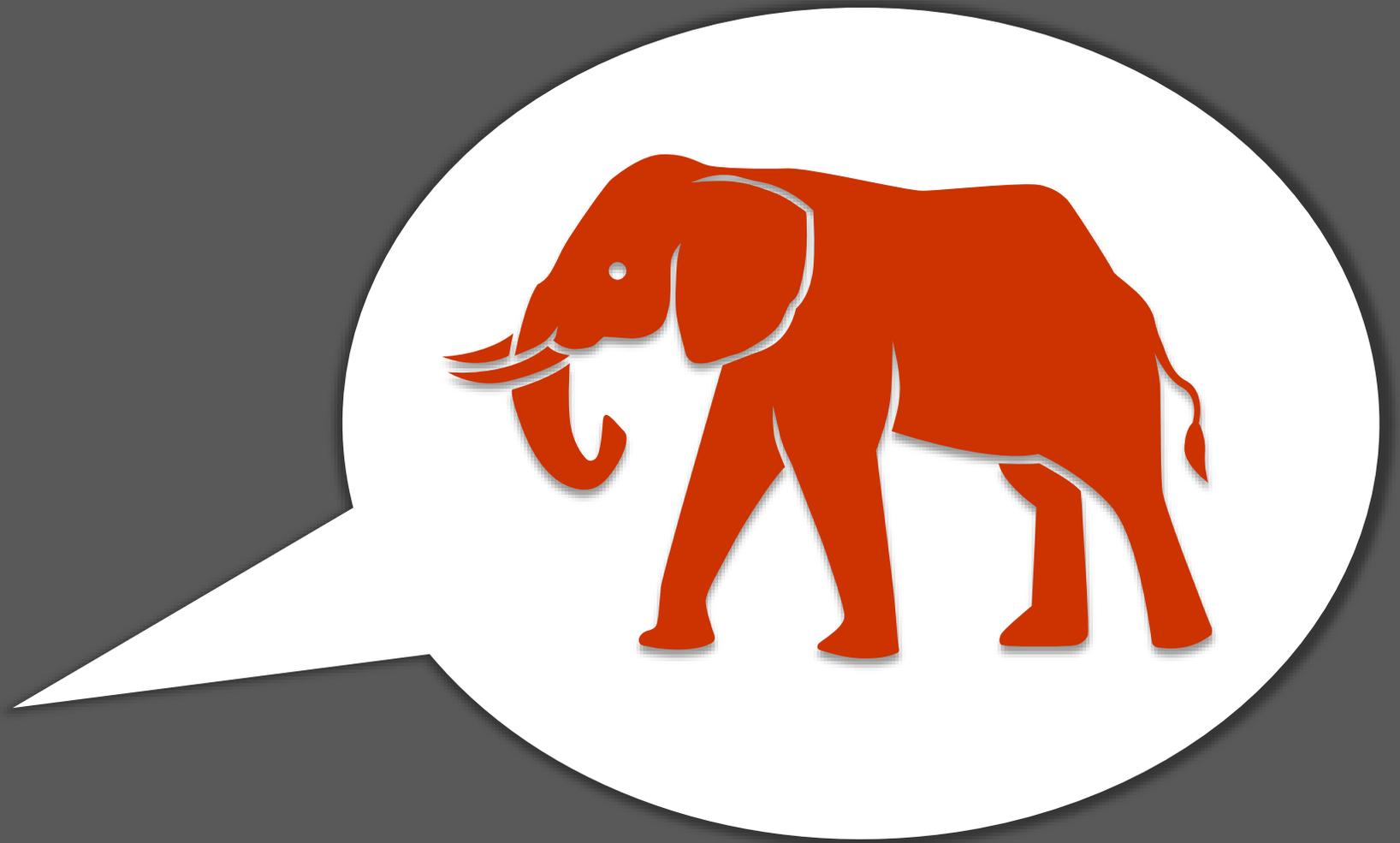
Filter

Show Hidden

Add Template



Search

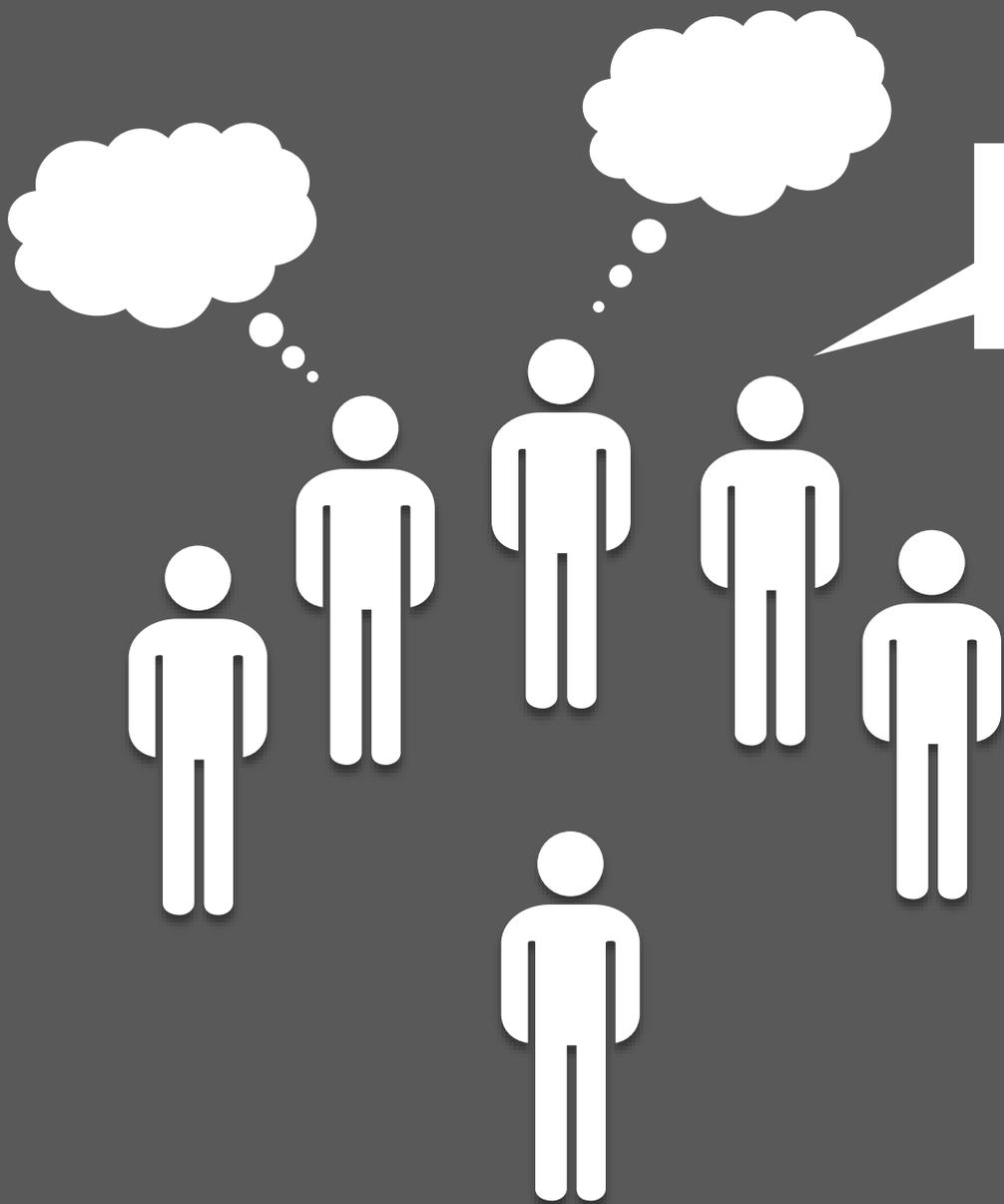


Don't listen to users...

- Jakob Nielsen

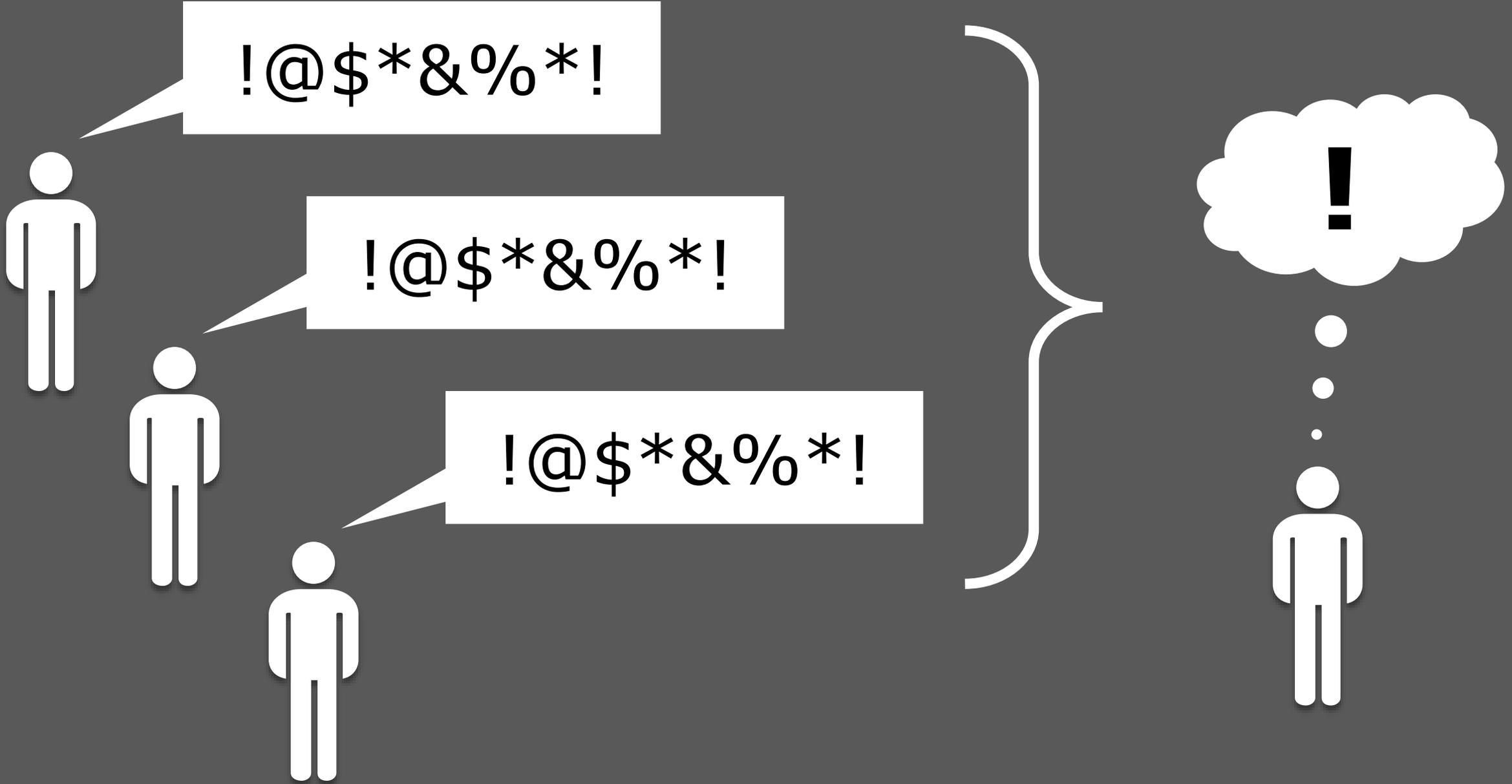
To really understand
what users do,
**go to their desks
and watch them work**
instead of doing
focus groups and surveys



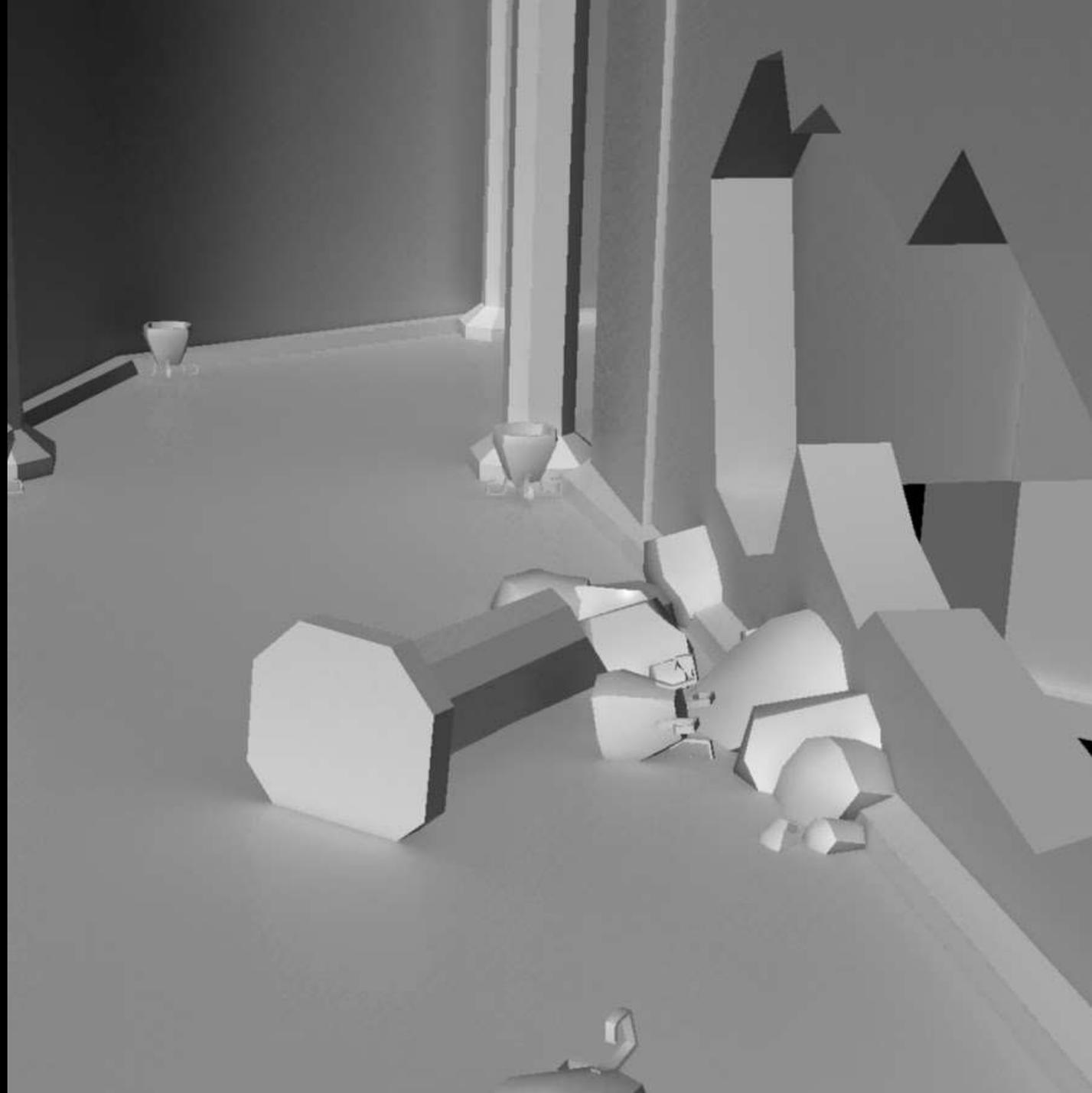


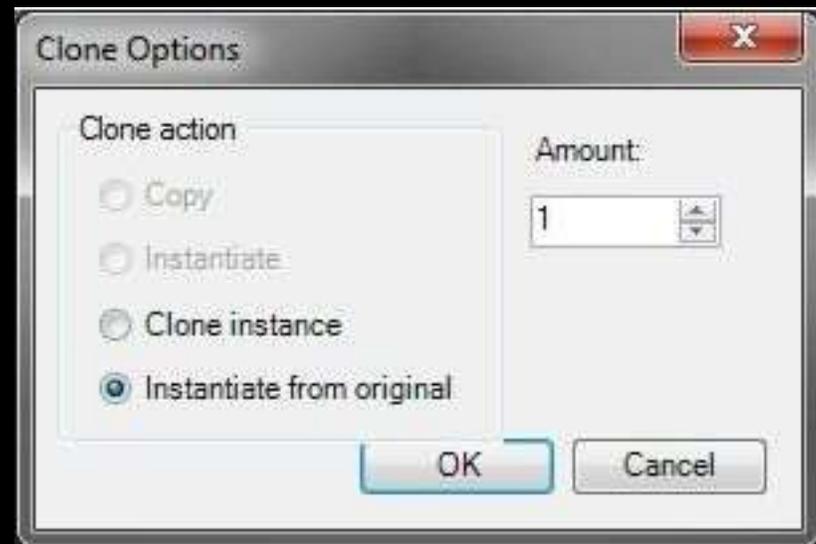
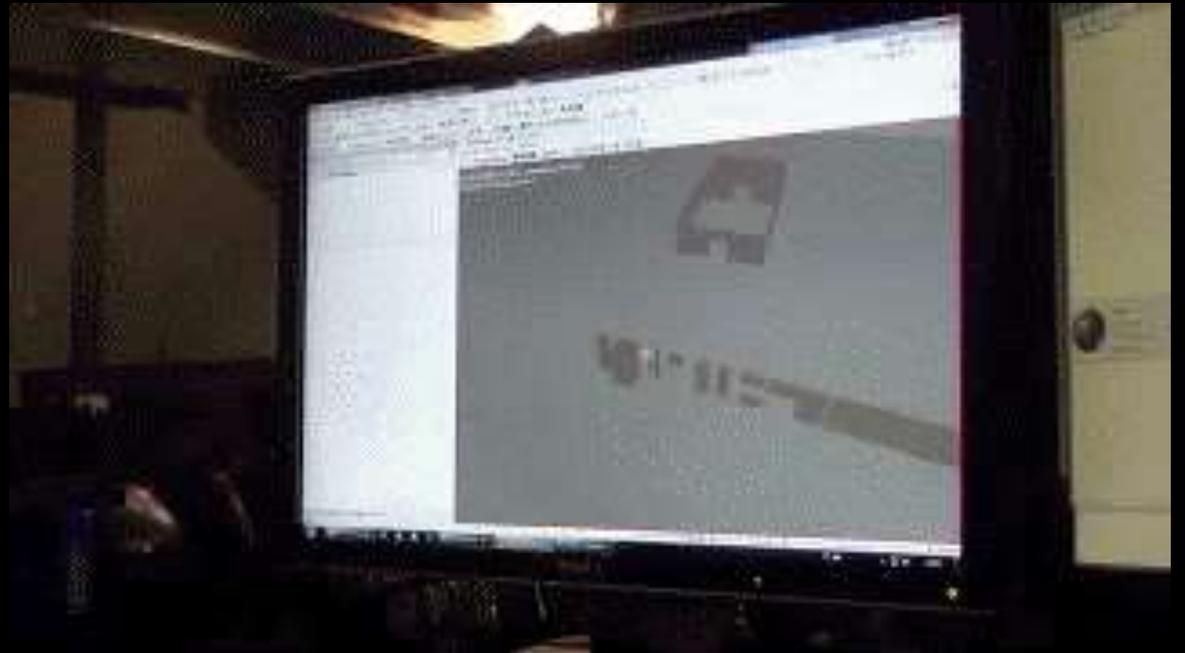
!@*\$&%*!











5 dialog boxes
per minute

5 Level Designers

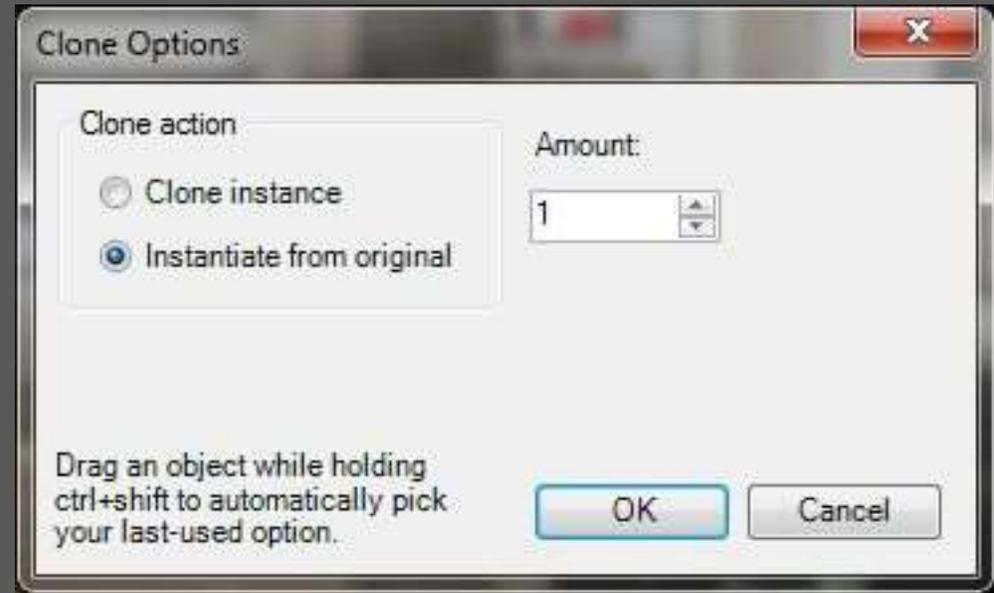
Grey-box **4 hours**
per day

1,250 dialog boxes
per day

Average **3 seconds**

7+ man months
per year





Intern Programmer

1/2 day

Knowing who the
majority of users are
and the
tasks they perform
most often



gives you the biggest ROI when

prioritizing features





R6 Installer
File Edit Help

 **Currently installed Anvil version: N/A**
Click Install to install Anvil version V971

To install a different build, click [More Packages](#).

[Release Notes V971](#)

Fixed Issues

Issue	Fixed by	Changelist	Summary
OSB-39145	aturcotte	471120	Angel - SyncTag doesn't get mirrored when animation is mirrored
OSB-44404	mlheureux	471048	[3C]Player is able to open car doors from the opposite side of the car
OSB-44072	gserafino	470968	[prog MP] in coop we need a better way to identify local player pawn in domino
OSB-28749	guillaume.riby	470965	[Animation] IDLE - Explosion Death
OSB-27804	guillaume.riby	470965	[Animation] RUN - Explosion Death
OSB-44475	jcauthier	470885	[Unspawn Operator]Object Variable connect with this operator should be able to browse squads list
OSB-44247	jcauthier	470885	DOMINO - Operators that use SquadDescs as Variables end up empty
OSB-		470838	Darkness with Ambient Occlusion makes multiple objects disappear together

[More Packages](#) [Custom Install...](#) [Install](#)



R6 Installer Appearance — ×

[Options](#) [Dependencies](#) [Help](#)

Currently installed Anvil build : V1640

Current Approved Anvil Build
V1642.1

 **INSTALL**

[More Packages](#) [Custom Install](#) [Close](#)



More Packages

Custom Install

Current Approved Anvil Build
V1642.1



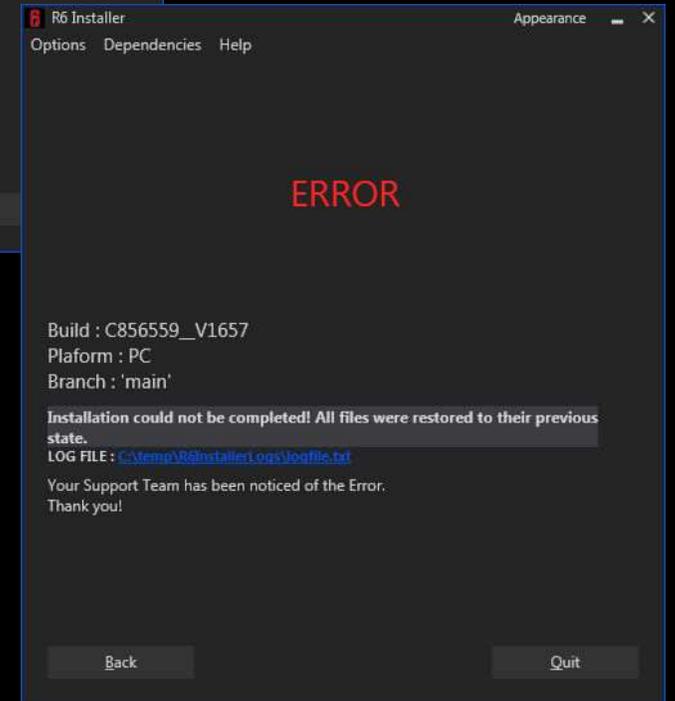
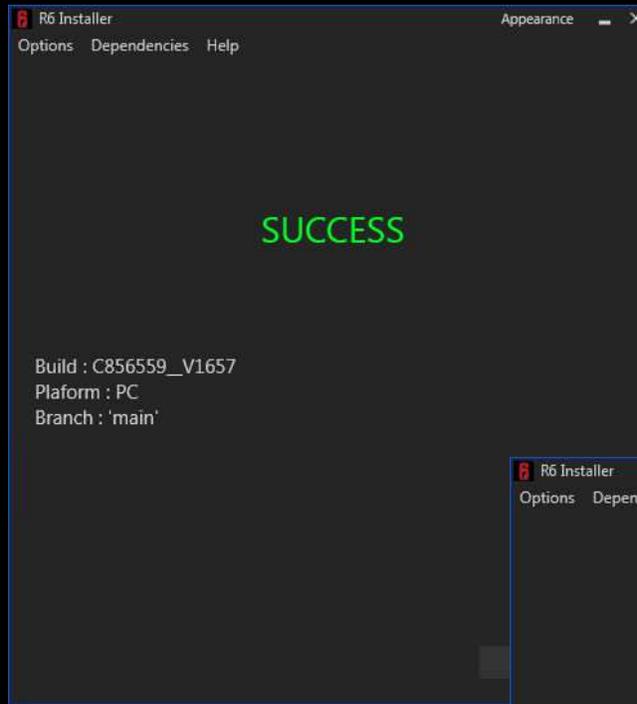
INSTALL

More Packages

Custom Install

Close



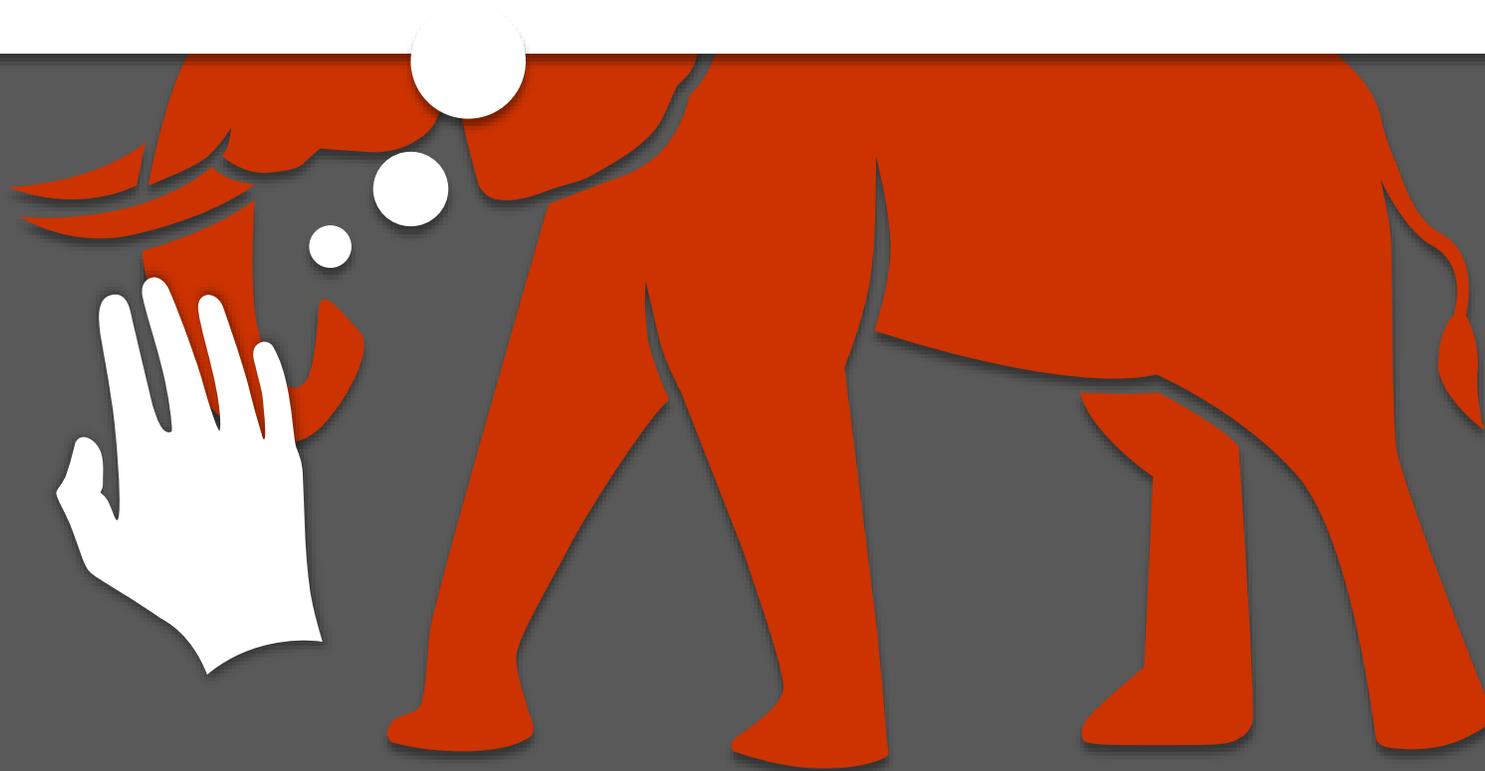


You're **not going to**
make everybody happy

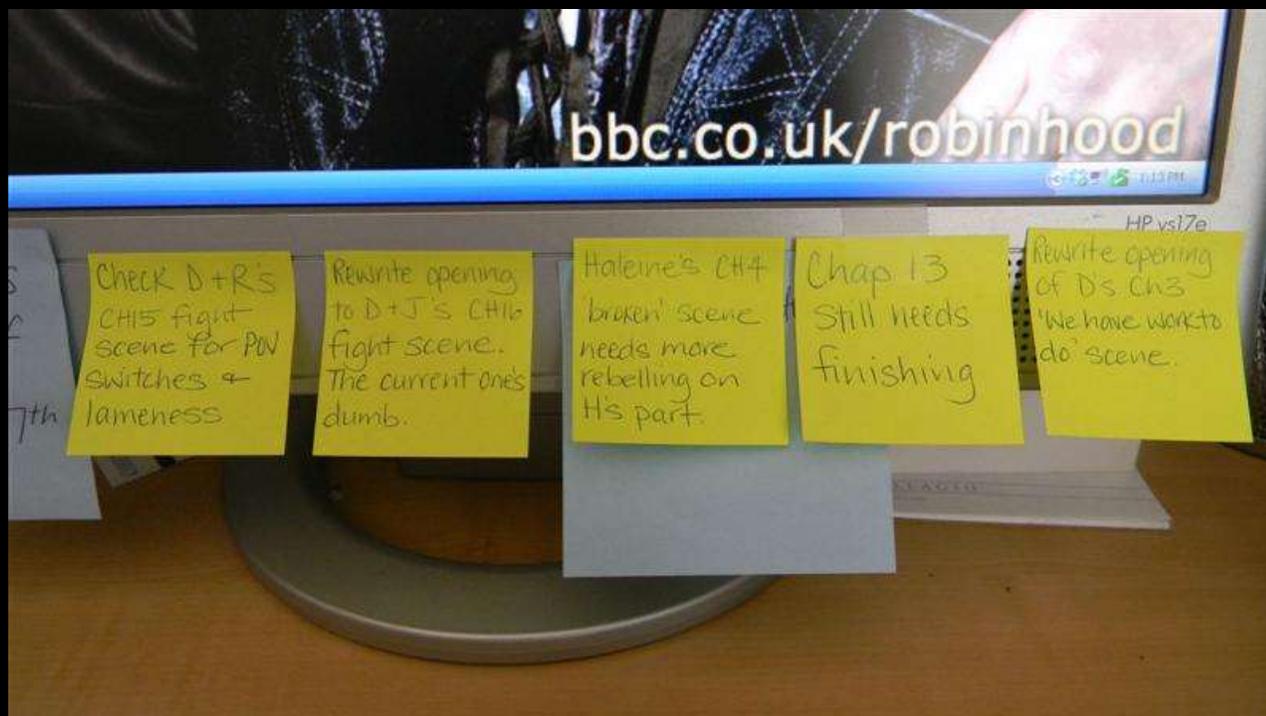
~~No~~

Not yet

“...there probably isn't
a better way...”









Emu-horn 23

ai-lbp - uni |
ai-vehicle-info |
ai-chasespawn |
showavailable .. |
ai-show-npc |
toggle-debug-id |

exec wpanmmo

Chase-search / chase-i
chase-detail / ~~Chase~~ CAMP
Helper GP



```
acadiePCa -password a1234567 -silentmode -matchkey acadiePCa -nomouse -nomultipad -norumble -RenderProfile_Fullscreen 0 -invasionsAlwaysOn -no
```

```
:MaterialResource: "graphics\_materials\adamdudley-m-0412201263313114.material.bin" (0x926BF  
:MaterialResource: "graphics\_materials\adamdudley-m-0512201248651828.material.bin" (0xD77D0  
:MaterialResource: "graphics\_materials\adamdudley-m-0312201251137567.material.bin" (0xCC6C9  
:MaterialResource: "graphics\_materials\adamdudley-m-0412201263313114.material.bin" (0x926BF  
:MaterialResource: "graphics\_materials\adamdudley-m-0512201248651828.material.bin" (0xD77D0  
:MaterialResource: "graphics\_materials\adamdudley-m-0312201251137567.material.bin" (0xCC6C9  
:MaterialResource: "graphics\_materials\adamdudley-m-0412201263313114.material.bin" (0x926BF  
:MaterialResource: "graphics\_materials\adamdudley-m-0512201248651828.material.bin" (0xD77D0  
:MaterialResource: "graphics\_materials\adamdudley-m-0312201251137567.material.bin" (0xCC6C9
```

```
ifo  
hics\_textures\sky\plane\clouds_01a.d.xbt" should not have split mips (this msg will be cor  
ature)  
hics\_textures\sky\ring\sunnyday_cumulus_b_01.d.xbt" should not have split mips (this msg t  
n the near future)  
hics\_textures\sky\ring\sunset_cirrostratus_b_01.d.xbt" should not have split mips (this me  
n the near future)
```

```
verride //  
// Set to 0 to hide, set to 1 to show  
/ Set to 0 to hide, set to 1 to show  
ble // Set to 0 to deactivate, set to 1 to activate  
verride //  
le // Set to 0 to hide, set to 1 to show
```

```
n-14149|Target:RELEASE|Server:main_21|Sandbox:WDOGS_PC_UAT_X  
0)(Public)(1 Clients)|MKey:acadiepca//windy_city|Mode:SPCampaign(Proposition:Available)(Inv  
s:1111111101  
0]:1|Platform:1|Network:1[wd.acadiePCa]|RdV:1[e0b68c2e-19ae-4893-9293-e1e19b312916][PID:496
```



Ally v1.1.0.5 : localhost

Connect ● Not Connected Host: localhost

Command Buttons Console Variables Debug Kits Teleport OnGameplay Log

Filter:

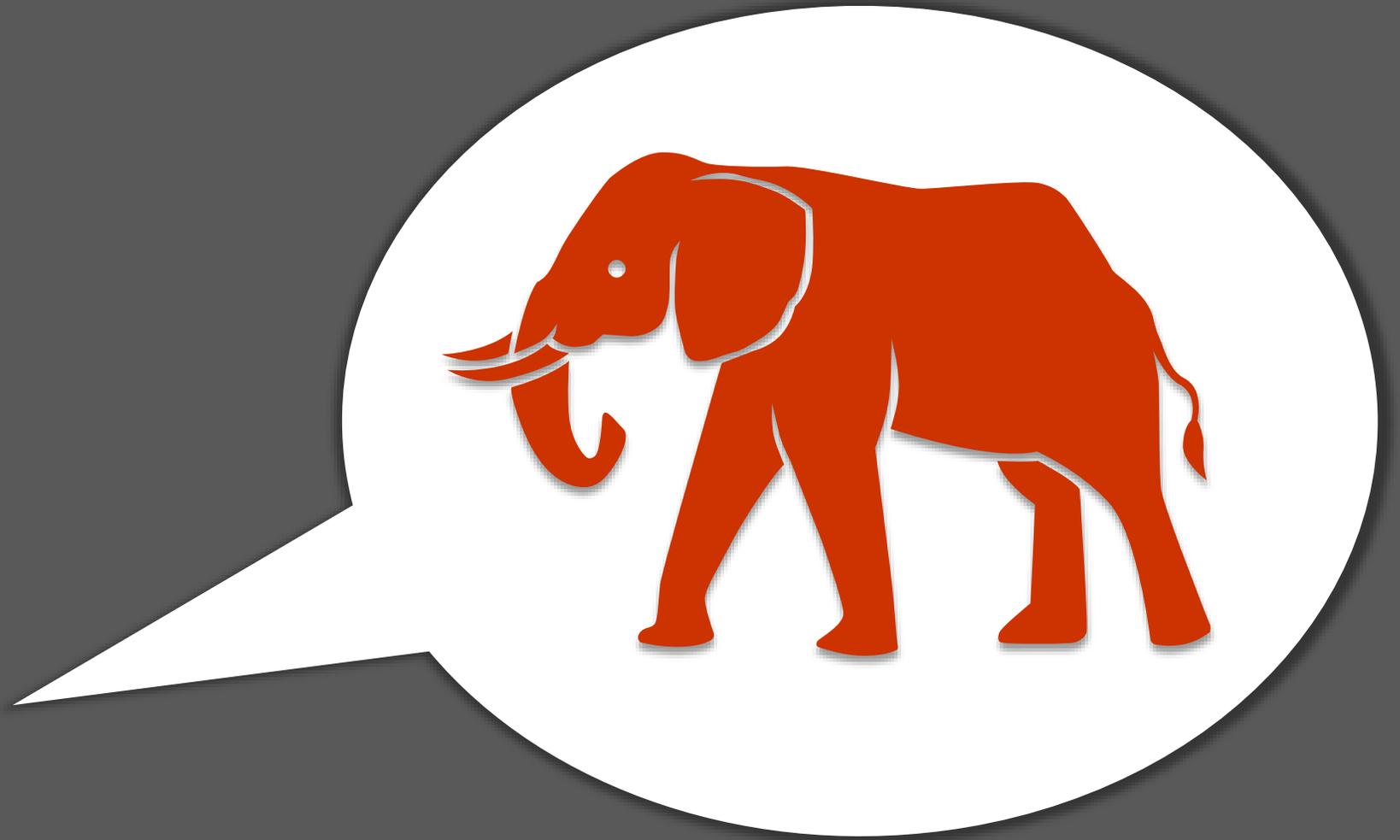
^ Felony

Tout nuit	Tout jour	Tout sans heure	chase debug	Agentlist	Guns
Playerpos	Progression max	Stage 2	Stage 3	Roadnetwork on	Roadnetwork off
Roadblock box	Heat + 110	Heat - 110	Restrict lanes	Chaseinfo	Driving mission
Heli show path	Airfield	Envhour 23	Envhour 12	Grenades/Lure	ShowNPC
Shownpc detail	Offroad off	Speed	Moto	Tires Invincible	Car invincible on
Car invincible off	LKP	felonykill	Suppress chopper	scan circle	Partir A03M03
Vigil + reinforce	raycast onfoot	auto traffic lights	Force spawn amb	Tous les guns	CL 02
HP car civils on	HP car civils off	Add 25 skill			

v Inventory
v Main Missions - Act 1
v Progression
v Spawn Vehicles

Sync Data Make Button Reload Controls Expand All Collapse All

Send



Task Flow



Action (1 second)



Action (2 seconds)



Action (10 seconds)



Action (2 second)



Action (30 seconds)

TOTAL = 45 seconds

Optimize

Remove

Action (1 second)

Action (1 second)

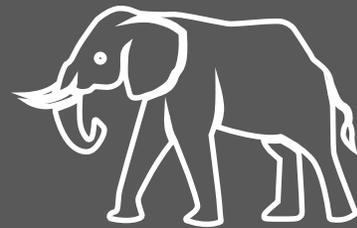
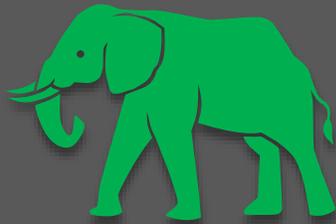
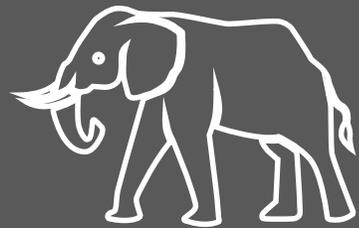
Action (5 seconds)

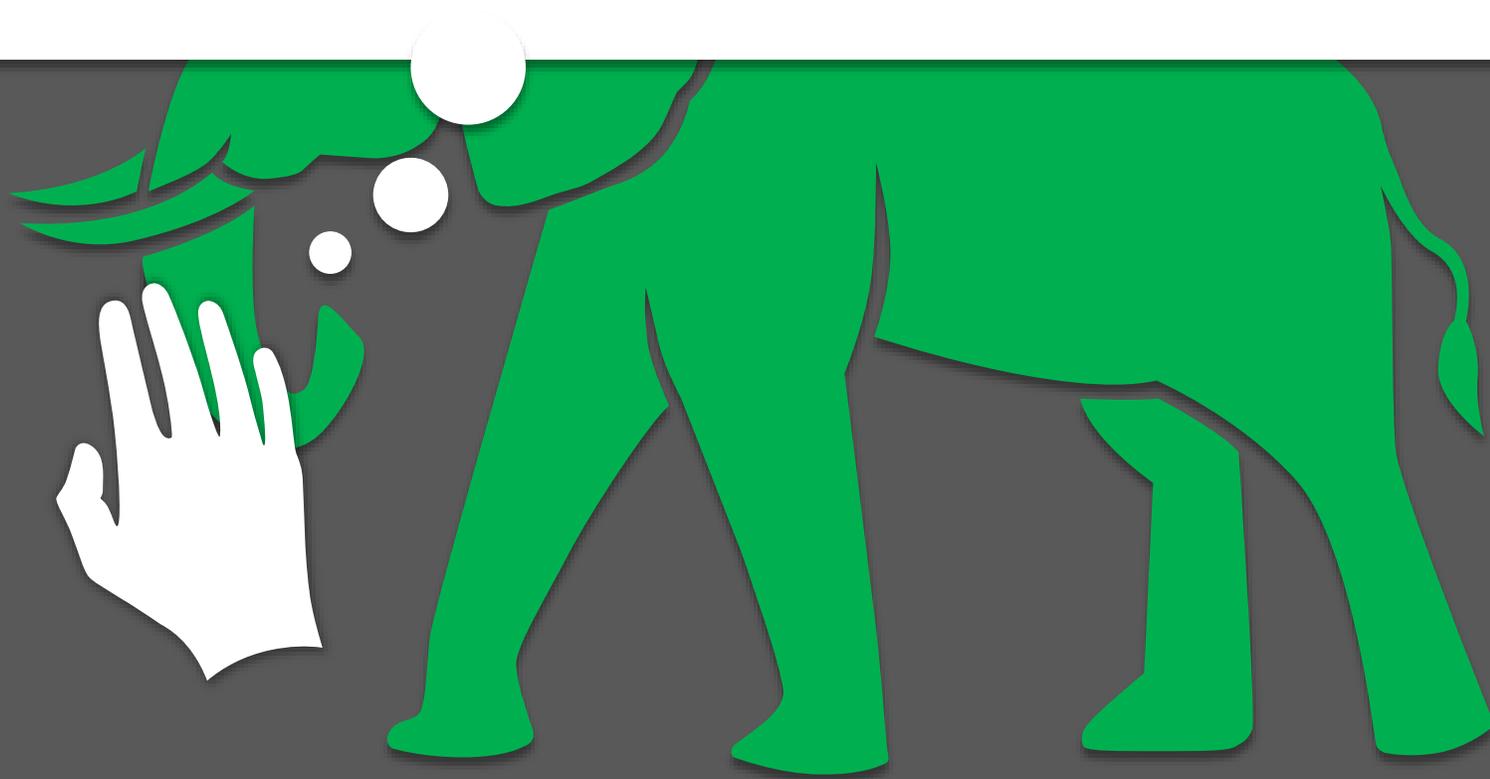
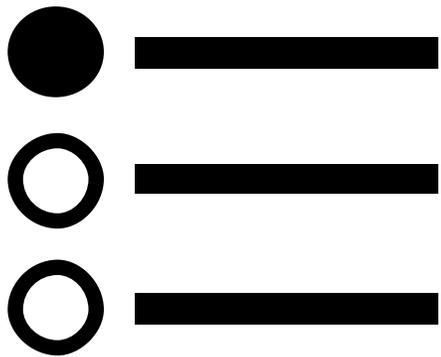
Action (3 second)

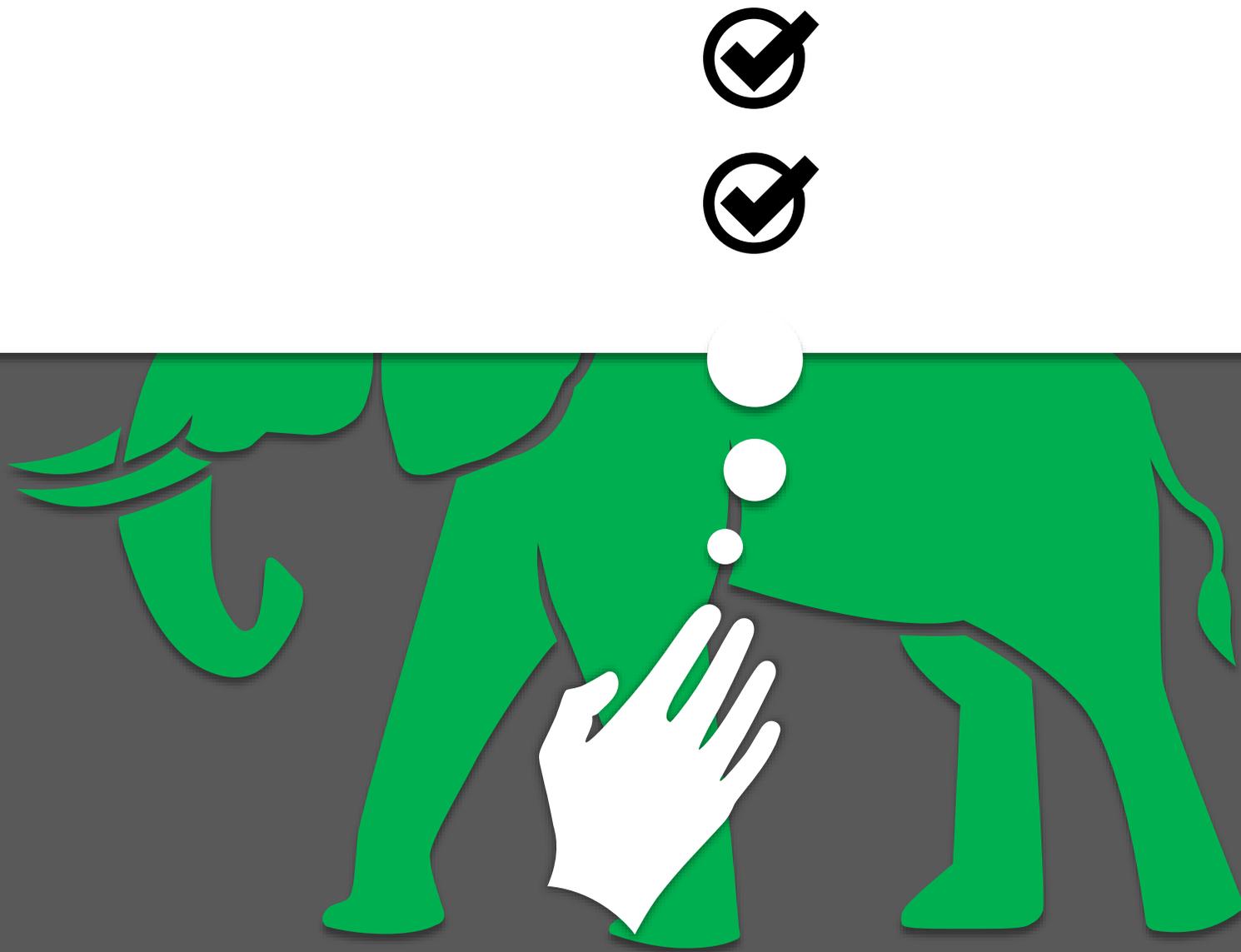
Action (1 seconds)

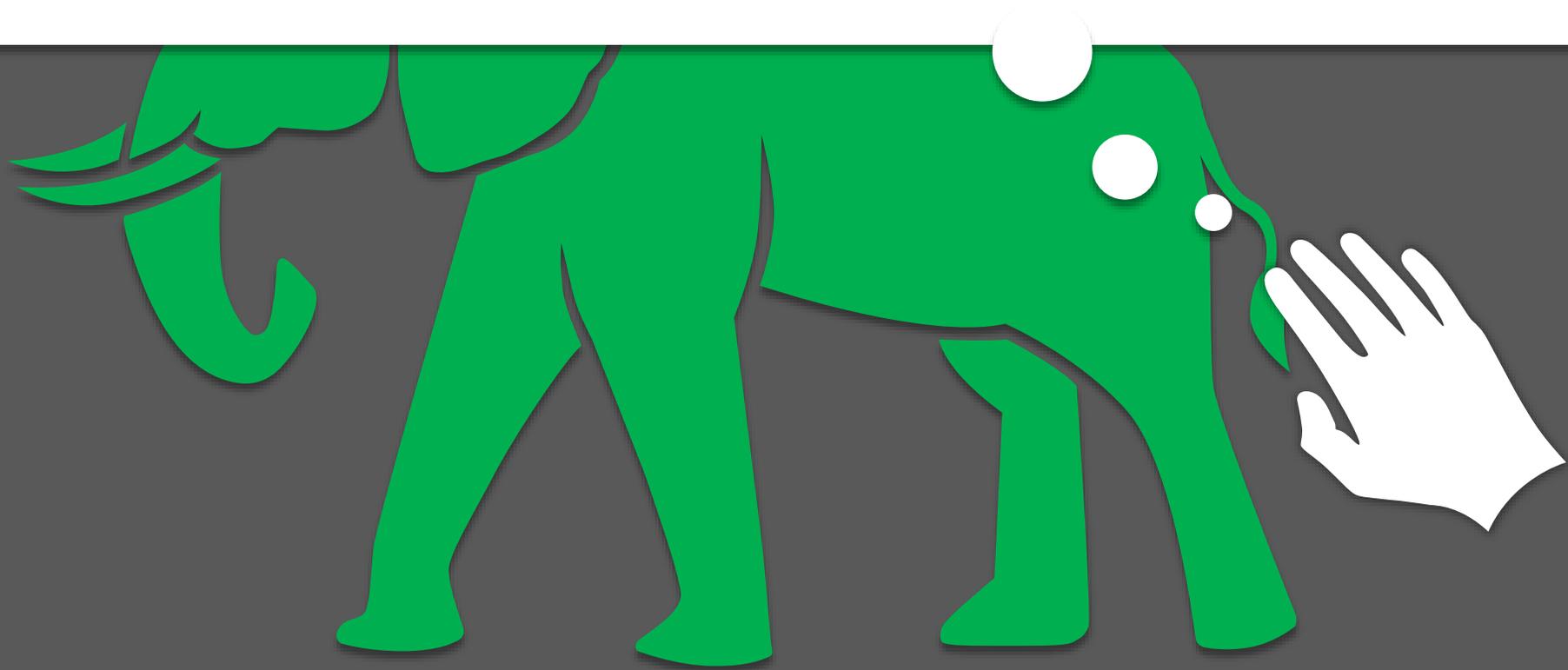
TOTAL = 9 seconds

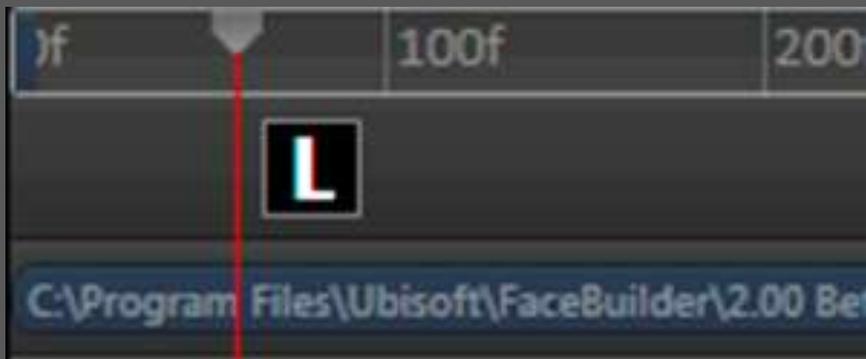
How does the interface work?



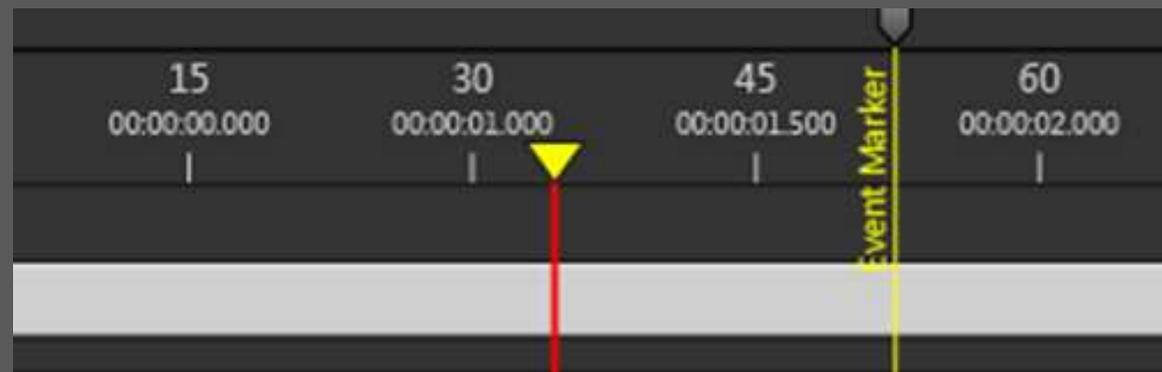
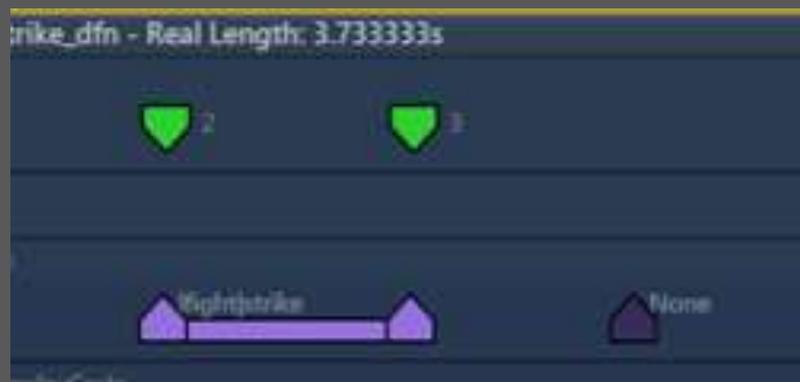








Markers



Filter  

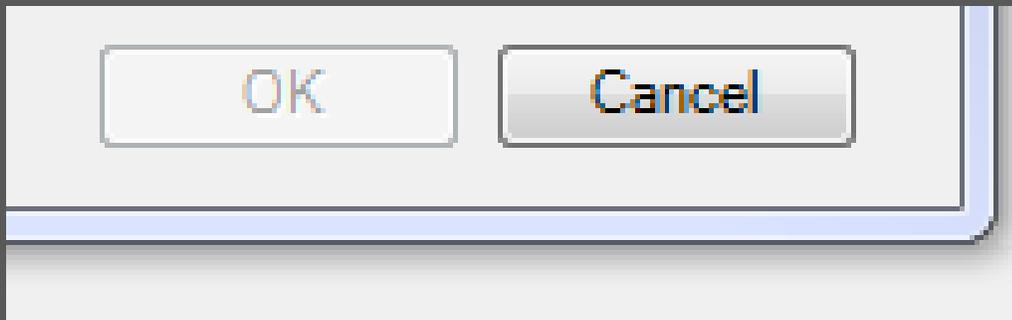
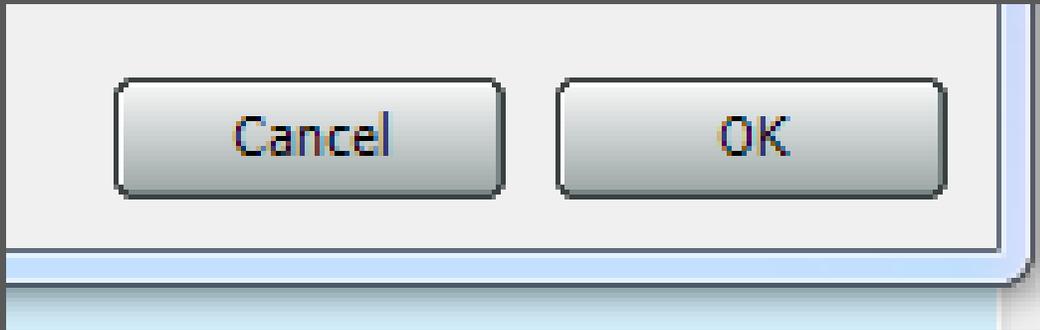
Filter 



Filter & Search

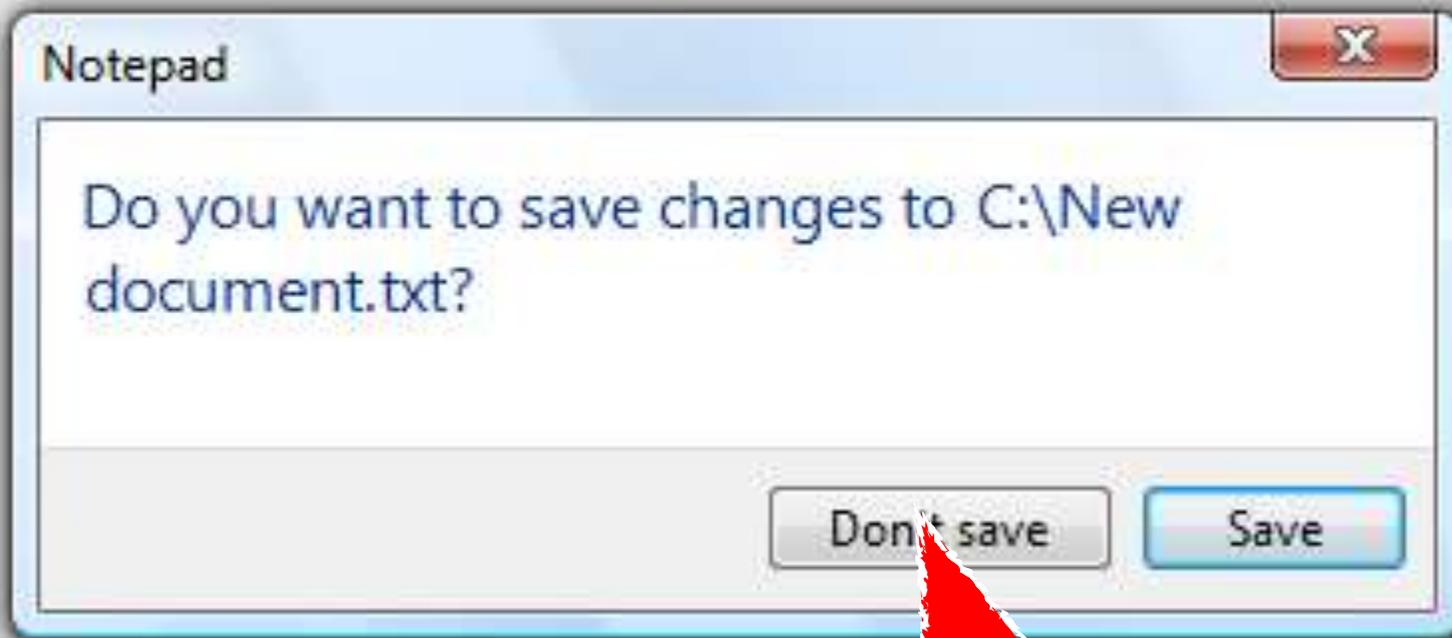






**OK &
Cancel**





Notepad

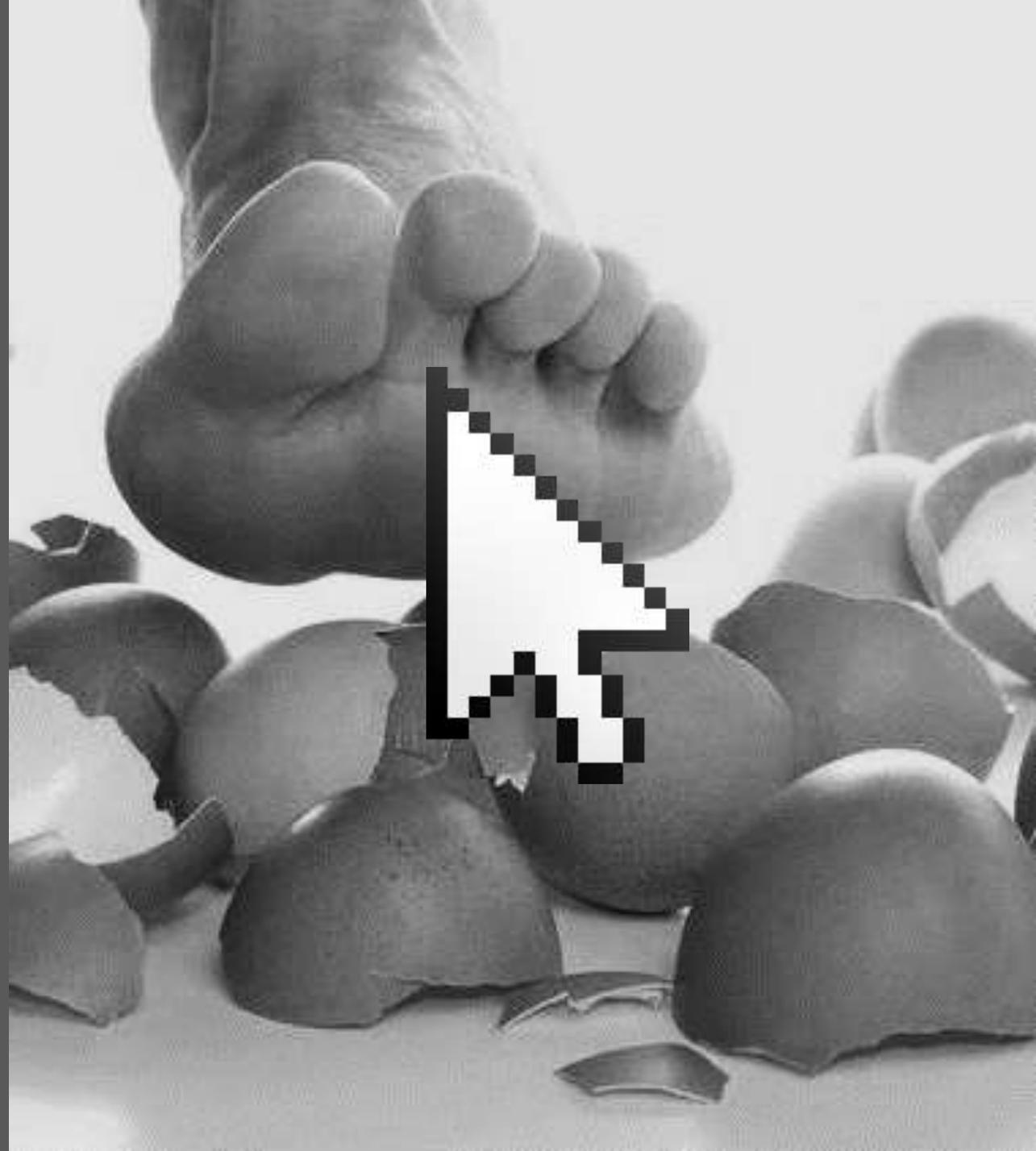


Do you want to save changes to C:\New document.txt?

Don't save

Save

“Clicking
on
eggshells”



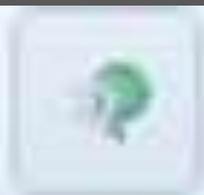




TECHNOLOGY GROUP
UBISOFT®



Find



Search

Search / Find

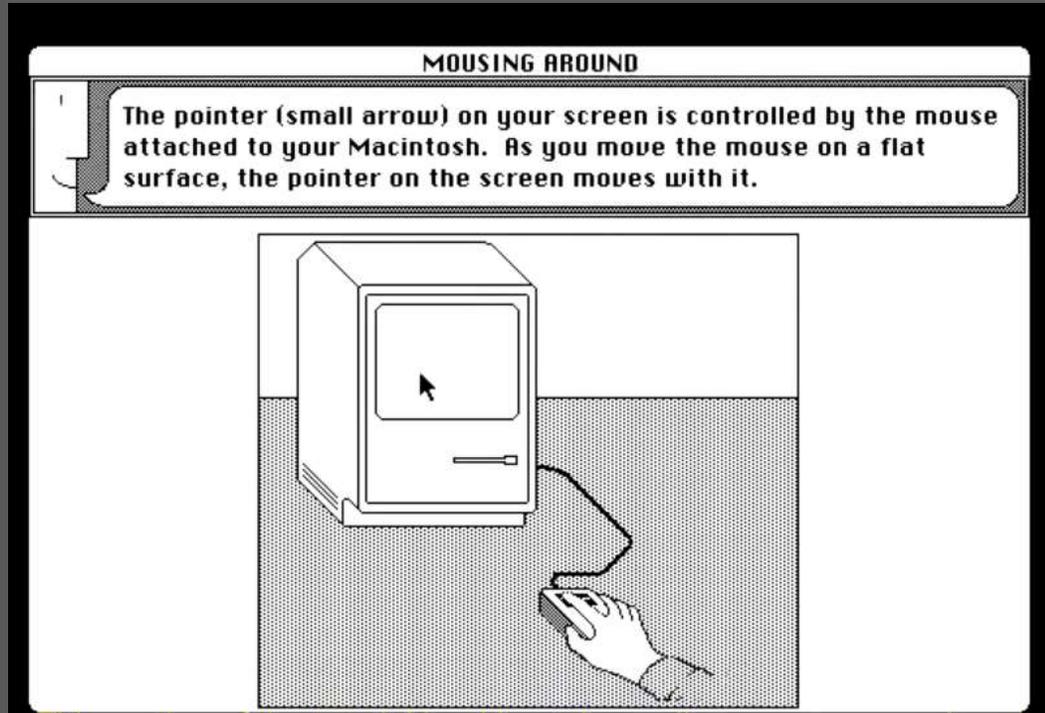


Toggle camera & Capture a video

Intuitive



Google



Already
Learned

Not Yet
Learned

Audience Participation



2:50

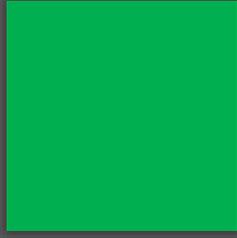
IT'S A TRAP!
3 Remarkably Common UI Traps and How
to Avoid Them in Your Designs

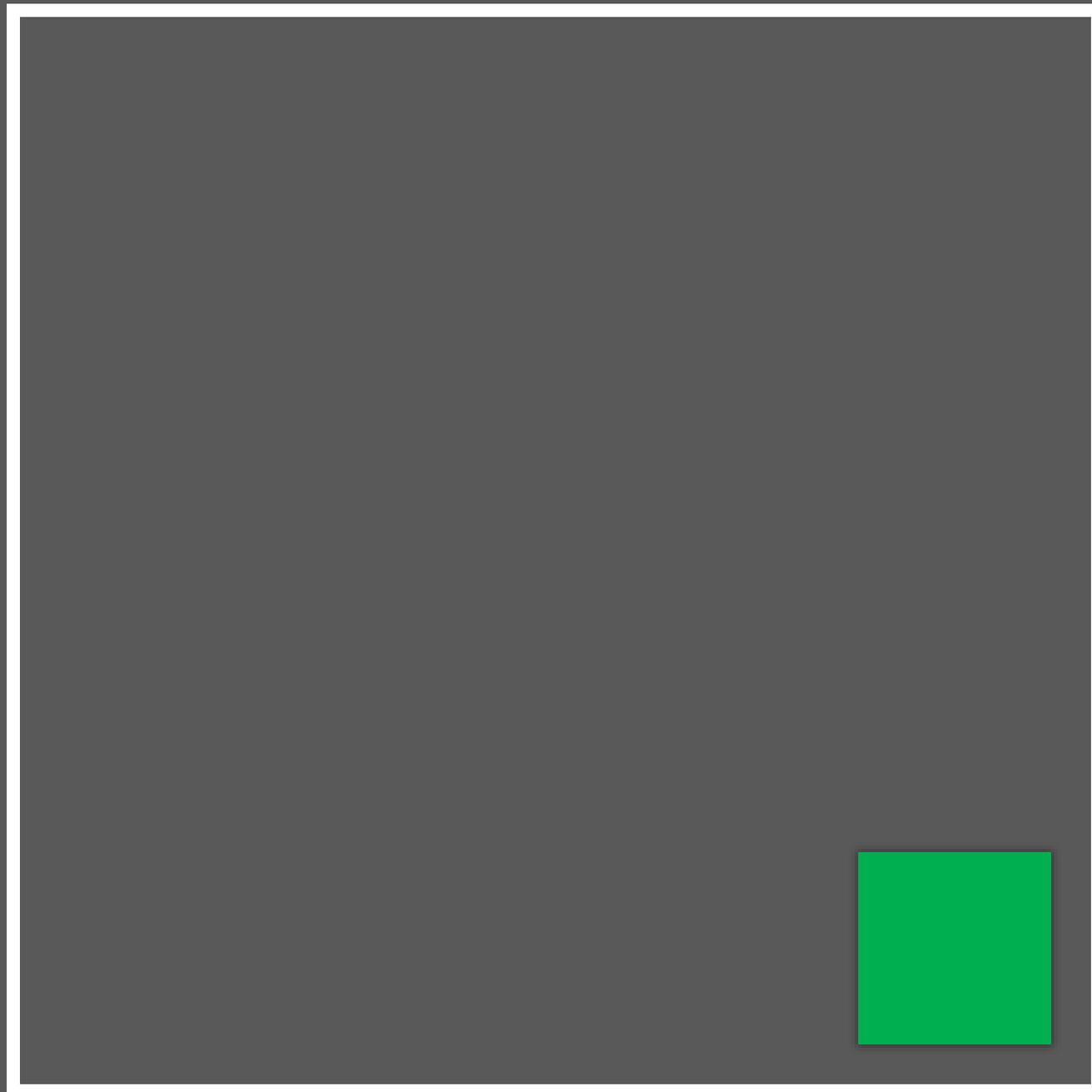
Steve Herbst
Principle Design Researcher
Michael Medlock
Senior Design Researcher

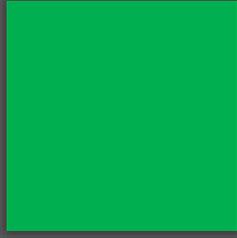
//build/

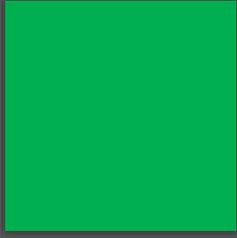
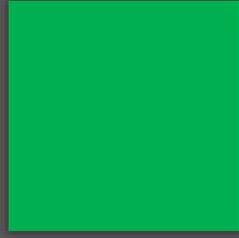
Microsoft

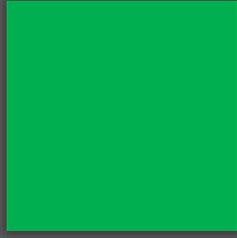
The image shows a video player interface with a blue header and footer. The main content area is white and contains a play button icon over a video thumbnail. The text on the slide is centered and includes a title, subtitle, and speaker information. The Microsoft logo is in the bottom right corner, and the //build/ logo is in the bottom left corner.

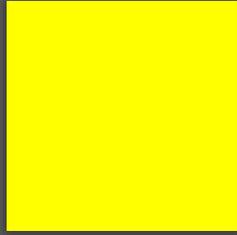


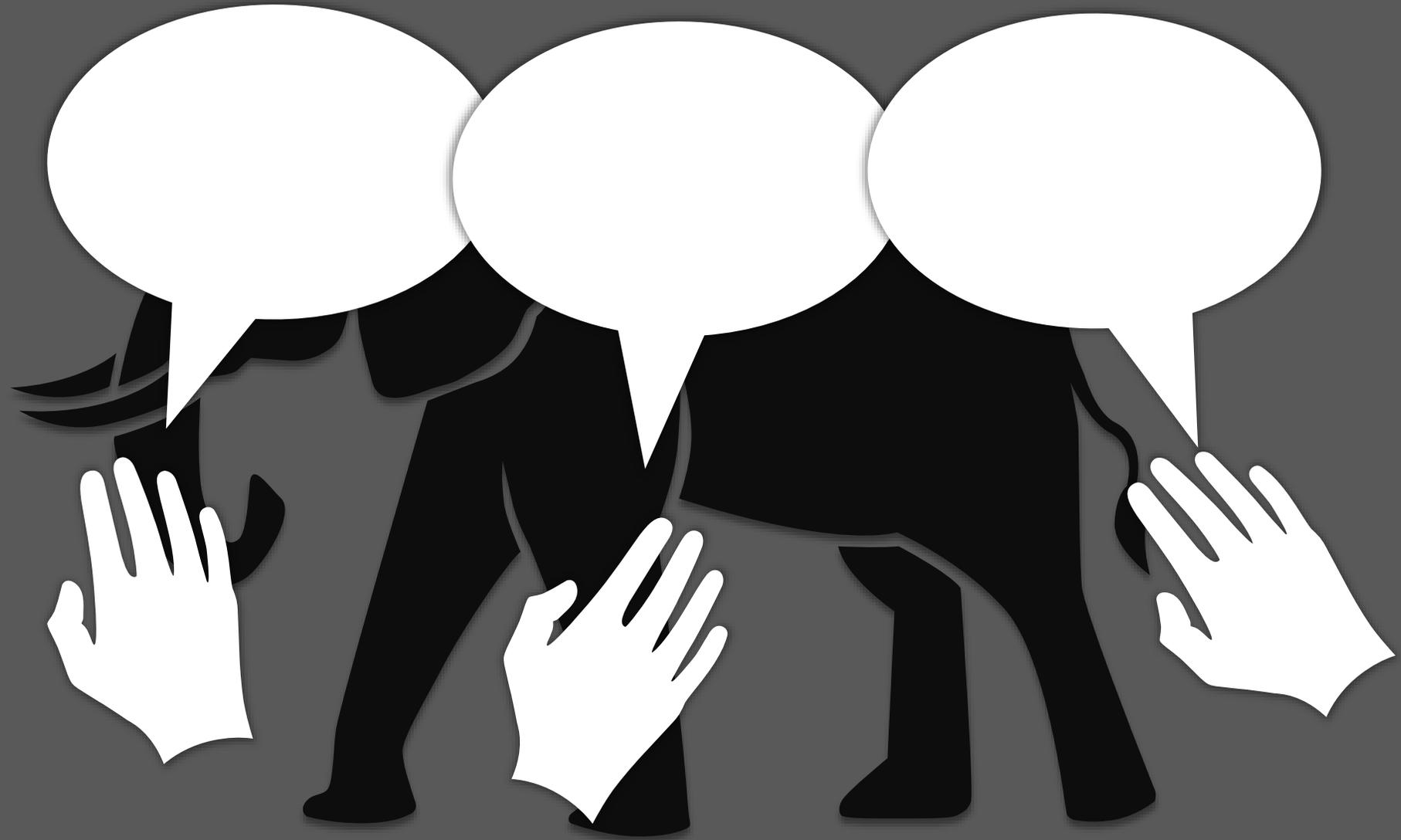


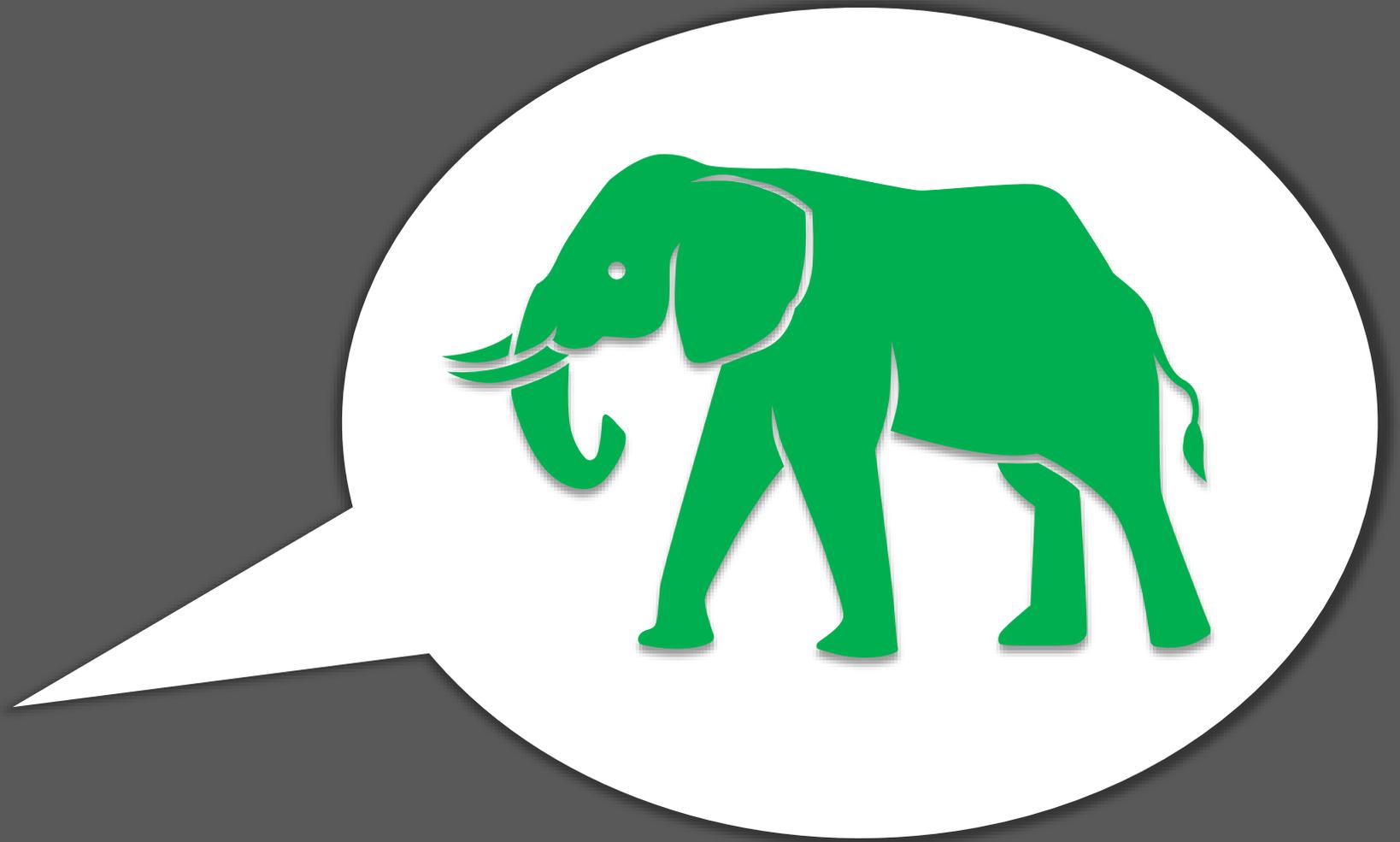






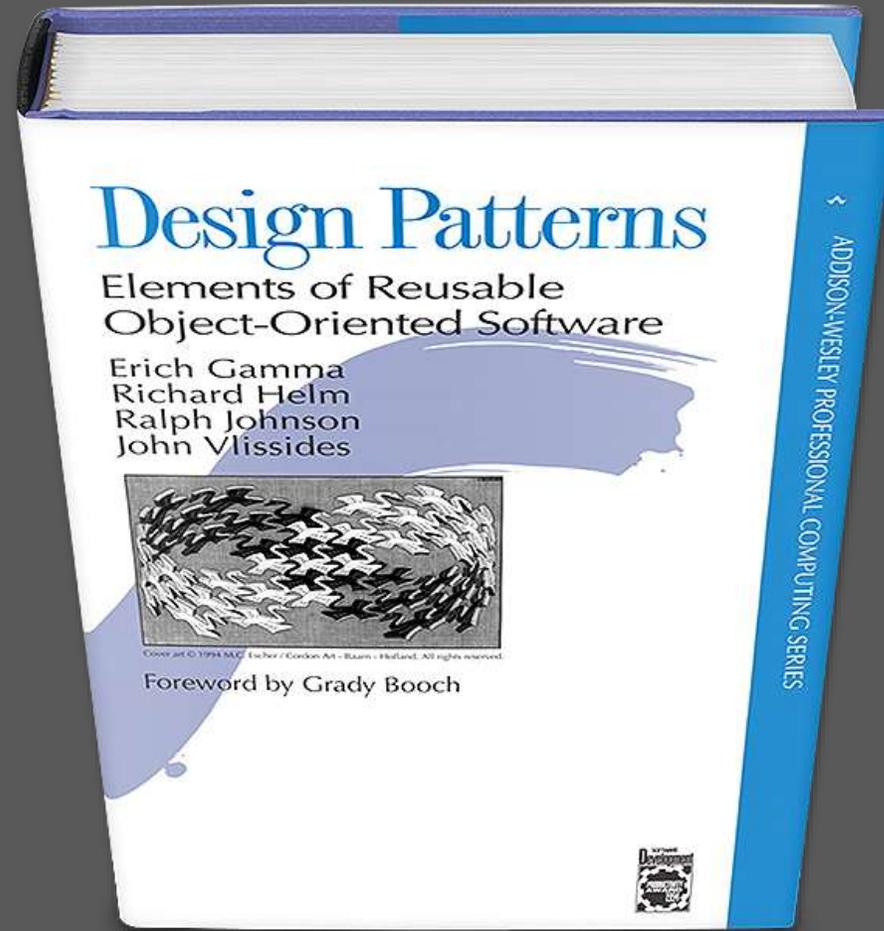






Design guidelines
can make your tool
easier to learn
and
more efficient to
implement and use





Solution

Problem

Context

Windows

Window Management

Window Frames

Dialog Boxes

Common Dialogs

Wizards

Property Windows

Dialog Boxes

Is this the right user interface?

Design concepts

Usage patterns

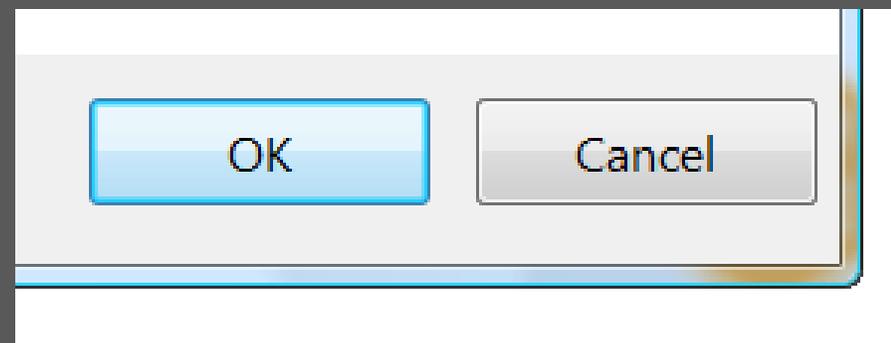
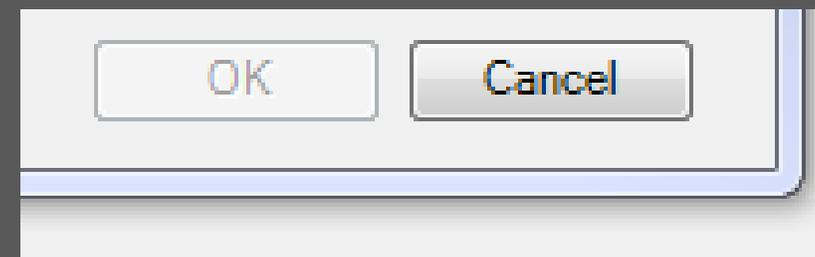
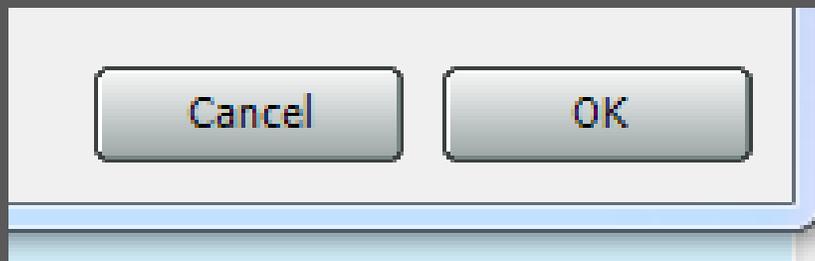
Guidelines

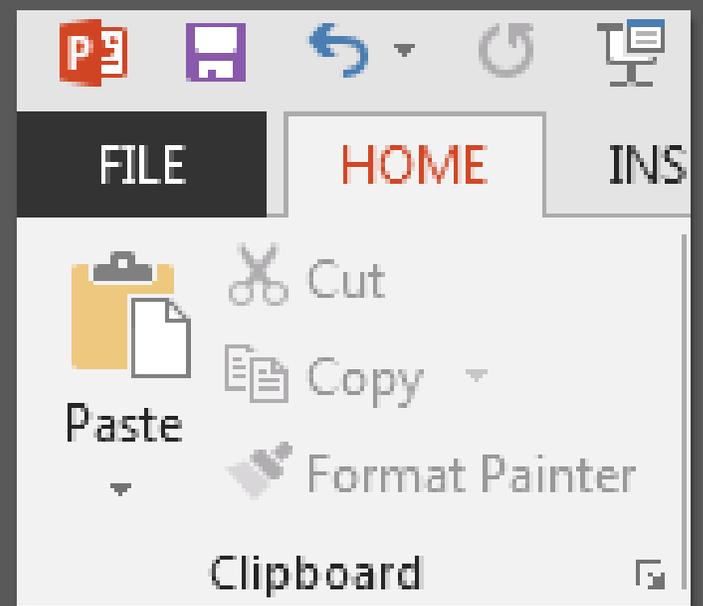
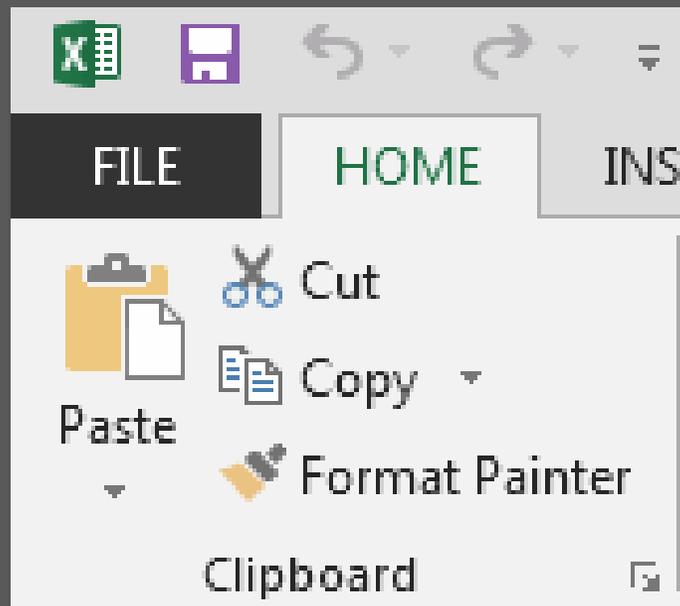
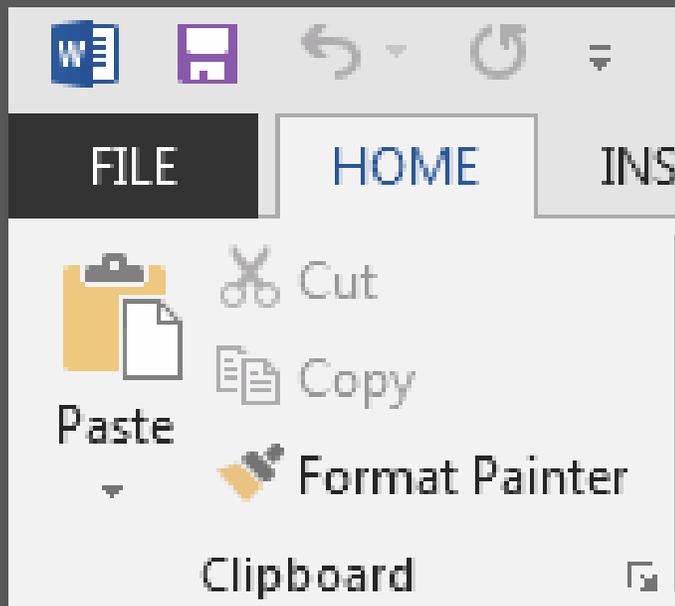
General

Modal dialog boxes

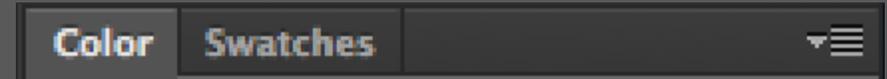
Modeless dialog boxes

Multiple dialog boxes





Photoshop



Illustrator



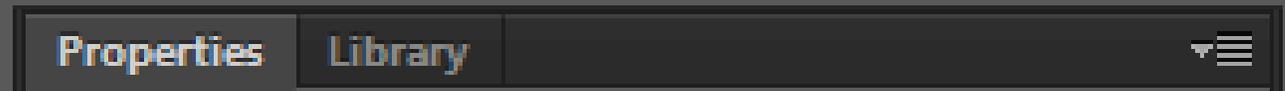
Premiere



After Effects



Flash



Photoshop Acquired (Knoll Brothers)

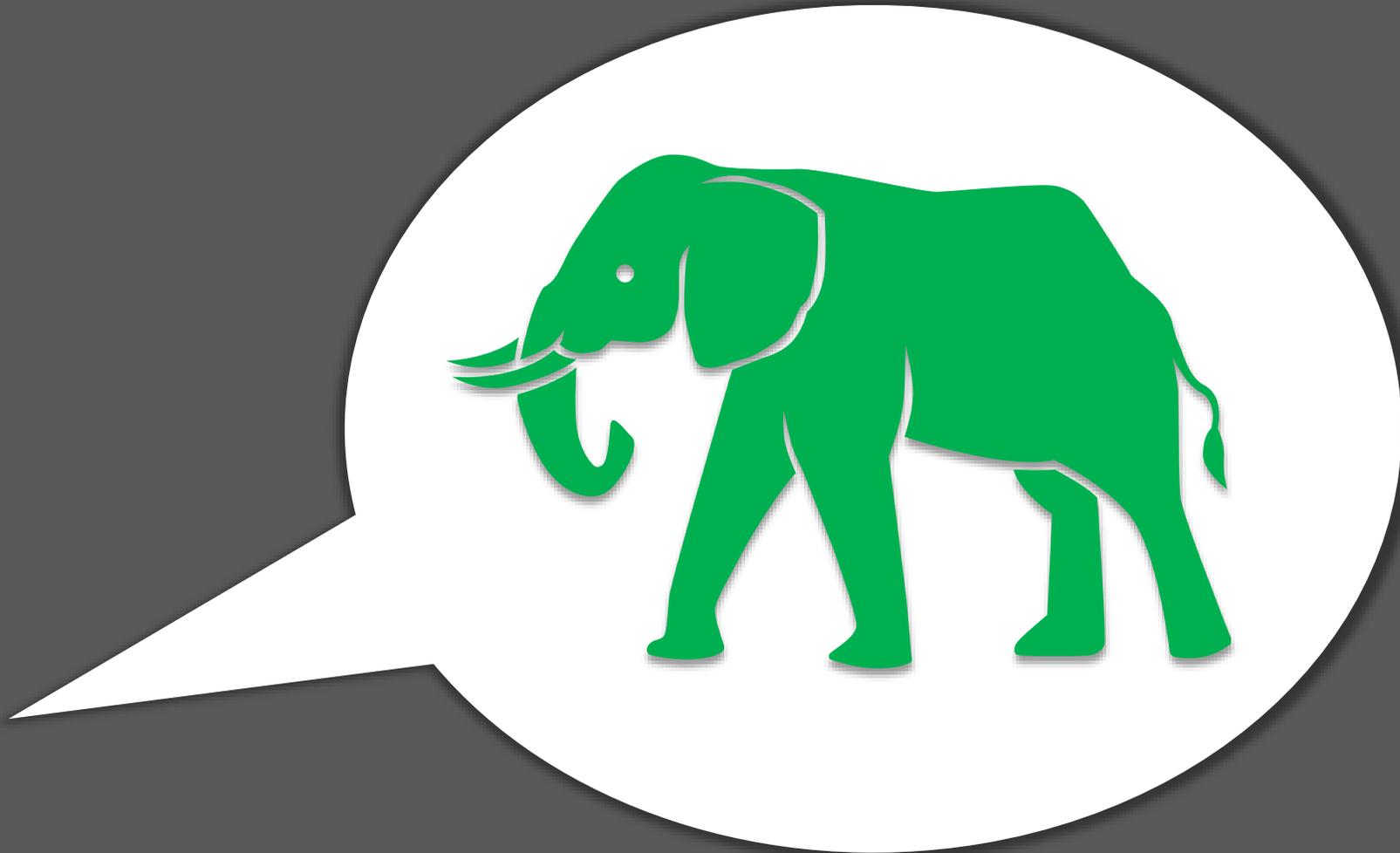
Illustrator

Premiere Acquired (SuperMac)

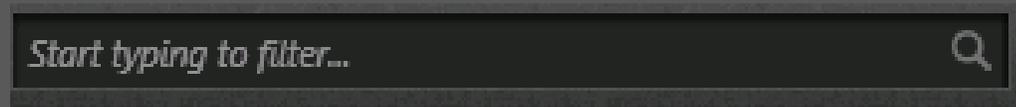
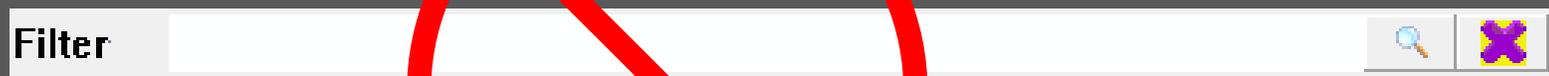
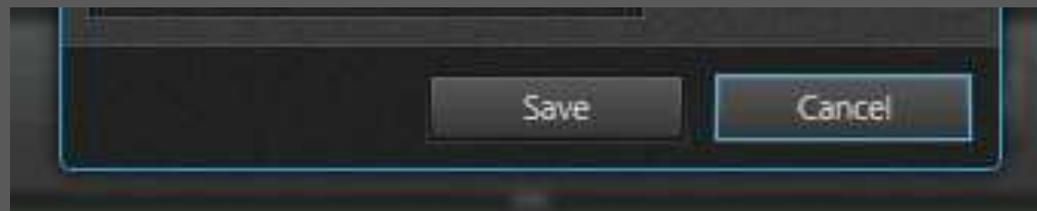
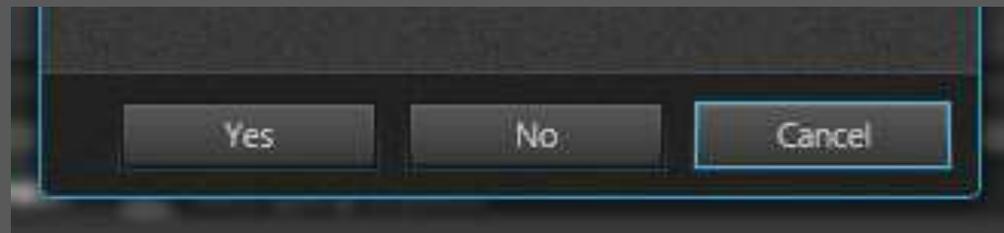
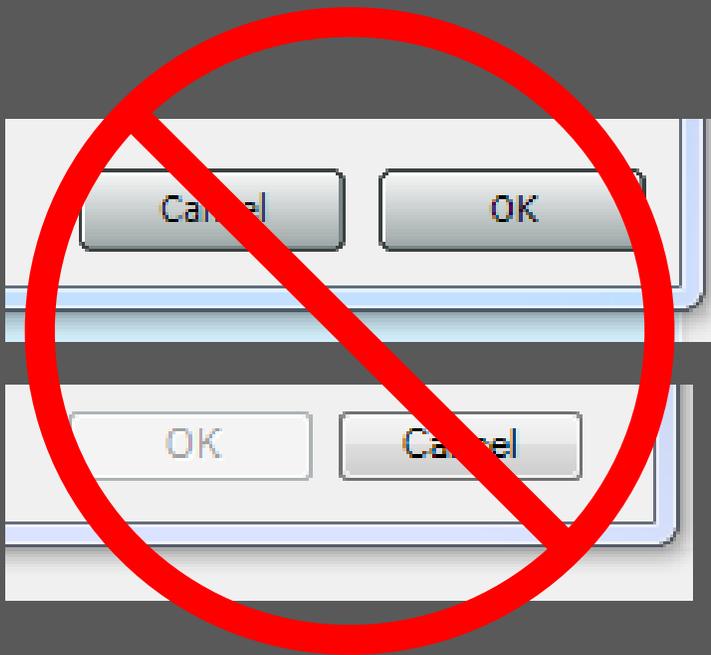
After Effects Acquired (CoSA / Aldus)

Flash Acquired (Macromedia)

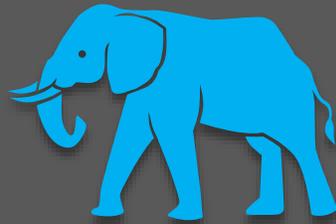
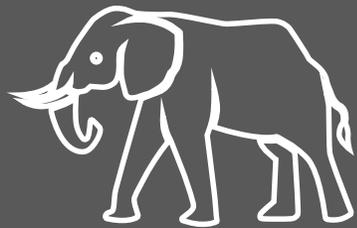
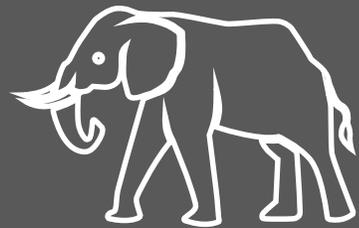




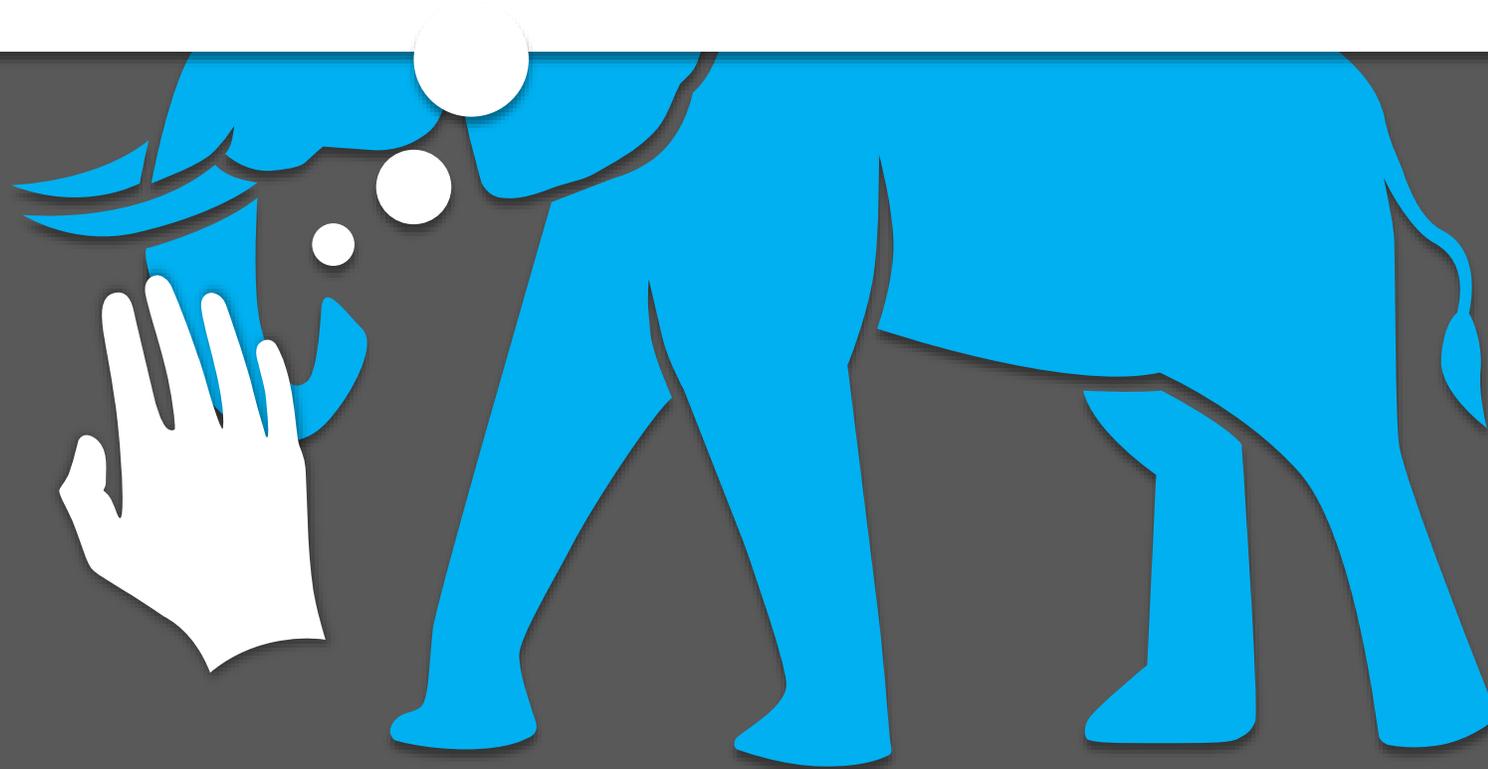
Consistent Visual Language



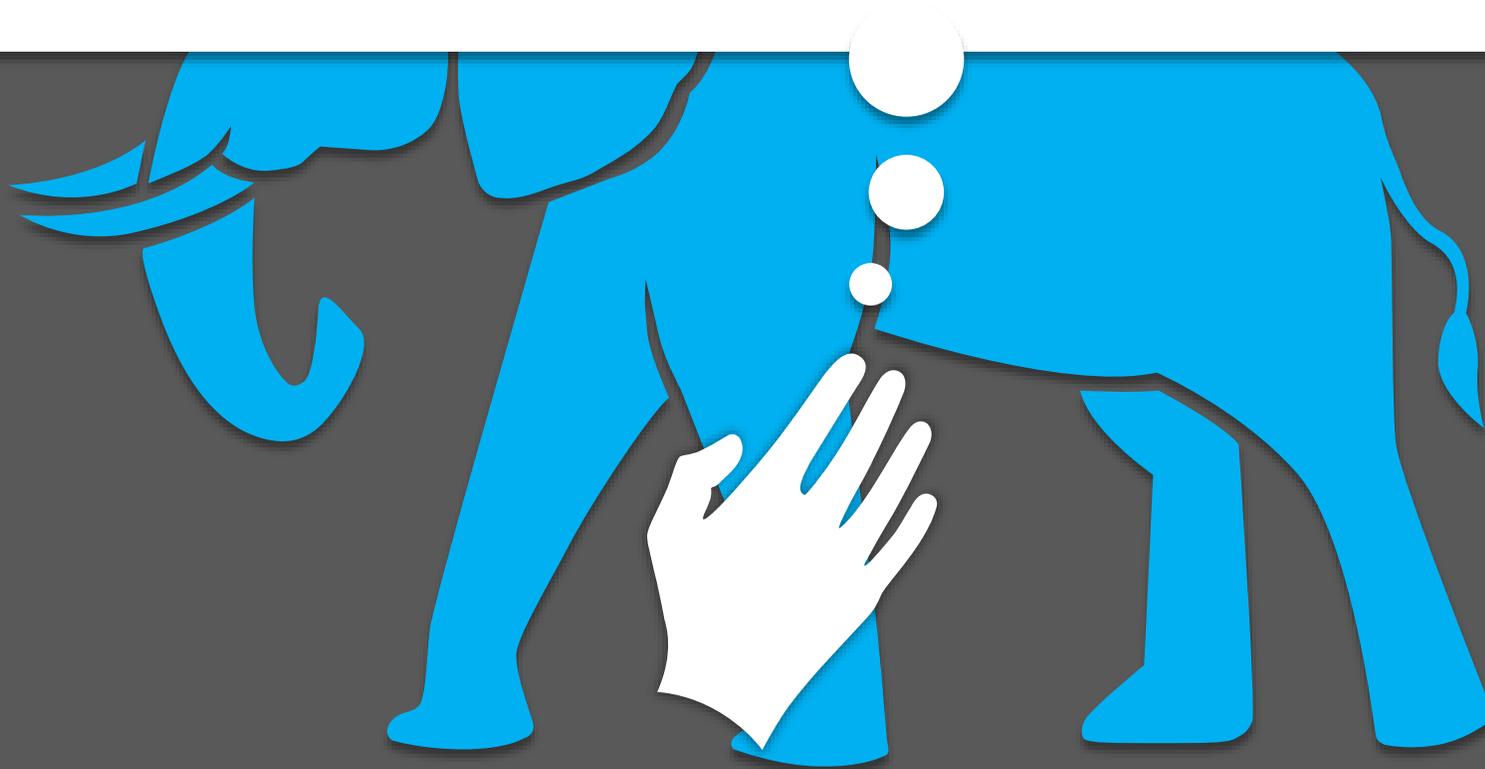
What is it like to use?



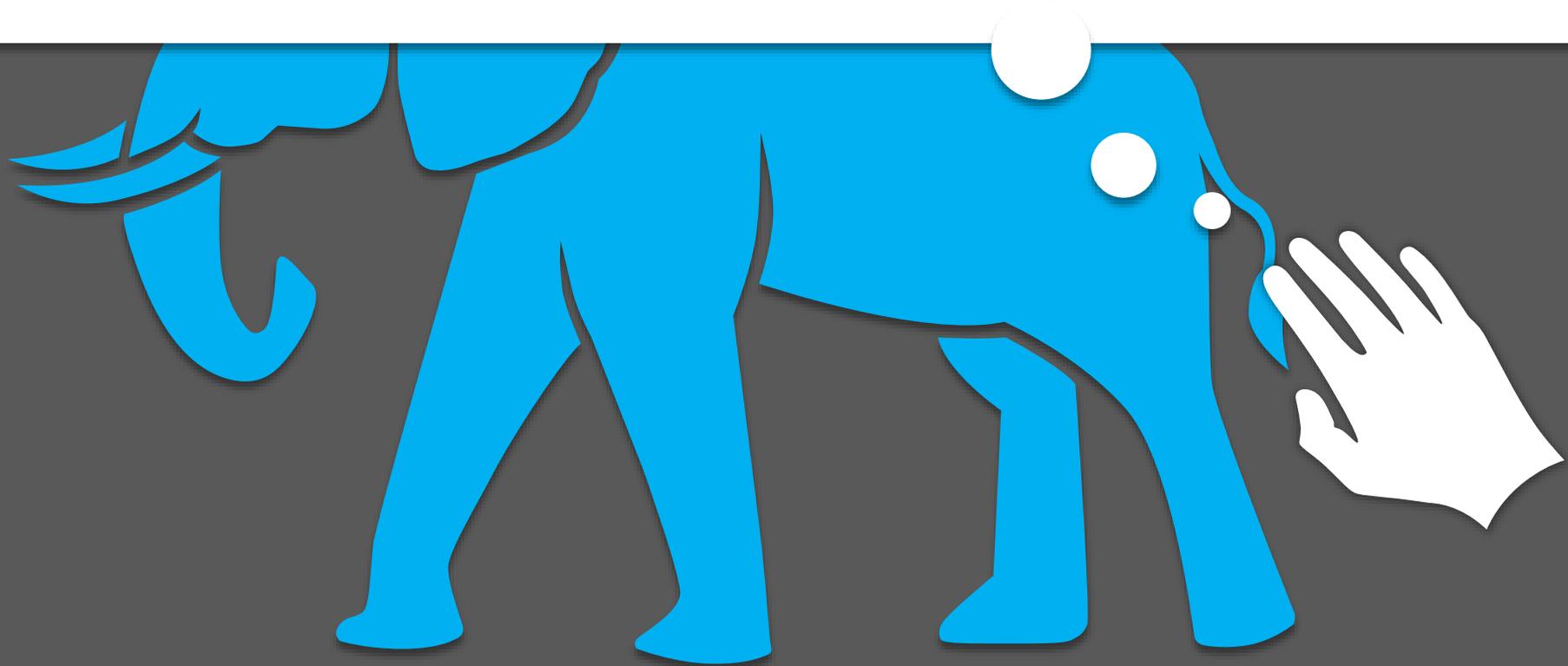
“The only time the users do
this is when...”



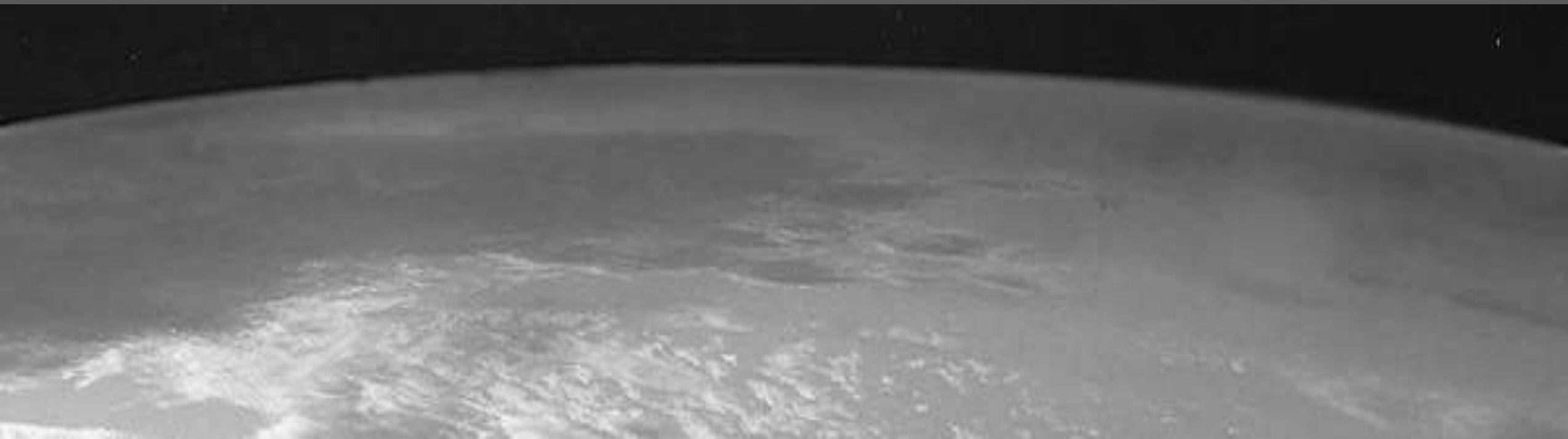
“All users prefer to
do it this way...”



“The users only do this during pre-production...”



Big Picture

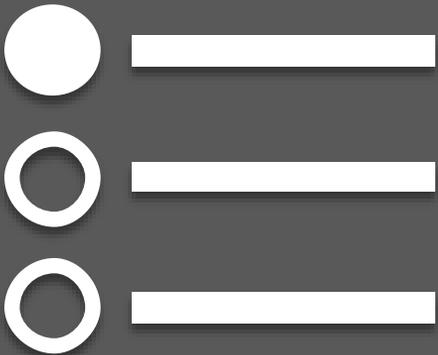


We think about
features

Users think about
outcome

**Not talking about
the
same thing**

Visualizing



**Waiting too long
to
get user feedback**



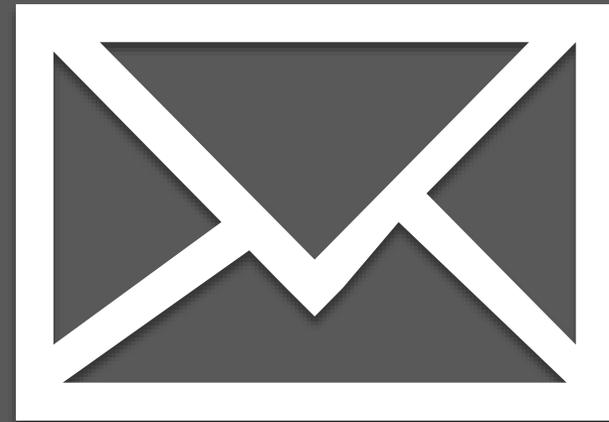
**WRONG
WAY**

Audience Participation



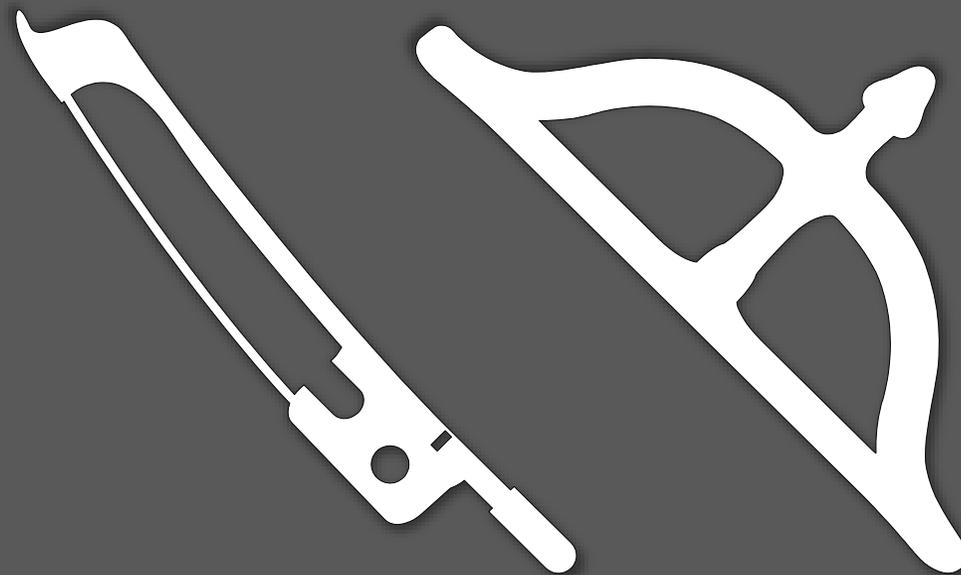
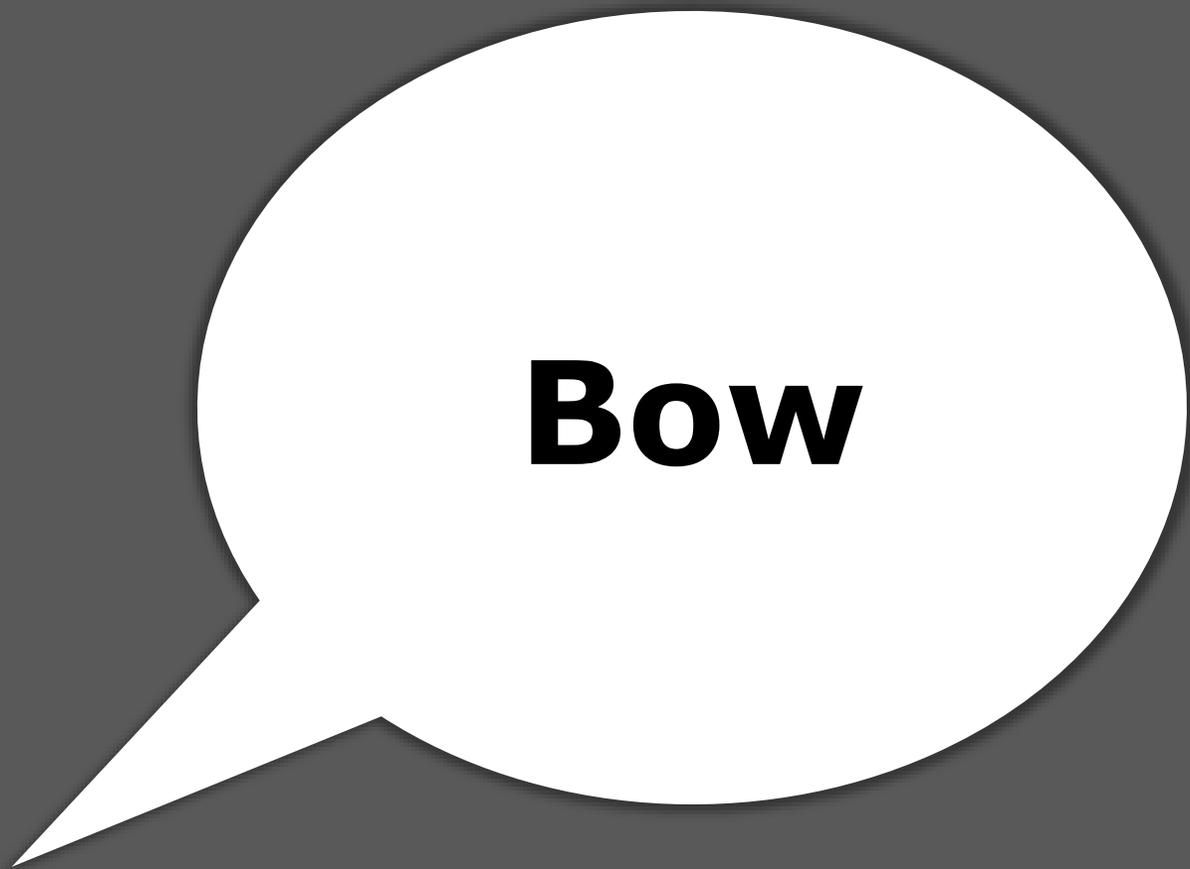
Letter

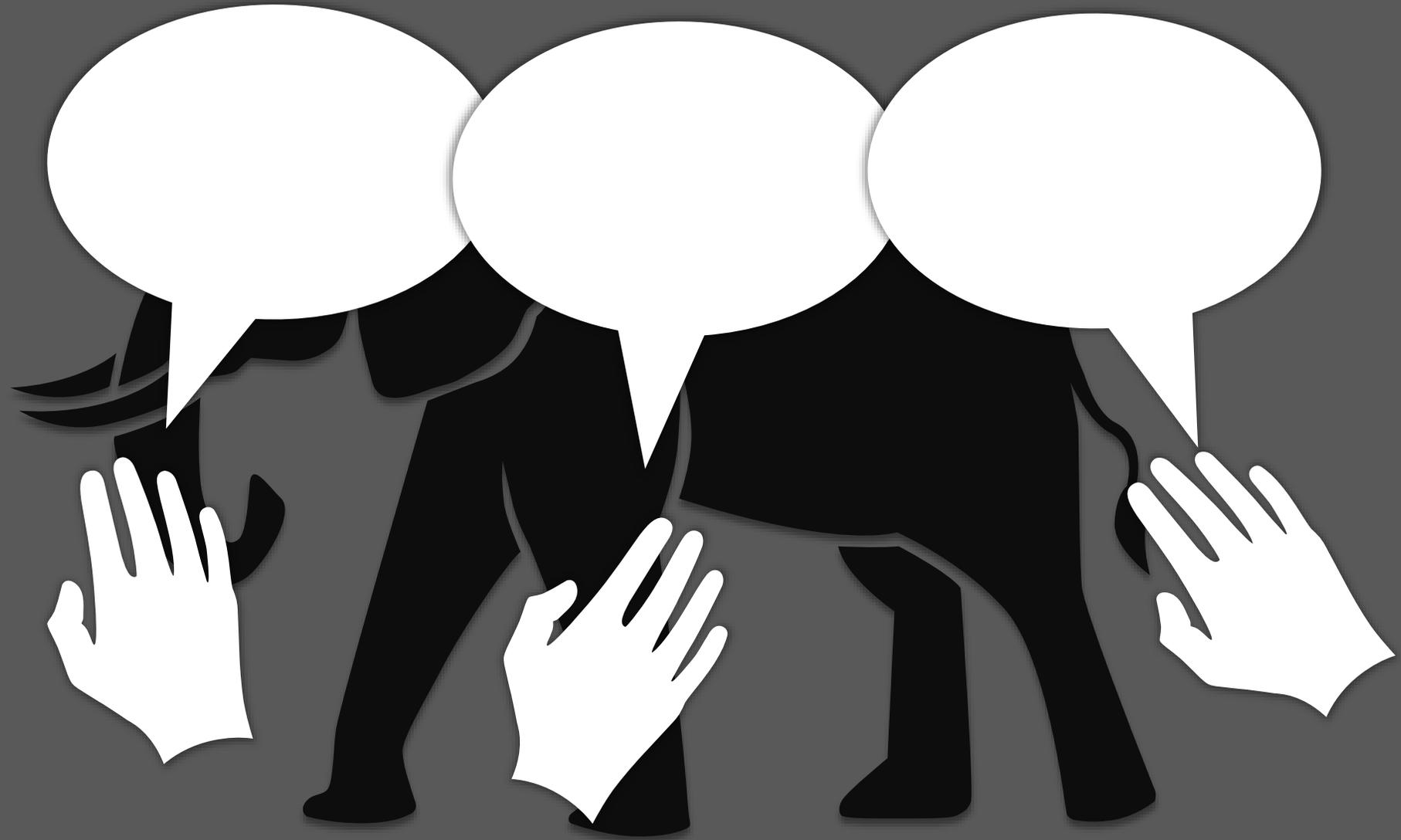
A

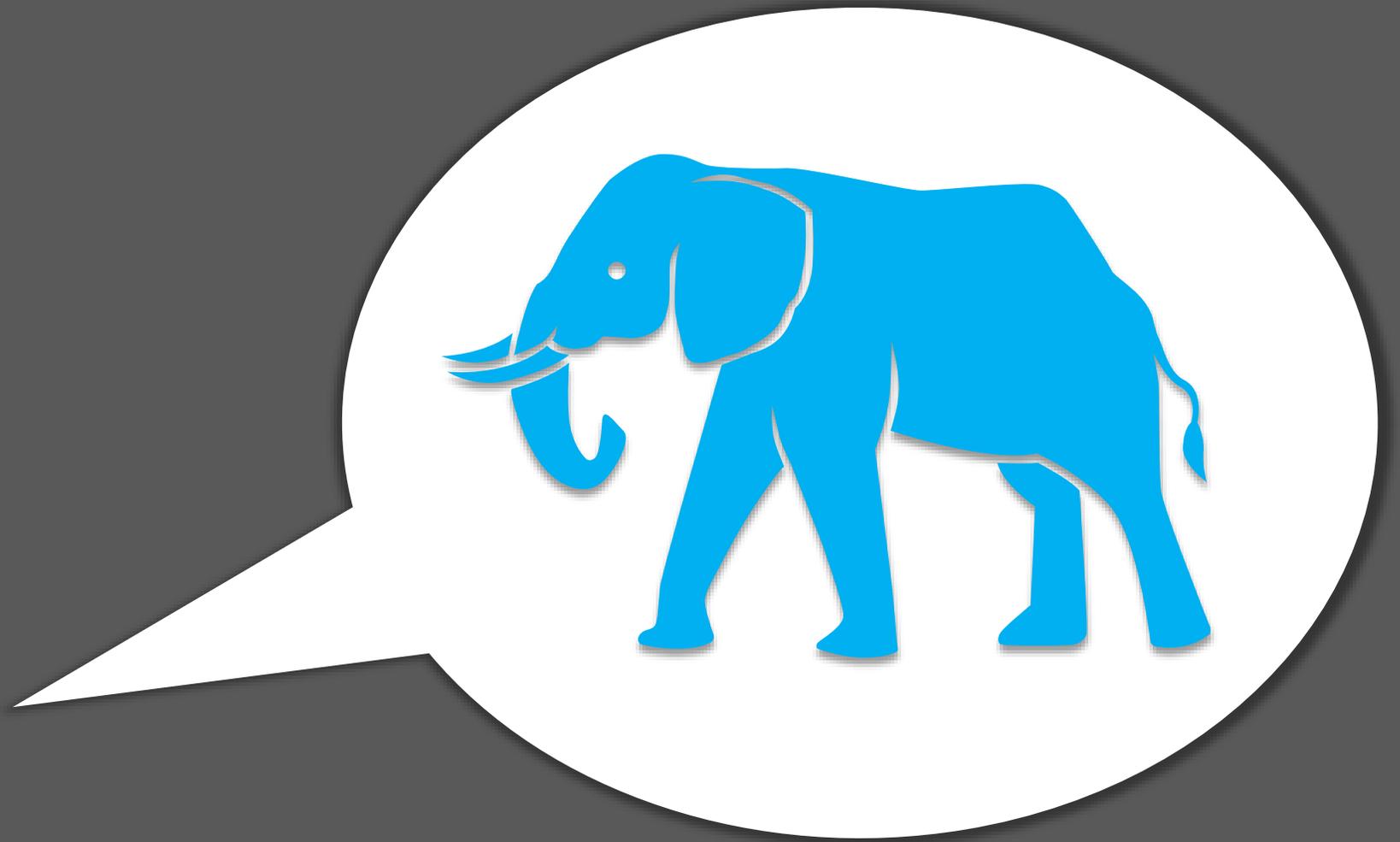


Pitcher









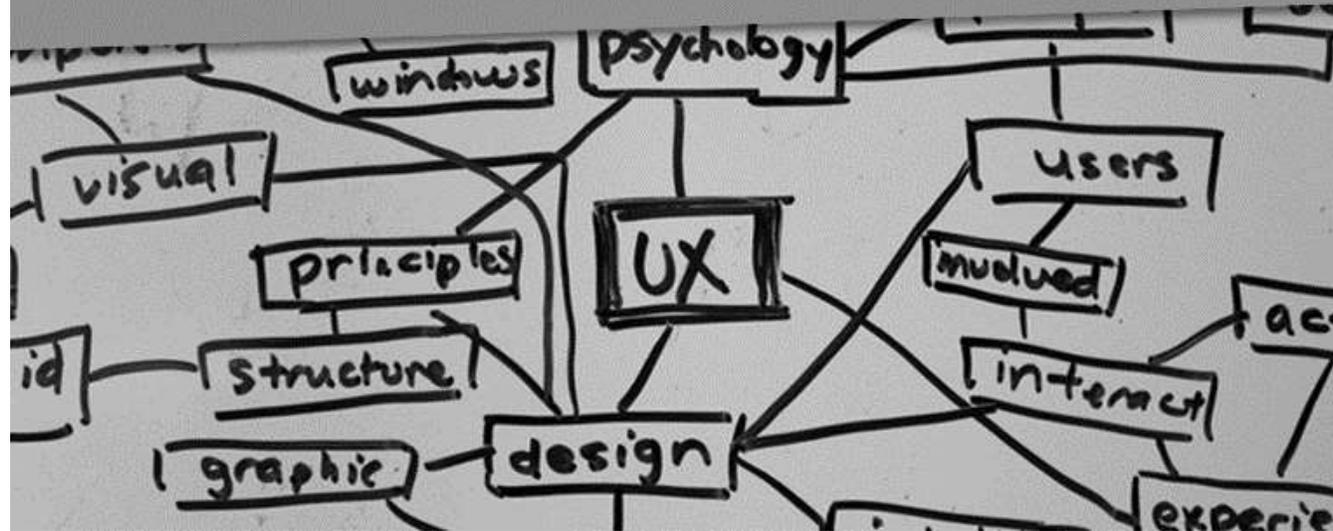
Mockups
are a
quick and inexpensive
way to
get user feedback
on your tool
sooner



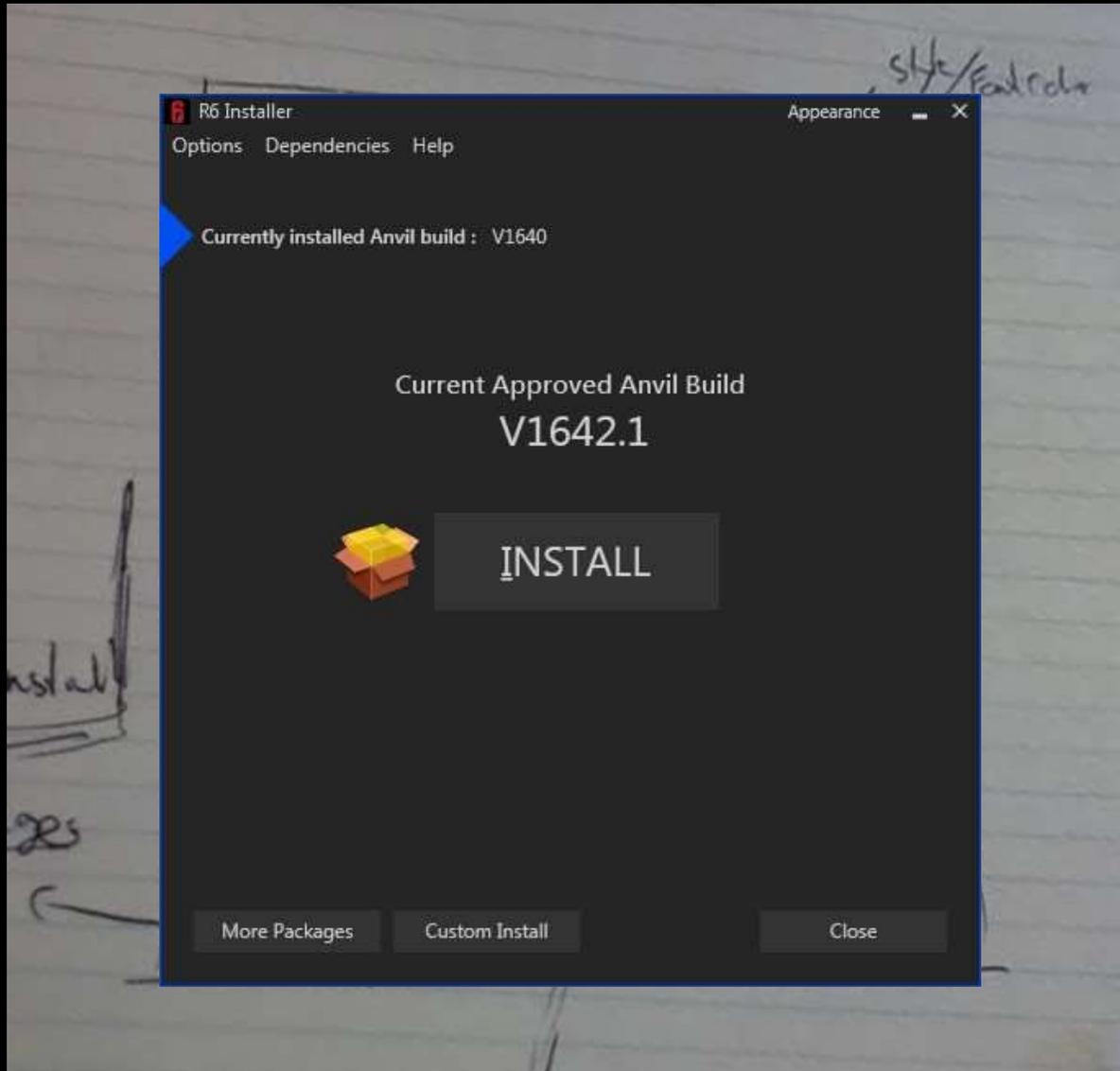




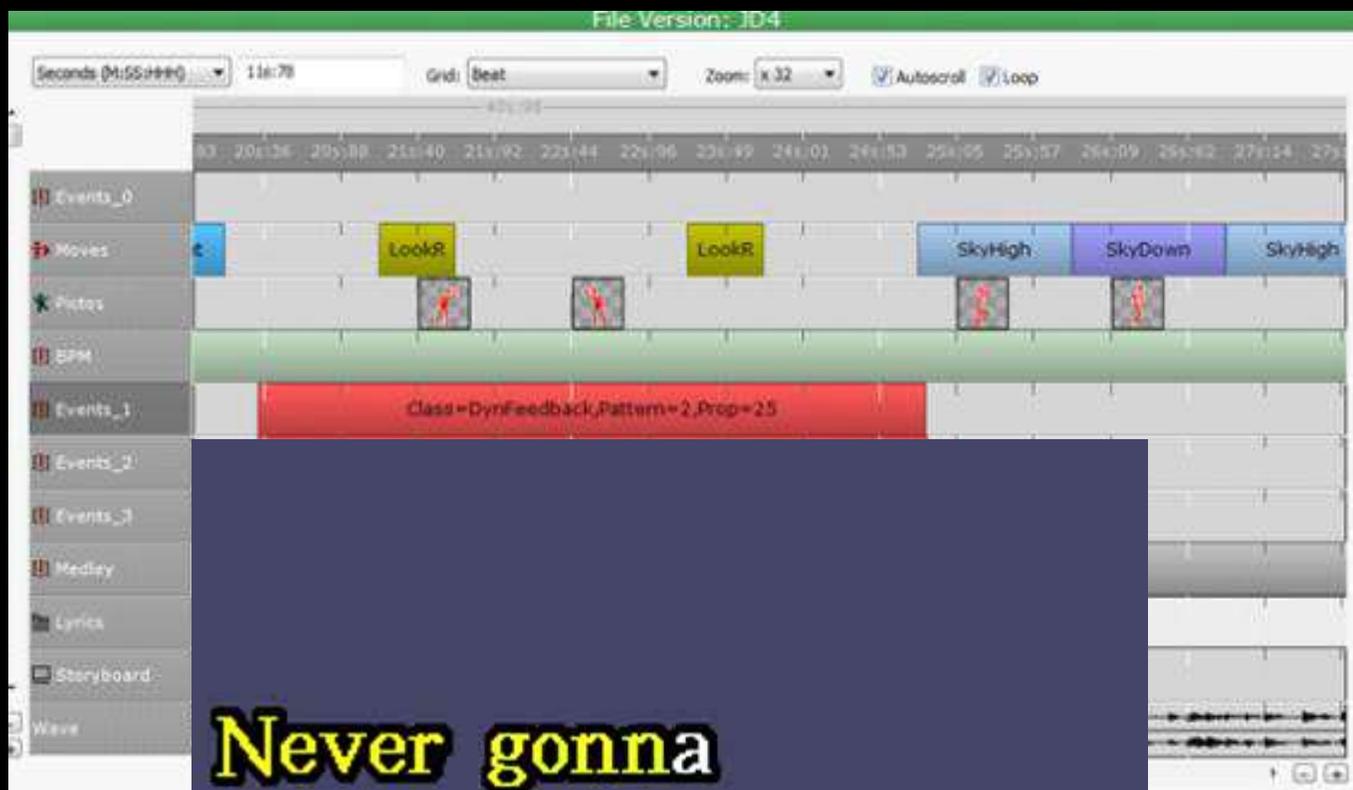
Introduction to User-Centered Design







**JUST
DANCE**



Never gonna
make you cry
Never gonna
say goodbye

**JUST
DANCE**

NEVER

GONNA

SAY

GOODBYE

A4

B4

D4

B4

A5

E#5

F5

**JUST
DANCE**



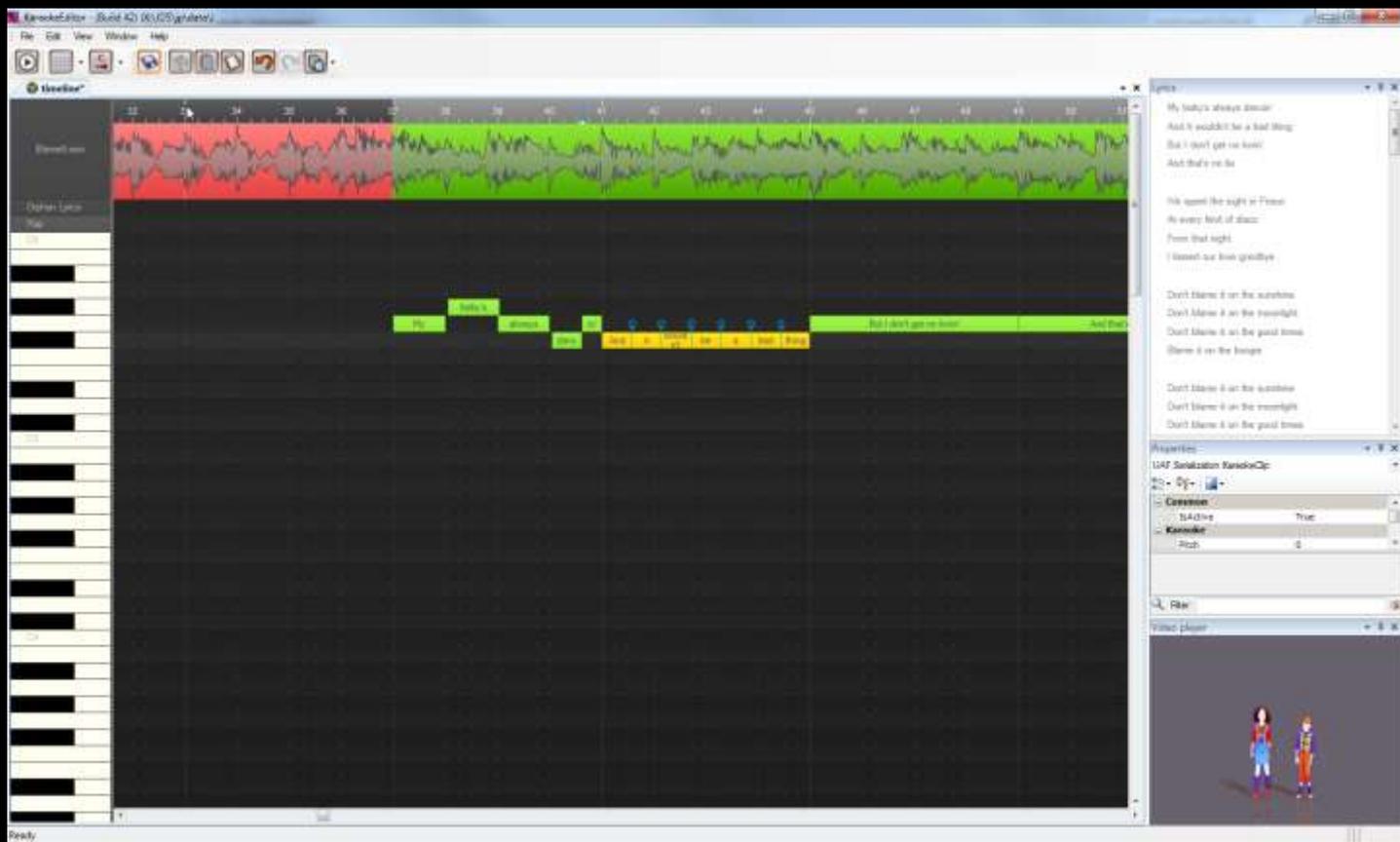
**JUST
DANCE**



**JUST
DANCE**

The image displays a music sequencer interface with several overlapping windows. The main window, titled "CONSOLE Sequencer", features a piano roll with four tracks labeled 1, 2, 3, and 4. Track 1 contains orange horizontal bars representing notes. A smaller window titled "Piano Roll 4track(s) (Track 1)" is overlaid on the main piano roll, showing a detailed view of the notes with a list of parameters: Tem, Met, Key, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, and 021. A keyboard view is visible on the right side of the interface, showing notes on the C5 and C6 staves. The top menu bar includes "File", "Tracks", "Actions", "Windows", and "Help". At the bottom, there are three tabs labeled "screenshot.mdml".

**JUST
DANCE**



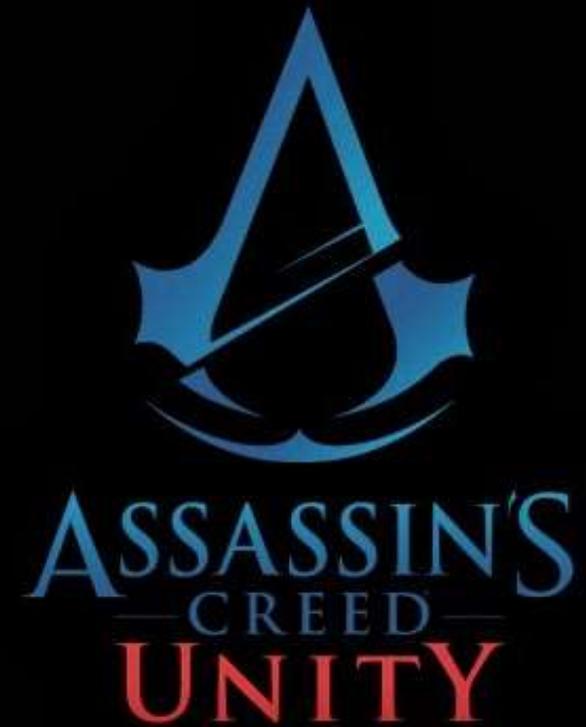
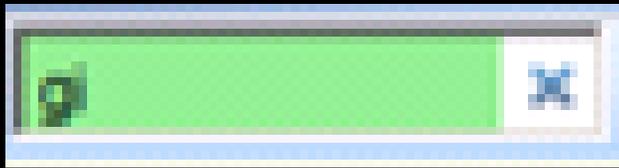
**JUST
DANCE**

The context
in which a tool is used can
help us find
simpler ways
for users to
achieve their goals





ASSASSIN'S
— CREED —
UNITY



✦ START TYPING TO SEARCH... 🔍 MORE ⚙️

ALL_PRETTY ▾

✦ ALL_PRETTY ▾

GLO X MORE ⚙️

Found 3 results for "Glo"

- ☆ Global Illumination (Ctrl-Alt-G)
- ★ Glow Distance 10
- ☆ Shader Glossiness Level 0 1 2

START TYPING TO SEARCH... 🔍 LESS ⚙️

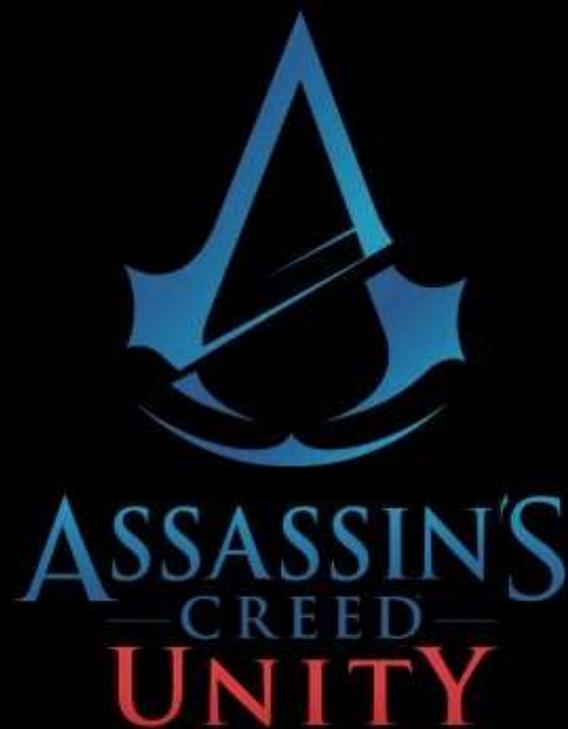
LIGHTING ▾

- ☆ Global Illumination (Ctrl-Alt-G)
- ★ Glow Distance 10

SHADERS ▾

- ☆ Shader Glossiness Level 0 1 2

GRID ▲



Receive Email



Copy Text



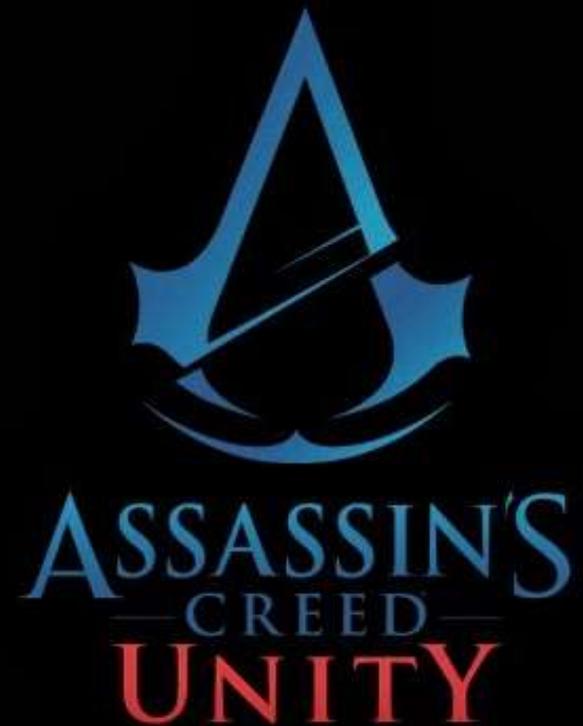
Open Render Options



Paste Text in Filter



Adjust Value



Receive Email



Copy Text



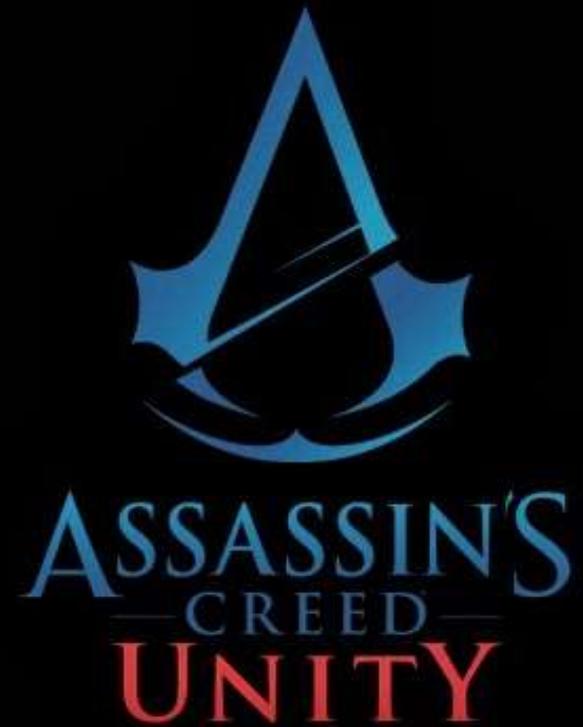
Open Render Options



Paste Text in Filter



Adjust Value



Updated scene

File Message Insert Options Form

Calibri (Body) 11

Paste

Clipboard Basic Text

To: francis

Subject: Updated scene

Send

Hey Francis,

I just merged mocap and facial data into th

Can you test it?

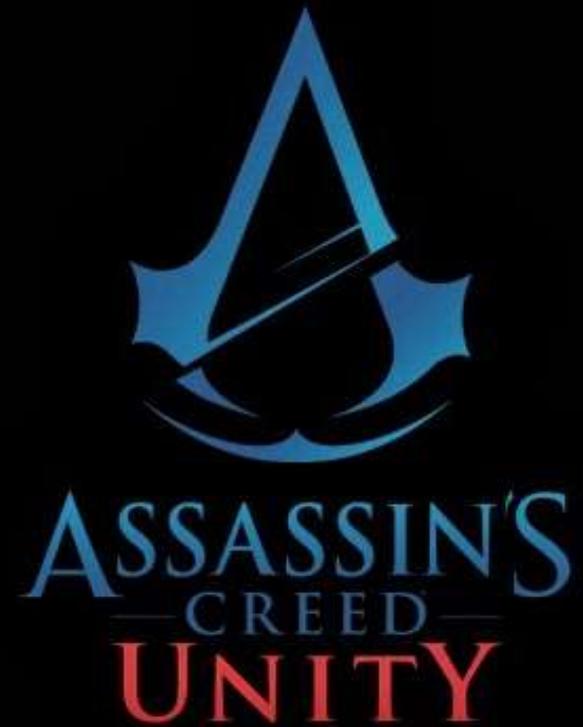
<theater://project.scene01>

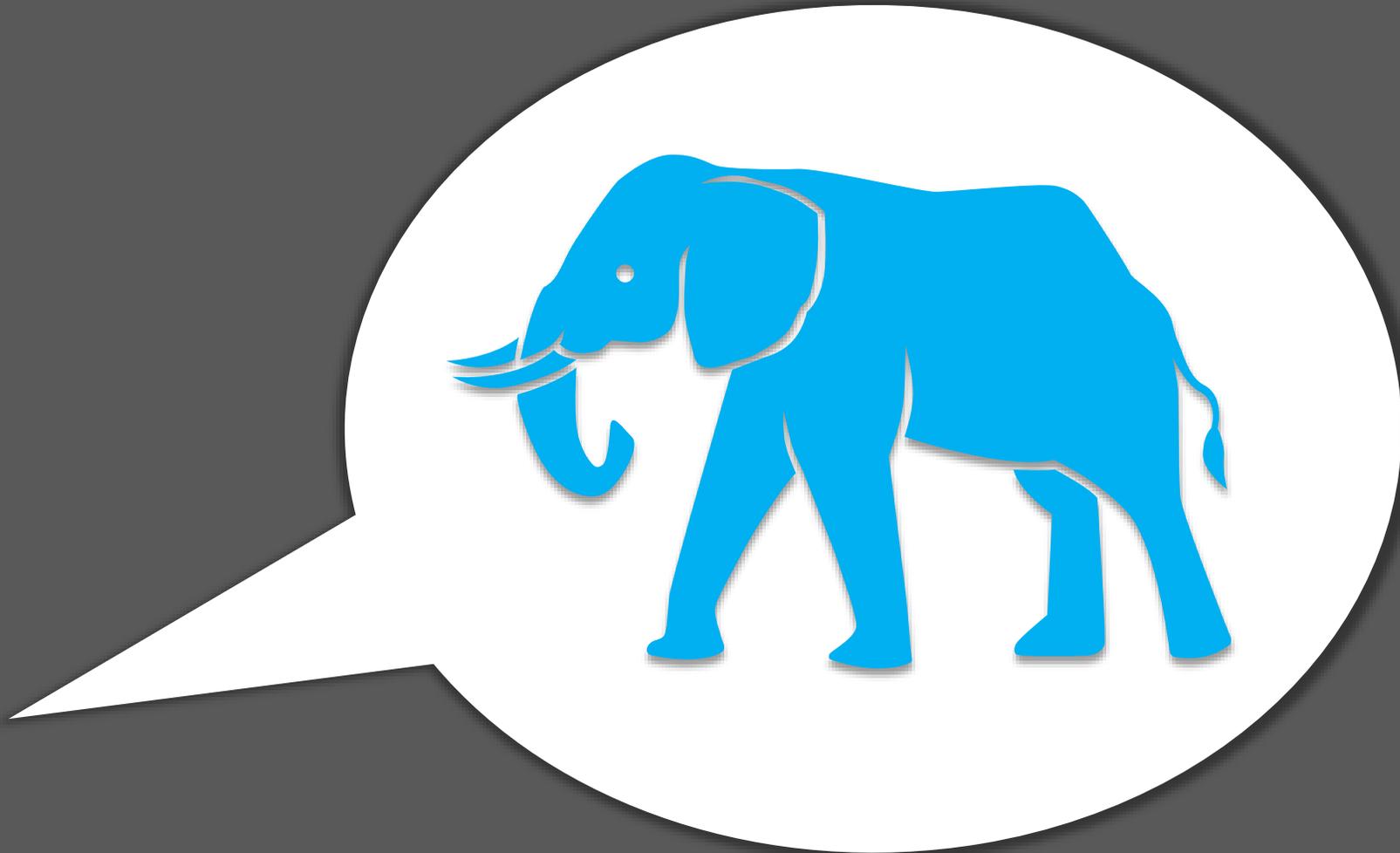
Rendering Options

Properties may be hidden by your filter.

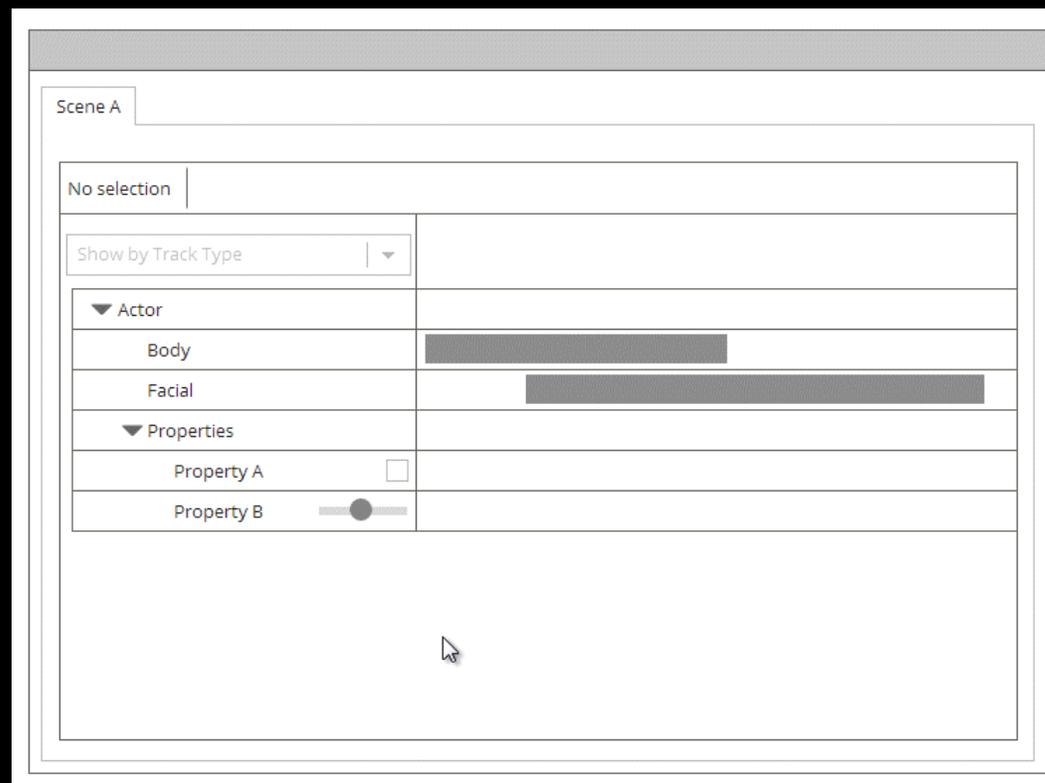
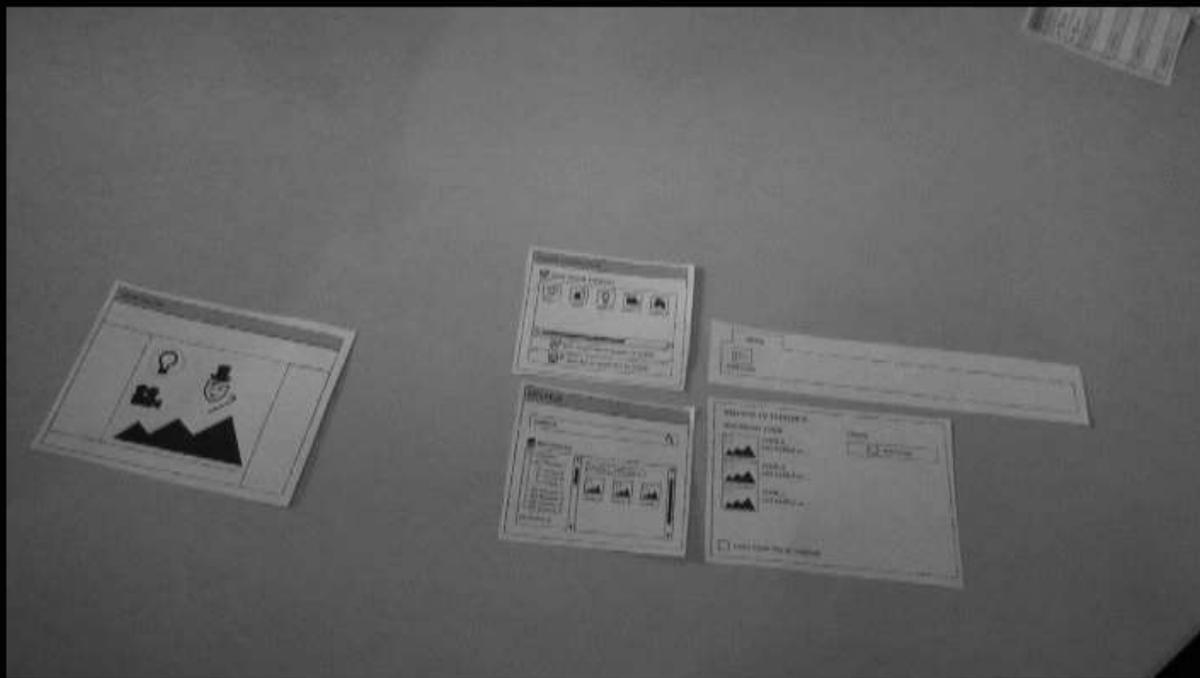
- Display
 - Region Layout
 - Region avoidance system
- Display - Fight
 - Fight Staging
 - Fight strategies info
 - Fight strategies steering info
- Display - Fight Events / Strategies
 - Fire line info
 - Grenade volley info
 - Double attack/counter kill info
 - General Fight Event info
 - Safe positions info
- Display - Level Design
 - Crowd regions
 - Crowd regions - Use Player Z
 - Crowd regions connectivity
 - Crowd regions blob
- Display - Physics
 - Rigid bodies
- Misc
 - Show Allegiances
- Profiling

anvil://

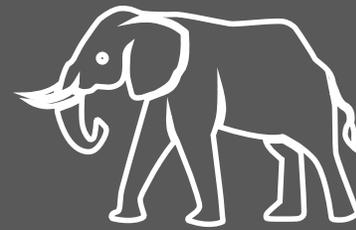
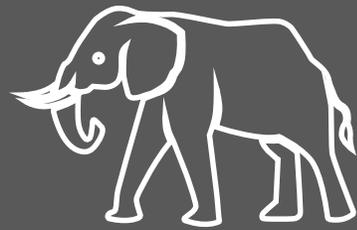
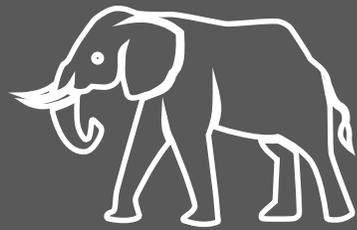




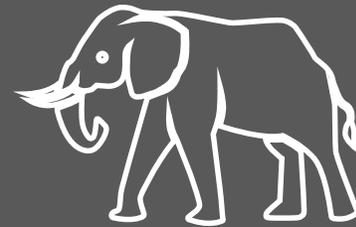
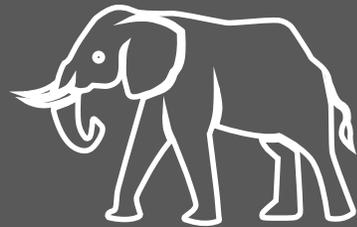
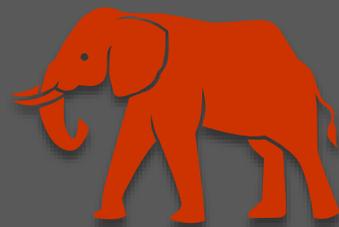
Interactive Prototypes & Mockups



Summary

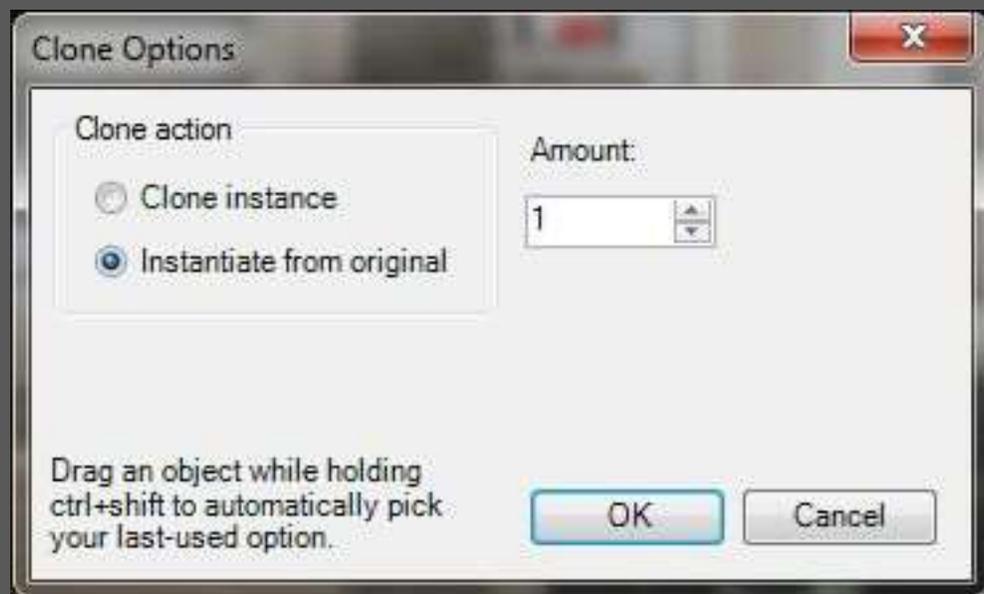


Who are we building
this for?



To really understand
what users do,
**go to their desks
and watch them work**
instead of doing
focus groups and surveys





Emu-hom 23

ai-lbp - uni |

ai-vehicle-info |

ai-chasespawn |

showavailable .. |

ai-show-npc |

toggle-debug-id |

exec upammo

chase-search / chase-u

chase-detail / ~~chase~~ CAMP

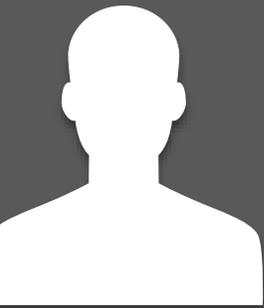
Helper GP

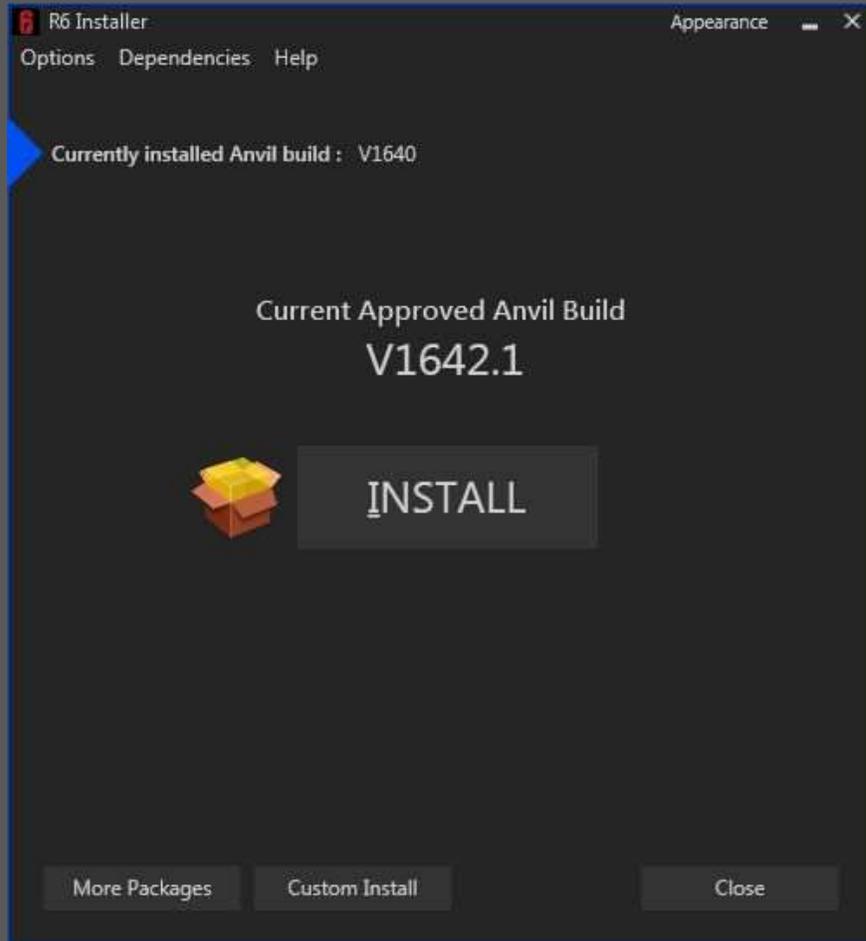
Knowing who the
majority of users are
and the
tasks they perform
most often



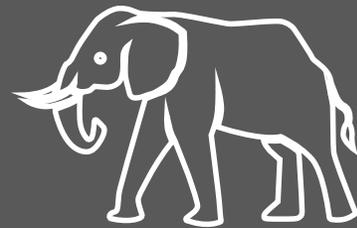
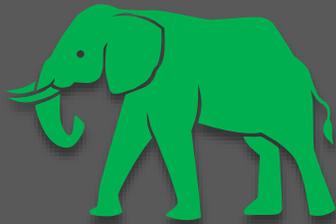
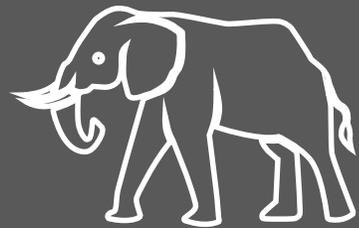
gives you the biggest ROI when

prioritizing features



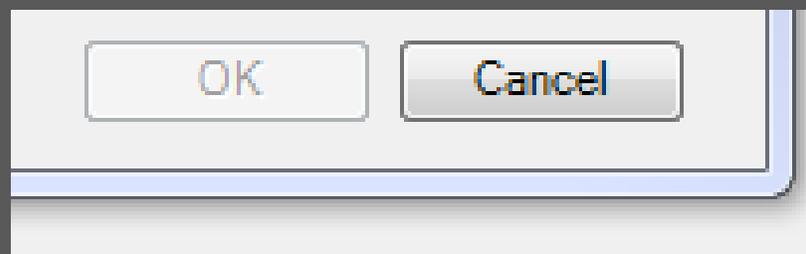
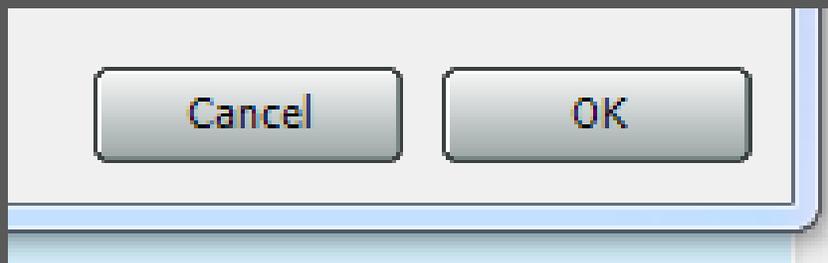


How does the interface work?

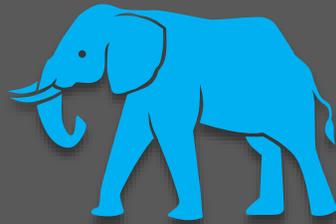
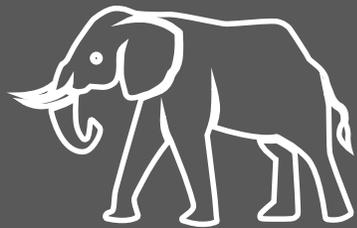
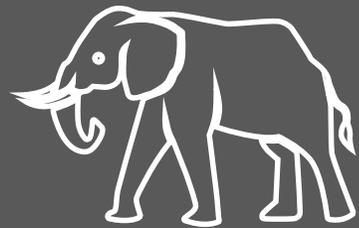


Design guidelines
can make your tool
easier to learn
and
more efficient to
implement and use





What is it like to use?

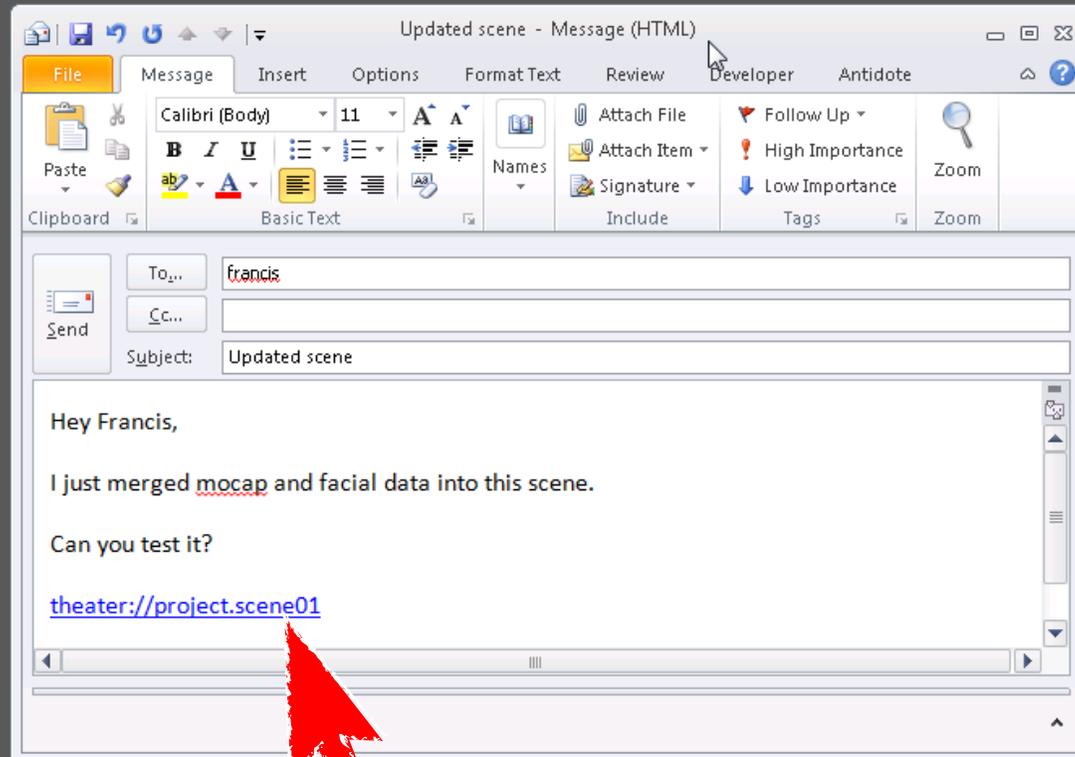


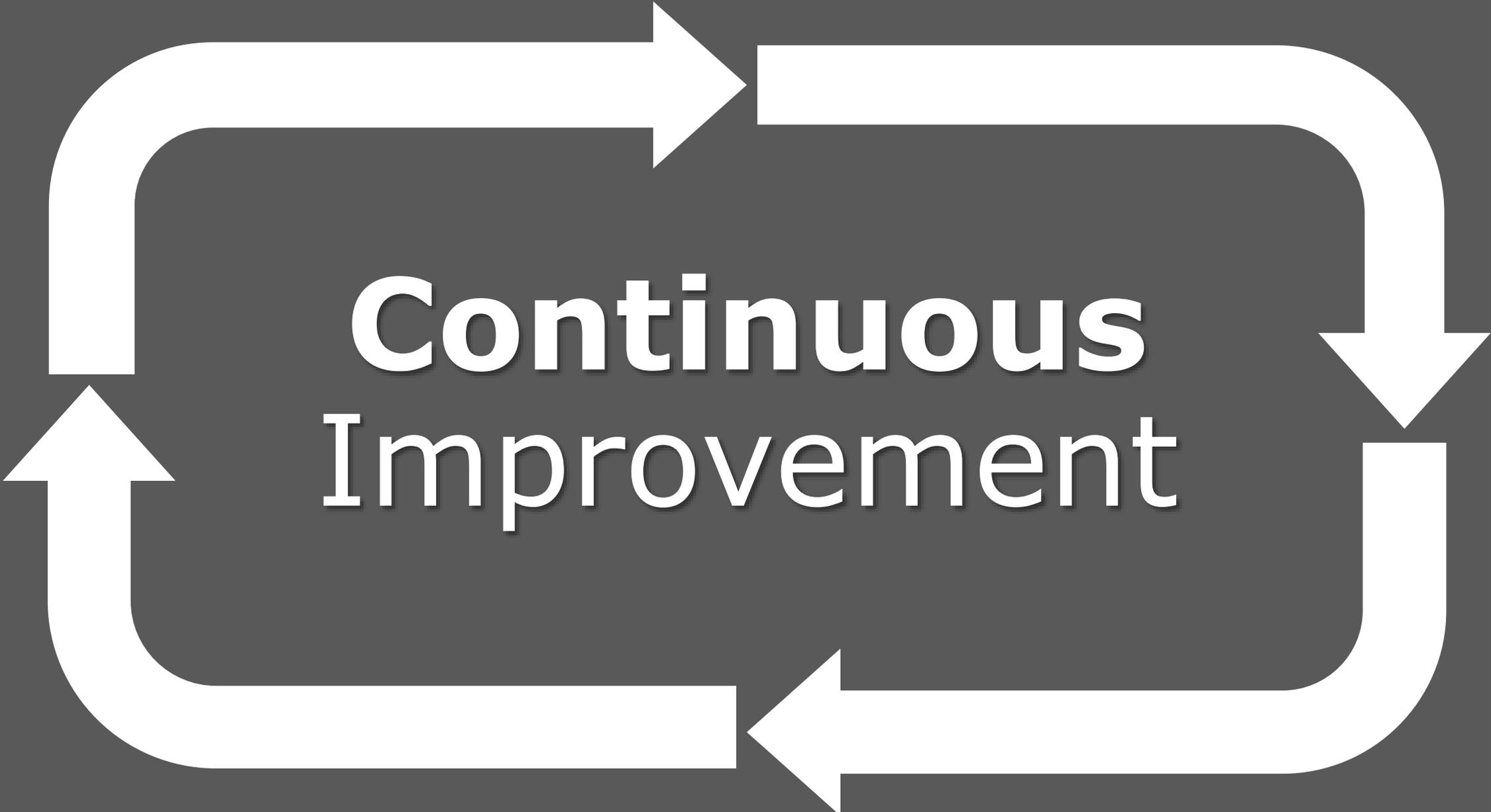
Mockups
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way to
get user feedback
on your tool
sooner



The context
in which a tool is used can
help us find
simpler ways
for users to
achieve their goals

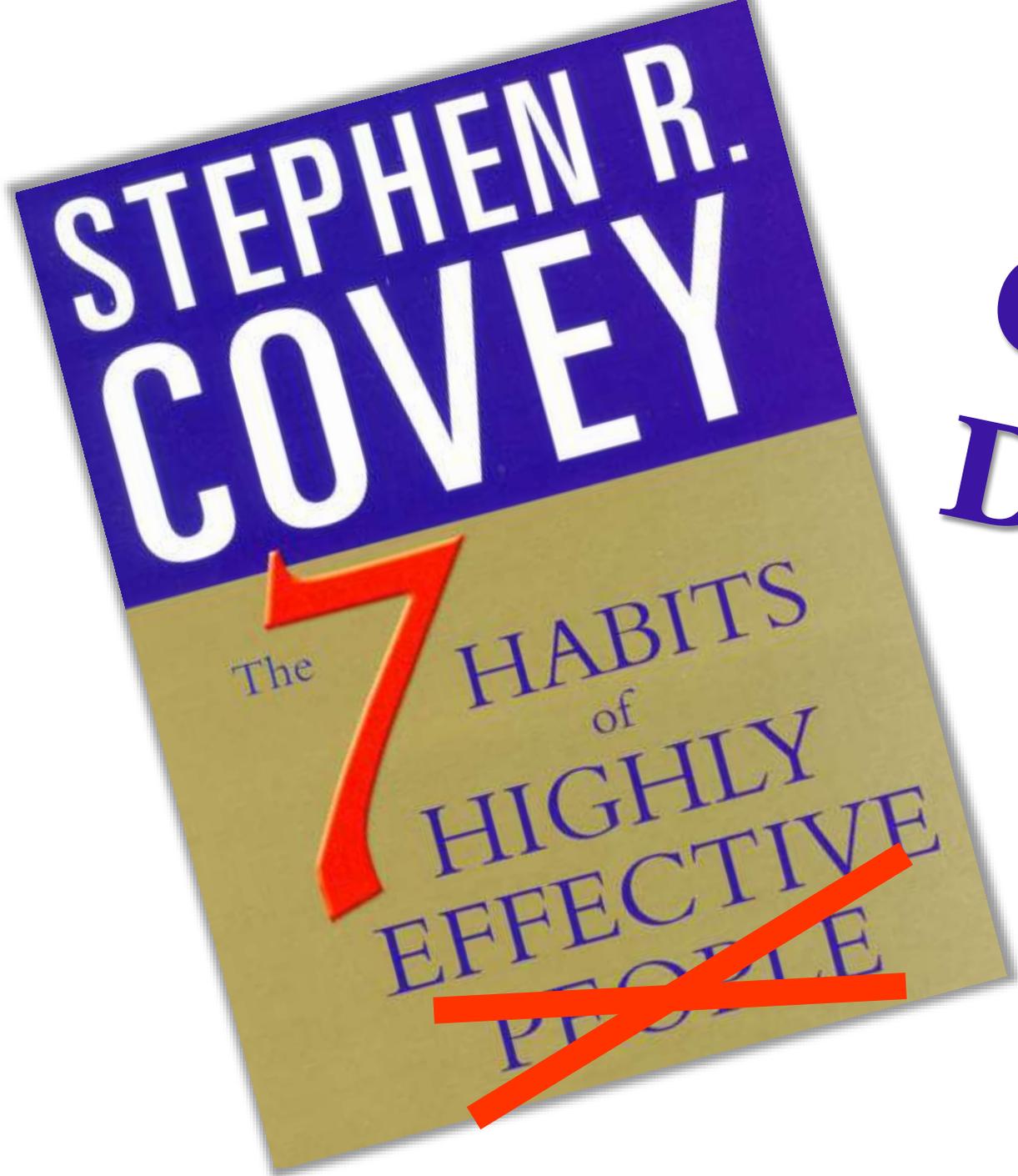






**Continuous
Improvement**

How to do this
consistently?



**GAME TOOLS
DEVELOPERS**

Watch people work

Start with
**one morning
per month**





Start with the UX Guidelines

 Windows | Dev Center - Desktop ▾

[DASHBOARD](#) [GET STARTED](#) [DESIGN](#) [DEVELOP](#) [CERTIFY](#)

[Guidelines](#) [Visual index](#) [Glossary](#)



Make a **mockup**

Show it to your **users**

Iterate & Repeat

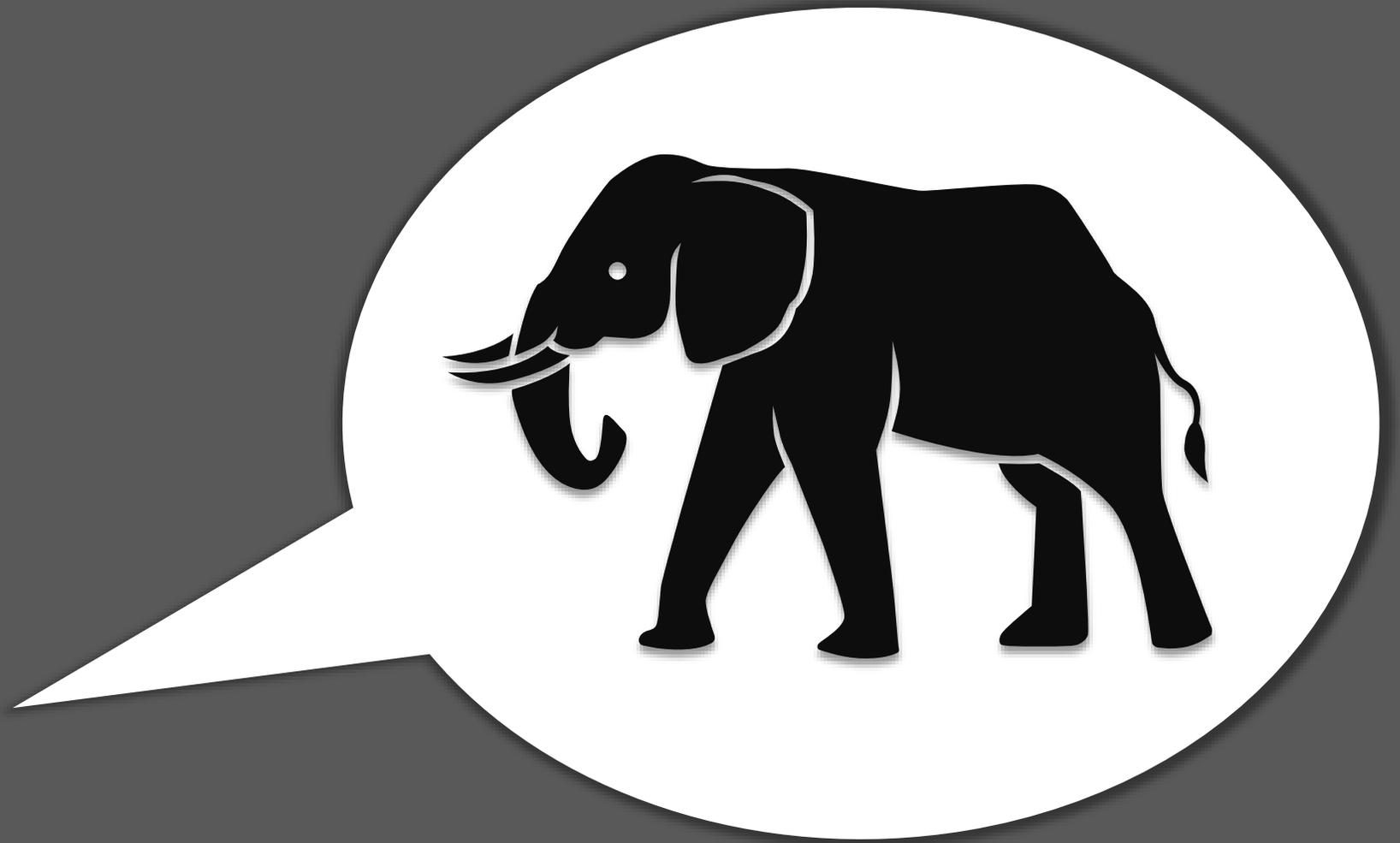


	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5
6	7	8	9	10	11
12	13	14	15	16	17
18	19	20	21	22	23
24	25	26	27	28	29
30	31				

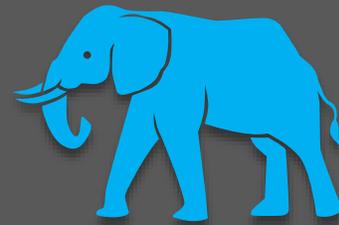
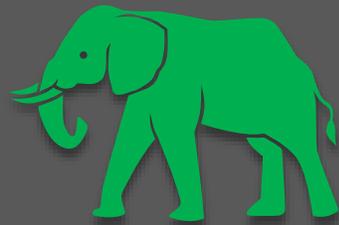
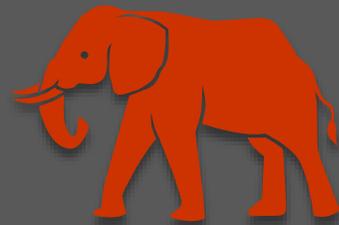


STORIES	TODO	IN PROGRESS	TEST
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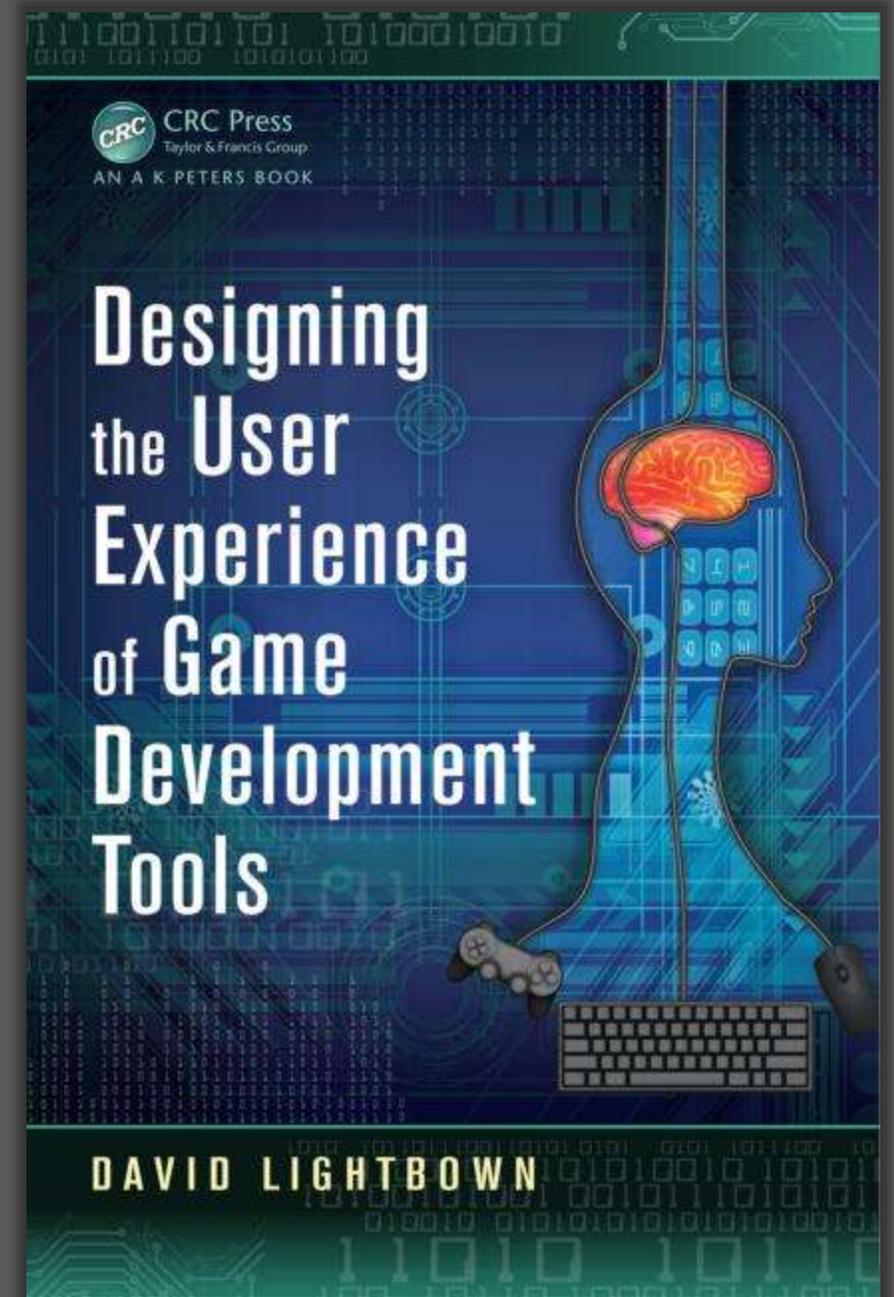


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