

<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>

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 preformatted paragraph style
35. Update style
36. Set font
37. Set font face size
38. Toggle bold
39. Toggle italic
40. Toggle underline
41. Toggle overline
42. Toggle strikethrough
43. Toggle superscript
44. Clear direct formatting
45. Set text color
46. Color chooser
47. Toggle background color
48. Set background color
49. Color chooser
50. Rotate to create a custom color
51. Rotate
52. Rotate to create a custom color
53. Rotate to create a custom color
54. Rotate to create a custom color
55. Rotate to create a custom color
56. Rotate to create a custom color
57. Rotate to create a custom color

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 intersected vertices
12. Scatter: 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

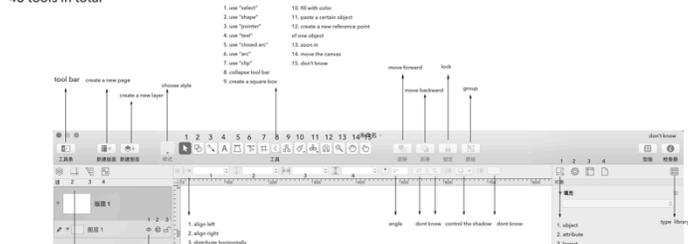


1. Rectangular Marquee Tool. Select points with a rectangular shape
2. Tool Preset selector
3. New selection. Add to selection. Subtract from selection. Intersect with selection
4. Soften edges of selection
5. Smooth edges of selection
6. Style selector? the height and width of selection
7. Manually 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. don't know
17. don't know
18. don't know
19. don't know
20. don't know
21. don't know
22. don't know
23. don't know
24. don't know
25. don't know
26. don't know
27. don't know
28. don't know
29. don't know
30. don't know
31. don't know
32. don't know
33. don't know
34. don't know
35. don't know
36. don't know
37. don't know
38. don't know
39. don't know
40. don't know
41. don't know
42. don't know
43. don't know
44. don't know
45. don't know
46. don't know

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

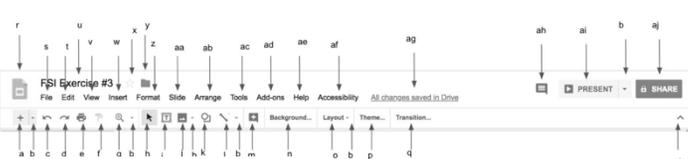
Author: Juji Okuja
 # Tools: 53



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 items
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



- a: Add Slide- add a new, blank slide to slide deck
- b: Drop-down- offer other options from which to choose
- c: Undo- revert to previous form of slide
- d: Redo- revert to the slide form before 'Undo' requested
- e: Print- print presentation
- f: Part-format- allows for format changing based on other parts of the presentation
- g: Zoom- change view of presentation
- h: Select- returns mouse to pointer mode after other tools like "Shape" and "Image" are used
- i: Text- insert text box
- j: Image- select an image to insert
- k: Shape- select a shape to insert
- l: Line- select line to insert
- m: Add-comment- insert comment about presentation for other project partners
- n: Background- change slide background color/image
- o: Layout- change slide design within theme
- p: Theme- change the overall theme of presentation
- q: Transition- change transition to current to next slide
- r: Home- return to Google Slides' home for your account
- k: File-menu- search and select actions related to the presentation as a whole
- T: Edit-menu- search and select actions related to changing items within the presentation
- v: View-menu- search and select actions related to how the user is seeing the presentation
- w: Insert-menu- search and select actions related to adding new objects to the presentation
- x: Star- mark document as special for quicker access later
- y: Move- changes folder in which presentation is saved
- z: Format-menu- search and select actions related to the format of the presentation
- ac: Zoom-menu- search and select actions related to this current slide specifically
- ab: Arrange-menu- search and select actions related to the arrangement of the objects on the presentation
- ac: Tools-menu- search and select actions related to general tools used when created documents of any kinds
- ad: Add-ons-menu- search and select actions related to including more, personalized tools
- af: Accessibility-menu- search and select actions related to allowing presentation to be accessible to everyone
- ag: Changes-saved- shares when the document was last saved
- ah: Comments- directs to all comments made on presentation
- aj: Present- displays project in form ready for presentation
- ak: Share- gives access to presentation or presentation url to other users
- al: Close-menu- hides the menu from user

Software: Microsoft Excel 14.0.6
 Hardware: Dell Precision 390, Windows 7
 Purpose: Create tables and graphs

Author: Rafiei MARZIEH
 # Tools: 38

Font

- Reduce the size of font: Decrease the size of the text
- Color of font: Change the color of the text
- Raise the size of font: Increase the size of the text
- Fill a cell: Change the color of a case
- Size of the font: Determine the dimension of the text
- Edge of the table: Draw the limits of the array
- Font: Modify a writing style
- Underline: Underline a text
- Italic: Turn the typographical design of a text in italic
- Bold: Obtain a thicker text

Number

- Format: User can define the type of its values (%; identifier...)
- Reduce the decimal: Decrease the precision of a value
- Raise the decimal: Increase the precision of a value
- Thousands separator: Insert a space blank in the value corresponding to the thousands separator
- Percentage: Convert a value in percentage
- Accounting: Choose a currency (available only for a kind of application)

Alignment

- Cell Styles: User can configure a cell
- Create Array: User can create and configure an array
- Create condition: user can specify some rules between values

Font

- Return to the line: Make viewable the whole text in a cell
- Action on cells: User can do some actions on cells (merger...)
- Raise the margin: Increase the space between a text and the edge of it cell
- Action on text: Position the orientation of a text
- Reduce the margin: Decrease the space between a text and the edge of it cell
- Align right: Put a text on the right of it cell
- Align down: Put a text on the bottom of it cell
- Align center: Put a text in the middle of it cell
- Align center: Put a text in the between the top and the bottom of it cell
- Align left: Put a text on the left of it cell
- Align up: Put a text on the top of it cell

Software: CINEMA 4D
 Hardware: HP WASD, WINDOWS
 Purpose: 3D motion graphic design

Author: Zhong Yuanyang (Zonyiac)
 # Tools: 44

Handwritten Annotations:

- Scale tool: Change size
- Move tool: Move object
- Rotate tool: Rotate object
- Axis: View preview
- Object tool: Create object
- Camera tool: Create camera
- Light tool: Create light
- Floor or sky tool: Create floor or sky
- Transformer tool: To choose different type of transformer
- Pen tool: Draw different type of path
- Vendor region: Change a region to vendor
- Search: User can find, replace a value or a text
- Classify and filter: Sort values per categories
- Formula: Create mathematical functions and formulas from set cells
- Matrix: Fill array from a pattern
- Erase: Delete all values and texts of cells or arrays

Exercise #5 Critical Object interview

What happened first: What did you try to do?
 Did it work? If yes, what did you do next?
 If no, what else did you try?

Interview #1: A interviews B and takes notes
 Interviewer A: _____ Interviewee B: _____
 Question: _____
 Answer: _____
 Question: _____
 Answer: _____
 ...

Interview #2: B interviews A and takes notes
 Interviewer B: _____ Interviewee A: _____
 Question: _____
 Answer: _____
 Question: _____
 Answer: _____

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

For next week:

Exercise #5: Cross-Application Tools individual

Send your typed notes of your critical object interview

Plus: Choose a partner
 Choose 3 articles for your iMuseum entries

(Enter your choices in the Google Doc)