Inkscape Tutorial

v2024-05

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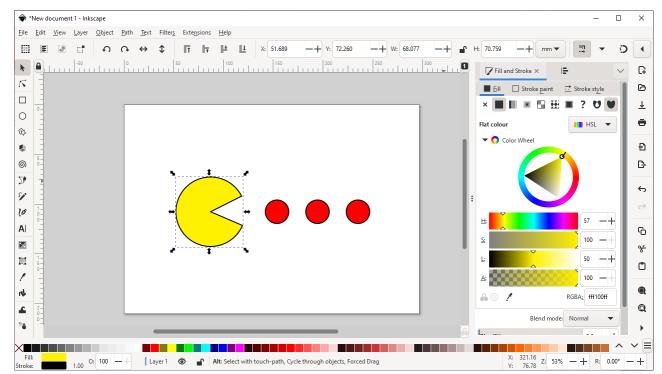


What is Inkscape?

- Vector Graphics Editor
- Free, Cross Platform
- Good for:
 - Editing
 - Drawing
 - Compositing
- Not for:
 - Bitmap editing

www.inkscape.org







Setting up a canvas

- File > Document Properties
- Shows page in view
- Doesn't restrict drawing
- Useful as a guide

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Moving around

- Panning
 - Scroll bars on bottom / right
 - Scroll up/down, Shift+scroll for left/right
- Zooming in / out
 - **Q** Click to zoom in, shift+click to zoom out
 - Control + Scroll Up/Down to zoom in/out to cursor
- Shortcuts
 - Fit n page, drawing, selection in window



The main toolbar

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- Selection tool
- Edit nodes tool
- Make rectangles
- Make ellipses / arcs
- Make polygons / stars
- Make 3D boxes
- Make spirals
- Draw straight lines / curves
- Draw freehand lines
 - Calligraphy tool
- Add text



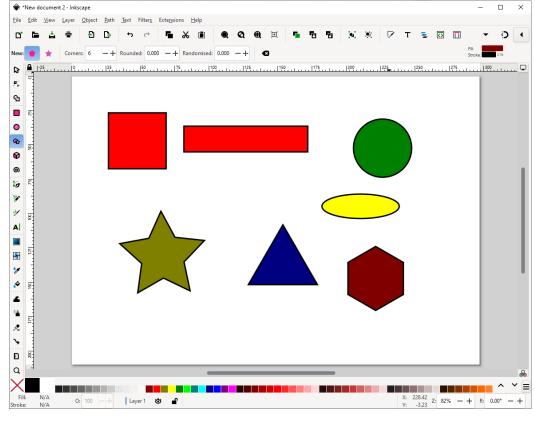
Creating basic shapes

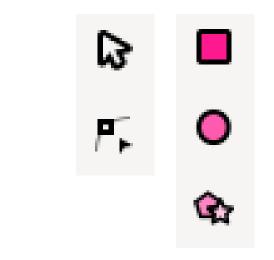
- Select tool from toolbar
- Click and drag on canvas
 - Box selects the bounds of the new shape
 - Colours are remembered from the last shape
- Basic options appear in top toolbar
 - Number of spokes on stars
 - Rounded corners on rectangles
 - Circle vs segment vs arc

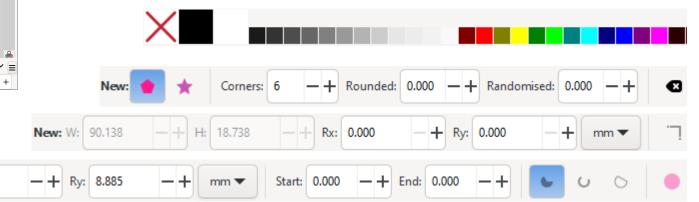


Creating basic shapes

New: Rx: 28.108









Creating basic shapes

- Modifiers press keys whilst drawing
 - Control = Constrain height/width ratio
 - Easiest way to make circles / squares
 - Shift = grow from centre not edge
 - Help appears at the bottom of the screen

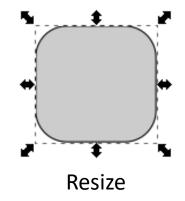
Ellipse: 24.13 px × 36.20 px; with Ctrl to make square or integer-ratio ellipse; with Shift to draw around the starting point

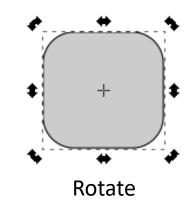
Click or click and drag to start a path; with Shift to append to selected path. Ctrl+click to create single dots (straight line modes only).



General Transformations

- Select the Selection tool
- Moving Click and drag an object
- Duplicating Select object and press Ctrl+D
- Resizing / Rotating
 - Click on object
 - Click again to change control arrow type
 - Click and drag arrows to resize / rotate

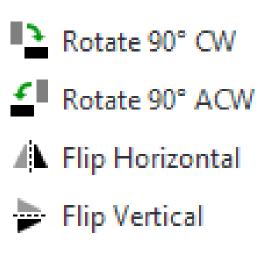






Transform Shortcuts







Selecting and Grouping

- Selecting multiple objects
 - Drag a box to cover multiple objects
 - Shift+click to add an object to a selection
 - Shift+click on a selected object to remove it from the selection
- Grouping (Control + G or Object > Group)
 - Combine multiple objects into a single object
 - Reversible (Control + shift + G or Object > Ungroup)



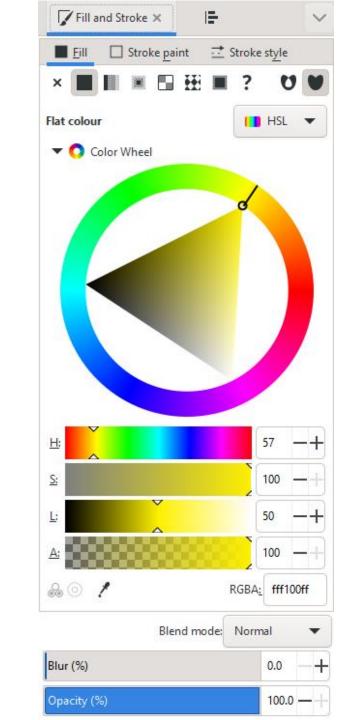
Fill and Stroke (Object > Fill and Stroke)

• Fill = Colour/Gradient/Pattern within a shape

• Stroke = The line around a shape

- Edit
 - Colours
 - Opacity





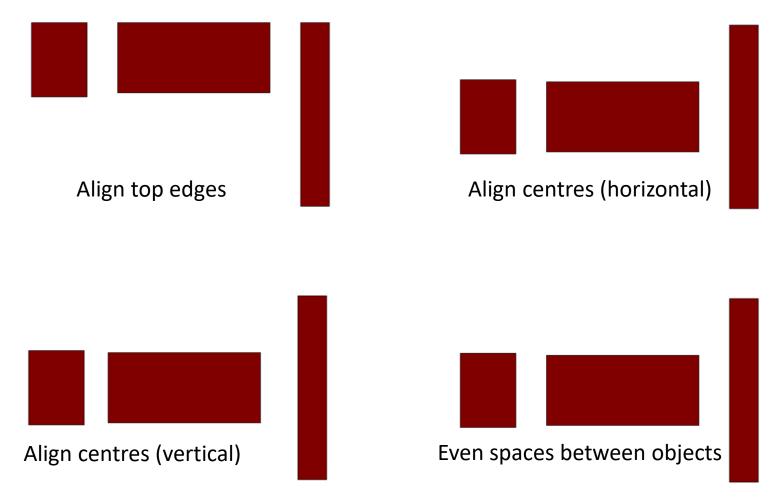
Aligning and Distributing

- Object > Align and Distribute
 - Align = Give objects the same centre/edge position
 - Distribute = Space objects evenly
- Align relative to
 - First/Last selected object in group
 - Largest/Smallest object in group
 - Page
 - Drawing



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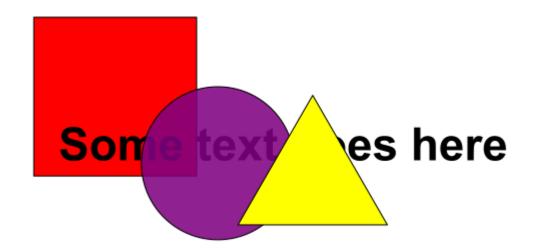
Aligning and Distributing





Zaxis - Ordering

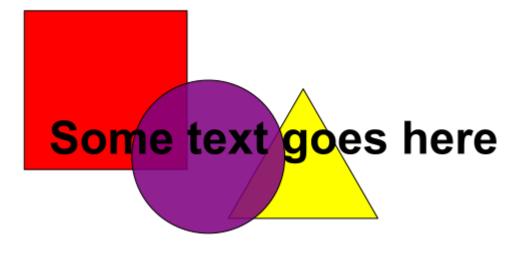
- New objects sit over the top of old objects
- Objects obscure those underneath them (except for transparency)





Z-axis Ordering

- Send object to bottom of z-stack
- Lower object one level
- Raise object one level
- Bring object to top





Working with imported pictures

- File > Import
 - PNG, JPEG, SVG, PDF etc.
- (Bitmaps) Choose Embed
 - Copies image into Inkscape
 - Create single portable file

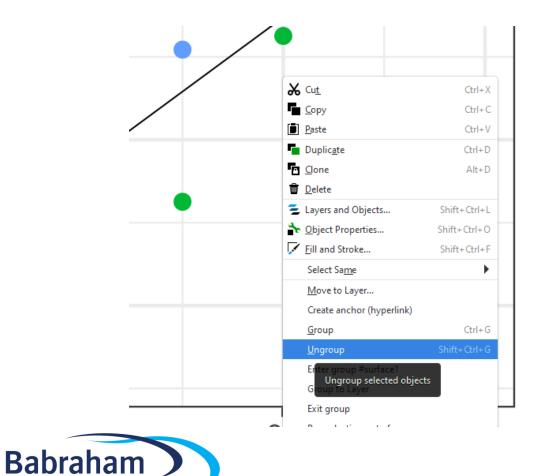
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Working with imported pictures

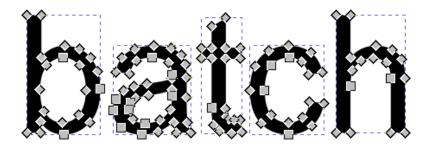
Pictures are usually grouped

Text may not actually be text



Bioinformatics

batch



Adding Text

• Use the text tool to add text



• Click and type to generate text

- Text can be scaled or rotated as any other object
 - Always hold Ctrl when scaling otherwise the aspect ratio will be messed up



Text options

• Text toolbar

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- Text and font settings
 - Font (always Arial for scientific figures)
 - Size
 - Alignment



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Andalus	Bold Italic Bold Italic
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AngsanaUPC	
Arial	
Arial Rounded MT Bold	
Bahnschrift	
Baskerville Old Face	Font size 18 💌

Saving & Exporting

- Saving
 - File > Save (As)
 - Default is Scalable Vector Graphics (SVG)
- Exporting as a Vector
 - Can export as a PDF
 - File > Save (As), select PDF

