# FUDGE

FURTWANGEN UNIVERSITY DIDACTIC GAME EDITOR

What is FUDGE?

- A lightweight open-source game engine and editor

- for audiovisual 2D- and 3D-games

- the editor running on common desktop devices (Windows, Mac, Linux)

- for use in academic environment

- to teach students how to create digital games and interactive applications

- and for rapid prototyping in productive environments

- deploying results to most common platforms (desktop, mobile, web)
  and operating systems (Windows, Mac, Linux)
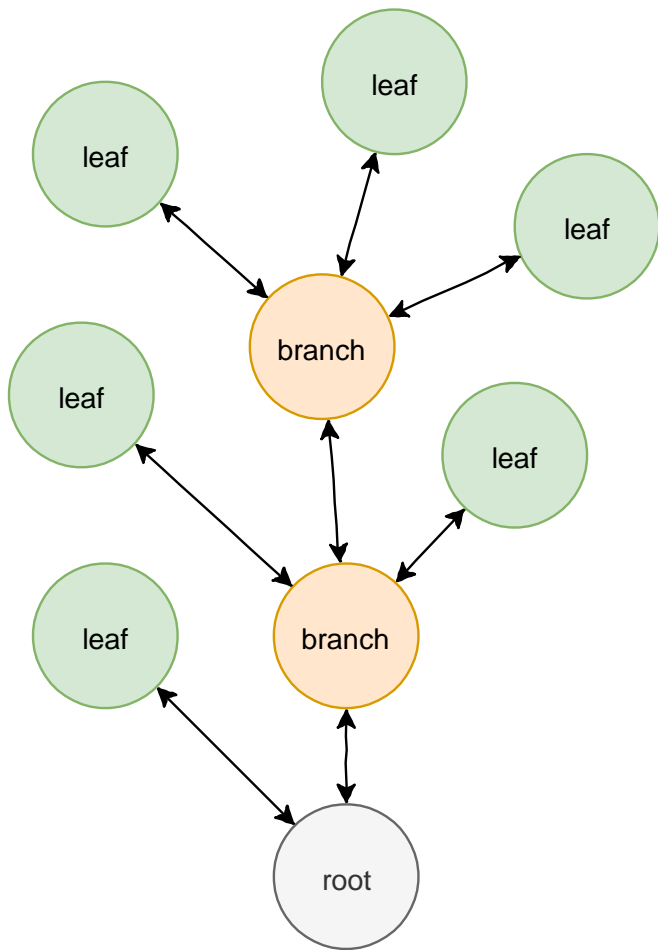
- since it's completely browser based

Not (necessarily):

      performant, safe, competing with other game engines, easy to use
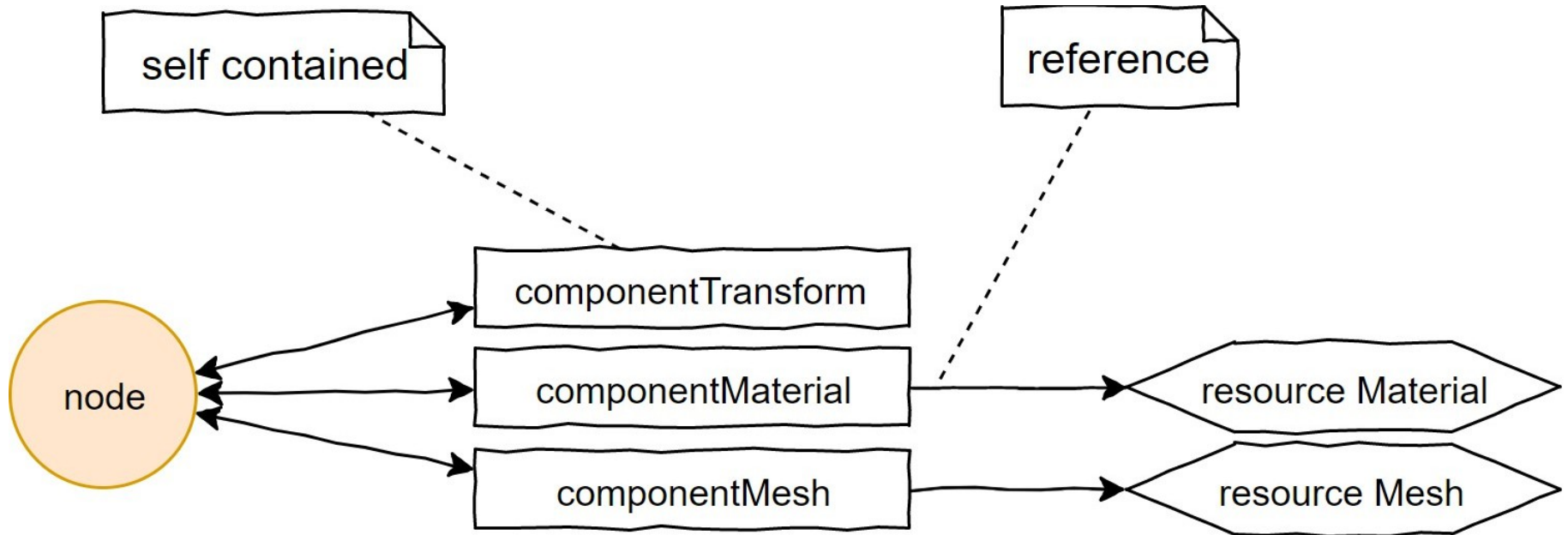
Actors
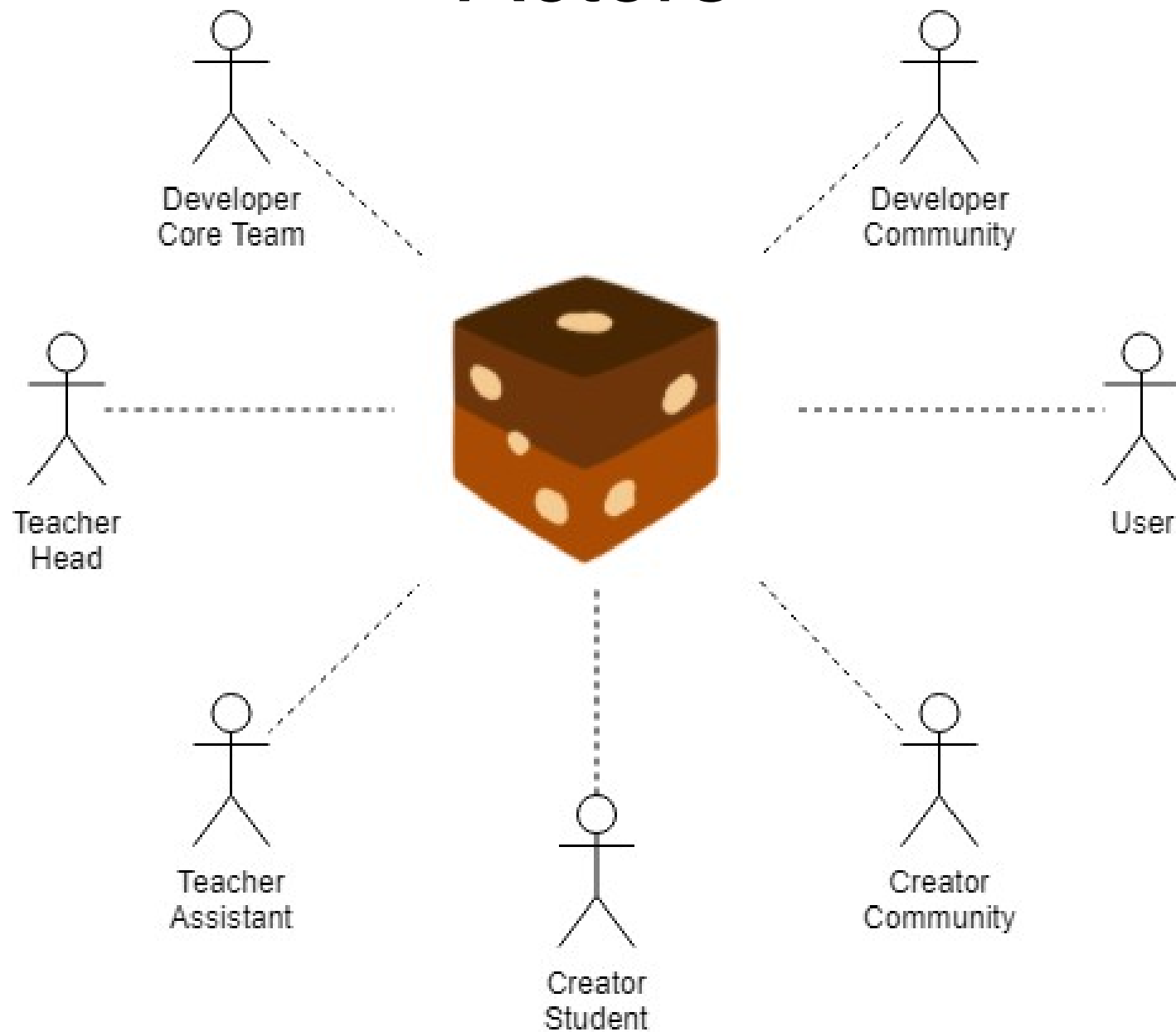
Graph

- standard model used in game engines

- also called scenetree or displaylist

- consists of nodes and edges

- creating parent-child-relationships

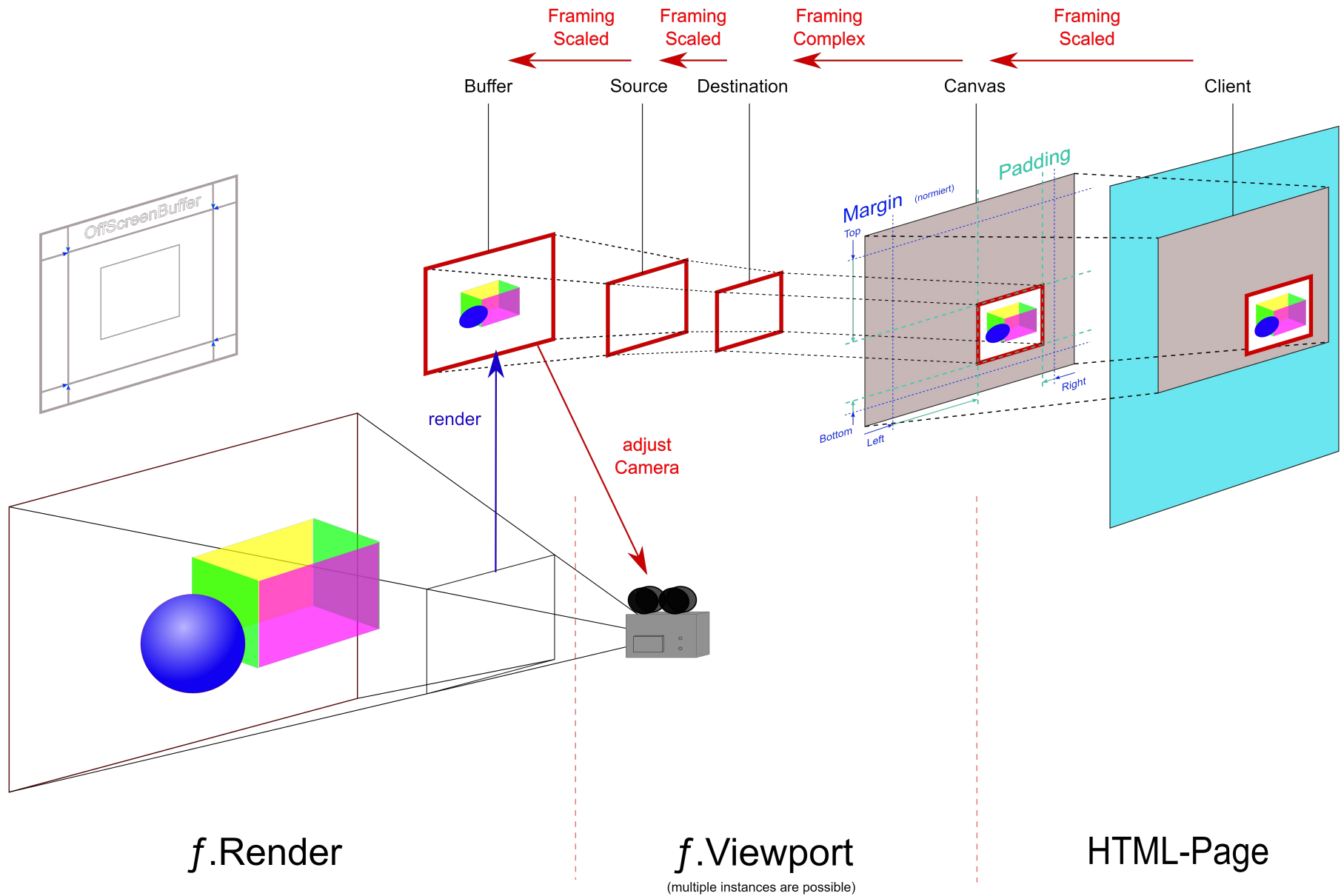- building a hierarchical structure (tree)

Node

- root, branch, leaf

- aggregates components

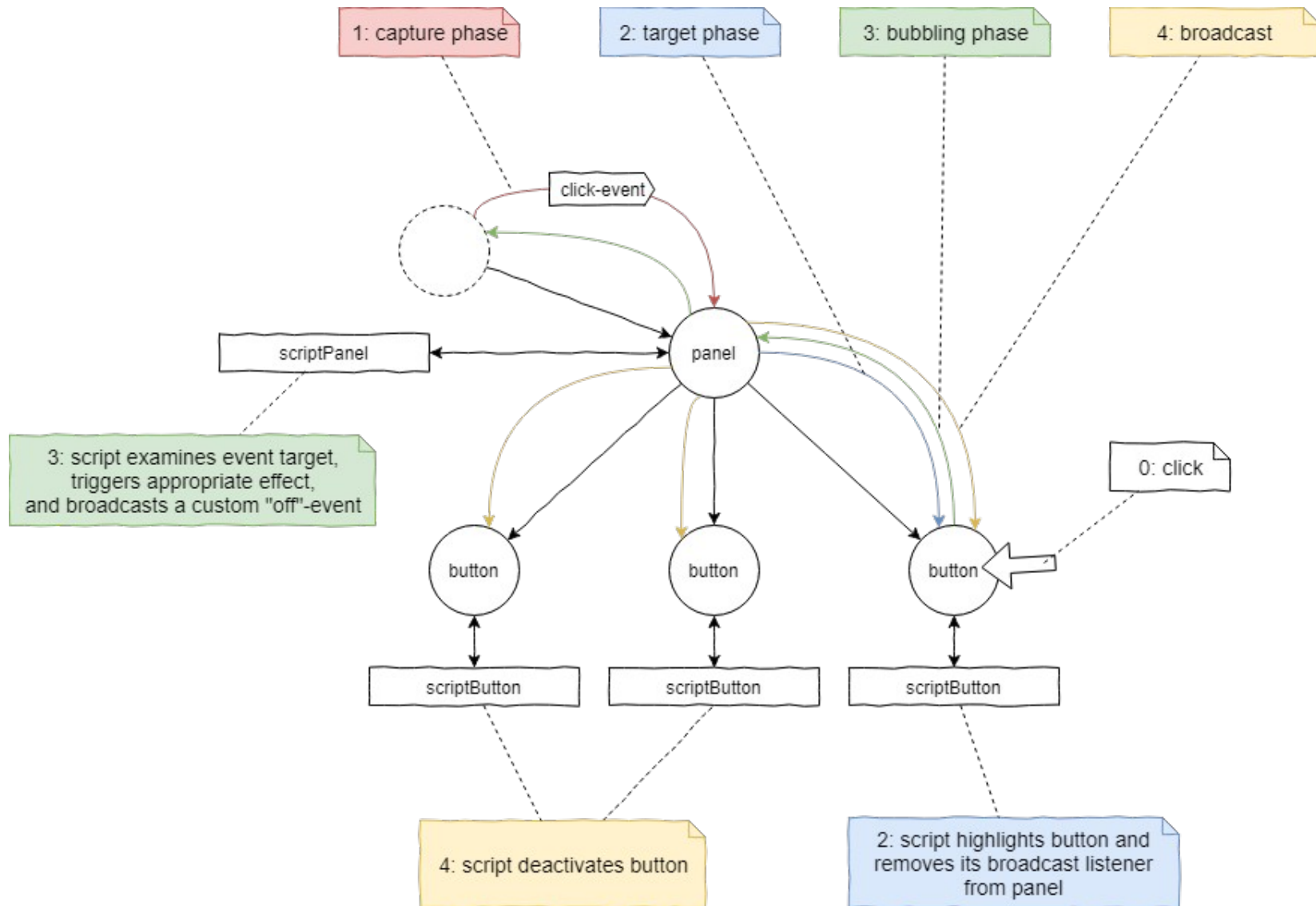- effects descendants

- passes events
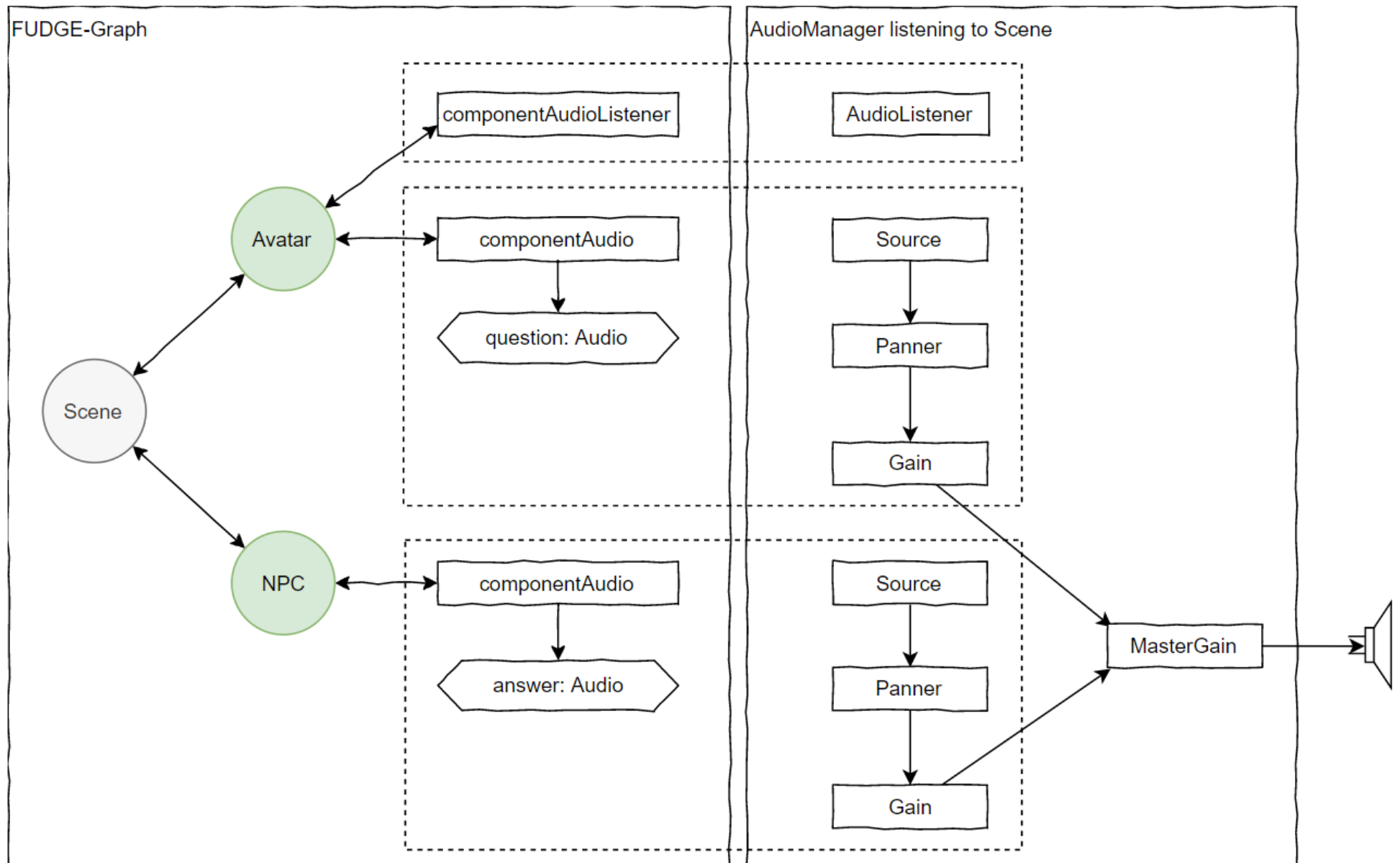
- feeds viewport

Component

Framing

Framing Scaled ← Framing Scaled ← Framing Complex ← Framing Scaled ←

Buffer   Source   Destination   Canvas   Client

Padding

Margin (normiert)

Top

Right

Bottom   Left

render

adjust Camera

OffScreenBuffer

f.Render f.Viewport   HTML-Page

(multiple instances are possible)

Event

Audio Management

Mutation & Serialization
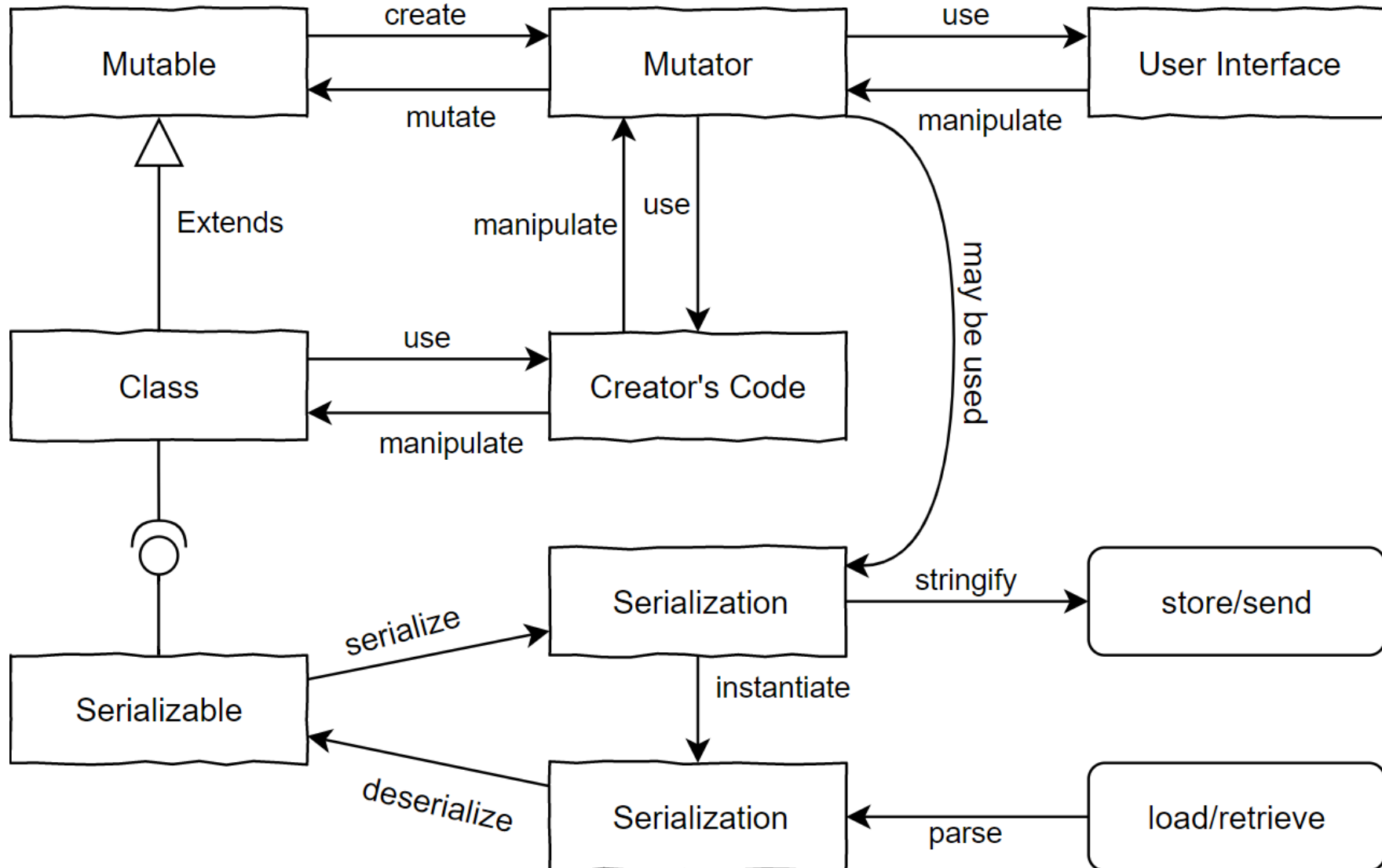
Status 8.21

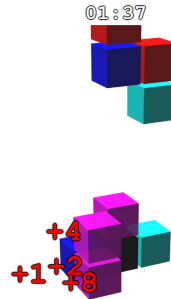|	Scheduled	Design	Implementation	Integration	Test
Core					X
UserInterface					X
Physics					X
Network				X	
Key-Animation			X		
Animation Editor		X			
Sketch Editor			X		
Modeller			X		
Importer			X		
Modular Shaders			X		
Particle System				X	
Particle Editor	X				
Skeletal System	X				
Visual Novel Module					X

Examples

UfoundLost | GGJ21
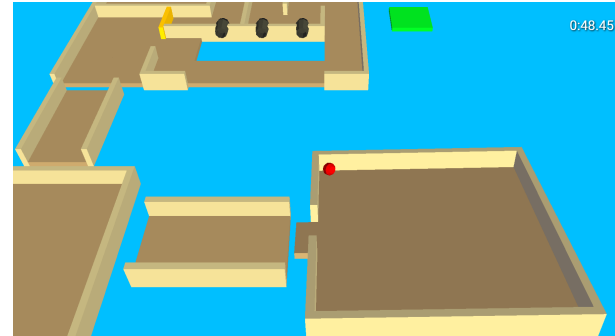
MazeBall | S21

Enter the Asteroids | S21

Craftris | W19

Jump & Fight | W20

Thanks!

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