TEACHING GODOT ENGINE
LEARNING EXPERIENCE DESIGN

GODOTCON 2021
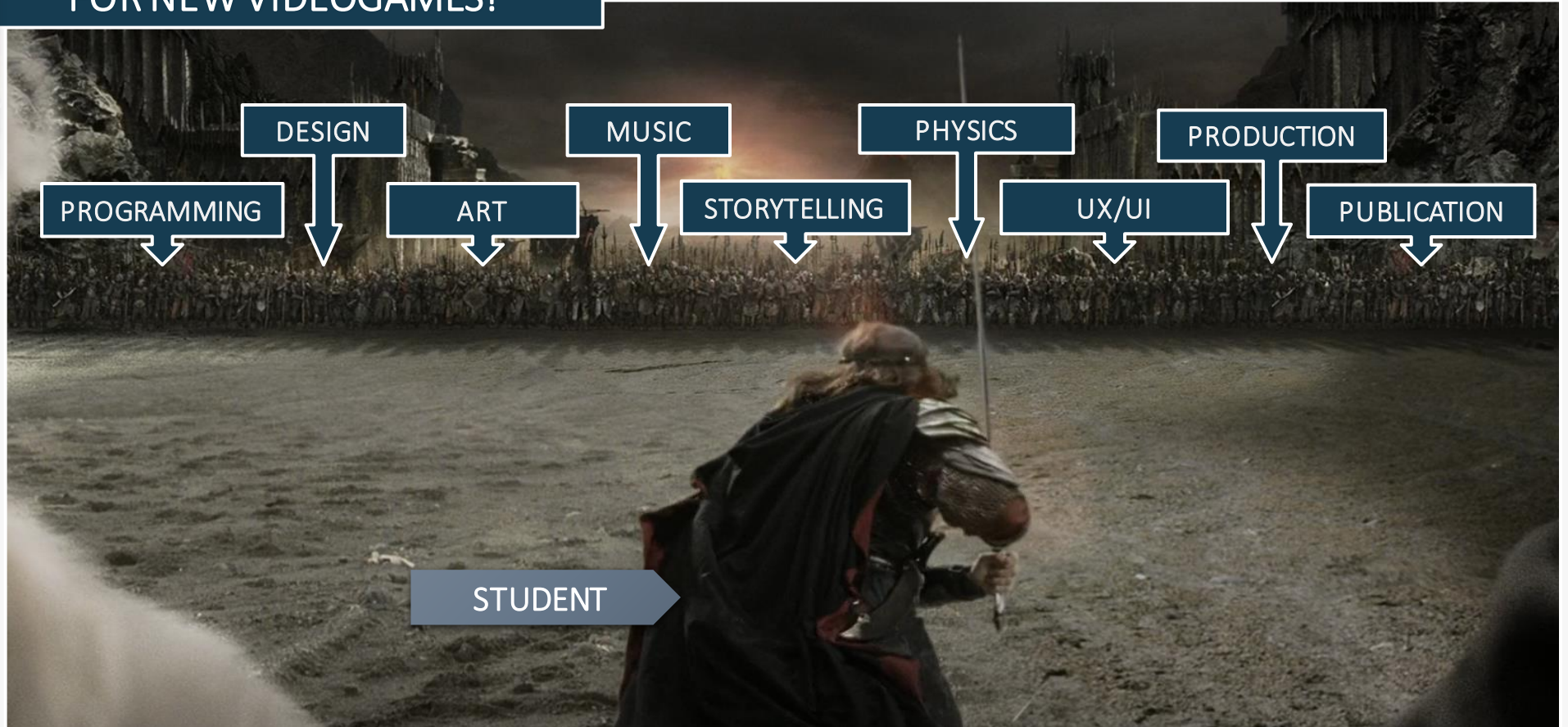
Temario

- ❑ Presentation

- ❑ LXD & game development

- ❑ Why teach Godot Engine?

- ❑ Curriculum & Godot Engine

- ❑ Our experience

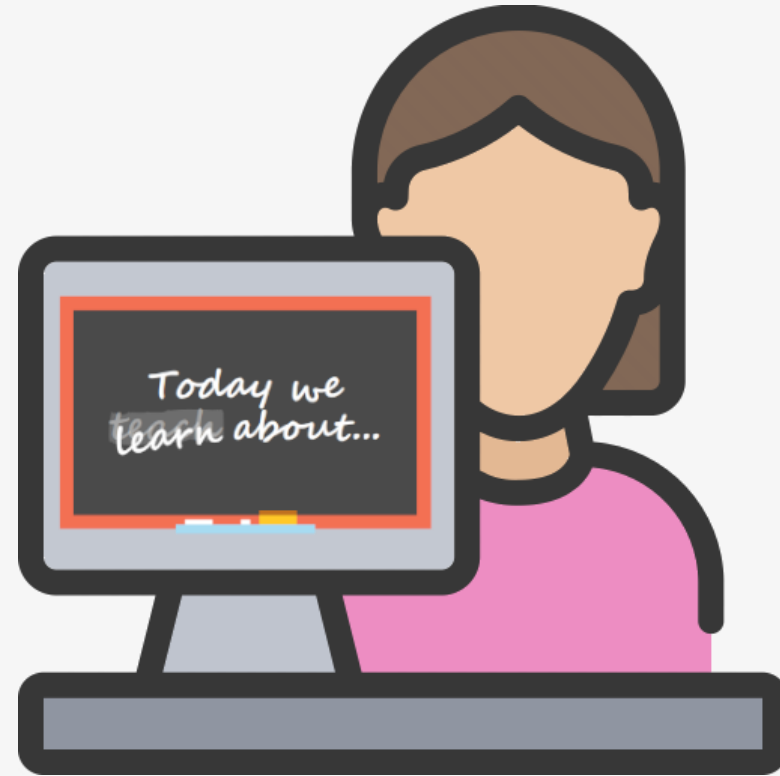- ❑ Questions

Presentation

FOR NEW VIDEOGAMES!

PROGRAMMING

DESIGN

ART

MUSIC

STORYTELLING

PHYSICS

UX/UI

PRODUCTION

PUBLICATION

STUDENT

Fuente: The Lord of the Rings: The Return of the King(2003)

LXD & game development

Experience

Challenge

Design

Fuente: The Karate Kid (1984)

LXD & game development

Game Design

LX Desing

LXD & game development
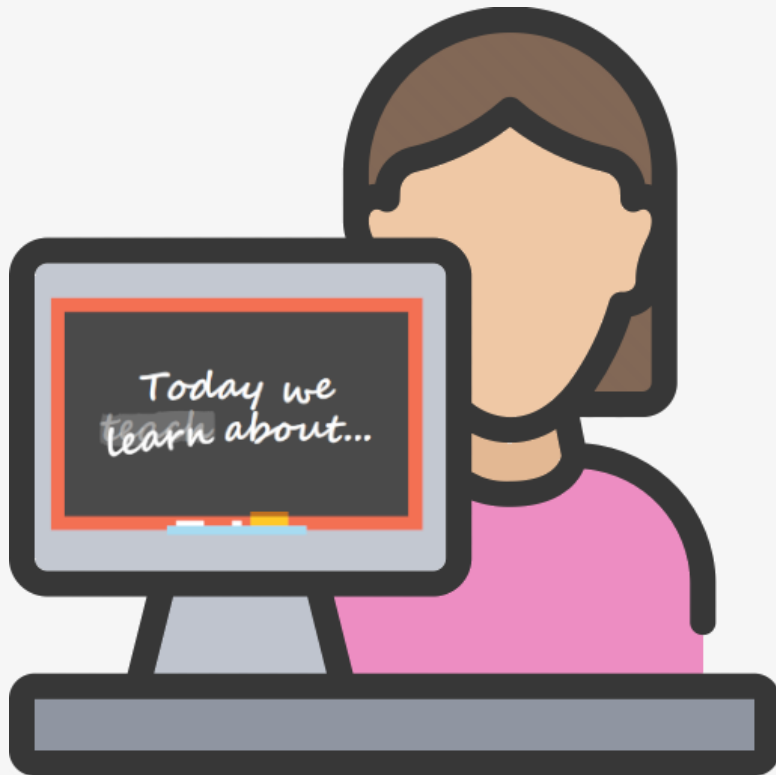
LEARNING EXPERIENCE DESIGN

DESIGN

GOAL

LEARNING

INTERACTION

Source: LXCanvas – Five Critical Questions, Niels Floor

Why teach Godot Engine?

Free and Open Source Software

Development Approach

Low Requirements and Multiplatform

Community and Resources

Curriculum & Godot Engine [Nodes]

NODE CHARACTERISTICS

- Node
  - Spatial
  - CanvasItem
    - Control
    - Node2D
      - AnimatedSprite
      - CollisionObject2D
      - AudioStreamPlayer2D
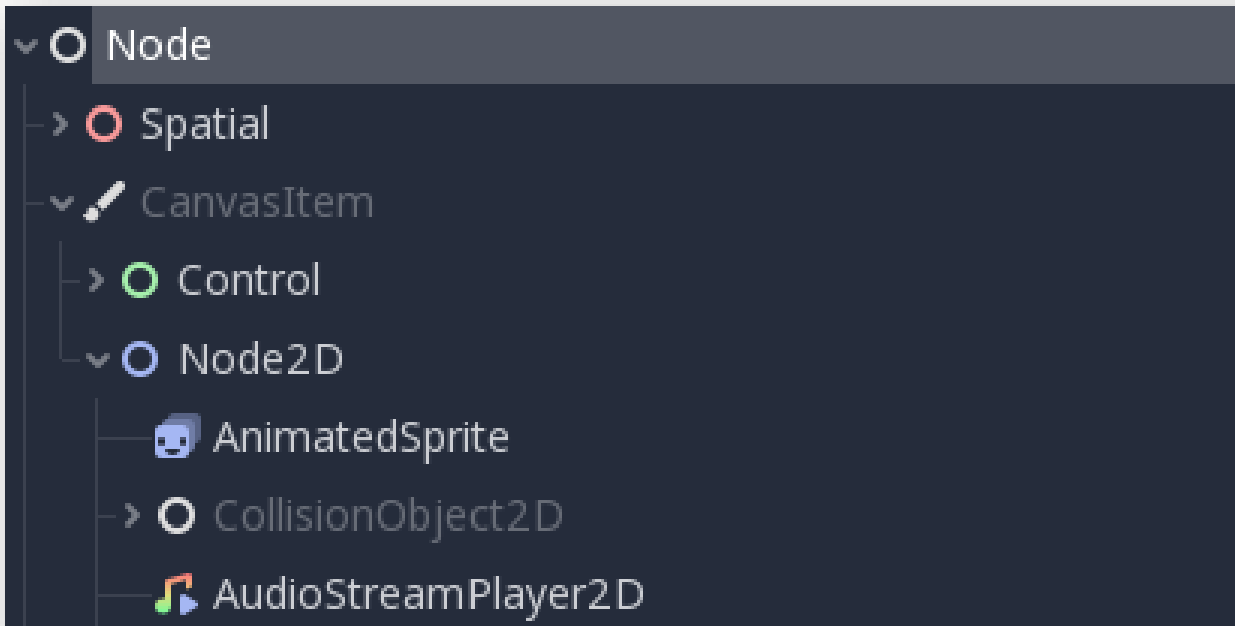
In Godot *everything tends to Node*, are the pieces of any element to be created in the game

PATTERN
Responsibility and Combination

HERITAGE
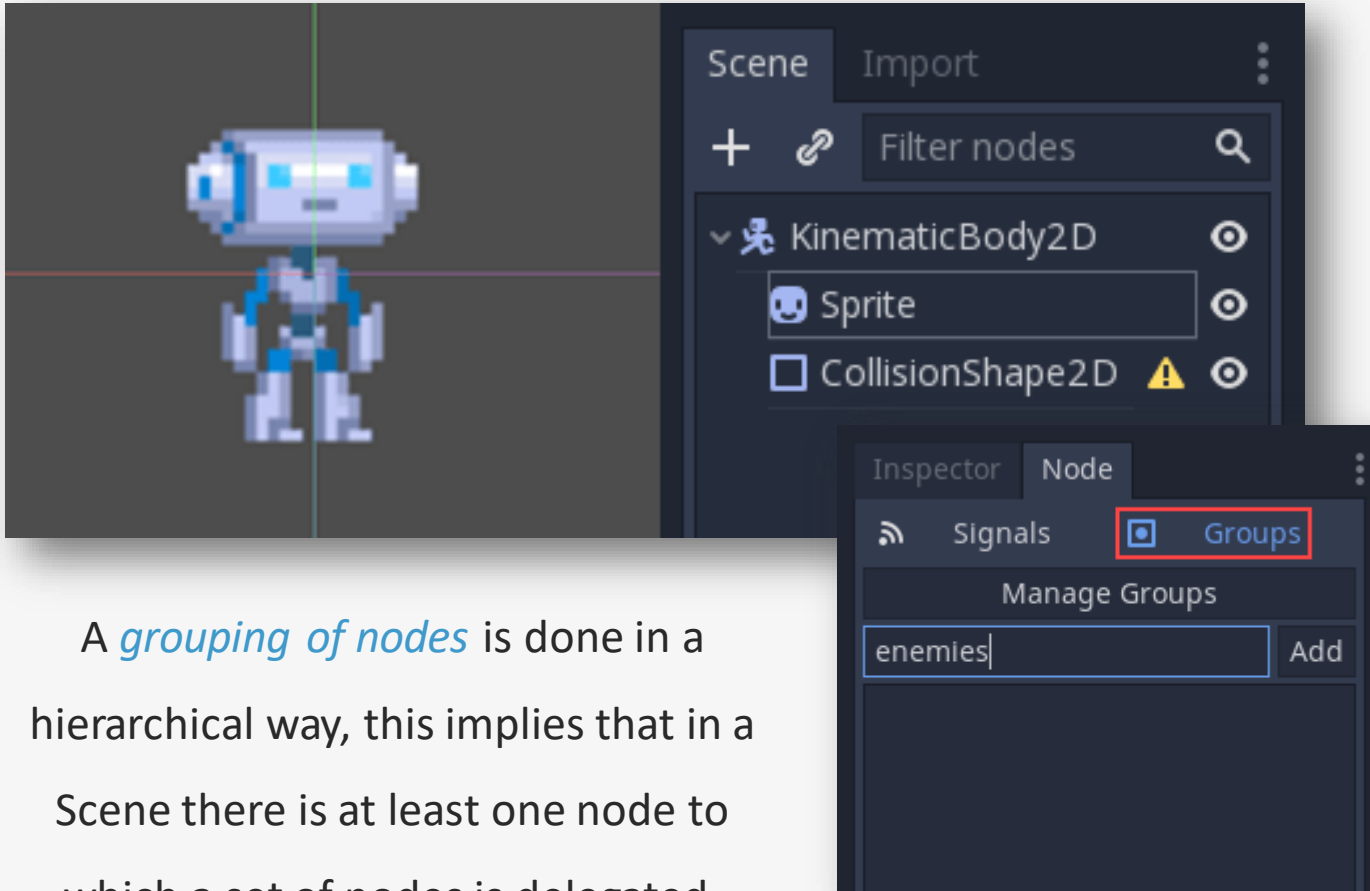*OOP approach*

STORAGE
Saved in scenes

EXTENSIBLE
Create own nodes

Curriculum & Godot Engine [Groups]

Scene panel

Scene | Import

+ 🔗 | Filter nodes 🔍

∨ 🏃 KinematicBody2D ⊙
  😀 Sprite ⊙
  ☐ CollisionShape2D ⚠ ⊙

Node panel

Inspector | Node

📶 Signals | 🔲 Groups

Manage Groups

enemies | Add

A *grouping of nodes* is done in a hierarchical way, this implies that in a Scene there is at least one node to which a set of nodes is delegated.

GROUPS
Behavioral identification

SUBORDINATION
Parent/Child Relationship

HIGHER ORDER
SceneTree

BRANCH
Segment a hierarchy

GODOTCON 2021

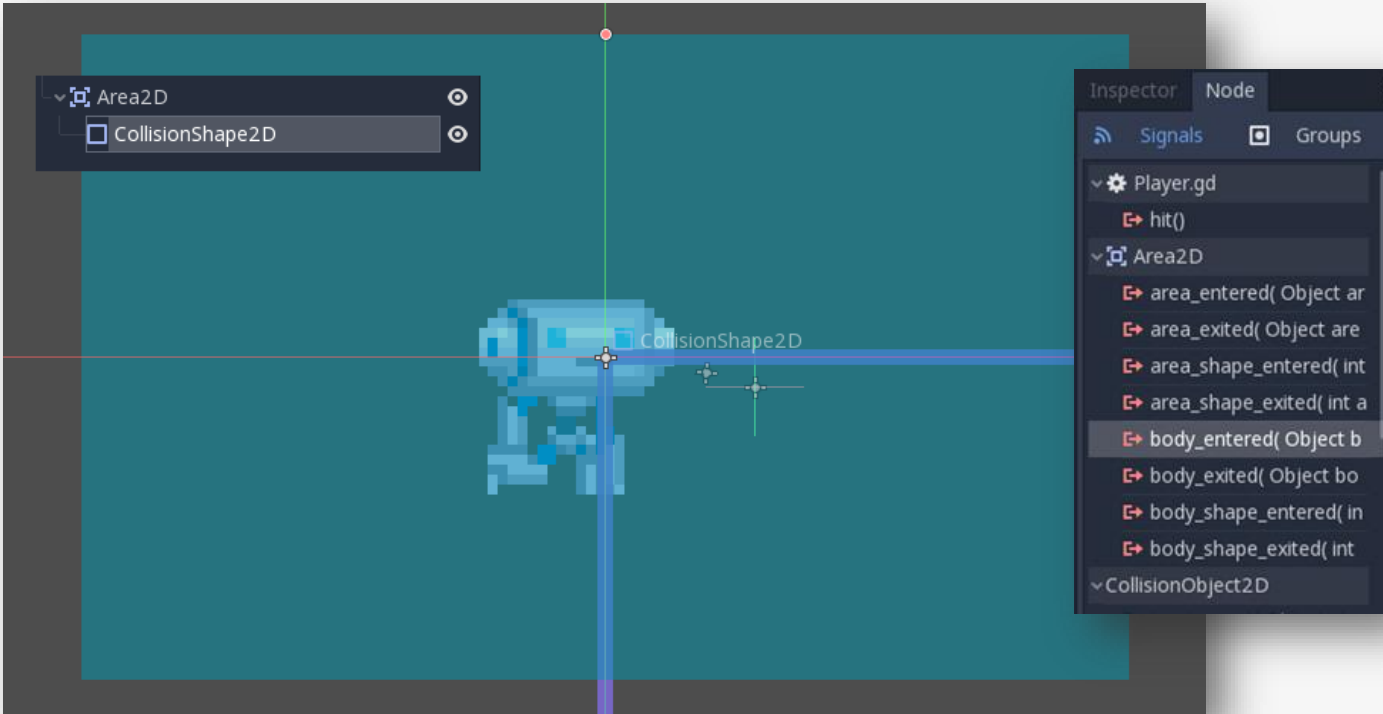## SIGNAL CHARACTERISTICS

PATTERN
Observer

HERITAGE
Common signals

DEDICATED
State management

EXTENSIBLE
Create own signals

In this way of *communicating nodes*, a node emits a signal in response to an event and the receiver executes a behavior.

Curriculum & Godot Engine [UI]

A group of *nodes called control* nodes is available for interface development.

INTERFACE CHARACTERISTICS

PATTERN
Working with nodes

RESOLUTION
Multi-resolution adjustment

LAYERS
Visibility order

CONTAINERS
Complex User Interfaces

CURSO
DESARROLLO DE VIDEOJUEGOS
DE PLATAFORMA 2D CON
GODOT ENGINE

DISERTANTE:
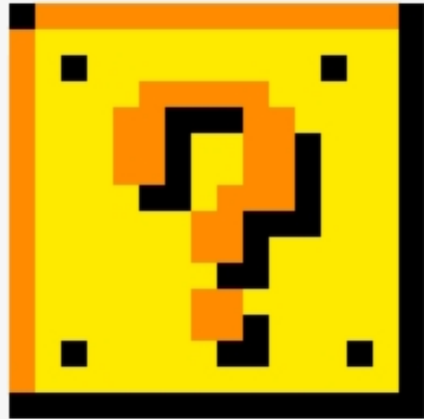PROF. GASTÓN CAMINITI.

Desarrollo de videojuegos de plataforma 2D con Godot Engine

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Questions

IEEE R9 GTC INITIATIVES
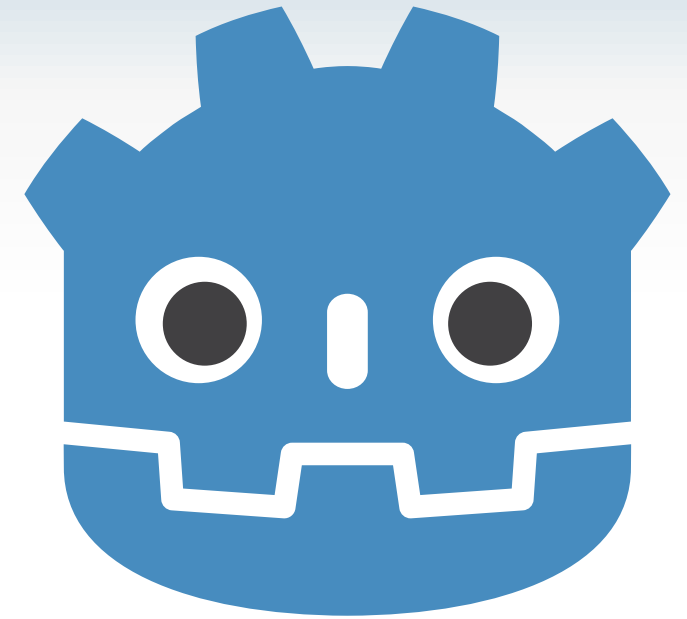
- GODOT ENGINE SERIES

- PLATFORGODOT

- CURSO GODOT ENGINE GTC-UADER

- WEBINARS GODOT ENGINE

SPEAKER

GASTON CAMINITI

gastoncaminiti.tech

Fuente: Mario Bros. Nintendo

¡THANKS FOR PARTICIPATING!

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