

# Blender 3D

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# Introduction

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Are you interested in 3D? Blender 3D is free(GPL) and it allow you to do 3D design, 3D animation, engineering, architecture and much more...

Visit youtube and find for Blender3D Compilation

Blender started in 1995; the latest version was built in this year.

It's possible to perform modeling, lighting, rendering, animation and graphics creation, digital composition using the procedural node technique, video editing, sculpture (includes dynamic topology) and digital painting

## Introducció iii

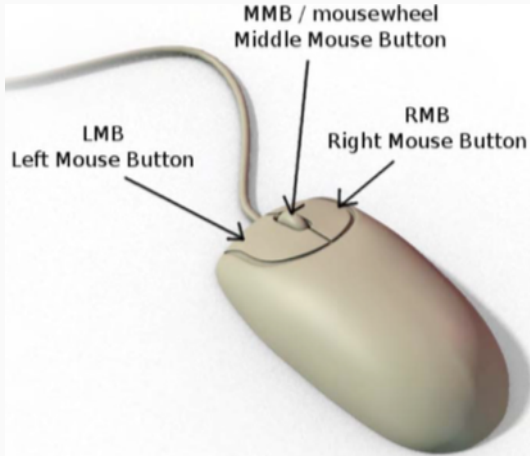


# INTERFACE AND BASIC ELEMENTS

1. Interface and mouse
2. Views and tools:
  - Selection, zoom, mouse movement
  - Views, division of areas
  - Windows, tabs, areas
  - Objects, and manipulation of objects
  - Layers
  - Practice

## Interface and mouse

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## Interface and mouse

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tab	: switch views
MW roll	: zoom
Shift+MW roll	: vertical scroll
Ctrl+MW roll	: horizontal scroll
MMB drag	: orient point of view
Shift+MMB drag	: orient point of view with precision
Ctrl+MW drag	: zoom

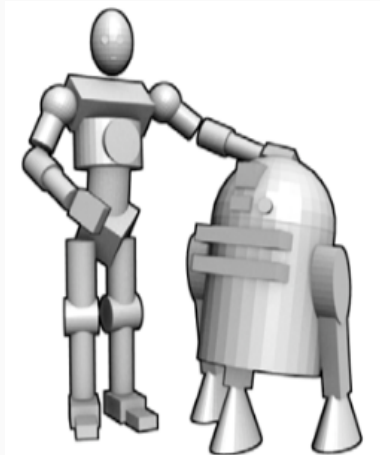


## views and tools

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x	: delete an object
Shift+A	: Add a new object
RMB-click	: Select an object
A	: Select/deselect all objects
Shift+LMB	: Select multiple objects
G	: Move a selected object
R	: Rotate a selected object
S	: Scale a selected object

## exercise



# exercise



1. Modeling and editing mode, units, tools, textures
2. Background and images properties:
3. Modifiers(mirror,Boolean, etc):

## Modeling and editing mode, units, tools, textures

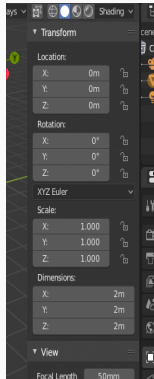
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ctrl+tab	: edit mode
E	: extrude
F:	: fill
ctrl+R	: add edge loop
alt+m	: merge vertices

## Modeling and editing mode, units, tools, textures

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## Modeling and editing mode, units, tools, textures

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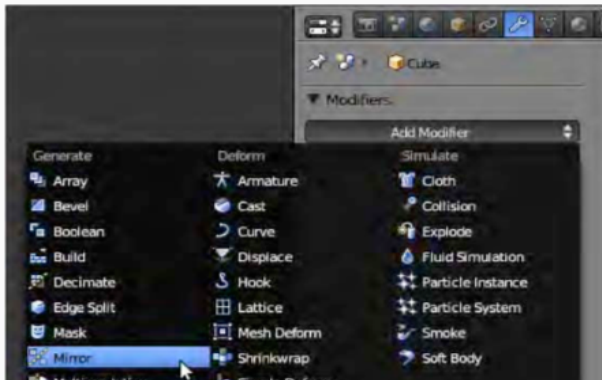


It could use GLSL to work with textures or materials. So, you could have nice renders.

it is possible to use lights with different colors too.

## Modeling and editing mode, units, tools, textures

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mirror, edge split, boolean, etc



1. basic animation and use of characters
2. simulation:

## Animation mode

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<http://jasonpierce.animadillo.com/resource/ludwig/ludwig.html>.

The locroot tool to animate is basic and nice(use "i")

## Simulation mode

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Particle physics can be simulated with speeds, accelerations, collisions, materials, shapes, weights etc ...

## Bibliography

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Beginning blender book 2010 by Lance Flavell  
<https://www.blender.org/>

gracias "mijines-😊