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## GAME DEVELOPMENT

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## CONSTRUCT 2D:

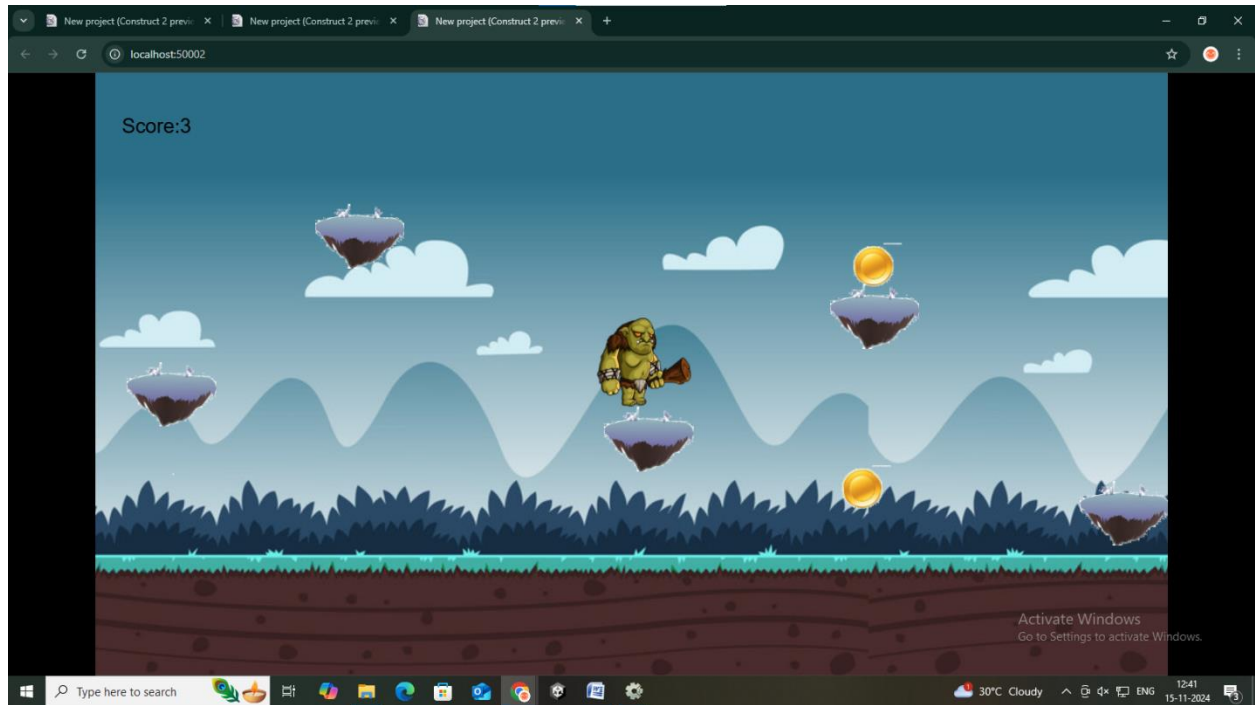
Construct 2D is a powerful, user-friendly game development platform designed for creating 2D games without requiring advanced programming knowledge. It's an HTML5-based engine that allows developers to build games that can run on the web, as well as on mobile devices, desktop computers, and consoles.

### Working Interface:



The Construct 2D interface is designed to be intuitive and accessible, focusing on providing an easy-to-use platform for creating 2D games without the need for extensive programming knowledge. The layout of the interface is clean, and the workflow is streamlined for users to quickly build and test their games.

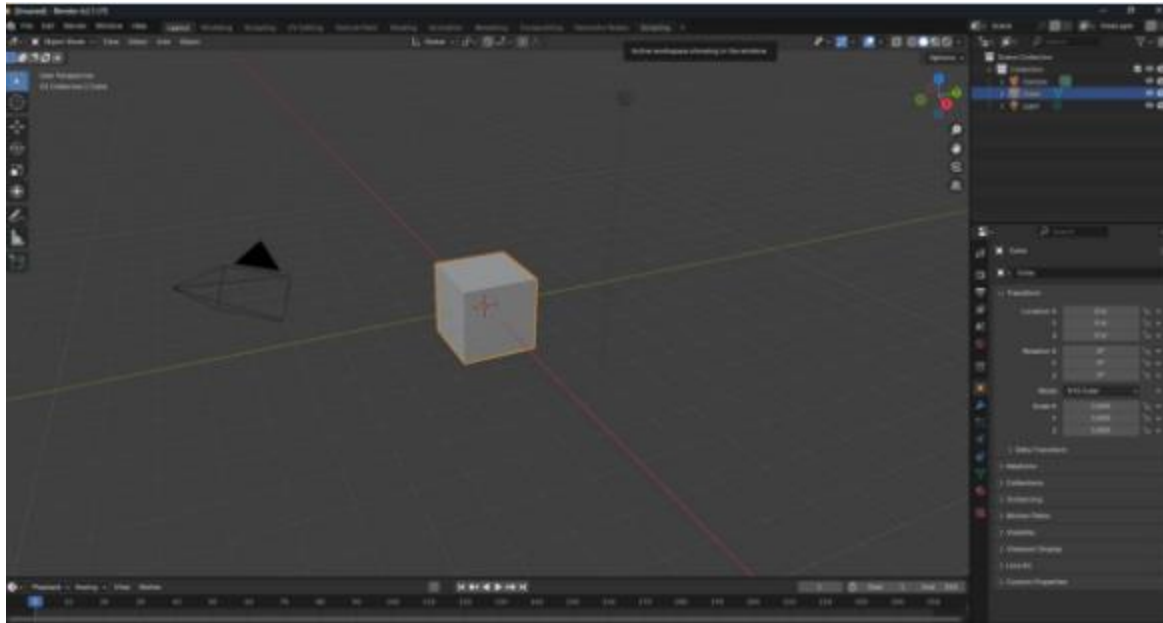
The Construct 2D interface is designed to be approachable while still offering a wide range of functionality for both beginners and advanced users. The event-based system, drag-and-drop workflow, and intuitive layout make it a great tool for quickly building 2D games, and the interface is built to support fast iteration and testing.



The above image is a 2D game created in Construct 2D. It features an image background, a figure sprite and multiple platform sprites.

## **BLENDER:**

Blender is a free and open-source 3D computer graphics software tool set that runs on Windows, MacOS, BSD, Haiku, IRIX and Linux. It is used for creating animated films, visual effects, art, 3D-printed models, motion graphics, interactive 3D applications, virtual reality, and, formerly, video games. Blender's features include 3D modelling, UV mapping, texturing, digital drawing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animation, match moving, rendering, motion graphics, video editing, Python scripting, and compositing.



Blender's interface is separated into three main parts:

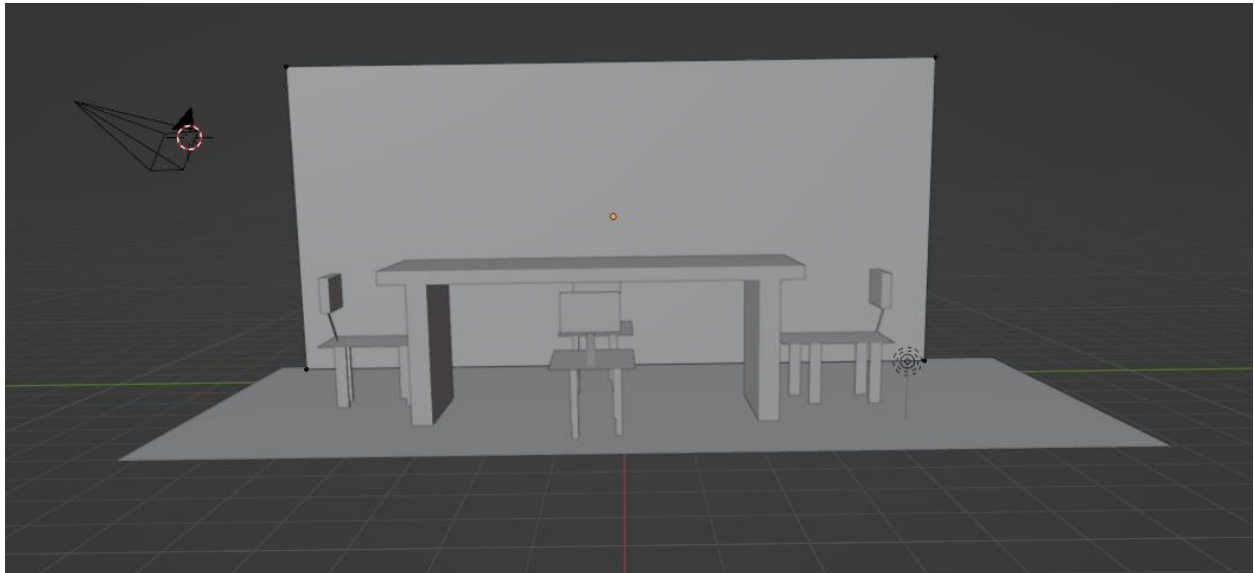
- The Top bar at the very top, consists of the main menu, which is used for saving, importing and exporting files, configuring settings, and rendering among other functions.
- Areas in the middle, which is the main workspace
- The Status Bar at the bottom, which displays shortcut suggestions and relevant statistics.

## Modeling:

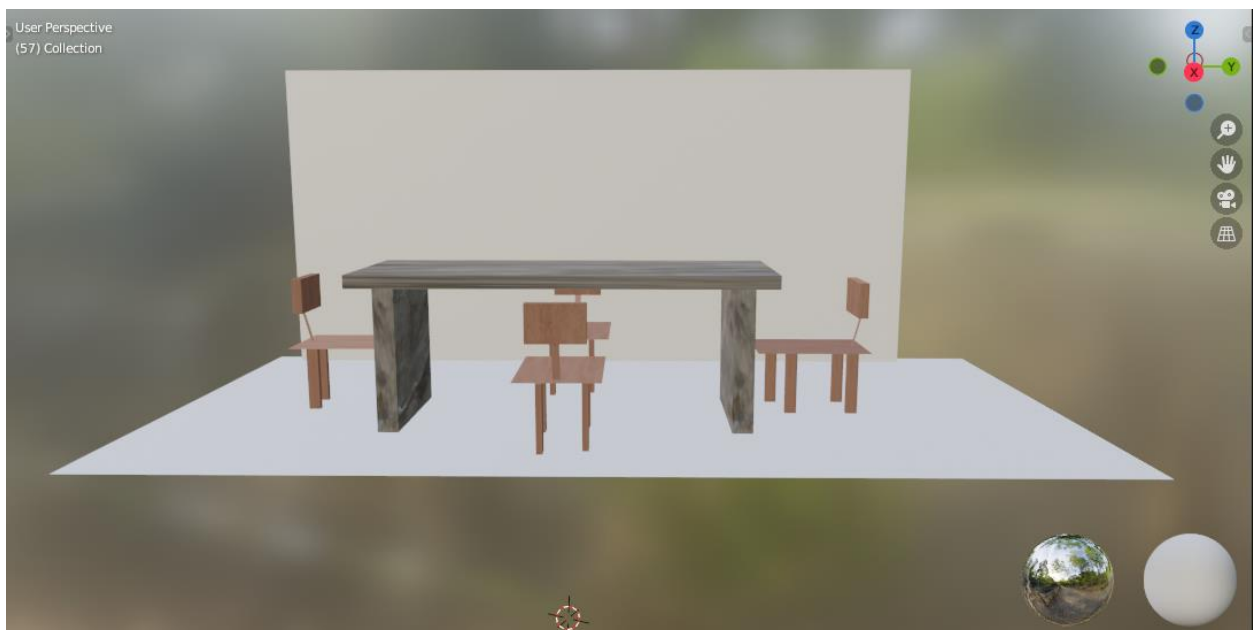
Blender is typically used for 3D modeling, which involves creating a three-dimensional representation of an object or scene using specialized software. The models simulate and capture the shape and appearance of real-world objects, rendering them in digital form.

Blender is particularly popular for creating low-poly models, which are 3D models with a relatively small number of polygons. These are widely used in game development and real-time rendering due to their efficiency.

## Modeling view:



## Shading view:

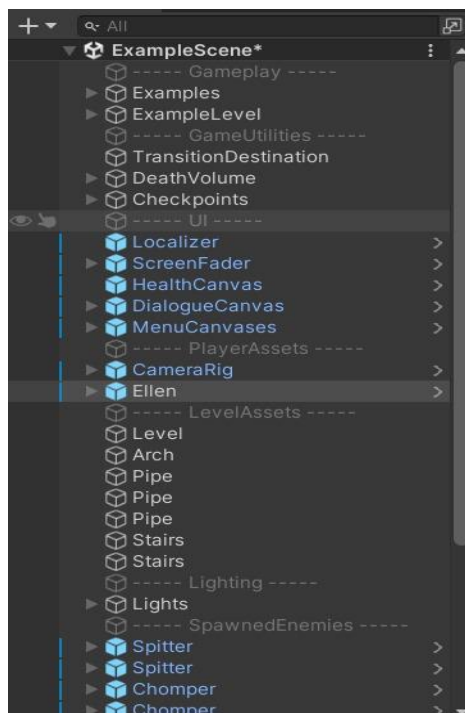


## UNITY 3D:

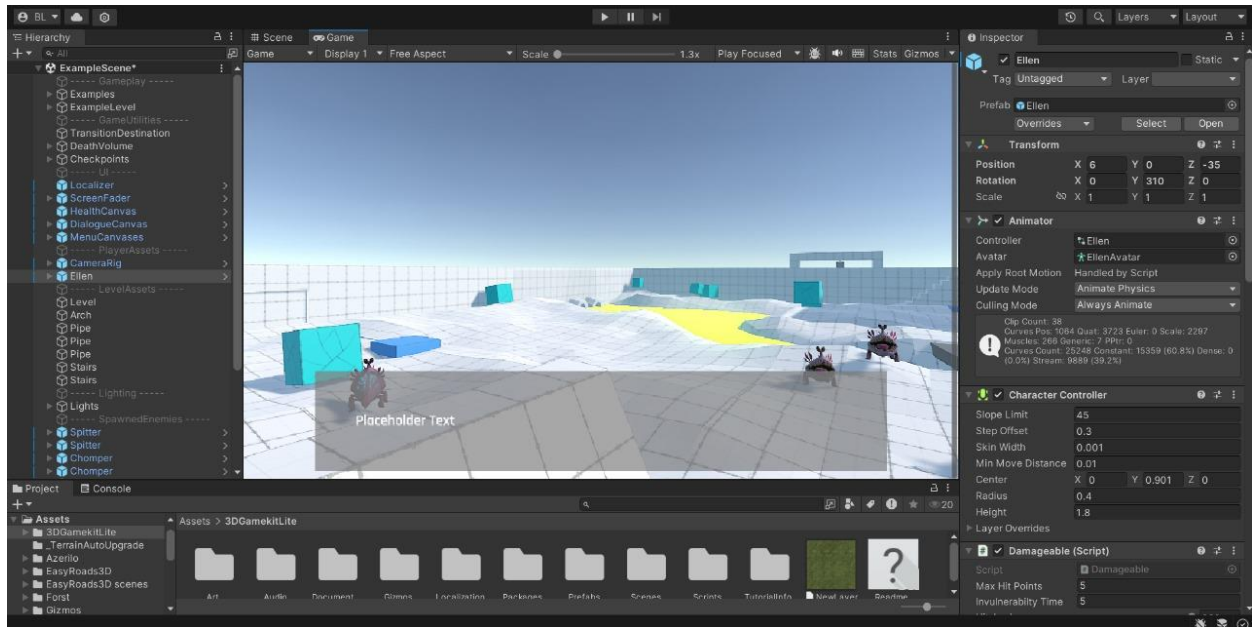
Unity is a cross-platform game engine developed by Unity Technologies, first announced and released in June 2005 at Apple Worldwide Developers Conference as a Mac OS X game engine. The engine has since been gradually extended to support a variety of desktop, mobile, console, augmented reality, and virtual reality platforms. It is particularly popular for iOS and Android mobile game development, is considered easy to use for beginner developers, and is popular for indie game development.

The engine can be used to create three-dimensional (3D) and two-dimensional (2D) games, as well as interactive simulations. The engine has been adopted by industries outside video gaming, such as film, automotive, architecture, engineering, construction, and the United States Armed Forces.

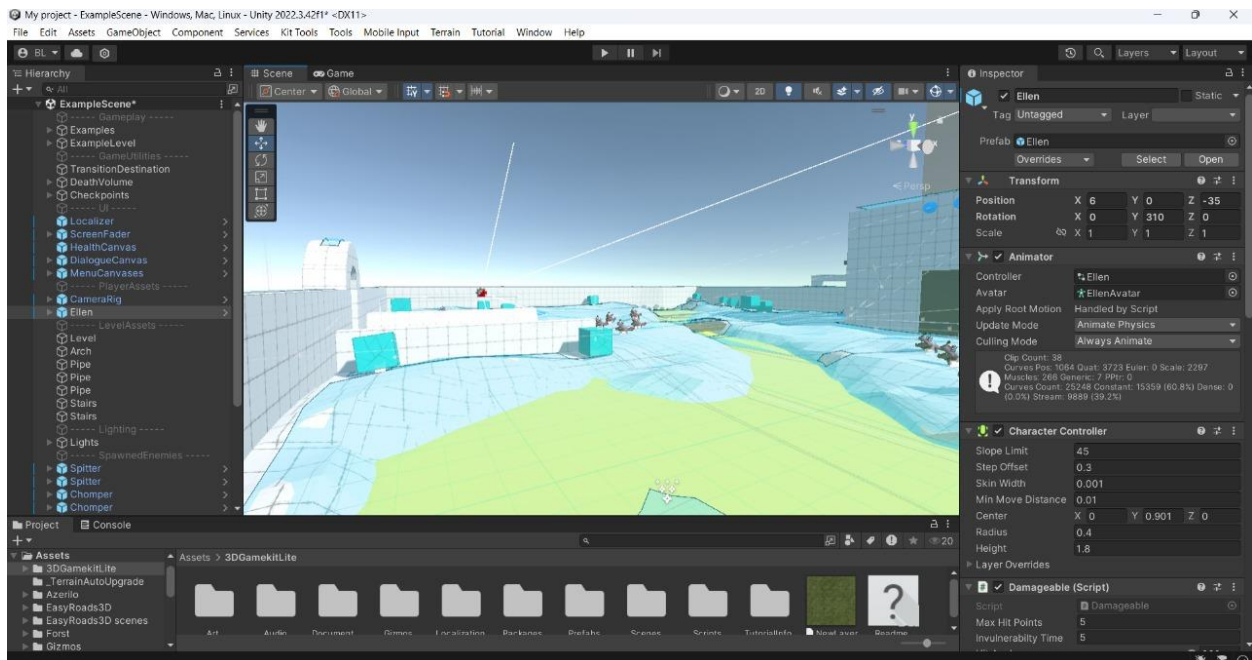
## Hierarchy Window:



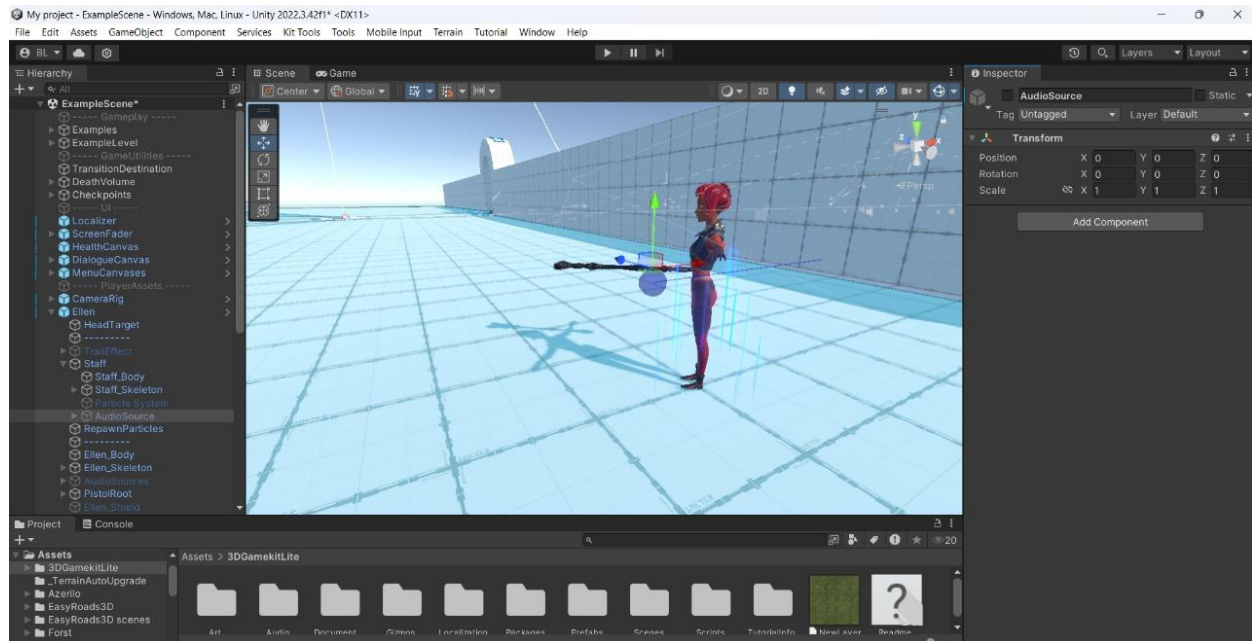
## Scene Window:



## Game Window:



## Player View:



An immersive 3D action , game build in Unity , featuring dynamic environment, challenging obstacles and engaging character that delivers a captivating gaming experience.