

# GAME INTERFACE

EVENTS, BUILDER, FEEDBACK

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GAME MEDIA STUDIO



# UI IN UNITY

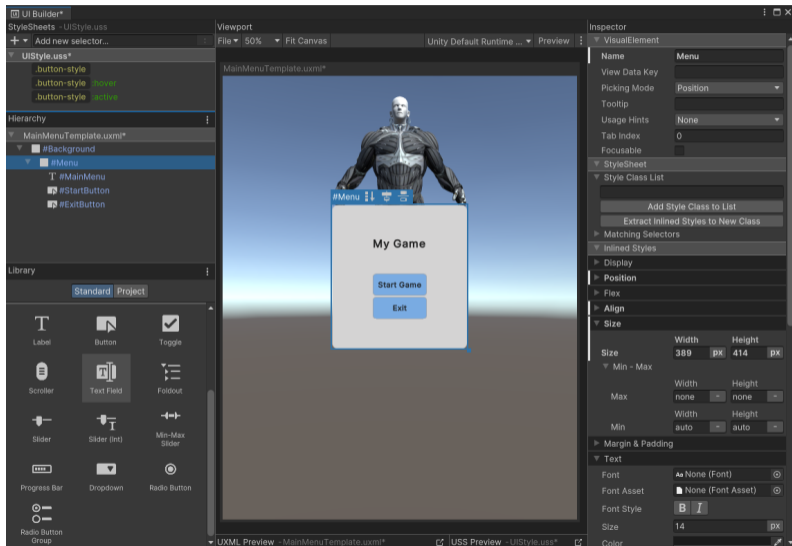
# USER INTERFACE SYSTEM

- UI Fully Supported
- Various Modes
- Camera Stacking
- Three Options
  - ▶ UI Toolkit
  - ▶ Unity UI
  - ▶ ImGUI

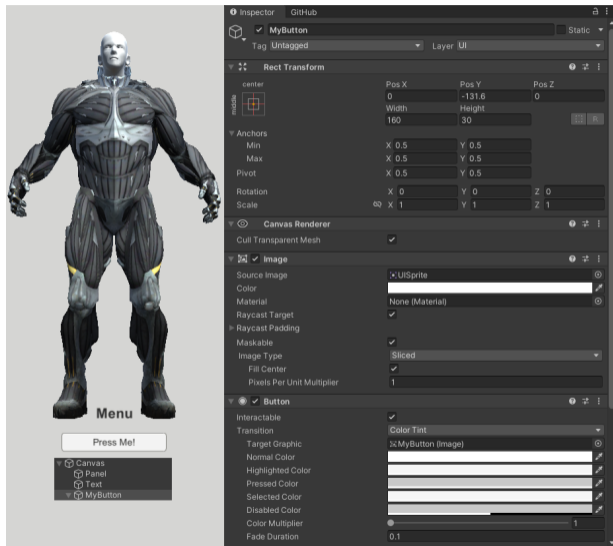


# UNITY UI TOOLKIT

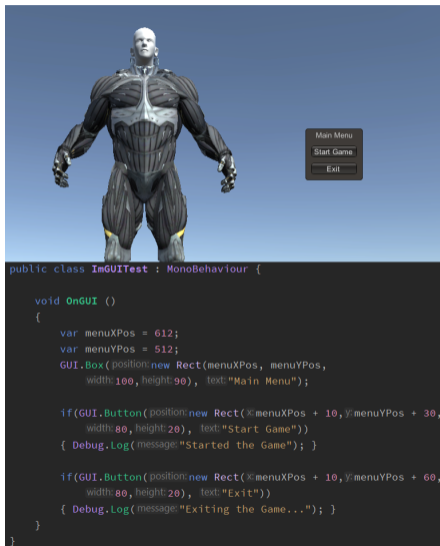
- Newest System
- “Classical UI”
- Integrated Editor
- HTML + XML + CSS
- Performance



- Older System
- Based on GameObjects
- Utilizes Assets
- Code Integration



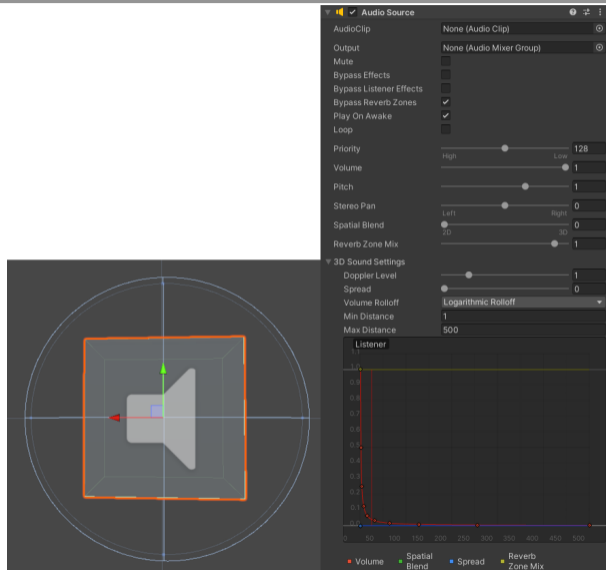
- Based on ImGui
- Immediate Mode
- Good for Programmers
- Debugging & Tools



# AUDIO IN UNITY

# AUDIO OVERVIEW

- Hierarchy Integration
- Audio Source & Listener
- 2D and Full 3D
- Audio Asset Support
- Profiler Section
- Tracker Modules



The screenshot displays the audio engine's configuration interface. On the left, a 3D perspective view shows a speaker icon within a circular field of view, with a red arrow pointing left and a green arrow pointing up. On the right, the 'Audio Source' settings panel is visible, featuring various controls and a graph.

**Audio Source Settings:**

- AudioClip: None (Audio Clip)
- Output: None (Audio Mixer Group)
- Mute:
- Bypass Effects:
- Bypass Listener Effects:
- Bypass Reverb Zones:
- Play On Awake:
- Loop:
- Priority: High (slider) / 128 (value)
- Volume: 1 (slider)
- Pitch: 1 (slider)
- Stereo Pan: 0 (slider, between Left and Right)
- Spatial Blend: 0 (slider, between 2D and 3D)
- Reverb Zone Mix: 1 (slider)

**3D Sound Settings:**

- Doppler Level: 1 (slider)
- Spread: 0 (slider)
- Volume Rolloff: Logarithmic Rolloff (dropdown)
- Min Distance: 1 (value)
- Max Distance: 500 (value)

**Listener Graph:**

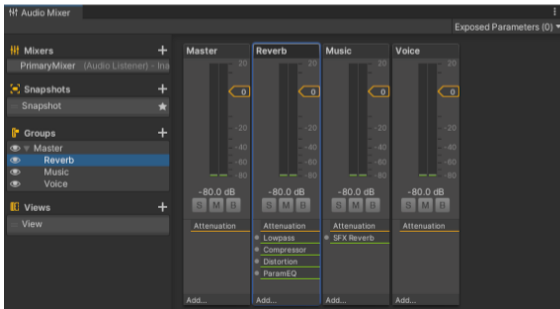
The graph shows the relationship between distance and various audio parameters. The x-axis represents distance (0 to 500), and the y-axis represents the parameter value (0.0 to 1.0). The parameters are:

- Volume (red line): Starts at 1.0 and drops to 0.0 by distance 50.
- Spatial Blend (green line): Constant at 1.0.
- Spread (blue line): Constant at 0.0.
- Reverb Zone Mix (yellow line): Constant at 1.0.



# AUDIO MIXING

- Spatial Blending & Distance
- Equalizer → Groups
- Filters, Parametric Equalizer
- Effects: Reverb, Echo, ...



# ADDITIONAL RESOURCES

- [Doc] Unity UI System Comparison
- [Doc] Unity ImGUI Elements
- [Doc] Unity Audio Effects



Source: Binary Domain

Thanks For Your Attention!

- s: Search
- Stray Turkey Hen (Tame)
- Wagon
- claystone Pebbles



Dwarf Fortress

Outside Light Above Ground

- Enter: View E: Follow
- ESC: Done +-\*/: Scroll

## REFERENCES I