

<p style="text-align: center;">Fundamentals of Situated Interaction</p> <p style="text-align: center;">Wendy Mackay & Michel Beaudouin-Lafon 21 September 2018</p> <p style="text-align: center;"><i>mackay@iri.fr</i> <i>mbl@iri.fr</i></p>

Homework
<p>Send: Exercises 1, 2, 3, 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>

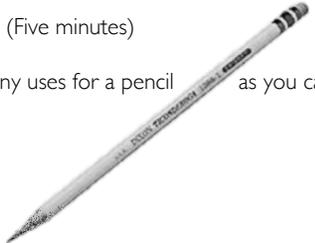
Today
<p>Review exercises</p> <p>Co-adaptive Systems</p>

<p>Exercises</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@lri.fr; mbi@lri.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@lri.fr; mbi@lri.fr
 Subject: <last name> FSI: Ex #2: Situated Pencil Activities

Exercise #4 **Finding Digital Tools**

Choose a creative software application such as Microsoft Word



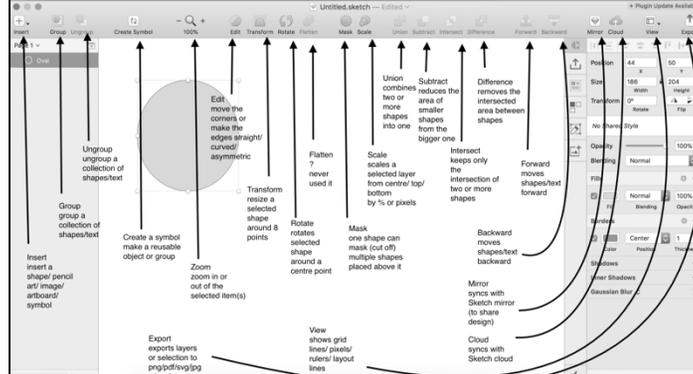
Take a screen shot of one toolbar.
 Count how many discrete tools appear on the screen
 Give each tool a name and a brief description of what it does, with pointers to the screenshot

Shape:
 insert a new shape

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

Software: Sketch
 Hardware: Mac?
 Purpose: xxx

Author: Ranjini ARAVIND
 # Tools: 21



- 1. Insert a shape/ pencil art/ image/ boards/ symbol
- 2. Group group a collection of shapes/text
- 3. Ungroup ungroup a collection of shapes/text
- 4. Create a symbol make a reusable object or group
- 5. Zoom zoom in or out of the selected item(s)
- 6. Edit move the corners or make the edges straight/ curved/ asymmetric
- 7. Transform resize a selected shape around 8 points
- 8. Rotate rotates selected shape around a centre point
- 9. Flatten ? never used it
- 10. Scale scales a selected layer from centre/ top/ bottom by % or pixels
- 11. Mask one shape can mask (cut off) multiple shapes placed above it
- 12. Union combines two or more shapes into one
- 13. Subtract reduces the area of smaller shapes from the bigger one
- 14. Difference removes the intersected area between shapes
- 15. Intersect keeps only the intersection of two or more shapes
- 16. Forward moves shapes/text forward
- 17. Backward moves shapes/text backward
- 18. Mirror syncs with Sketch mirror (to share design)
- 19. Cloud syncs with Sketch cloud
- 20. View shows grid lines/ pixels/ layout lines
- 21. Export exports layers or selection to png/pdf/svg/ other formats

Software: xxx
Hardware: xxx
Purpose: xxx

Author: Luis CONTRERAS
Tools: 14?

Drop Down Menu to Select other styles

Button Selector (It has a real name I can remember it or find it on google navigation bar?) - Lets you choose between the options

Another kind of drop down menu that lets you select multiple options. Typeface, Font Style and Font Size.

Color Picker - Lets you pick a color

Settings - Extra options to modify the text

Underline - Underline the text

Italics - Italicize? the text

Bold - Bold the text

Justify - Justify the text

Align right - Align the text right

Align middle - Align the text middle

Align left - Align the text left

Add Margin right

Add Margin left

The rest are similar to all the others.

Software: LibreOffice Writer
Hardware: Razer Blade, Fedora
Purpose: Create documents

Author: Joel GIL LEON
Tools: 57

1. New
2. Open
3. Save
4. Export to PDF, a pdf is generated and placed in the same place as the current file
5. Print, opens printer settings
6. Toggle print preview
7. Cut
8. Copy
9. Paste
10. Copy formatting, clicking on it while text is highlighted copies the formatting, the next click will make whatever text is under the cursor have the same formatting as the first text.
11. Go back one change
12. Go forward one change
13. Find & replace
14. Spell check
15. Toggle formatting marks
16. Insert Table
17. Insert image
18. Insert graph
19. Insert text box
20. Insert page break
21. Insert field
22. Insert special character
23. Insert hyperlink
24. Insert Footnote
25. Insert End-note
26. Insert Bookmark
27. Insert cross-reference
28. Insert comment
29. Insert link, template function
30. Insert line
31. Insert table above
32. Shows many basic shapes to choose from
33. Set paragraph style
34. Change from predefined paragraph style
35. Update style
36. Set font
37. Set font face size
38. Toggle bold
39. Toggle italic
40. Toggle underline
41. Toggle strikethrough
42. Toggle superscript
43. Toggle subscript
44. Clear direct formatting
45. Set text color
46. Color chooser
47. Gradient
48. Set background color
49. Color chooser
50. Gradient
51. Gradient
52. Gradient
53. Set line spacing
54. Increase paragraph spacing
55. Decrease paragraph spacing
56. Increase column
57. Decrease column

Software: Sketch 50.2 (55047)
Hardware: MacOS High Sierra
Purpose: UI design, prototype

Author: Yunin HONG
Tools: 22

1. Insert: Insert different elements (artboard, shape, vector, pencil, text, image...) into workspace
2. Group: Make several layers as a group
3. Ungroup: Dissolve the group
4. Create Symbol: Make a layer as a symbol (symbol can be used ref edit one, other will be edited automatically)
5. Zoom in/out: Zoom in or zoom out the view of workspace
6. Edit: Edit the anchor point of a shape / (if a text), edit the text
7. Transform: Transform the shape
8. Rotate: Rotate the element
9. Flatten: Don't know, never use it
10. Mask: Create a mask for selected layer
11. Scale: Scale the element using percentage
12. Union: Create a new single shape from combining two shapes
13. Subtract: Create a new single shape from two shapes (The shape below subtract shape above)
14. Intersect: Create a new single shape from the overlapping part of two shapes
15. Difference: Create a new single shape from non-overlapping part of two shapes
16. Forward: Move the layer up
17. Backward: Move the layer down
18. Link: Set the interaction from trigger to result
19. Preview: Preview the interactive mockup
20. Cloud: Use the sketch cloud to upload design or share with friends
21. View: Add some additional view assistance, such as grid and ruler
22. Export: Export the artboard

Software: Adobe Illustrator, CS6, version 16.0.0
Hardware: Apple Macintosh, OSX
Purpose: Create vector art, logos, printable posters, etc.

Author: Xi HU
Tools: 28

1. Select: Select an object to edit
2. Magic Wand Select: Select objects of the same color
3. Pen: Draw straight lines, curves, shapes
4. Line: Draw straight lines
5. Calligraphic Brush: Draw freehand lines with different brush stroke textures
6. Blob Brush: Draw freehand lines with different brush stroke textures, fill, no stroke
7. Rotate: Rotate object around a set point which can be modified
8. Width: Modify the width of a stroke
9. Shape Builder: Build compound shapes
10. Grid: Create grid in an object by adding intersected vertices
11. Gold: Create grid in an object by adding color, font, and other attributes
12. Sprayer: Place a copied symbol where mouse clicked, as a stamp
13. Artboard: Create or move an artboard
14. Hand: Change viewport position of the artboards inside the file window
15. Directly select: Select points of an object
16. Lasso select: Select points of an object within freehand drawing area
17. Text: Create or edit texts
18. Rectangle: Create or edit a rectangle
19. Pencil: Create path with freehand drawing
20. Eraser: Erase parts of path with freehand moving
21. Scale: Resize selected object
22. Free Transform: Resize or rotate selected object
23. Perspective Grid: Create perspective grid of a cube
24. Gradient: Create gradient effect for an object
25. Blend: Create gradual changed objects (shape, color) between two objects
26. Column: Create column graphics
27. Slice: Create slices of images for web
28. Zoom: Zoom in or out to adjust the scale of the view inside the window

Software: Adobe Photoshop
 Hardware: xxx
 Purpose: xxx

Author: András SZUCS
 # Tools: 46

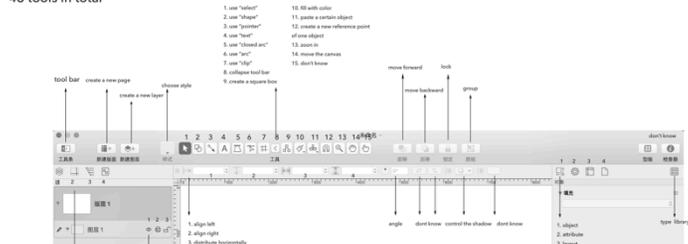


1. Rectangular Marquee Tool. Select points with a rectangular shape
2. Tool Preset selector
3. New selection. Add to selection. Subtract from selection. Intersect with selection
4. Soften edges of selection
5. Smooth edges of selection
6. Style selector? the height and width of selection
7. Manually specify the height and width of selection
8. Refine edge?
9. Workspace preset selector
10. Move tool
11. Polygonal Lasso tool. Create a selection polygon by connecting points
12. Quick selection tool. Create a selection automatically by hovering over the pixels
13. Crop tool
14. Eyedropper tool. Select color from image
15. Non-destructive brush tool?
16. Color Replacement tool. replace color on image
17. Clone stamp tool?
18. History panel. History tool
19. Eraser tool
20. Paint bucket tool. Fill the selection with the color
21. Blur tool
22. Dodge tool?
23. Pen tool?
24. Horizontal Type tool. Type text horizontally
25. Path selection tool?
26. Rounded rectangle tool. Create a shape
27. Hand tool. Move the canvas
28. Zoom tool. Zoom on the canvas
29. Switch background and foreground color
30. Set background and foreground color
31. Switch the background and foreground color back to default
32. Quick Mask mode?
33. Change screen mode. Switch to full screen
34. History tool. Revert changes to the image
35. Properties?
36. Device Preview. How the design looks on other devices such as mobile
37. Character. Change font style of the typed text
38. Paragraph. Paragraph text editor tools such as centering text
39. Color palette and selection
40. Swatches. Another color selection tool?
41. Libraries. assets from other Adobe apps?
42. Adjustments. Image adjustments like the saturation, exposure, hue
43. Styles?
44. Layers. layers in the PSD design file
45. Channels. setting the color channels, RGB
46. Paths?

Software: OmniGraffle
 Hardware: xxx
 Purpose: xxx

Author: Zaiqiao YE
 # Tools: 46

OmniGraffle
 46 tools in total



1. use "text"
2. use "shape"
3. use "transform"
4. use "text"
5. use "linked text"
6. use "text"
7. use "fill"
8. collapse text bar
9. create a square box
10. fill with color
11. paste a certain object
12. create a new reference point
13. zoom in
14. zoom the canvas
15. don't know
16. move forward
17. lock
18. move backward
19. group
20. align left
21. show HD reference line panel
22. show HD text panel
23. show the layout panel
24. align right
25. distribute horizontally
26. align vertically
27. show the layer
28. group the layer
29. lock the layer
30. don't know
31. control the shadow
32. don't know
33. object
34. attribute
35. layer
36. layer
37. layer
38. layer
39. layer
40. layer
41. layer
42. layer
43. layer
44. layer
45. layer
46. layer

Software: Microsoft Excel 2016
 Hardware: Microsoft, windows 7
 Purpose: Edit spreadsheets, organize data for statistical, engineering or financial needs

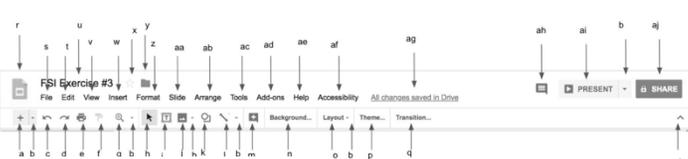
Author: Juji Okuja
 # Tools: 53



1. Save: save file
2. Undo: undo previous action
3. Redo: reverse the last undo
4. Customise quick access toolbar: add/remove short-cut icon on/from tool bar
5. Paste: Add content on the clipboard to the document
6. Drop-down menu: extend the menu to access to the other item
7. Cut: remove the selection and put it on the clipboard
8. Copy: put a copy of the selection on the clipboard
9. Format Painter: copy all of the formatting from one object and apply it to another one
10. More: see all other options that user can customize
11. Font: pick a font for the text
12. Font size: change the size of the text
13. Increase font size: make a text bigger
14. Decrease font size: make a text smaller
15. Bold: make the text bold
16. Italic: italicize the text
17. Underline: underline the text
18. Borders: apply borders to the currently selected cells
19. Fill color: color the background of cells
20. Font color: change the color of the text
21. Top align: align text to the top
22. Middle align: align text so that it is centered between the top and bottom of the cell
23. Bottom align: align text to the bottom
24. Orientation: rotate the text diagonally or vertically
25. Align left: align the content to the left
26. Center: center the content
27. Align right: align the content to the right
28. Decrease indent: move the content closer to the cell border
29. Increase indent: move the content further away from the cell border
30. Wrap text: wrap extra long text into multiple lines
31. Merge & Center: combine and center the contents of the selected cells in new larger cell
32. Number format: choose the format for the cells, such as percentage, currency, date or time
33. Accounting number format: format as dollars, euros, or other currency
34. Percent style: format as a percent
35. Comma style: format with a thousands separator
36. Increase decimal: show more decimal places for a more precise value
37. Decrease decimal: show fewer decimal places
38. Conditional formatting: easily spot trends and patterns in the data using bars, colors, icons to visually highlight important values
39. Format as table: quickly convert a range of cells to a table with its own style
40. Cell styles: put a colorful style on the cell
41. Insert: add new cells, rows or columns to the workbook
42. Delete: delete cells, rows, columns or sheets from the workbook
43. Format: change the row height or column width, organize sheets, or protect or hide cells
44. Autofill: automatically add it up
45. Fill: continue a series or pattern into neighboring cells in any direction
46. Clear: Delete everything in the cell, or remove just the formatting, contents, comments or hyperlinks
47. Sort & Filter: sort the selected data
48. Find & Select: find the text in the document
49. Ribbon display option: customize the setting of ribbon menu
50. Minimize: minimize the window
51. Maximize: maximize the window
52. Close: close the window
53. Share: get options for sharing

Software: xxx
 Hardware: xxx
 Purpose: xxx

Author: Elizabeth WALTON
 # Tools: 37



1. Insert-menu: search and select actions related to adding new objects to the presentation
2. Star: mark document as special for quicker access later
3. Move: changes folder in which presentation is saved
4. Format-menu: search and select actions related to the format of the presentation
5. Zoom: change view of presentation
6. Select: returns mouse to pointer mode after other tools like "Shape" and "Image" are used
7. Text: insert text box
8. Image: select an image to insert
9. Shape: select a shape to insert
10. Line: select line to insert
11. Add-comment: insert comment about presentation for other project partners
12. Background: change slide background color/image
13. Layout: change slide design within theme
14. Theme: change the overall theme of presentation
15. Transition: change transition to current to next slide
16. Home: return to Google Slides' home for your account
17. File-menu: search and select actions related to the presentation as a whole
18. Edit-menu: search and select actions related to changing items within the presentation
19. Title: name the document for later searching
20. View-menu: search and select actions related to how the user is seeing the presentation
21. Insert-menu: search and select actions related to adding new objects to the presentation
22. Star: mark document as special for quicker access later
23. Move: changes folder in which presentation is saved
24. Format-menu: search and select actions related to the format of the presentation
25. Zoom: change view of presentation
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