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3D DESIGN BLENDER

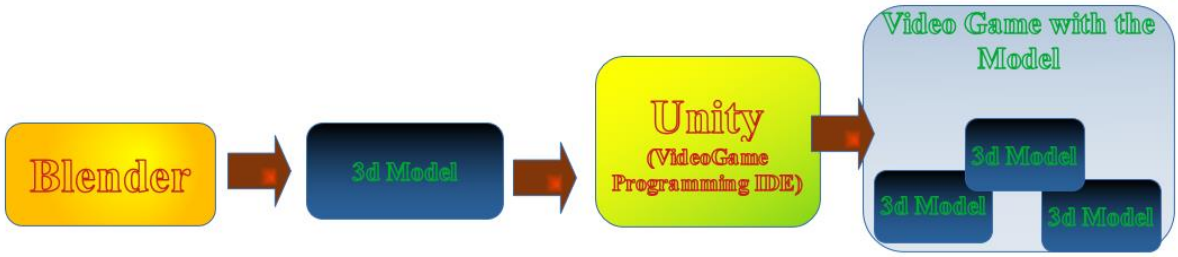
ENGLISH

What's Blender?

Blender is a free and open-source 3D computer graphics software toolset used for creating animated films, visual effects, art, 3D printed models, motion graphics, interactive 3D applications, virtual reality, and computer games. Blender's features include 3D modelling, UV unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animating, match moving, rendering, motion graphics, video editing, and compositing.

Professional use of Blender

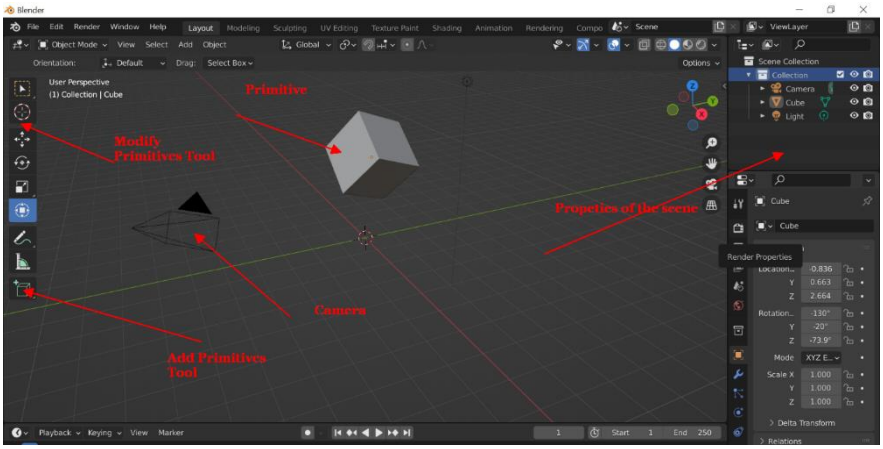
- Architectural rendering
- Scientific Physics fluid simulation (Gif)
- Artistical 3d Designs
- Forensic reconstruction (example mummy Cícero Moraes (Gif))
- 3d Video Design
- 3d Video games Designs



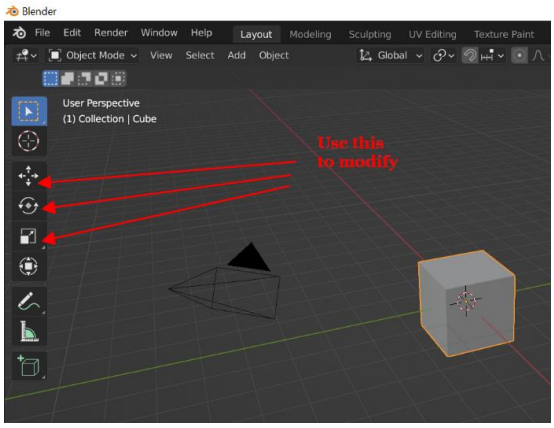
Lets Open Blender.

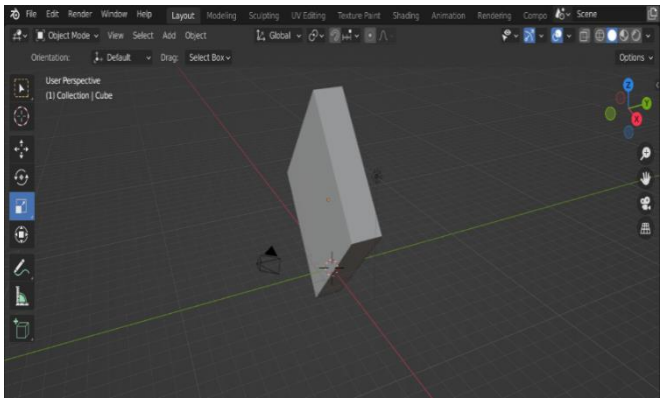
Transforming

Important concept , We have to select the points that we are going to modify- Tools: Rotate, Translate, Select, Scale, Draw

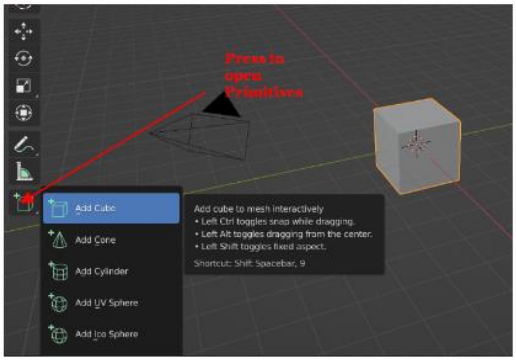


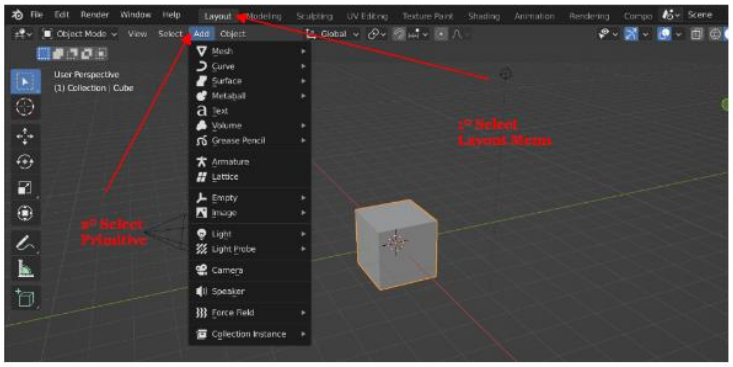
Task Transform the Cube to a rotated rectangle





Adding Primitives



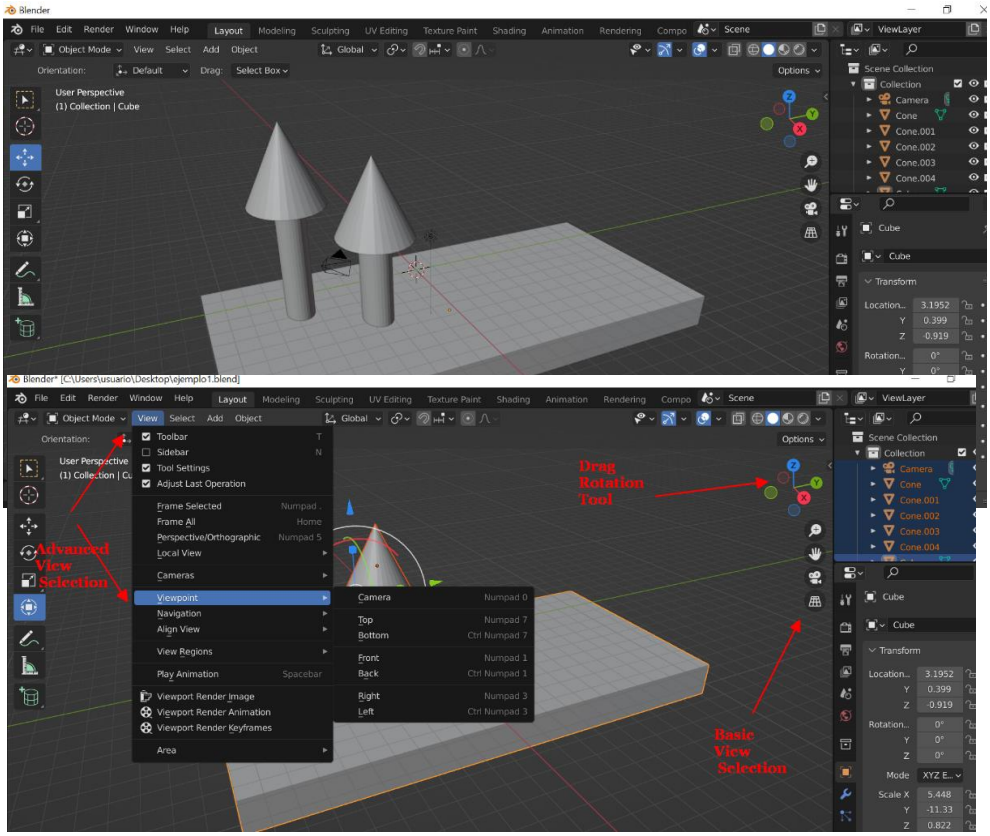


Task Add a Cube a sphere and a Cylinder To create this

Views

- Views X-Y-Z
- Isometric
- Camera

Check several Views of the scene.



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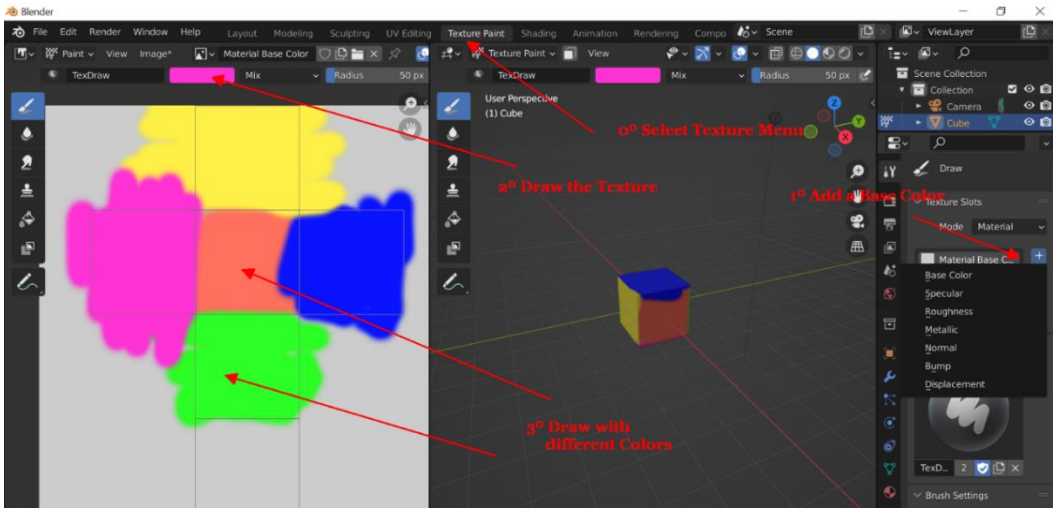
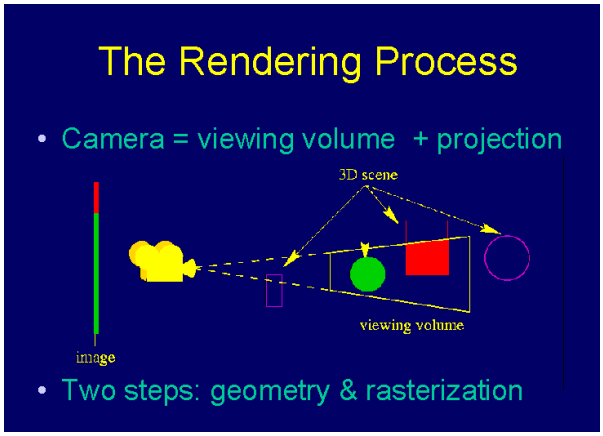
Adding Textures

Task Draw a colorful Cube

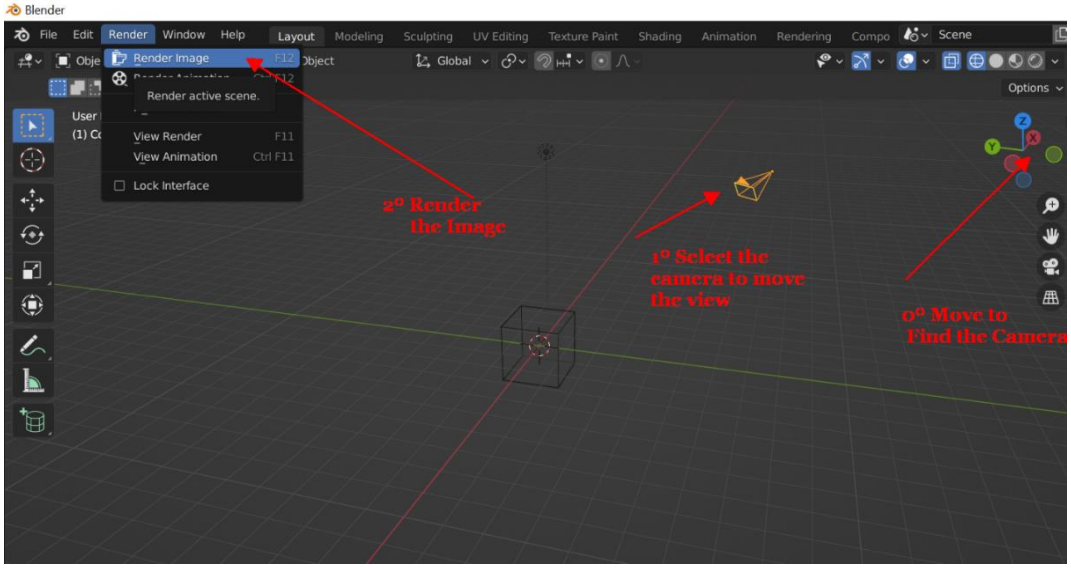


Camera & Rendering

What's Rendering? It's the process to take a shot of the scene with the textures



5º Task Render the Colored cube



CZECH

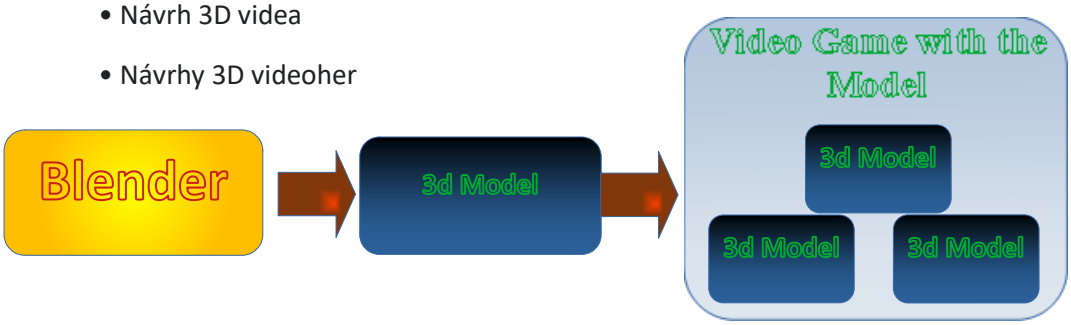
3d Design Blender

Co je to Blender?

Blender je bezplatná a otevřená sada softwarových nástrojů pro 3D počítačovou grafiku, která se používá k vytváření animovaných filmů, vizuálních efektů, umění, 3D tištěných modelů, pohyblivé grafiky, interaktivních 3D aplikací, virtuální reality a počítačových her. Mezi funkce Blenderu patří 3D modelování, UV rozbalování, texturování, editace rastrové grafiky, rigging a skinování (animace pohybu postav), simulace tekutin a kouře, simulace částic, simulace měkkého těla, modelování, animace, pohyb podle zápasů, renderování, pohyblivá grafika, střih videa a kompozice.

Profesionální použití Blenderu

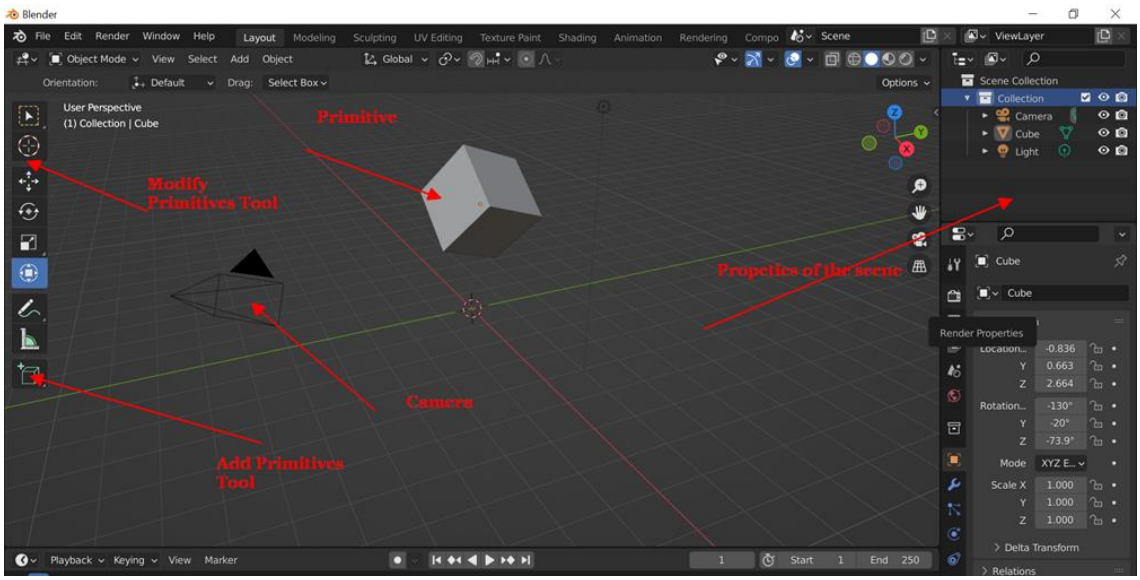
- Architektonické vykreslování
- Simulace kapaliny ve vědecké fyzice (Gif)
- Umělecké 3D návrhy
- Forenzní rekonstrukce (příklad mumie Cícero Moraes (Gif))
- Návrh 3D videa
- Návrhy 3D videoher



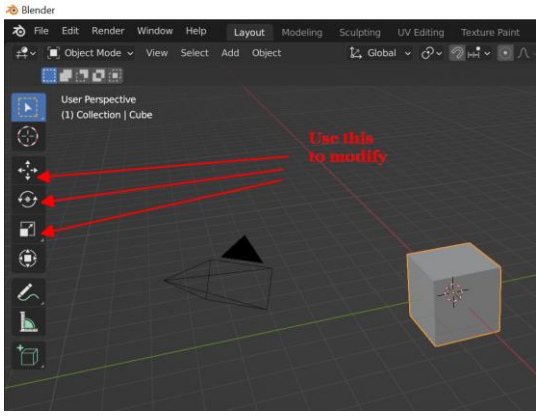
Otevřete program Blender

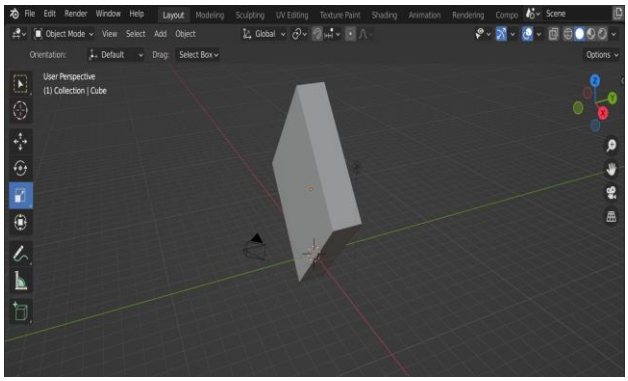
Transformace

Důležitý je koncept. Musíte vybrat body, které budete upravovat –Nástroje: Otočit, Přeložit, Vybrat, Měřítko, Kreslit..

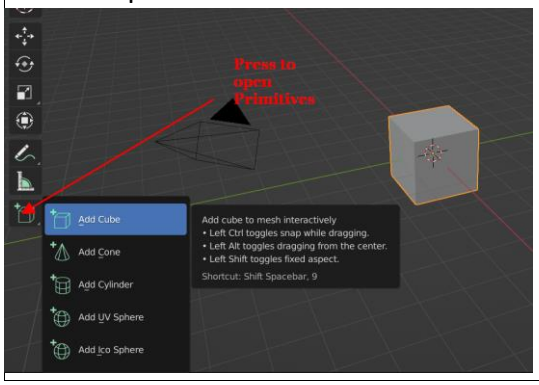
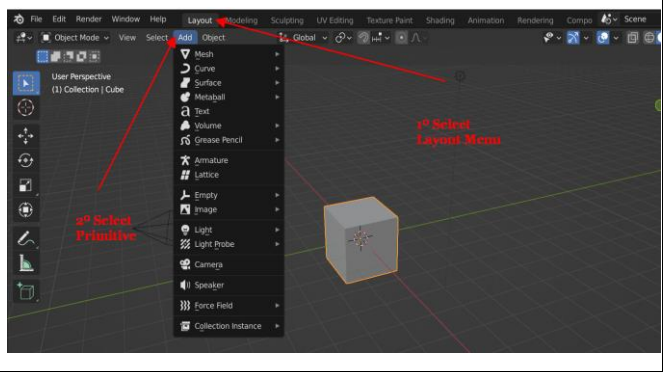


Úkol Transformujte krychli na otočený obdélník





Přidání jednoduchých objektů

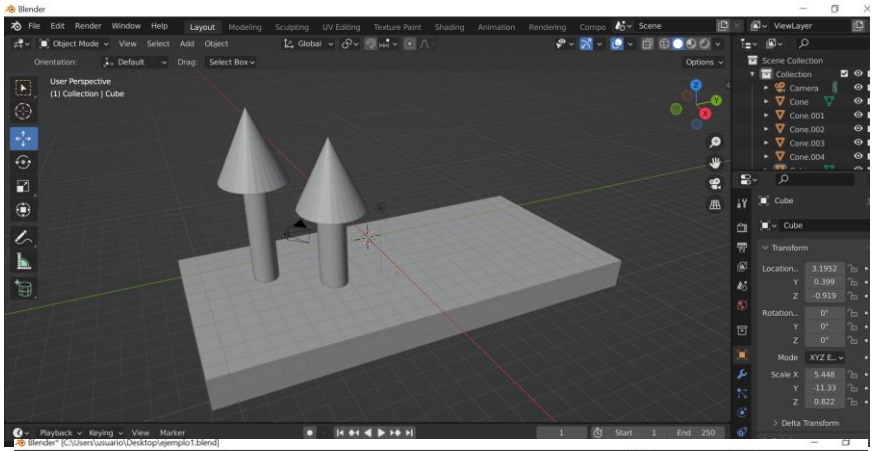
Základní přidání	Pokročilé přidávání
	

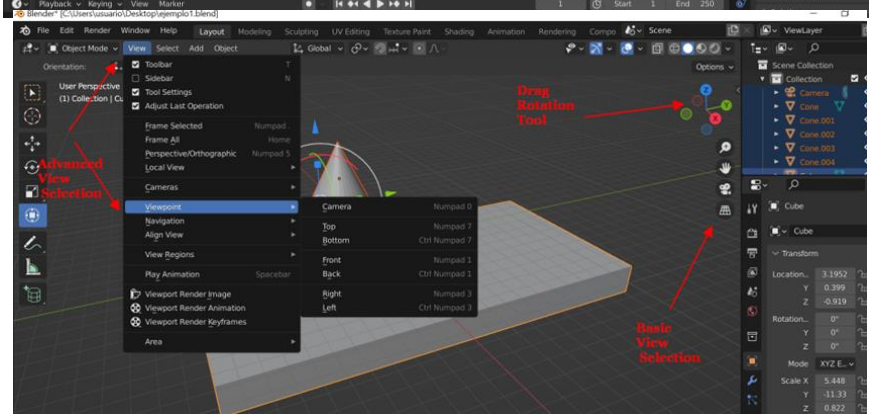
Úkol: Přidejte krychli, kouli a válec

Pohledy

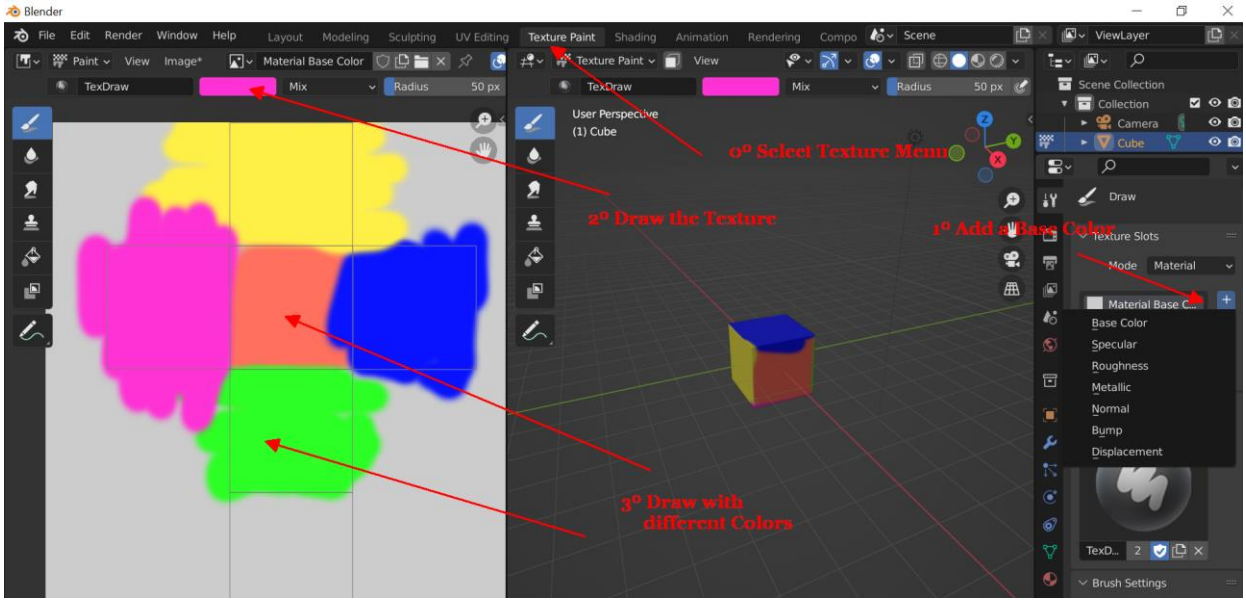
- Pohledy X-Y-Z
- Izometrické
- Fotoaparát

Zkontrolujte několik pohledů na scénu



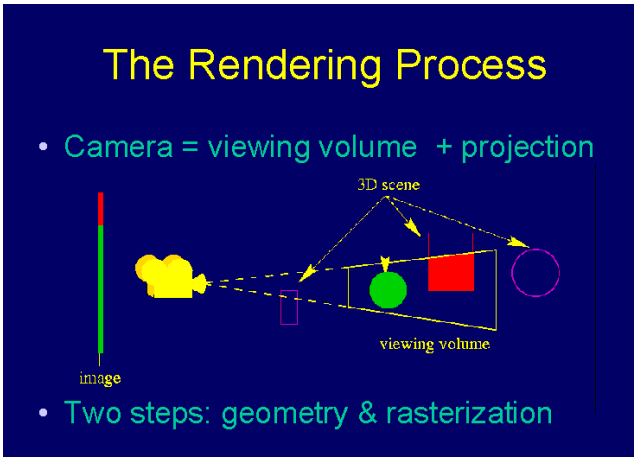


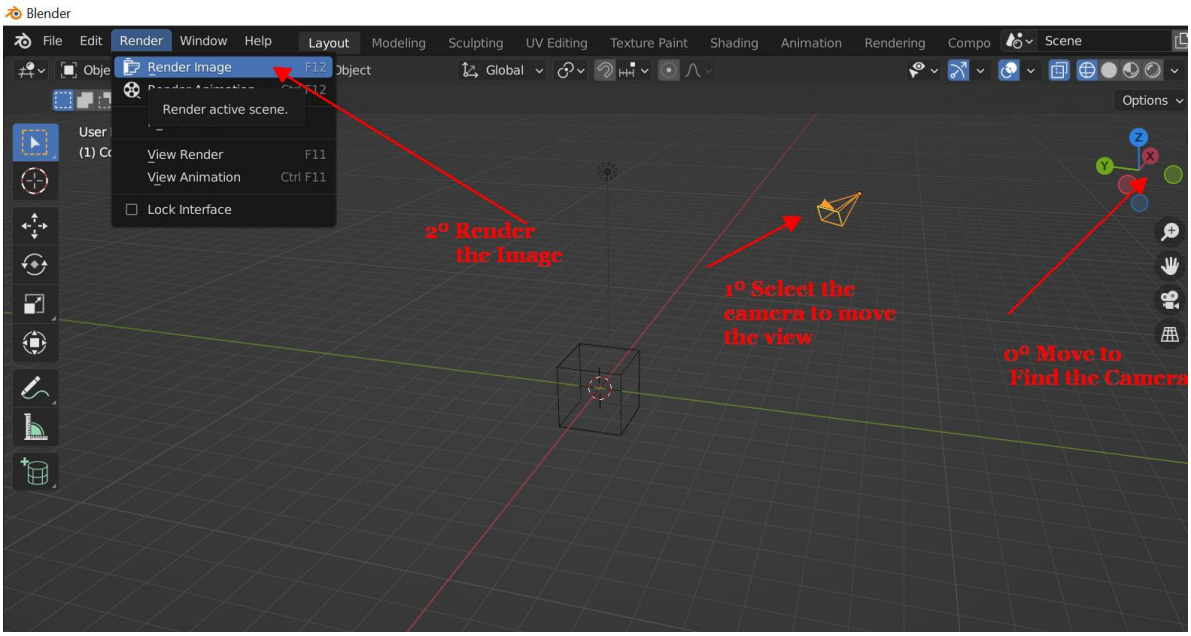
Přidání Textury



Fotoaparát a vykreslování

- Co je vykreslování?
  Je to proces pořízení snímku scény s texturami





- Úkol Nakresli barevnou kostku

PORTUGAL

O QUE É O BLENDER?

Blender é um conjunto de ferramentas de software computacional gráfico 3D gratuito e de código aberto, usado para criar filmes de animação, efeitos visuais, arte, modelos impressos em 3D, animação gráfica, aplicativos 3D interativos, realidade virtual e jogos de computador. As características do Blender incluem modelação 3D, desdobramento UV, texturização, edição de gráficos raster, rigging (processo de construção de uma armadura para controlar/animar um objeto) e skinning (processo de associação da armadura à malha), simulação de fluido e de fumo, simulação de partículas, simulação de corpo macio, escultura, animação, correspondência em movimento,

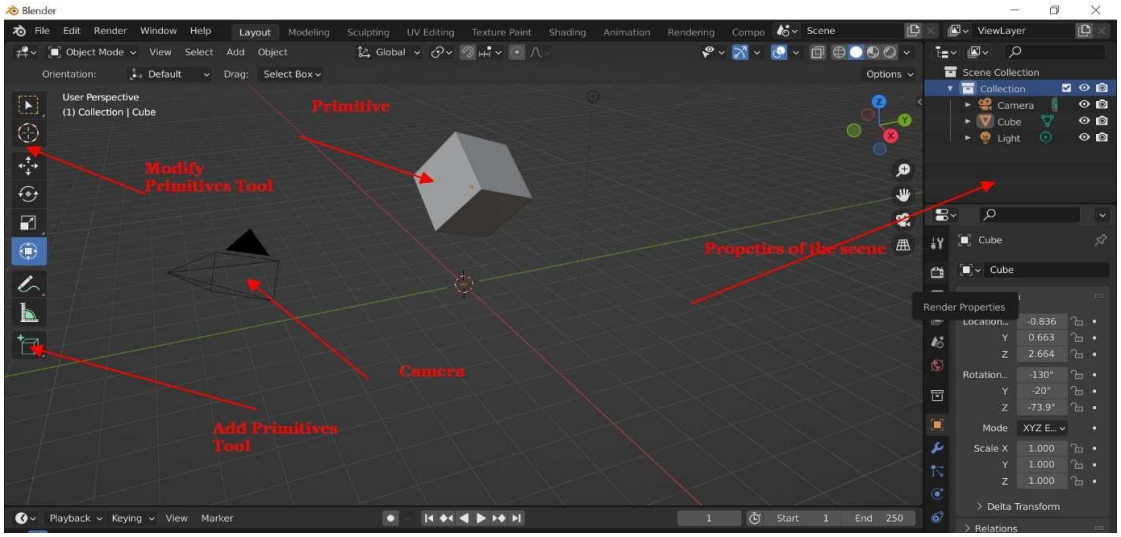
renderização, gráficos em movimento, edição e composição de vídeo
Uso profissional do Blender

- Renderização arquitetónica
- Simulação de fluído de Física Científica (Gif)
- Desenhos Artísticos 3d
- Reconstrução forense (exemplo múmia Cícero Moraes (Gif))
- Projeto de vídeo 3d
- Desenhos de videojogos 3d

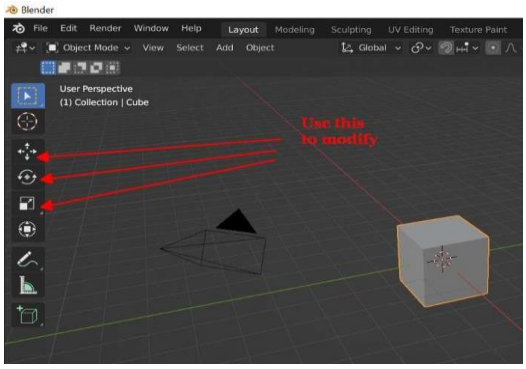
Permite abrir o Blender

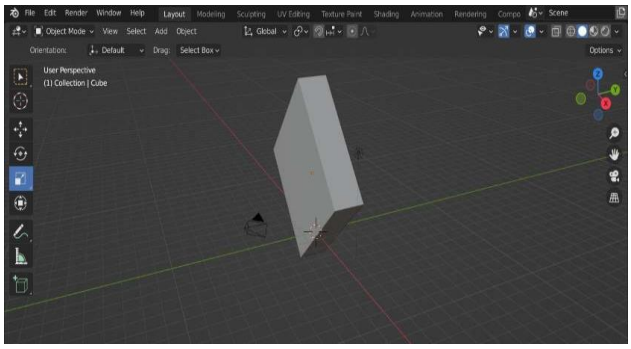
TRANSFORMAÇÃO

Conceito importante, Temos que selecionar os pontos que vamos modificar- Ferramentas: Rodar, Selecionar, Escalar, Desenhar

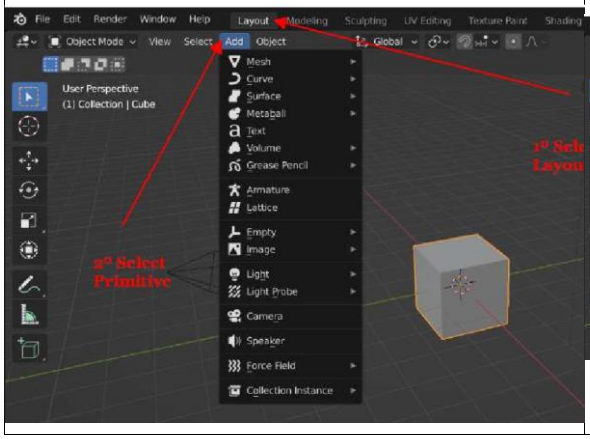
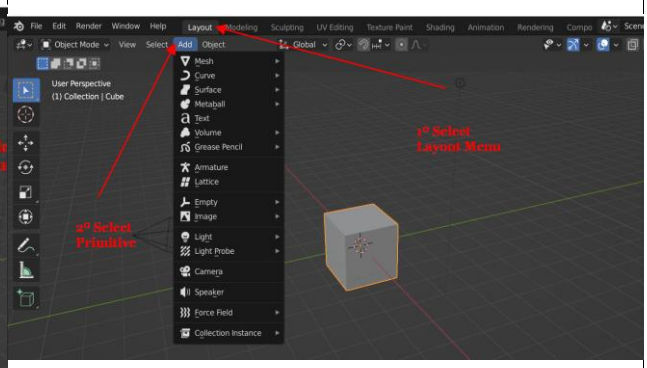


Tarefa Transformar o Cubo num retângulo rotativo

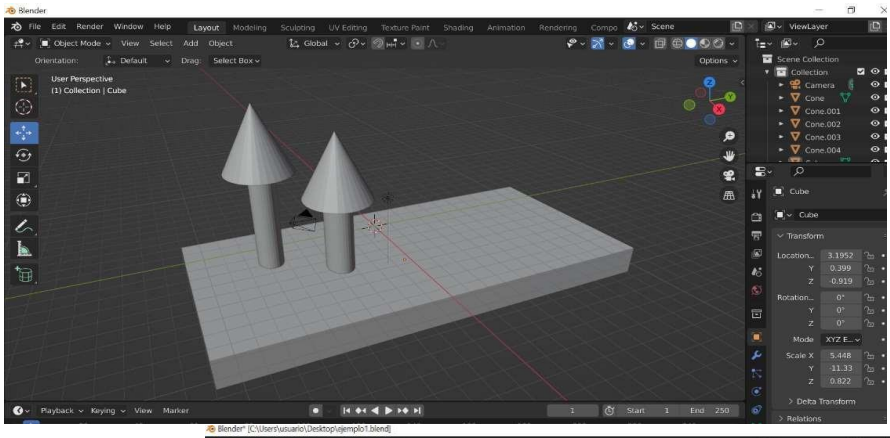




ADICIONAR PRIMITIVAS

Adição Básica	Adição Avançada
	

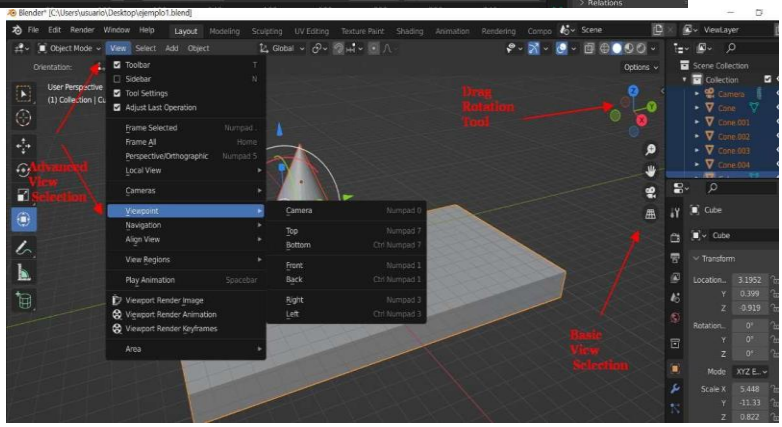
Tarefa Adicione um Cubo a uma esfera e um cilindro, para criar isto



MODOS DE EXIBIÇÃO

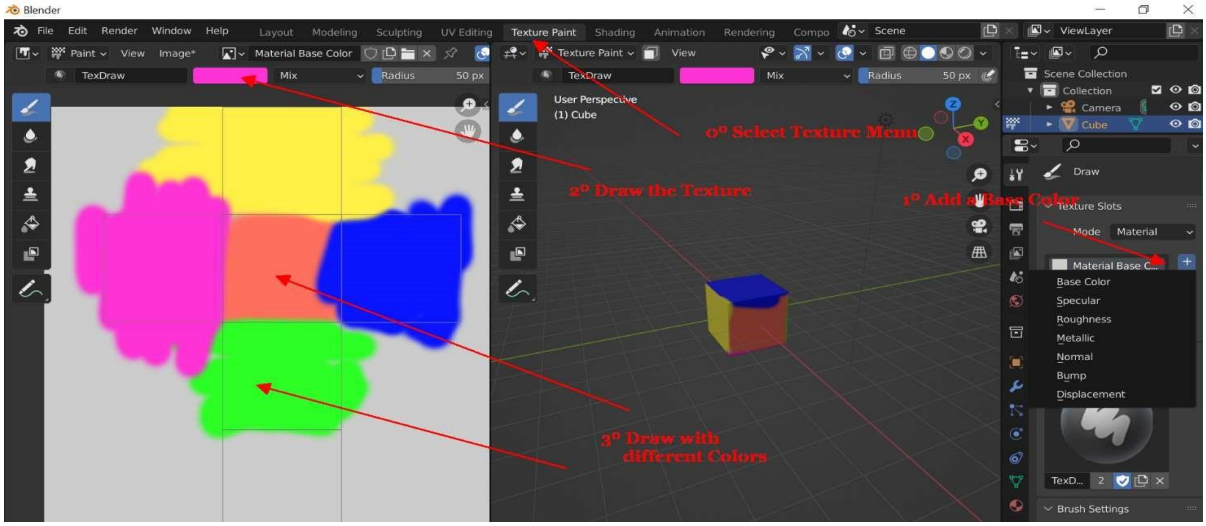
- Vistas X-Y-Z
- Isométrica
- Câmera

Verifique várias vistas da cena.



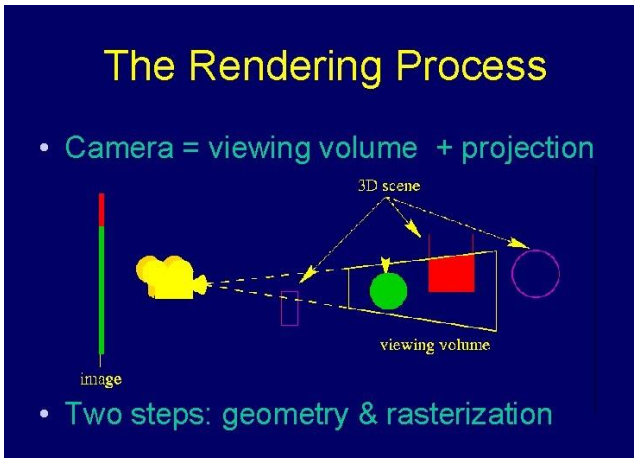
ADICIONAR TEXTURAS

Tarefa Desenhar um cubo colorido

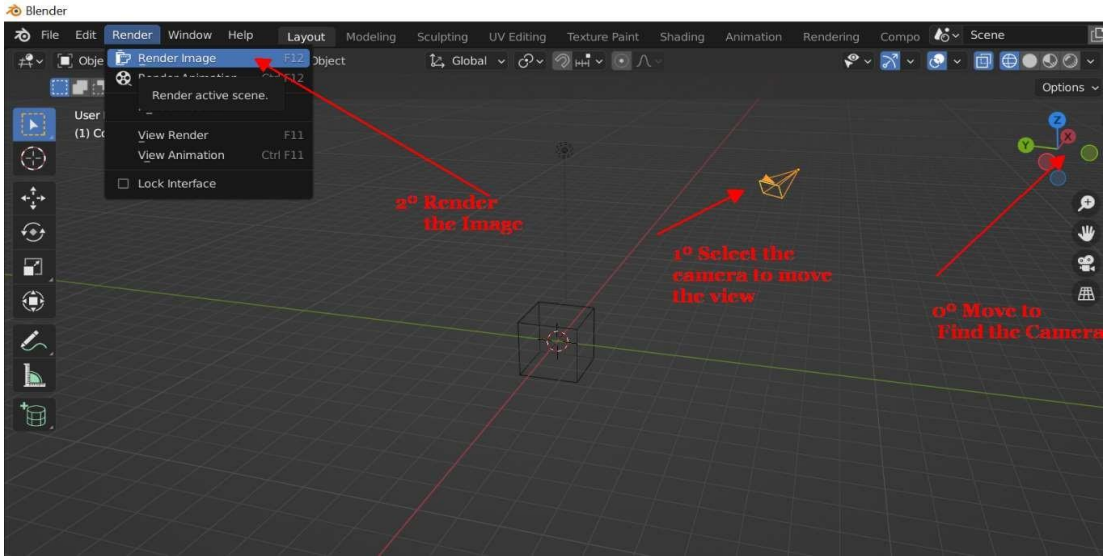


CÂMERA E RENDERIZAÇÃO

O que é renderização? É o processo para tirar uma foto da cena com as texturas



5º Tarefa Renderizar o cubo colorido



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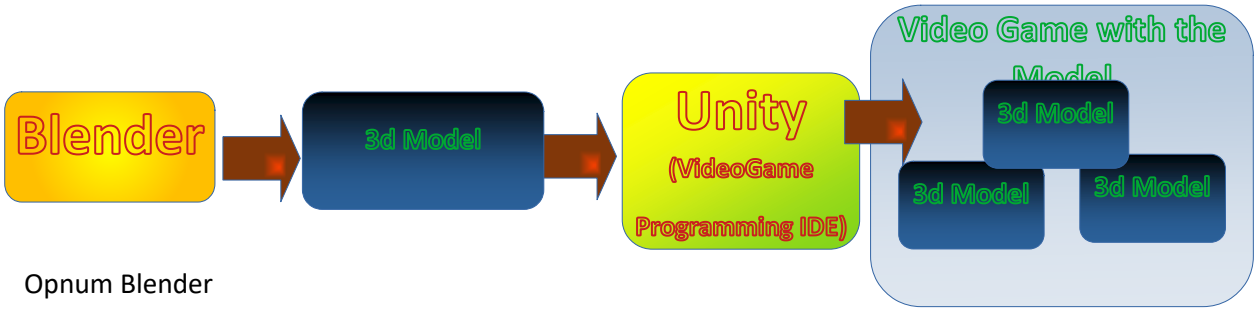
ICELAND

Hvað er Blender?

Blender er ókeypis, open -source, 3D tölvu teiknunar forrit notað til þess að búa til teiknimyndir, list, 3D model, hreyfimyndir, gagnvirk 3D forrit, sýndarveruleika og tölvuleiki. Í Blender er hægt að nota 3D modelling, UV unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animating, match moving, rendering, motion graphics, video editing, og compositing.

Blender er líka notað í atvinnulífinu

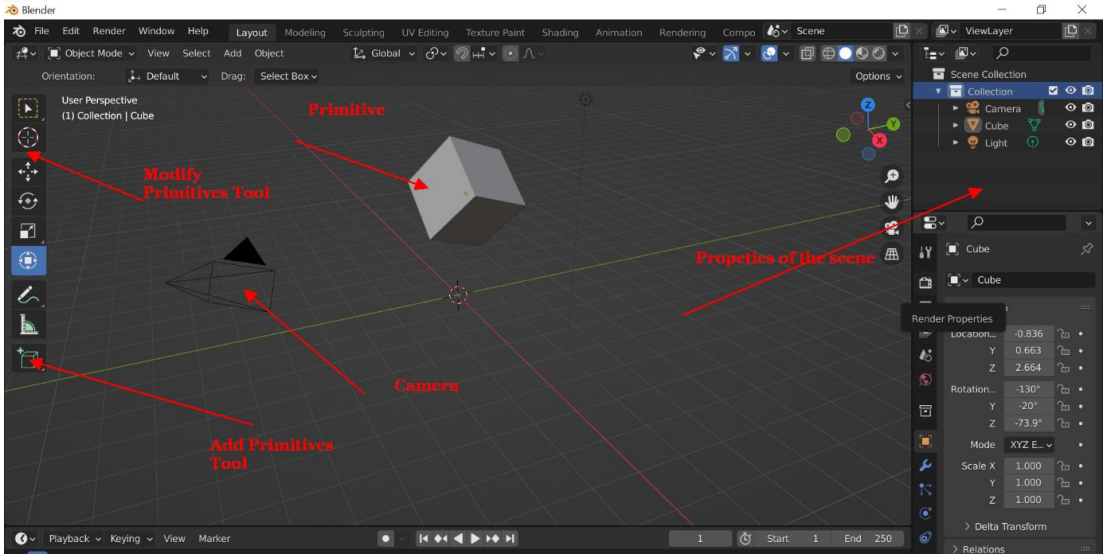
- Arkitekta teikningar
- Vísindalegar straumfræðimyndir (Gif)
- Listrænar 3D hannanir
- Líffræðilegar endurgerðir, dæmi múmía: Cícero Moraes (Gif))
- 3D vídeó Hönnun
- 3D tölvuleikja hönnun



Opnum Blender

Transforming

Mikilvægur hlutur, við þurfum að velja þá punkta sem við viljum breyta, tólin heita á ensku: Rotate, Translate, Select, Scale, Draw



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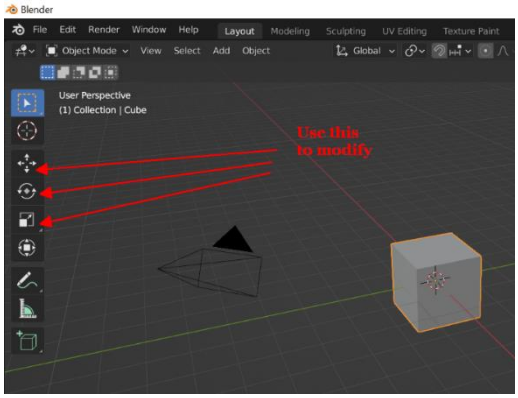
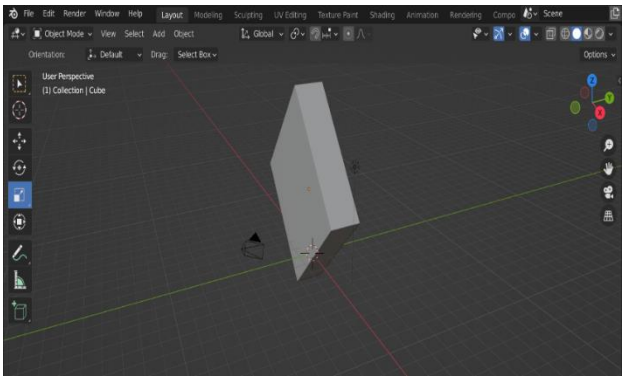
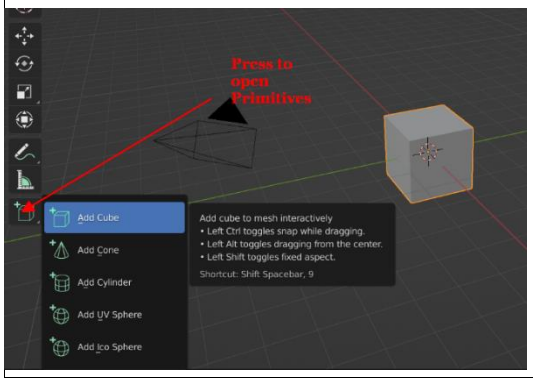
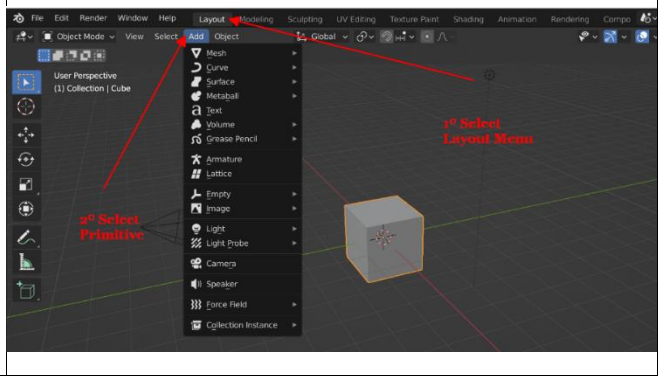
Hér breytum við ferningi í ferstrending





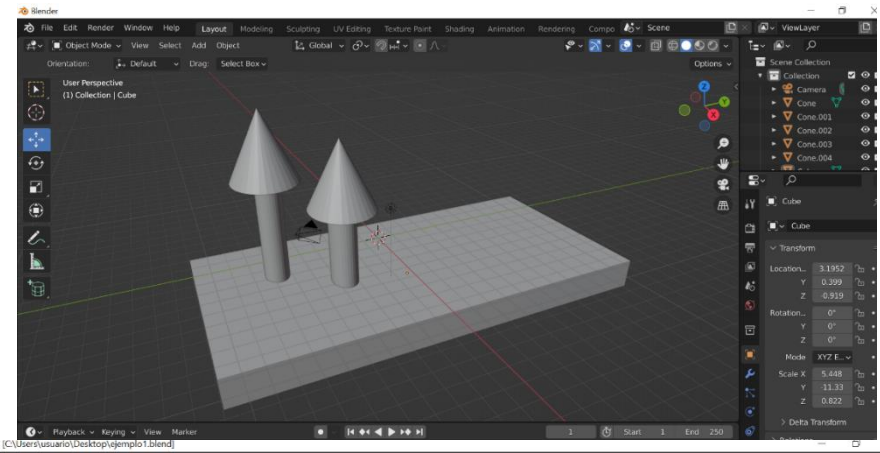
Adding Primitives

Basic Adding	Advanced Adding
	

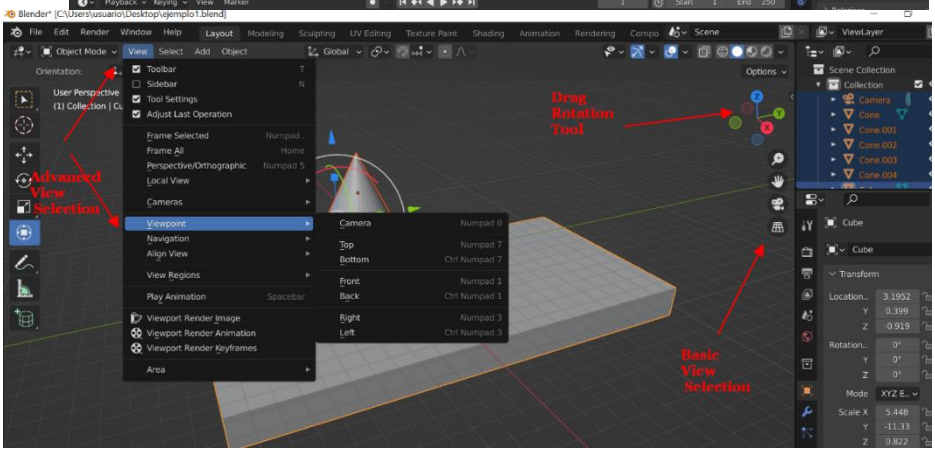
Hér bætum við teningi við hring og sívalning til þess að búa þetta til

Views

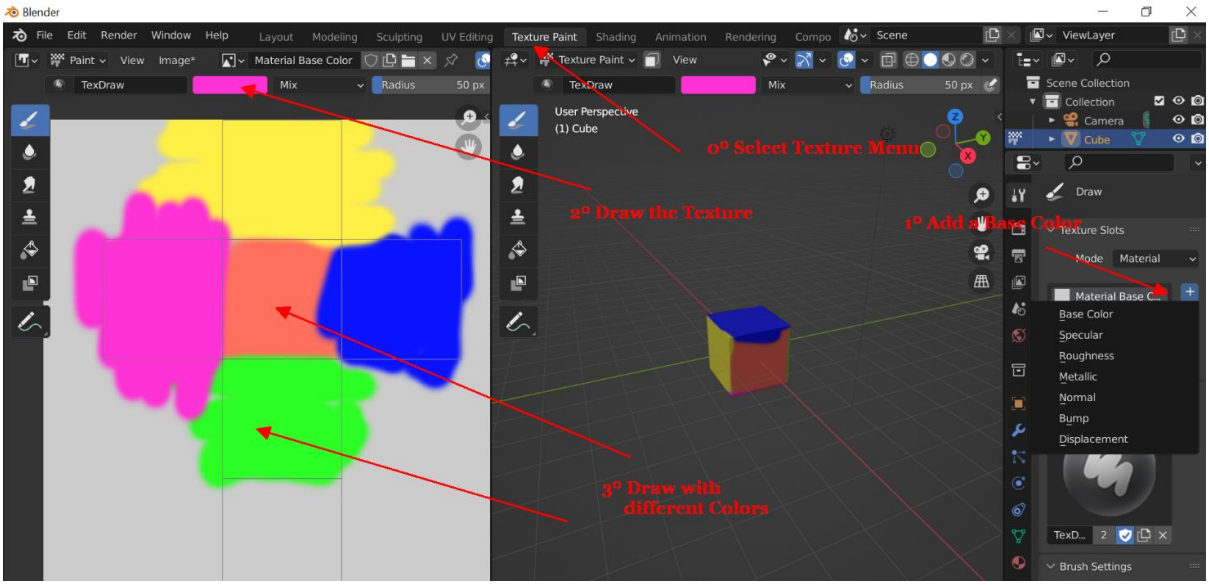
- **Views X-Y-Z**
- **Isometric**
- **Camera**



Mismunandi sjónarhorn.



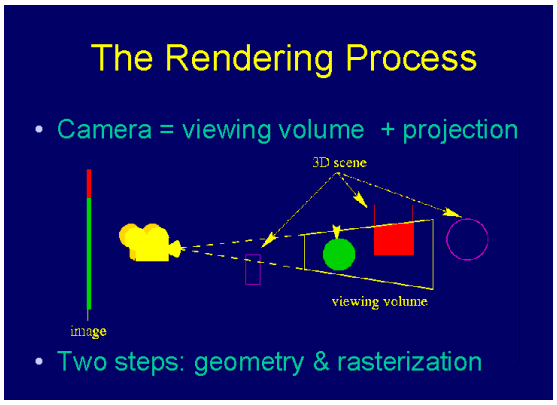
Adding Textures



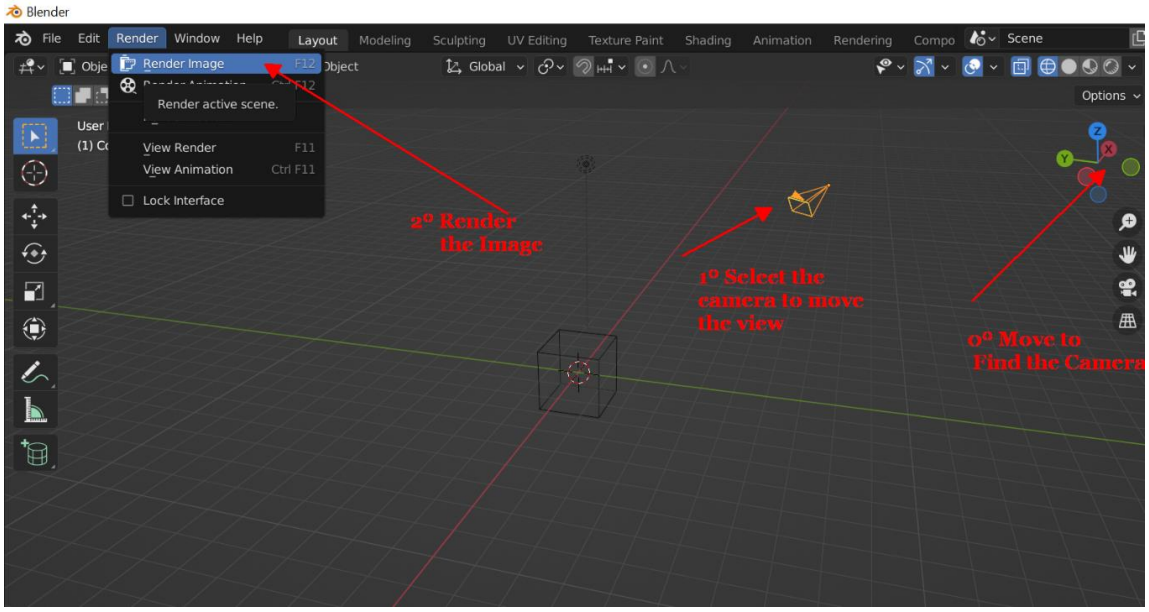
Að teikna litríkan tening

Camera & Rendering

Hvað er Rendering? Það er ferlið þegar tekin er mynd af svæði með mismunandi hlutum



5º Renderum litríka teninginn



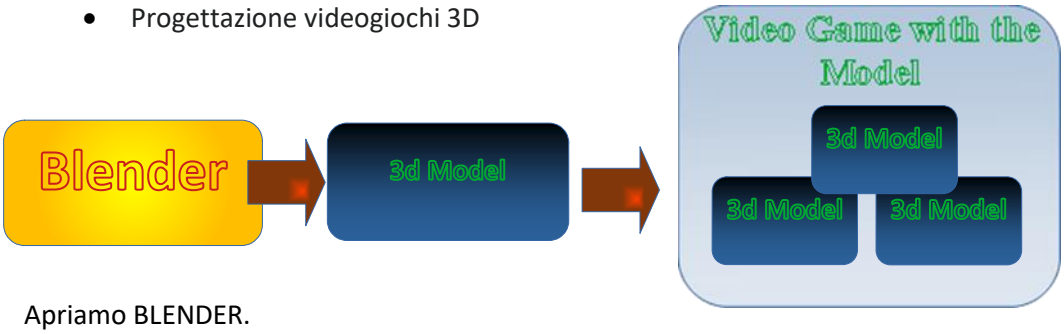
ITALIA

Cos'è Blender?

Blender è un set di strumenti software di computer grafica 3D gratuito e open source utilizzato per la creazione di film animati, effetti visivi, arte, modelli stampati in 3D, grafica animata, applicazioni 3D interattive, realtà virtuale e giochi per computer. Le funzionalità di Blender includono modellazione 3D, rimozione dell'involucro UV, texturing, editing di grafica raster, rigging e skinning, simulazione di fluidi e fumo, simulazione di particelle, simulazione di corpi morbidi, scultura, animazione, movimento di partite, rendering, grafica animata, editing video e compositing.

Usi professionali di Blender:

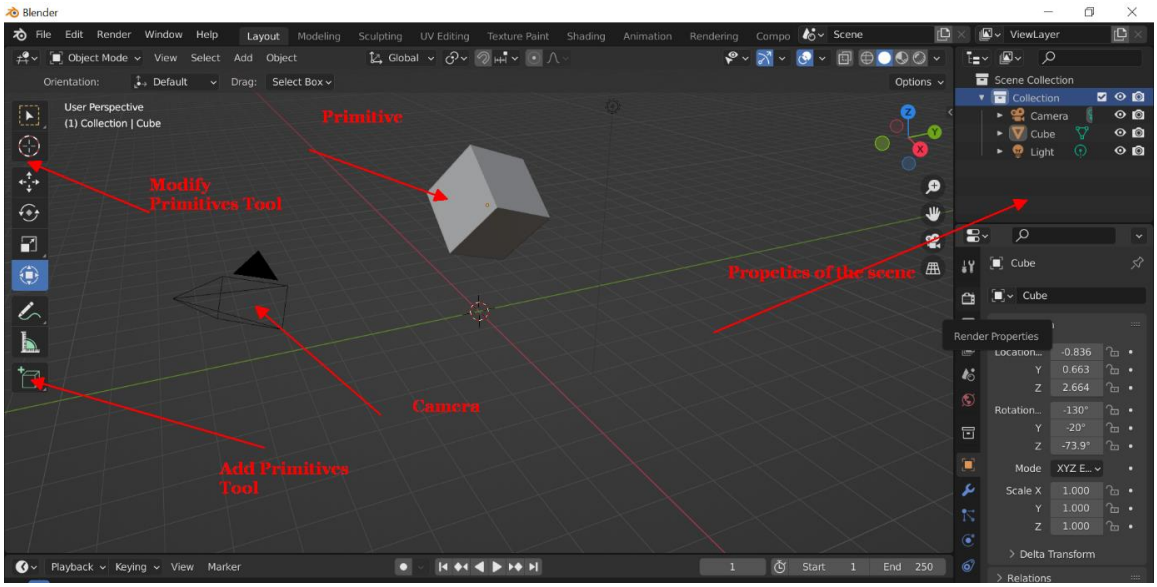
- Rendering architettonico
- Simulazione fluida di fisica scientifica (Gif)
- Progetti artistici in 3D
- Ricostruzione forense (esempio mummia Cicero Moraes (Gif))
- Progettazione video 3D
- Progettazione videogiochi 3D



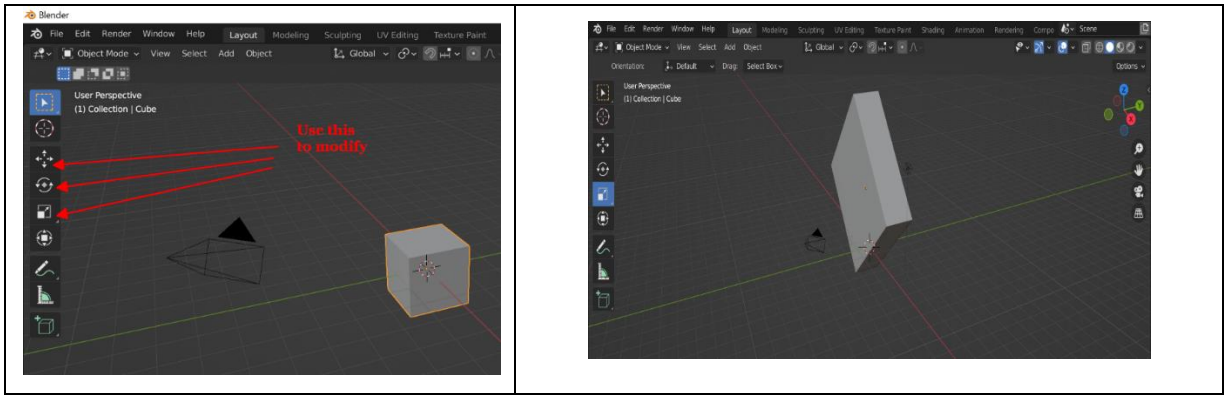
Apriamo BLENDER.

Transforming

Concetto importante, dobbiamo selezionare i punti che andremo a modificare. Strumenti: ruota, trasla, seleziona, ridimensiona, disegna

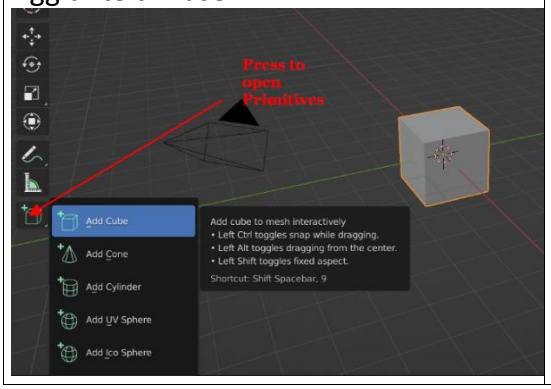


Compito: Trasforma il cubo in un rettangolo ruotato

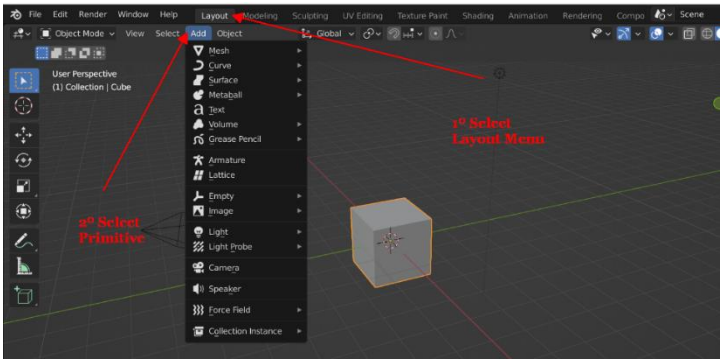


Aggiungere Primitive

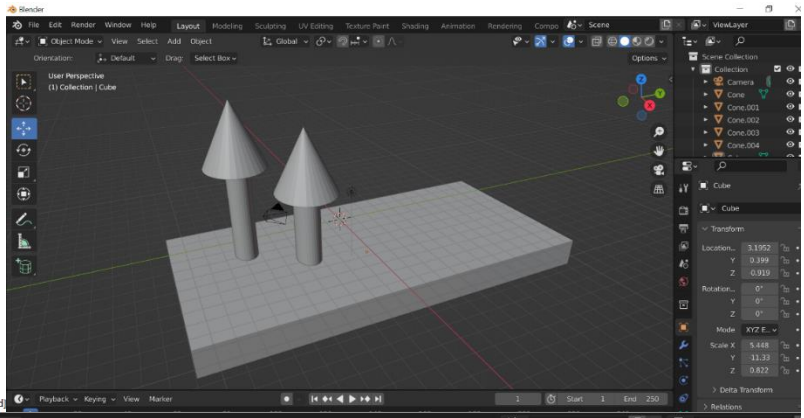
Aggiunte di Base



Aggiunte Avanzate



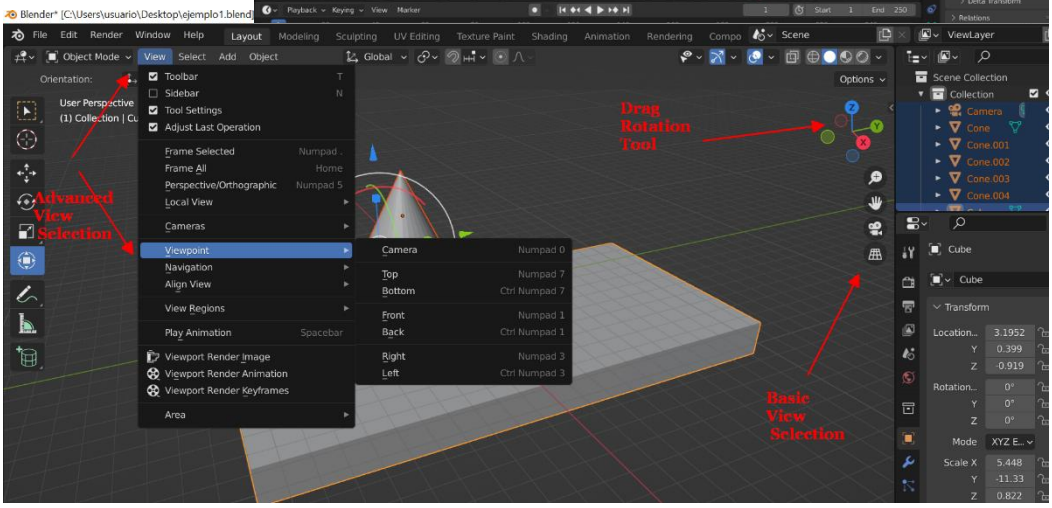
Compito: Aggiungi un Cubo, un Cono e un Cilindro per creare questo



Vista

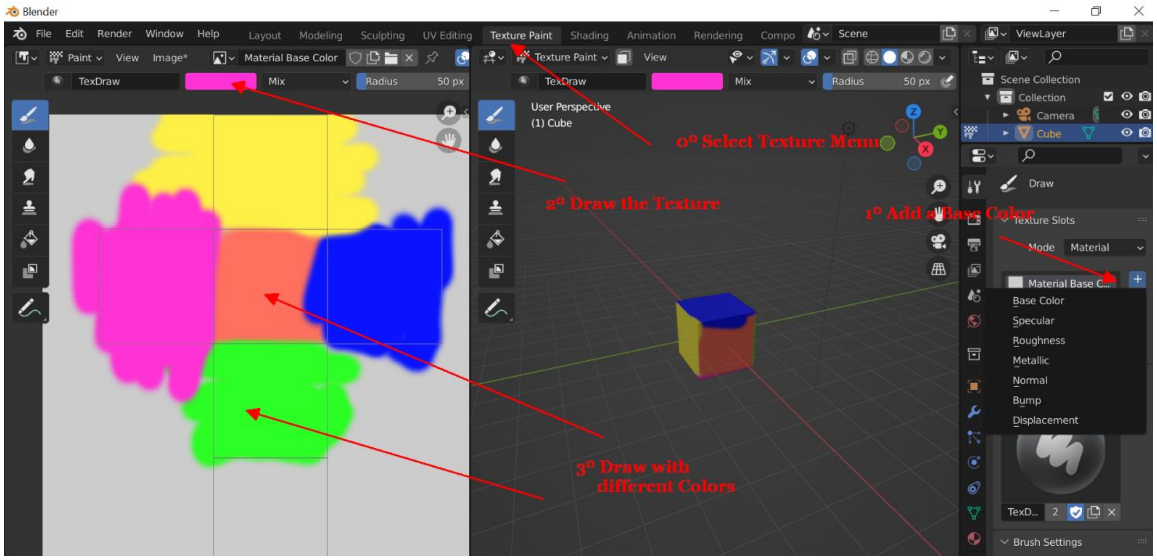
- **Vista X-Y-Z**
- **Isometric**
- **Camera**

Visualizza la scena in modi differenti.



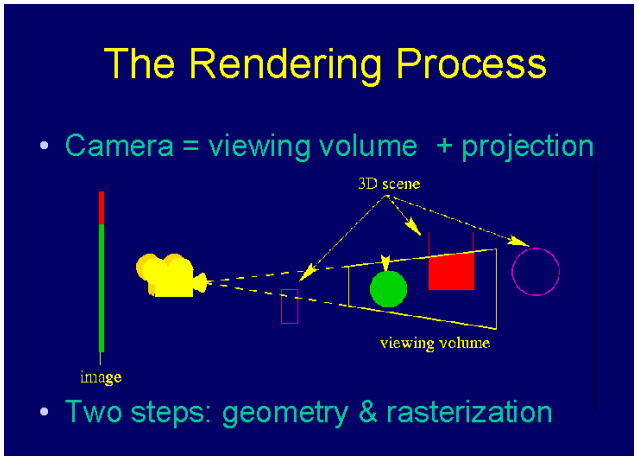
Aggiungere Textures

Compito: Disegna un cubo colorato

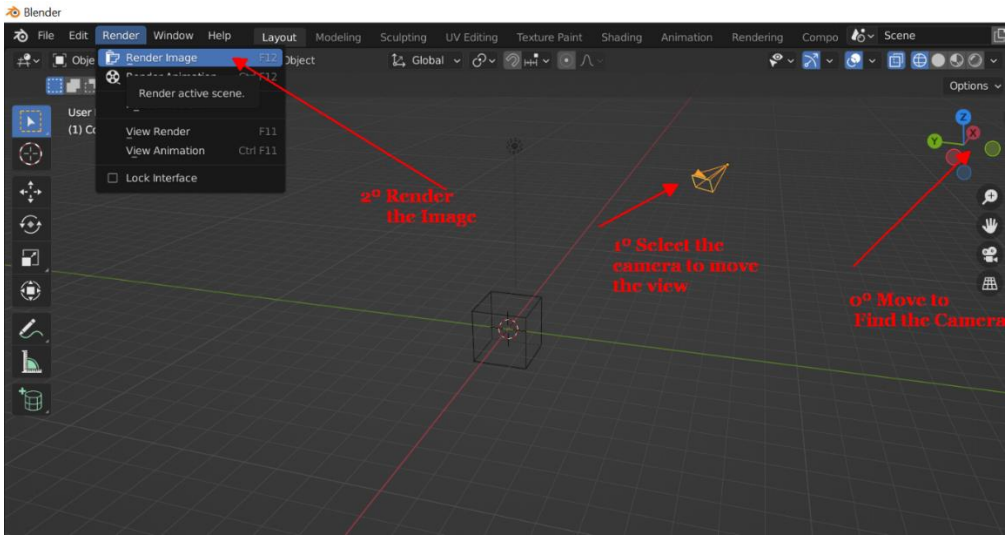


Camera & Rendering

Cos'è il Rendering? È il processo per realizzare una ripresa della scena con le trame.



Compito: Rendering del cubo colorato



SPAIN

¿Qué es Blender?

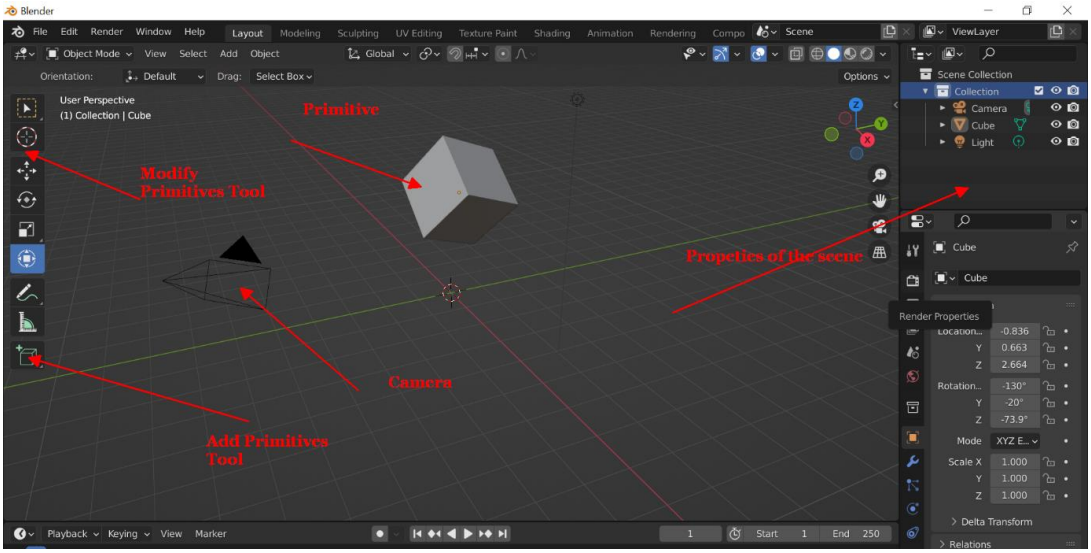
Blender es un conjunto de herramientas de software de gráficos por computadora en 3D gratuito y de código abierto que se utiliza para crear películas animadas, efectos visuales, arte, modelos impresos en 3D, gráficos en movimiento, aplicaciones 3D interactivas, realidad virtual y juegos de computadora. Las características de Blender incluyen modelado 3D, desenvolvimiento UV, texturizado, edición de gráficos rasterizados, montaje y desollamiento, simulación de fluidos y humo, simulación de partículas, simulación de cuerpos blandos, escultura, animación, movimiento de partidos, renderizado, gráficos en movimiento, edición de video y composición.

Uso profesional de Blender

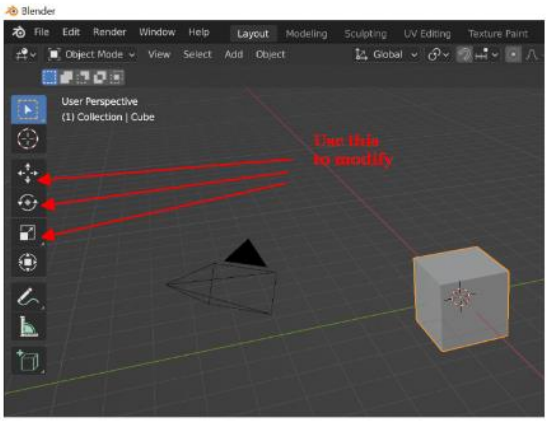
- Representación arquitectónica
- Simulación de fluidos de Física Científica (Gif)
- Diseños artísticos en 3D
- Reconstrucción forense (ejemplo momia Cícero Moraes (Gif))
- Diseño de videos en 3D
- Diseños de Videojuegos 3d

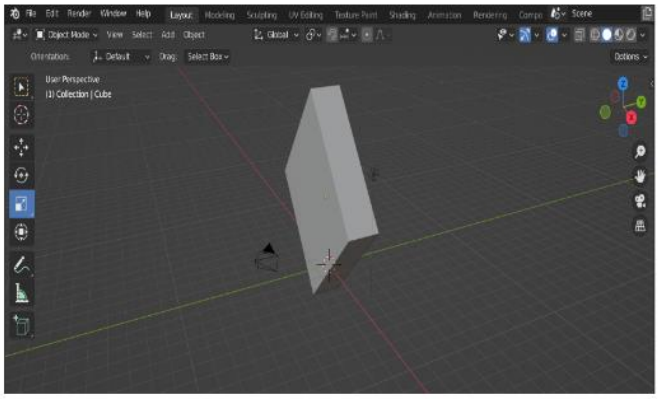
1º TransformaCiones

Concepto importante, tenemos que seleccionar los puntos que vamos a modificar- Herramientas: Rotar, Trasladar, Seleccionar, Escalar, Dibujar



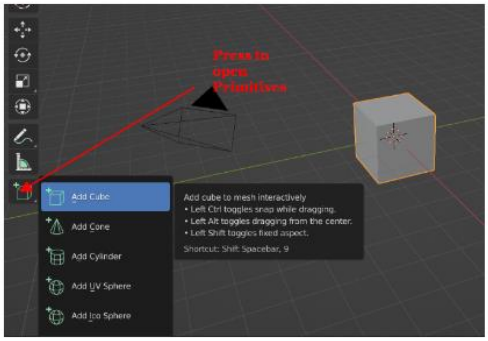
Tarea Transformar el cubo en un rectángulo rotado



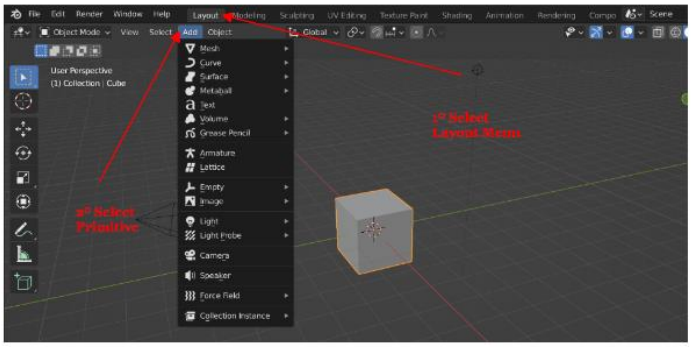


Adición de primitivas

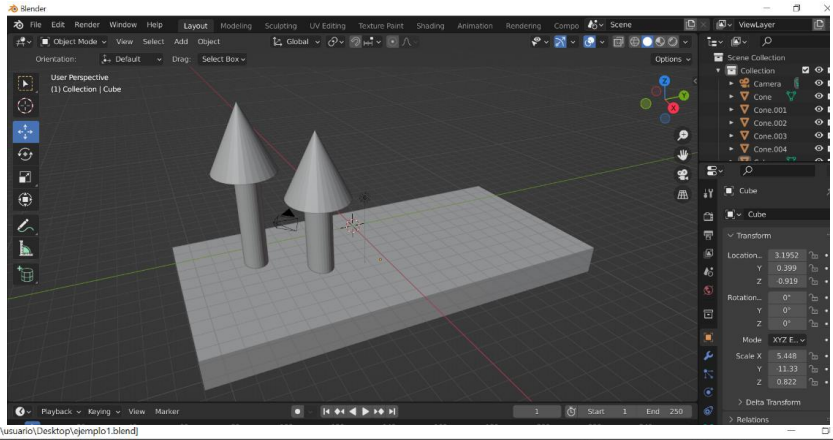
Adición básica



Adición avanzada



Tarea Agrega un cubo, una esfera y un cilindro para crear esto

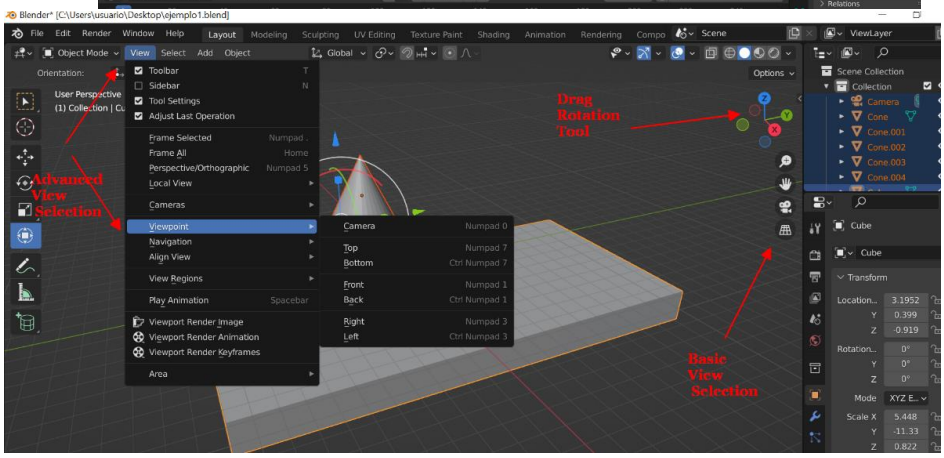


Vistas en 3d

En el menú lateral podemos escoger entre

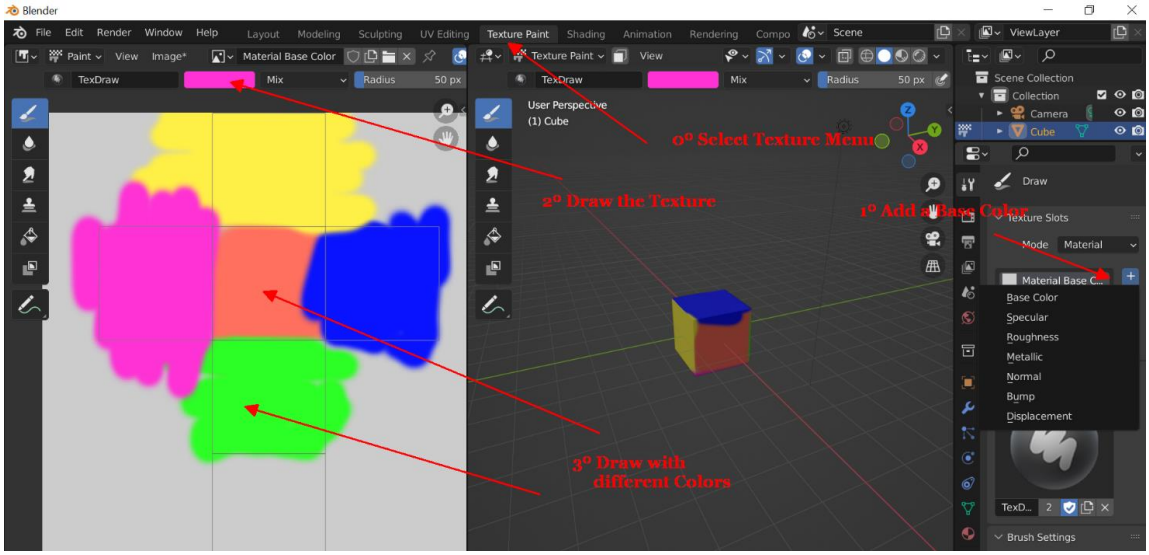
- Vistas X-Y-Z
- isométrica
- Cámara

Tarea: Compruebe varias vistas de la escena.



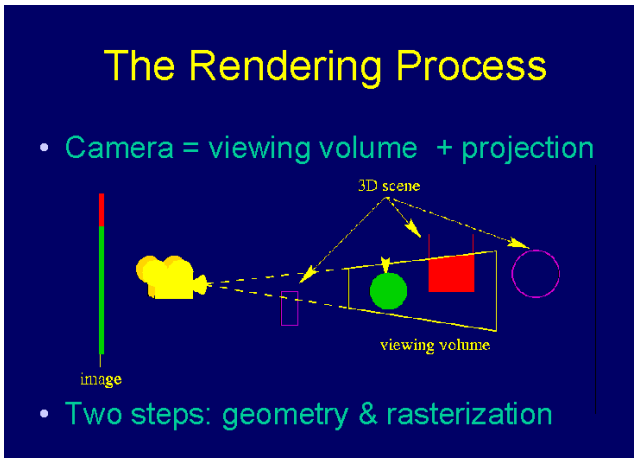
Agregar texturas

Tarea Dibuja un cubo colorido



Cámara y renderizado

¿Qué es renderizar? Es el proceso para tomar una foto de la escena con las texturas.



Tarea Renderizar el cubo de color