

## SCHOOL ESSENTIALS – HALLWAY

by



## TABLE OF CONTENTS

|                                   |   |
|-----------------------------------|---|
| School Essentials – Hallway ..... | 1 |
| Bell Script .....                 | 2 |
| How It Works .....                | 2 |
| Callable Methods .....            | 2 |
| DrinkingFountain Script.....      | 3 |
| How It Works .....                | 3 |
| Callable Methods .....            | 3 |
| Clock Script .....                | 4 |
| Variables .....                   | 4 |
| How It Works .....                | 4 |
| Callable Methods .....            | 5 |
| ClockFace Script .....            | 6 |
| Variables .....                   | 6 |
| How It Works .....                | 6 |
| Callable Functions.....           | 6 |

## BELL SCRIPT

---

### HOW IT WORKS

The bell script should be attached to the bell object.

The animator on the bell should have a parameter for “isRinging”.

This parameter will always be set by the script to the scripts isRinging variable.

The animation should call the scripts “RingBell” method when the hammer hits the bell.

---

### CALLABLE METHODS

Calling the scripts “TurnOnOffBell” method from any script will toggle the On/Off state of the bell and the attached animation/animator.

## DRINKINGFOUNTAIN SCRIPT

---

### HOW IT WORKS

This script should be attached to the drinking fountain.

The animator on the drinking fountain should have a parameter for “fountainOn”.

This parameter will always be set by the script to the scripts “isSpraying” variable.

The animation should call the scripts three Audio methods method.

The “FountainOn” method is called by the animator to play the Audio for the fountain button push.

The “FountainRunning” method is called in the animator to loop while the fountain is running. This loop ensures that the audio will loop for the water coming out of the fountain.

The “FountainOff” method is called by the animator to play the audio for the fountain button being released.

### CALLABLE METHODS

Calling the scripts “ActivateFountain” method from any script will turn the fountain on.

Calling the scripts “DisableFountain” method from any script will turn the fountain off.

## CLOCK SCRIPT

### VARIABLES

|                      |  |
|----------------------|--|
| faces:               | List of faces that this clock manages. You can have a clock anywhere in the scene. The clock can manage as many faces as you need it to. If you have 50 physical clocks, you can have all 100 faces controlled by a single Clock script.   |
| isClockOn:           | This variable is the clock state. If it is on, it changes. If it is not on, it doesn't change.   |
| clockTicksPerSecond: | This variable sets how many in game ticks happen per real world second. So, a value of 1 would mean the clock in game ticks once every second [so a normal clock.] If it is less than 1 then the clock will tick slower than it would in the real world. If it is greater than 1 then the clock will tick faster than in the real world. |
| jumpySecondsHand:    | This Boolean tells the clock if the second hand needs to jump every second [as most normal clock seems to do] or if it smoothly moves by microseconds.   |
| startWithSystemTime: | This Boolean tells the clock to start with the computers system time. Keep in mind, this is only a starting time. If the clock is stopped, or at a fast pace, then this will not sync up with the system time after a few seconds.   |
| startingHour:        | If you do not use the system time above, setting this manually will let you set the hours hand to whatever time you like. This should be a value from 0 to 23.   |
| startingMinutes:     | If you do not use the system time above, setting this manually will let you set the minutes hand to whatever time you like. This should be a value between 0 and 59.   |
| startingSeconds:     | If you do not use the system time above, setting this manually will let you set the seconds hand to whatever time you like. This should be a value between 0 and 59.   |
| shouldStopAtTime:    | This Boolean tells the clock that it will stop at the time specified in the next three variables.  |
| stoppingHour:        | If shouldStopAtTime is activated, setting this manually will let you set the hours hand to whatever time you like time to stop at. This should be a value from 0 to 23.  |
| stoppingMinutes:     | If shouldStopAtTime is activated, setting this manually will let you set the minutes hand to whatever time you like time to stop at. This should be a value from 0 to 59.  |
| stoppingSeconds:     | If shouldStopAtTime is activated, setting this manually will let you set the seconds hand to whatever time you like time to stop at. This should be a value from 0 to 59.  |

### HOW IT WORKS

When this script starts it sets up all the clock faces in the faces variable to the time specified.

When the update function is called the clock script will check if it is activated, then update the time according to the variables presented, and then call out to all the clock faces in the faces variable to update the faces to display the time as specified.

---

## CALLABLE METHODS

Calling "IsClockOn" method will return true if the clock is On.

Calling "SetClockTime" with float hour, minute, second parameters will set the clocks time to that specified time and update the faces that are connected to the clock to display the proper time.

- SetClockTime(13f,10f,58f) would set the faces to show 1:10:58 PM for hour, minutes, and seconds.

Calling "ChangeTickSpeed" with float parameter will set the clocks tick speed to the specified speed/second.

- ChangeTickSpeed(1f) would set the speed to 1 tick per real world second.

Calling "FlipClockState()" would turn the clock on or off depending on its current state.

Calling "SetClockState()" would set the clock on or off depending on the Boolean passed into it.

- SetClockState(true) would turn the clock on.
- SetClockState(false) would turn the clock off.

Calling "MoveAtSpeedToTimeAndStop" would set the clocks tick speed to the tick speed specified, and then set the clock to stop at the specified time.

- MoveAtSpeedToTimeAndStop(2f, 11f,30f,0f) would make time move twice as fast then it would normally in real life, then set the clock to stop abruptly at 11:30 AM

Calling "SetStopTime" would set the clock to stop at a specified time.

- SetStopTime(19f, 0f, 30f) would set the clock to stop abruptly once it reached 7:00:30 PM.

## CLOCKFACE SCRIPT

---

### VARIABLES

hourHand, minuteHand, secondHand;

Literally the physical transform of the hands.

inverseFace: If the face seems to be going in the wrong direction, or if you want it to go in the wrong direction you would set this to true.

TwelveHourClock: Let's the face know if it should rotate around a 12 hour timeframe or a 24 hour time frame.

axis: An enumerator representing the AXIS that the face hands need to rotate around.

doITick: This Boolean controls whether or not the clock makes a ticking noise or not.

tickSound: This AudioClip variable should be set the audio file you want played when the clock ticks.

---

### HOW IT WORKS

The clock script sends in what time to set the time to, by calling SetTimeTo and the face calculates all of the rotations for each hand and places the hands at those positions.

---

### CALLABLE FUNCTIONS

The method "SetTimeTo" can be called to set the faces time to any time. A "Clock" script should already do this but if you wish you can call SetTimeTo from any of your own scripts to set the time to the time specified for any face.

SetTimeTo(13f,14f,15f) would rotate the hands on the face to display 1:14:15 PM.