

Situated Interaction

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| Next Week | 13h30 |
| <p>Send: Exercises 1, 2 and 4</p> <p>Read: Beaudouin-Lafon, M. (2000). Instrumental Interaction: an Interaction Model for Designing Post-WIMP User Interfaces. <i>Proc. ACM Human Factors in Computing Systems, CHI 2000</i>, The Hague (The Netherlands), CHI Letters 2(1):446-453, ACM Press.</p> <p>Beaudouin-Lafon, M. & Mackay, W. (2000). Reification, Polymorphism and Reuse: Three Principles for Designing Visual Interfaces. <i>Proc. Advanced Visual Interfaces, AVI 2000</i>, Palermo (Italie), ACM Press, pp 102-109.</p> | |

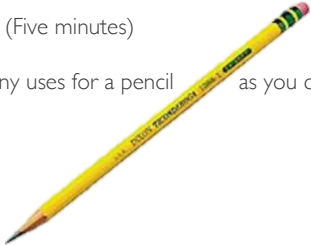
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| Homework | |
| <p>Exercises 1 & 2 ... Exercise 3 ... Exercise 4 ...</p> | |

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| Today | |
| <p>Review exercises</p> <p>Instrumental Interaction Reification Polymorphism Reuse</p> | |

Exercise #1 Brainstorm uses of a Pencil

Individual exercise (Five minutes)

Write down as many uses for a pencil as you can.




Homework: send typed exercises to:
 To: mackay@iri.fr; mbi@iri.fr
 Subject: <last name> FSI: Ex #1: Pencil Brainstorm

Exercise #2 Situated Pencil Activities

Individual exercise (Five minutes)

Think of four activities such as:
 gardening, cooking, dressing


For each, come up with at least five new uses for a pencil



Homework: send typed exercises to:
 To: mackay@iri.fr; mbi@iri.fr
 Subject: <last name> FSI: Ex #2: Situated Pencil Activities

Exercise #3 Graphical Objects as Tools


Create a drawing with properly aligned and distributed objects without using any 'official' PowerPoint tools



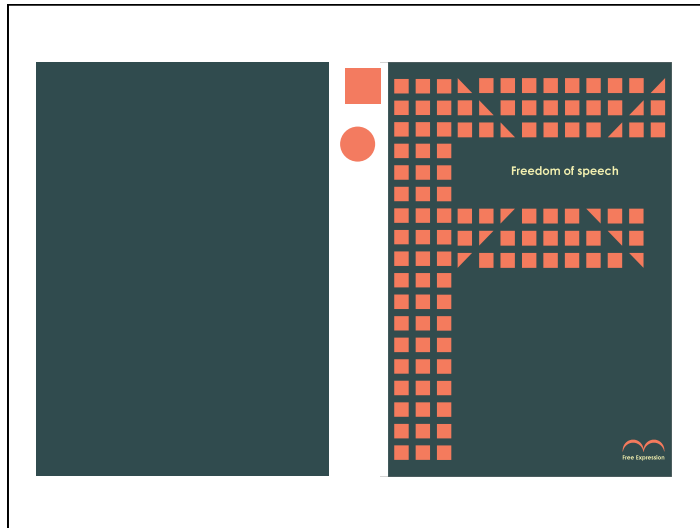
Exercise #3 Graphical Objects as Tools

Replicate this drawing using shapes as tools
 Do not use 'official' PowerPoint or Keynote tools

What tasks worked?
 What properties of the shapes did you use as tools?
 What tasks did not work (required 'real' tools)?



Homework: send typed exercises to:
 To: mackay@iri.fr; mbi@iri.fr
 Subject: <last name> FSI: Ex #3: Graphical Tools



Exercise #4 Finding Digital Tools

Choose a creative software application such as Microsoft

Take a screen shot of one toolbar.
 Count how many discrete tools appear on the screen
 Give each tool a name and a brief description of what it does, with pointers to the screenshot

Shape: insert a new shape

Homework: send typed exercises to:
 To: mackay@nir.fr; mbi@nir.fr
 Subject: <last name> FSJ: Ex #3: Finding Digital Tools

Software: Final Cut X Pro
 Hardware: Apple Macintosh, OSX El Captain
 Purpose: Edit videos

Author: Sara Eriksson
 # Tools: 48 + 153

Software: Axure
 Hardware: MacBook Pro (Retina, 13-inch)
 Purpose: Create highly functional prototype

Author: Yi Zhang
 # Tools: 74

Software: Illustrator
 Hardware: Apple Macintosh
 Purpose: Draw pictures

Author: Lucas Rodrigues
 # Tools: 38

Software: Eclipse
 Hardware: Apple Macintosh
 Purpose: IDE (integrated development environment)

Author: Jori Witte
 # Tools: 25

plus more ...

Software: Adobe Photoshop CS6 V.13
 Hardware: Apple Macintosh, OSX
 Purpose: Edit pictures, create digital art

Author: Viktor Gustafsson
 # Tools: 27

Software: Excel
 Hardware: Windows?
 Purpose: Manage Spreadsheets

Author: Zhuoming Zhang
 # Tools: 81

Software: InDesign
 Hardware: Macintosh
 Purpose: Layout

Author: Wuji Geng
 # Tools: 75

B1. moving tool bar: click on this area and drag to move the tool bar.
 D1. select: to select an object/ object group.
 D2. direct select: to select even the elements in the object group.
 D3. page: to edit the single page.
 D4. gap: to know the gap between objects.
 D5. container: to collect a container and put it onto the page.
 D6. text: edit the text in an object. It is also the access to text arrangement.
 D7. line: to draw a line on the page.
 D8. pens: draw the path of a shape, also the access to anchor functions.
 D9. pencil: draw a shape, also the access to smooth tool and eraser tool.
 D10. rectangle frame, also the access to other frame shapes.
 D11. rectangle, also the access to other pre-set shapes.
 D12. horizontal grid
 D13. vertical grid
 D14. scissors: to cut the path.
 D15. free transform
 D16. gradient coloring
 D17. gradient erosion
 D18. notes: to add notes to an object
 D19. color picker: also the access to ruler.
 D20. grab: to grab and move the view.
 D21. display size scaling
 D22. switch between border and in color
 D23. set the style to text or container
 D24. color applied

E1. layer: show/ hide and select a layer
 E2. layer information
 E3. new layer: create a new layer.
 E4. delete layer
 E5. path finder: access to searching for a path
 E6. align objects: align objects in different ways
 E7. distribute objects: distribute elements in the objects in different pre-set ways.
 E8. distribute by distance: distribute objects by setting a distance.
 E9. distribute the selections
 E10. distribute the objects to same distance.
 E11. distribute the objects to a same set distance.

A14. screen modes: make the work area shown as what the users want, with normal, preview, bevising modes etc.

Software: PowerPoint
 Hardware: Macintosh
 Purpose: Create slides

Author: Casper Kessels
 # Tools: 69

Close Minimize Full screen File Save Undo Redo
 Search Share Help Collapse
 Paste Cut Copy Format
 New slide Layout Reset Section
 Font Font size Font size +1 Font size -1 Clear all formatting Bold Italic Underline Strikethrough Superscript Character spacing Change case Text color
 Bullet list Number list Indent +1 Indent -1 Line spacing Add/remove columns Align left Align center Align right Align justify Text direction Click to add subtitle
 Picture Shapes Text box
 Arrange Quick styles Shape fill Shape outline
 69 Tools in total
 Add notes Click to add notes
 Show notes Show comments Normal layout Slide sorter Start presentation Zoom slider Zoom selector Fit slide to current window

Software: Keynote v.7.3
 Hardware: MacOS Sierra
 Purpose: Create slides

Author: Jj Xie
 # Tools: 374 (?)

Collection of operations to change slides
 Keynote settings
 Collection of file operations
 Add objects to slides
 Change format
 Arrange objects
 Play slides
 Share slides
 Change keynote window
 Keynote help document
 Add slide
 Insert
 Slide
 Format
 Arrange
 View
 Play
 Share
 Window
 Help
 Change size of slides
 Play slide
 Live Slideshow
 Insert table
 Insert text
 Insert media
 Share slides
 Insert comment
 Change format
 Change appearance of slides and side menus
 Change the appearance of slides and side menus
 Insert chart
 Insert shape
 Add animation
 Change doc or audio
 Background

| | | | | | |
|-----------|--------|--------|----------|--------|---------|
| #menus | #cmds | #dlogs | #smenus | #scmds | #sdlogs |
| | 28 | 49 | 20 | 49 | 40 |
| #palettes | #tools | #prefs | #options | | |
| | 9 | 65 | 2 | | 84 |

Software: Ominigraffle Pro (2013)
 Hardware: Macintosh
 Purpose: Create graphs

Author: Nicolas Taffin
 # Tools: 14 +

Red is for non instruments (or meta instruments like tool organizers)
 Green is for instruments (spatial and temporal - specified)

For next week:

Exercise #3: Graphical Objects as Tools individual
 Exercise #5: Cross-Application Tools group
 Exercise #6: Pencil Properties individual


Plus: Choose 3 articles for your presentation based on a common theme

(enter your choices in Google Doc)

Exercise #3 Graphical Objects as Tools

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 Subject: <last name> FSI: Ex #3: Graphical Tools

Exercise #5 Cross-Application Tools

Group exercise (15 + 15 minutes)

- Find tools that are used *across multiple applications*
 For each tool: How similar / dissimilar are they?
 What do they reify?
 Are they polymorphic?
 Are they reusable?
- Find tools that exist *in only one application*
 For each tool: How could it be used in another application?

Homework: send typed exercises to:
 To: mackay@iri.fr; mbl@iri.fr
 Subject: Group # FSI: Ex #5: Cross-App Tools

Exercise #6 Pencil Properties

Group exercise

- Start with your group's set of pencil ideas.
 List the physical properties of the pencil, e.g. 'rigid', that make the activity possible.
- For each physical property, list as many uses of that property as you can, e.g., 'prop up a young plant'.

Homework: send typed exercises to:
 To: mackay@iri.fr; mbl@iri.fr
 Subject: Group # FSI: Ex #5: Cross-App Tools