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CSC 165-02

A2 – Dolphin Adventure 2



### **Gameplay / Scoring:**

Collect the prizes which are the blue spheres and return them to their parent, the red sphere. There is chocolate that the dolphin may eat to gain a small incremental speed boost. Every time a blue sphere is picked up, the counter on carrying increases by one each time. Same thing goes for the chocolate counter! Once you collect one or many blue spheres, the dolphin must touch the red sphere to convert how many being carried, into the score points counter. The blue sphere may be hiding under the brick wall.

### **INPUTS:**

Inputs Moving Dolphin:

#### **KEYBOARD:**

W = Move dolphin forward

A = Move dolphin left

S = Move dolphin backward

D = Move dolphin right

### Inputs Orbit Camera:

#### **KEYBOARD:**

ARROW UP = Rotate camera up

ARROW LEFT = Rotate camera left

ARROW DOWN = Rotate camera down

ARROW RIGHT = Rotate camera right

#### **GAMEPAD:**

Y-AXIS = Zoom in OR Zoom out

X-ROTATION = Rotate camera left or right

Y-ROTATION = Rotate camera up or down

### Inputs Overhead Camera:

#### **KEYBOARD:**

U = Zoom in for overhead camera

O = Zoom out

I = Pan overhead camera upwards

J = Pan camera left

K = Pan camera downwards

L = Pan camera right

### Other inputs:

M = Toggle game world axes

## **Node Controllers**

RotationController = Built-in node controller that rotates targeted/attached game objects

ChocController = Custom node controller that shrinks targeted/attached game objects

## **Scenegraph Parent / Child Relationships**

### **Hierarchical Object Using:**

Big Red Sphere (as Parent) => Blue Spheres (as Child)

## **Changes made to the TAGE engine**

Added New Custom NodeController called ChocoController which shrinks objects it is attached to.

## **Things I wasn't able to get Working**

N/A

## **Special Addition**

N/A

## **Assets used:**

- dolphinHighPoly.obj texture – provided from professor
- Dolphin\_HighPolyUV.png – provided from professor
- brick.jpg – for square created by me using paint
- ball.png – blue sphere texture created by me using paint
- bigball.png – red big sphere texture created using paint
- choco.png – chocolate texture created using paint
- lime.png – texture for ground plane created using paint