

GAME INTERFACE

EVENTS, BUILDER, FEEDBACK

TOMÁŠ POLÁŠEK IPOLASEK@FIT.VUTBR.CZ

BRNO UNIVERSITY OF TECHNOLOGY

FACULTY OF INFORMATION TECHNOLOGY

DCGM, CPhoto@FIT

FACULTY OF FINE ARTS

GAME MEDIA STUDIO



UI IN UNITY

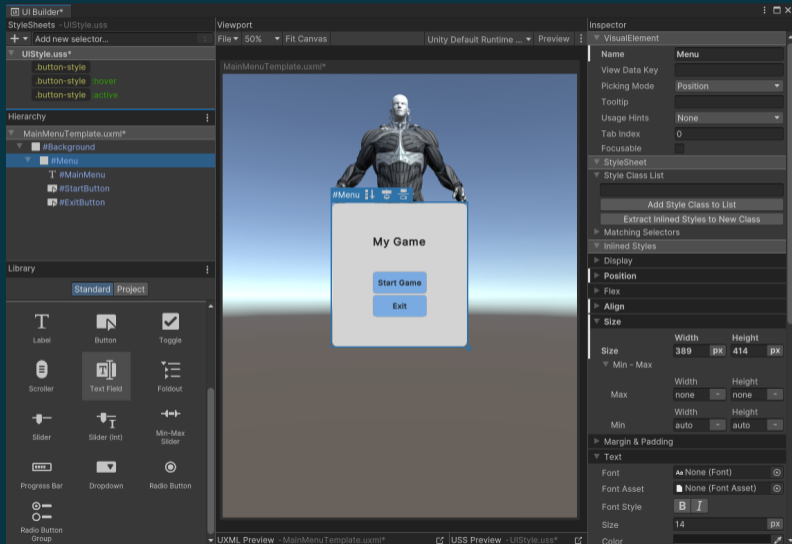
USER INTERFACE SYSTEM

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



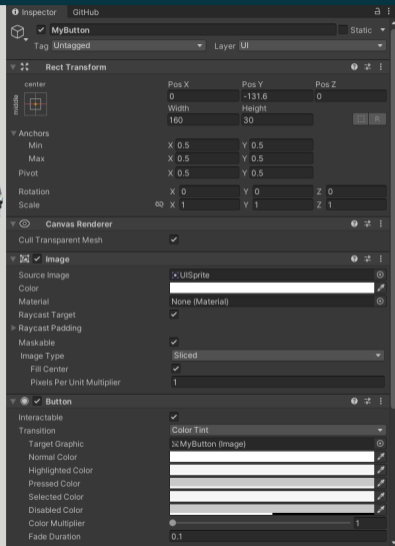
UNITY UI TOOLKIT

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



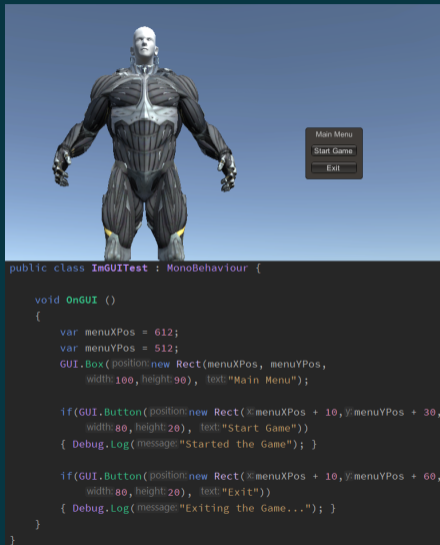
UNITY UGUI

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



UNITY IMGUI

- 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 image shows a software interface for audio configuration. On the right is a 'Audio Source' panel with various settings:

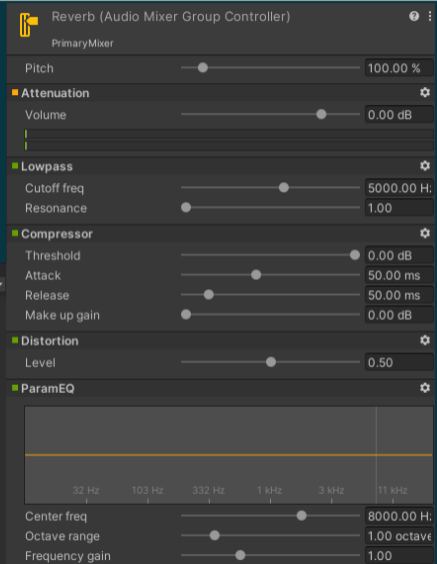
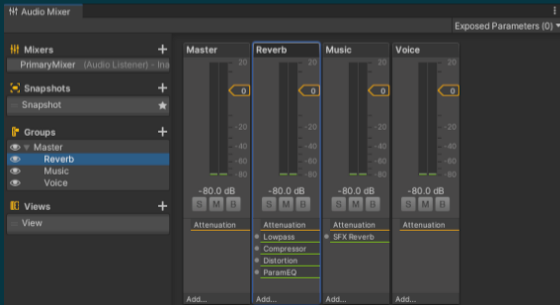
- AudioClip: None (Audio Clip)
- Output: None (Audio Mixer Group)
- Mute:
- Bypass Effects:
- Bypass Listener Effects:
- Bypass Reverb Zones:
- Play On Awake:
- Loop:
- Priority: High (slider) / 128 (value)
- Volume: 1 (slider)
- Pitch: 1 (slider)
- Stereo Pan: 0 (slider, between Left and Right)
- Spatial 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
 - Max Distance: 500

Below the settings is a 'Listener' graph showing the volume of different audio components over distance (0 to 500). The graph has four data series: Volume (red), Spatial Blend (green), Spread (blue), and Reverb Zone Mix (yellow). The Volume series starts at 1.0 and drops to 0.0 by distance 50. The other series remain at 0.0.

On the left is a 3D spatial audio diagram showing a speaker icon in the center of a coordinate system. A red arrow points left, a green arrow points up, and a blue square is at the origin. Concentric circles and a square represent the spatial audio field.

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 F: Follow 1
ESC: Done +-*/: Scroll 3
9

REFERENCES I