STATE LIBRARY QUEENSLAND

STATE LIBRARY QUEENSLAND

101 - Intro to Blender

Michelle Brown, June 2025

Acknowledgement of country

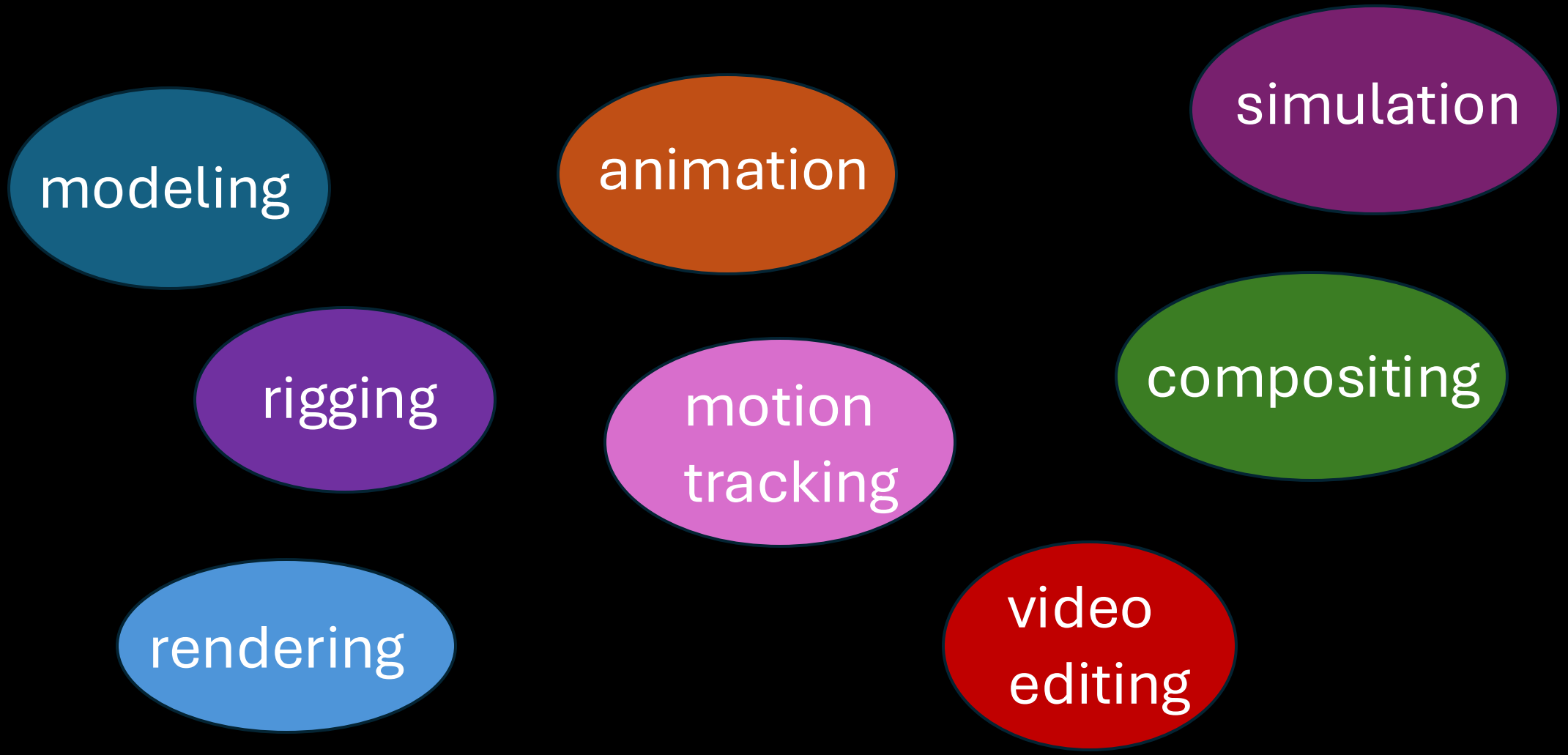
We acknowledge Aboriginal and Torres Strait Islander peoples and their continuing connection to land and as custodians of stories for millennia. We respectfully acknowledge the land on which we all meet today, and pay our respects to elders past, present and emerging.

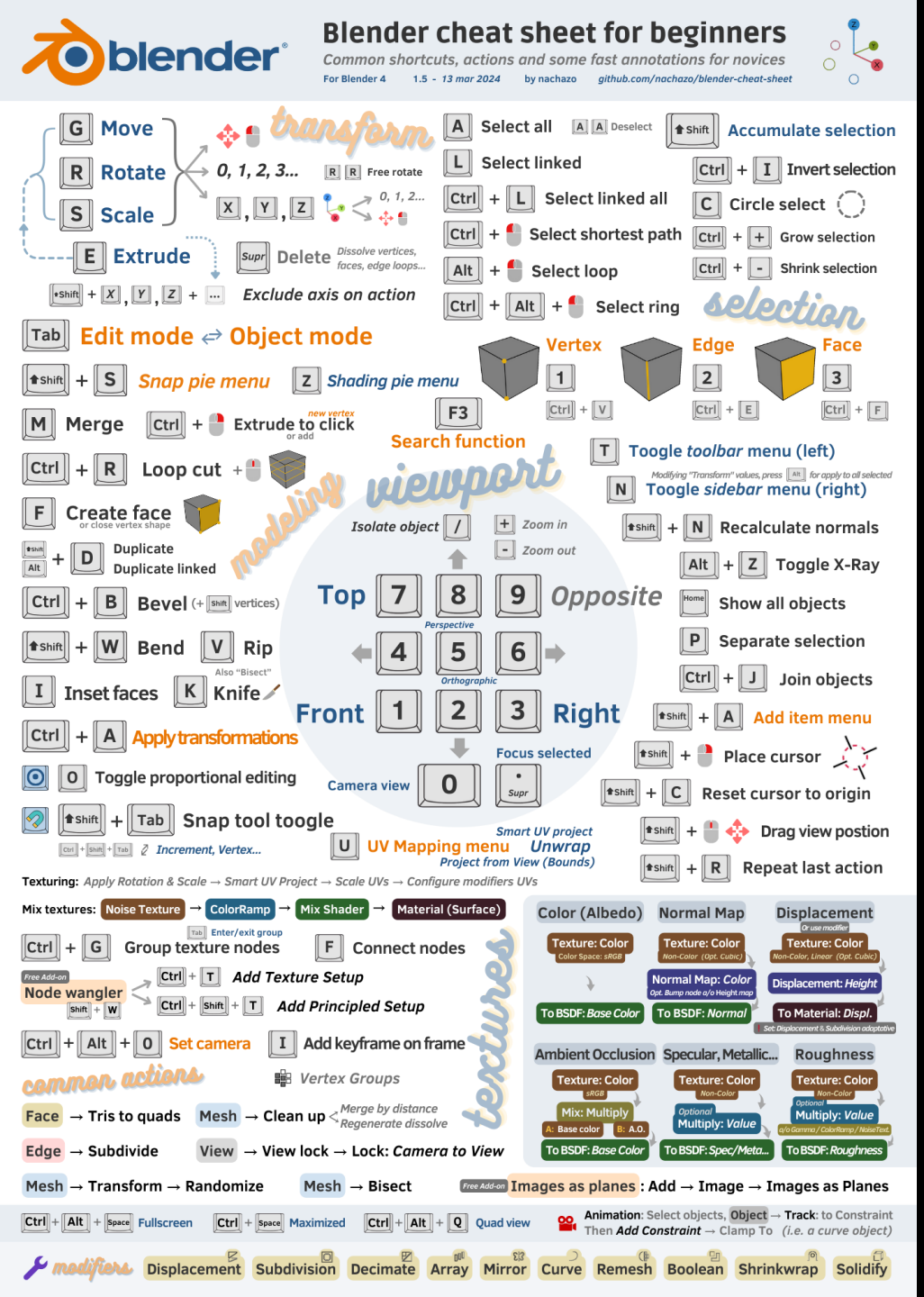
STATE LIBRARY QUEENSLAND

What do you want to use Blender for?

Blender can do me many things; this session will just give an overview of the program and simple 3D modeling and capture.

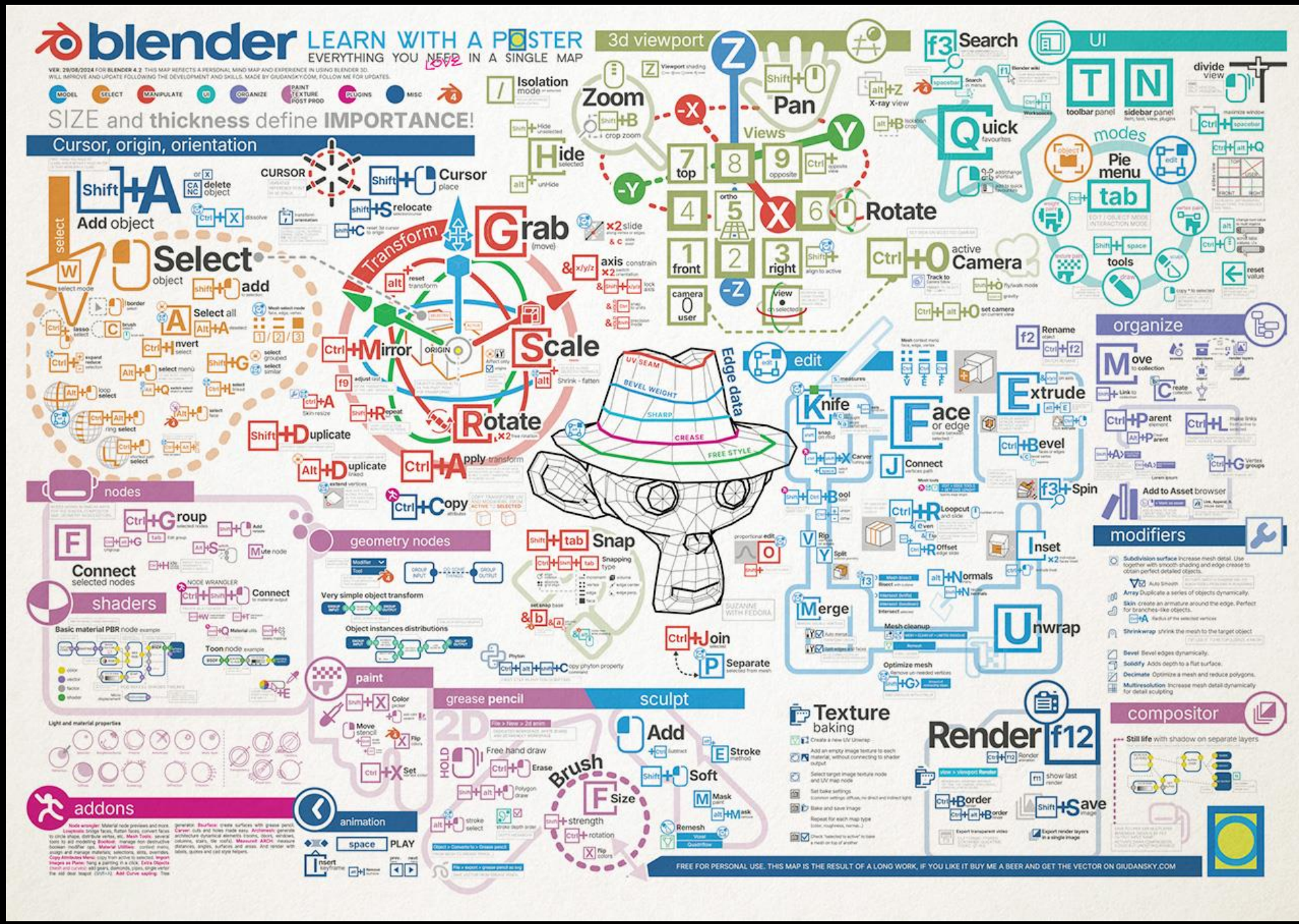
Blender is the free and open-source 3D creation suite, which supports the entirety of the 3D pipeline.

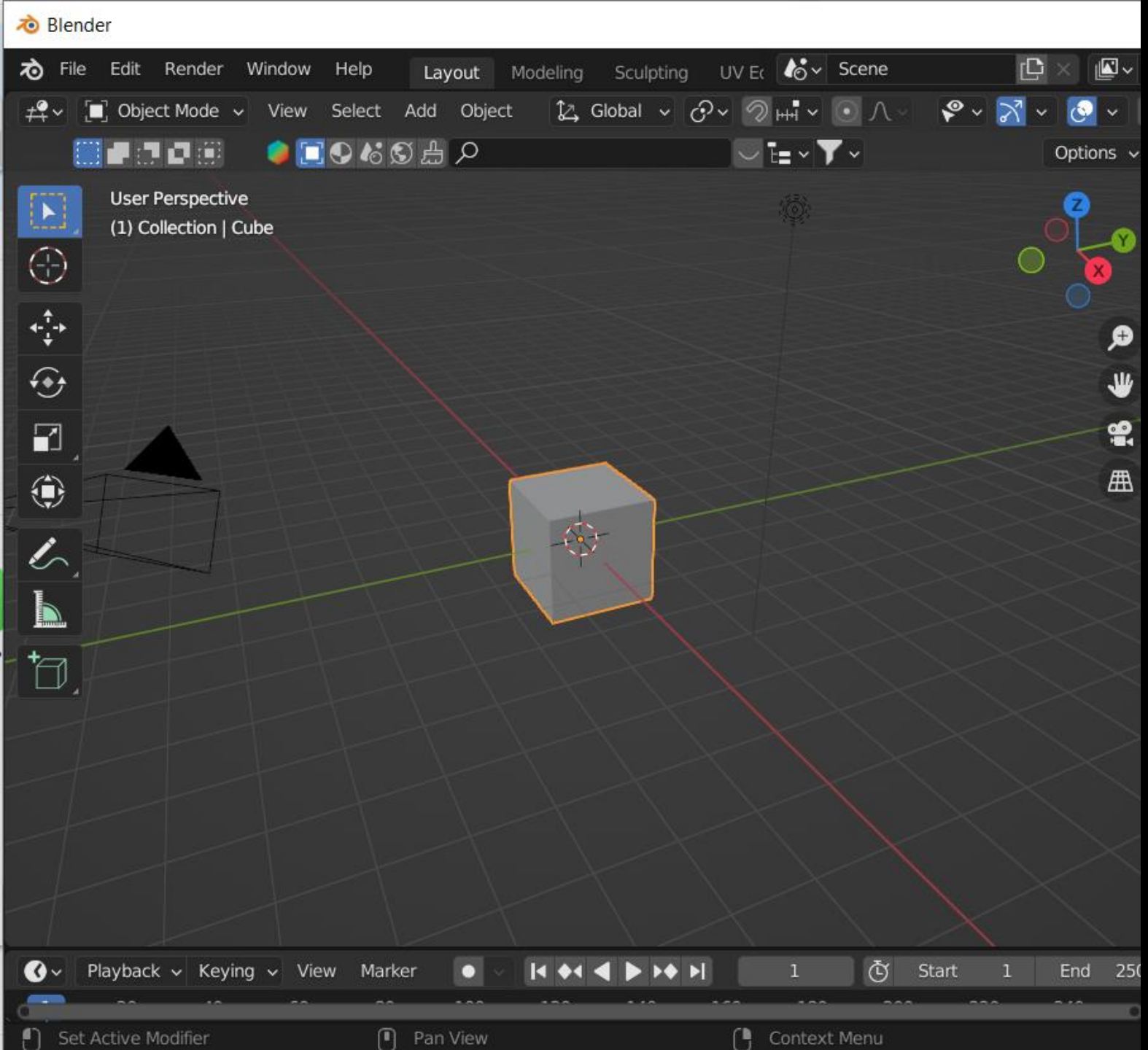




CHEAT SHEETS

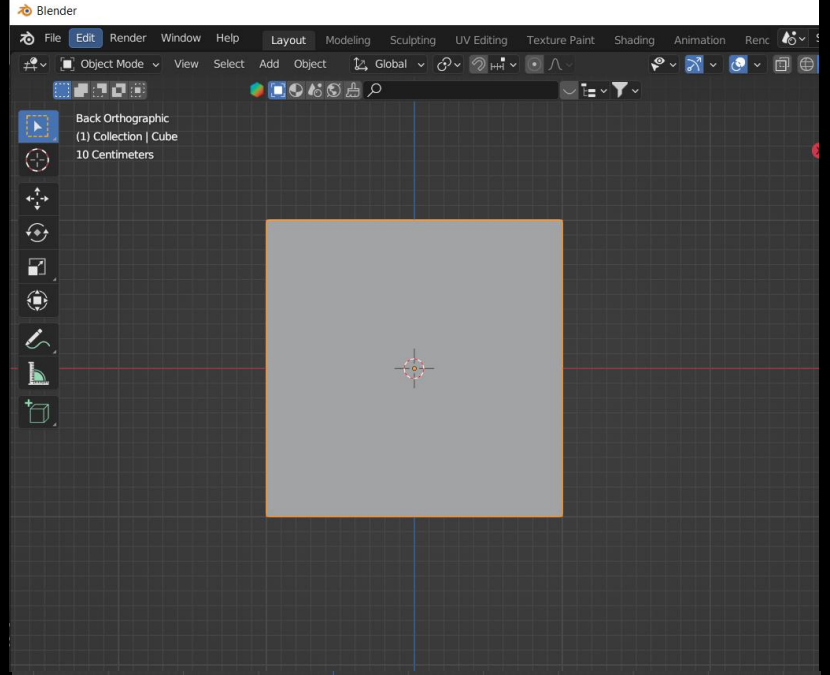
Shortcuts and actions

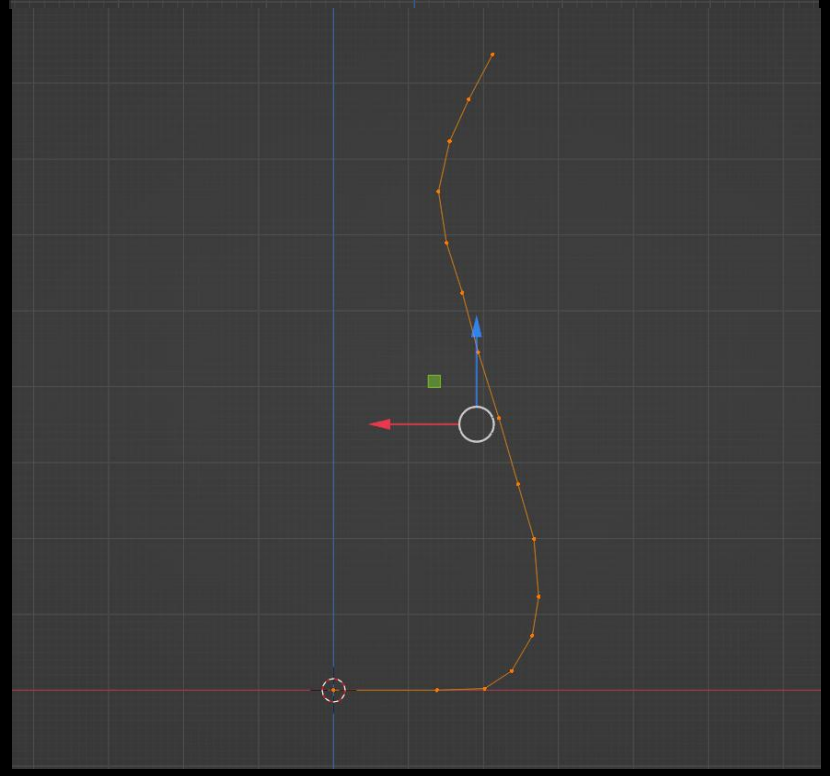

blender
LEARN WITH A POSTER
EVERYTHING YOU NEED IN A SINGLE MAP
SIZE and thickness define IMPORTANCE!
Cursor, origin, orientation
Shift+A Add object
Select
Grab (move)
Rotate
Scale
Transform
Mirror
Shift+D Duplicate
Alt+D Duplicate linked
Ctrl+A Apply transform
Ctrl+C Copy
3d viewport
Zoom
Pan
Views
Hide
Isolation mode
Rotate
Ctrl+0 active Camera
f3 Search
UI
Quick favourites
T toolbar panel
N sidebar panel
modes
Pie menu
tab
tools
edit
Edge data
UV SEAM
BEVEL WEIGHT
SHARP
CREASE
FREE STYLE
Knife
Face or edge
Extrude
Ctrl+B Bevel
J Connect
Ctrl+R Loopcut and slide
Inset
Merge
Unwrap
Normals
f3 Spin
f2 Rename
organize
Move
Create
Ctrl+P Parent
Ctrl+L
Add to Asset browser
modifiers
Subdivision surface
Array
Skin
Shrinkwrap
Bevel
Solidify
Decimate
Multiresolution
nodes
Ctrl+G Group
F Connect selected nodes
shaders
Basic material PBR node example
Toon node example
geometry nodes
Very simple object transform
Object instances distributions
Shift+tab Snap
Ctrl+J Join
P Separate
paint
grease pencil
sculpt
Add
Soft
Mask
Remesh
Brush
Size
strength
Free hand draw
Erase
Texture baking
Render f12
Ctrl+Border
Shift+Save
compositor
Still life with shadow on separate layers
addons
animation
space PLAY
FREE FOR PERSONAL USE. THIS MAP IS THE RESULT OF A LONG WORK, IF YOU LIKE IT BUY ME A BEER AND GET THE VECTOR ON GIUDANSKY.COM



Blender Workspace

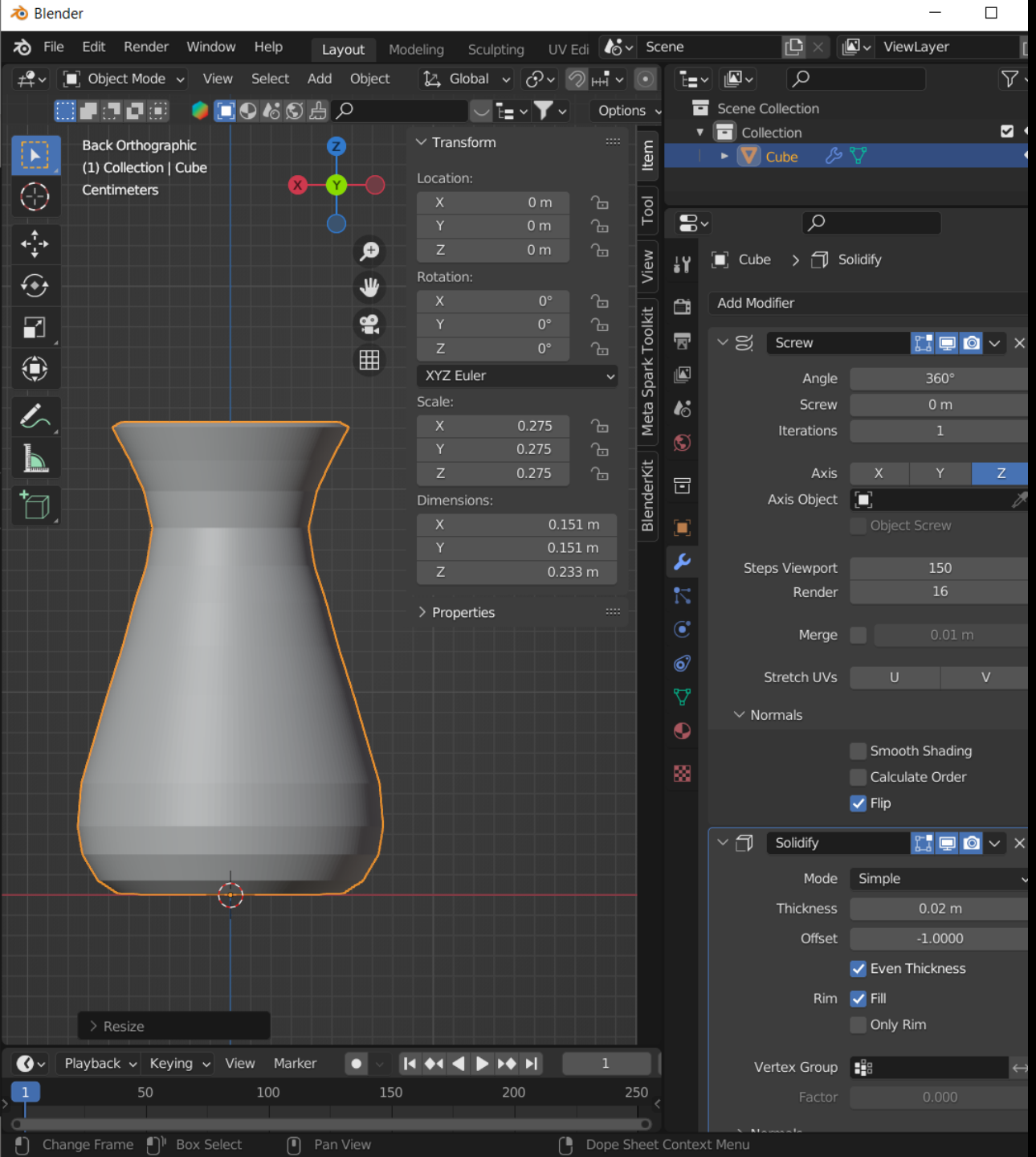
- Open the Blender app on your computer
- Choose 'General' as a new file
- The default file has a cube, camera and a light in the scene
- We'll spend some time going over the different workspaces and modes





Making a vase

1. Fix view to the Y axis and add a cube if you don't have one in your scene (Add>Mesh>Cube)
2. Go into edit mode and right click, choose 'merge vertices', at centre
3. Click E then X to extrude your first point along the X axis
4. Using E and click your left mouse button, extrude points until you create a basic vase shape



5. Add a 'screw' modifier to see your vase take shape, increase the steps to create a smoother look
6. Turn off smooth shading, and turn on Flip under normals
7. Add a 'solidify' modifier to create the vase walls to be at least 3mm thick (0.003m)
8. Once you are happy with your settings, choose the drop-down arrow and 'apply' the modifiers
9. Your vase is probably quite big so let's scale it down before we export, chose the scale tool and make it about 15cm height (0.15m)
10. Go to file menu, export, choose .stl

THANKS FOR ATTENDING

Please complete our survey that will be sent out via Eventbrite.

Tag us on socials @statelibraryqld

Contact us on appliedcreativity@slq.qld.gov.au

STATE LIBRARY QUEENSLAND

Queensland Government

slq.qld.gov.au