Practices Virtual Environments

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practice 2

Design of an immersive system

The aim of this practice is to create an immersive environment that will be imple- menting the following practices.

2.1. Introduction

Integrating the work done in previous practices creates a consistent system that can be run from the blender game engine.

The designed system must contain at least the following components:

- 3D model with a component which is an articulated object. At least one object must
- have texture. physical simulation.
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- Interaction. The user must be able to act on any component of the scene and be able to move the camera.

2.2. Examples of systems

The following possible topics are listed simply by way of example and without involving any restriction:

- Port crane. The user is placed in the cab of the crane and to move containers using the crane controls.
- Ship simulator. The user is in the wheelhouse and Atra car must ship at a port. Other boats can be placed as obstacles. As articulated object can use a lock.

- Drone simulator. You control a drone from the ground. The articulated object may be the drone itself (folding arms. Labyrinth. The user moves an avatar through a maze. You can include articulated and
- moving objects on stage.

- Chain of domino tokens. The user drives a cha fi and pushes. It should include any articulated part (eg several fi tokens stacked together with joint.

- Robot. The user operates a robot articulated by a scenario that may collide with objects.

2.3. Documentation to be submitted

- Description of the system including:
    - System description and purpose
    - Sketch model
    - Textures to use
    - Physical System
    - Interaction functions

2.4. Evaluation

In practice the following aspects will be assessed:

- Completeness and consistency of the description

Bibliography

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