

# Unity + LEGO® Microgame Behaviour Brick Manual

October 2020

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Version 1.0

# Actions and Triggers

**Two types of bricks that can produce interesting behaviours when combined**

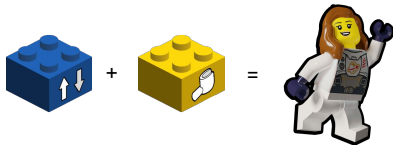
Triggers and actions are simple and predictable. They mainly do one thing.

Actions trigger on play and give different behaviour to the connected model (for example, move, explode, and play audio).

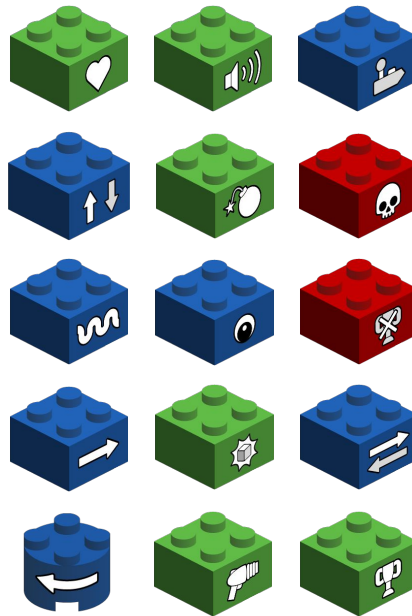
Triggers control when an action happens (for example, on touch, input, or at a time interval). The target actions for triggers can be set as:

- all actions connected to the same model
- any identified actions in your Scene.

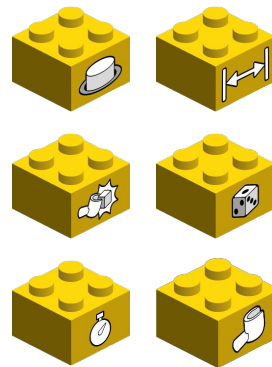
Gameplay parameters for both actions and triggers are exposed in the Inspector.



Actions



Triggers



# Actions

# Action: Alive

## Make your model come to life

The Alive action makes your model feel less static by adding a simple animation to it.

On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio



! Idea



Combine the Alive action with a Pickup trigger, then the characters in your game will start celebrating that you collected all the pickups



Make your model come to life with a simple animation

# Action: Audio

## Audio is important to every game

The Audio action plays an audio clip next to a model or as background music.

On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Volume
- Spatial
- Loop

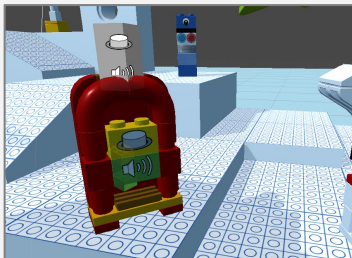


Play an audio clip

### Idea



Combine the Audio action with an Input trigger to create a fun jukebox. Run up to the jukebox, press play and hear the funky tunes.



# Action: Control

## Completely different types of games

You can create different types of controllable characters and vehicles with the Control action. It replaces the Character Controller.

On its own, the action will trigger when the game starts.

Available properties you can configure:

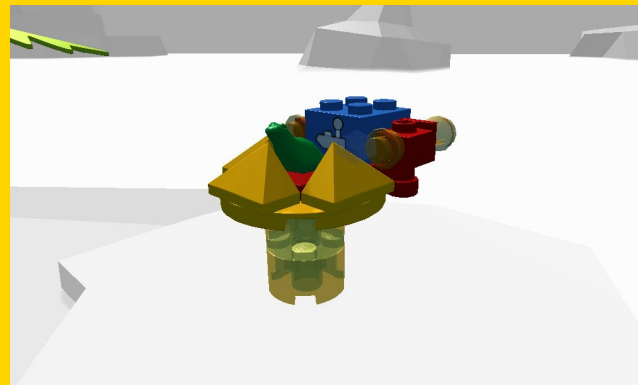
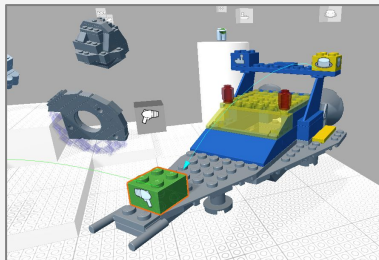
- Input Type
- Speed
- Rotation Speed



### Idea



Combine the Control action with a Shoot action and an Input trigger to create a controllable spaceship that can shoot asteroids.



Make the attached model a controllable vehicle

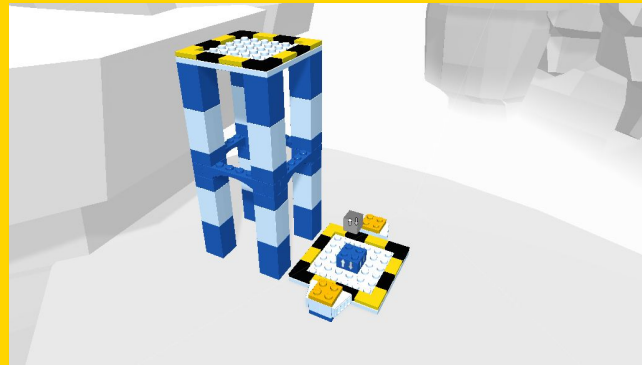
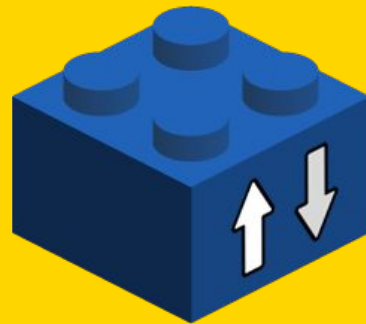
# Action: Elevator

## Make the LEGO® model move up and down

The Elevator action moves a LEGO® model up and down. On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Distance
- Time
- Pause
- Collide
- Repeat

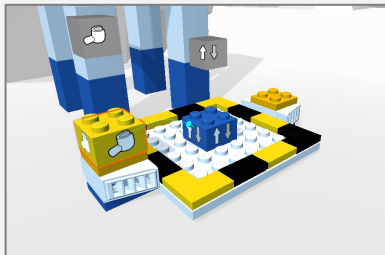


Moves the platform up and down

### Idea



Combine an Elevator action with a Touch trigger to make the model move once the player touches the model.



# Action: Explode

## BANG, explode the model

The Explode action can be used to break apart a model.  
On its own, the action will trigger when the game starts.

Available properties you can configure:

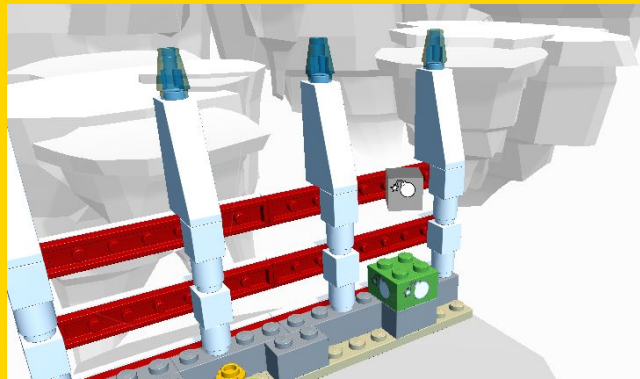
- Audio
- Power



### Idea



Combine the Explode action with a Touch trigger and Pickup Action to make hidden collectables that are only reachable when model is destroyed.



Break apart the model, see it explode by placing the Explode action



# Action: Hazard

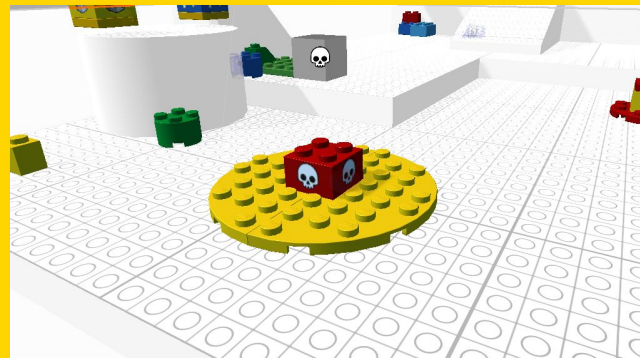
## Careful, don't touch this

Create dangerous obstacles using the Hazard action. Touch it and it is game over!

On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Effect



Make part of your level hazardous, then be careful touching this

Idea



Combine the Hazard action with a Touch trigger to make a dangerous poison cauldron.



# Action: Hover

## Make your level scenery more dynamic

The Hover action is a great way to make your game feel more dynamic and provide more challenges for your players, by making LEGO models hover.

On its own, the action will trigger when the game starts.

Available properties you can configure:

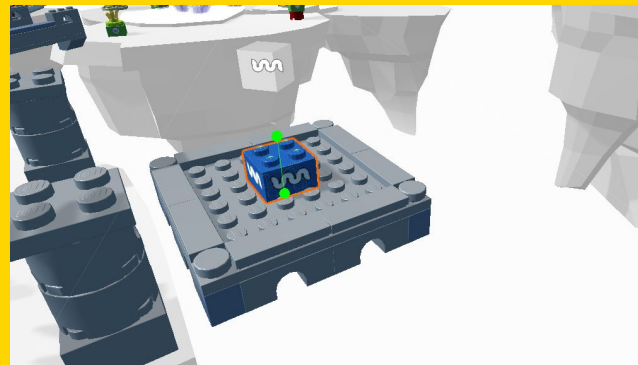
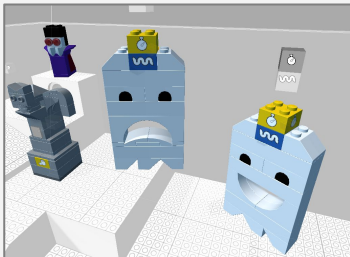
- Amplitude
- Time
- Collide



! Idea



Combine the Hover action with the Timer trigger and see the ghosts move at midnight.



Make the model hover in the air to make it a bit more tricky to reach the platform

# Action: Look At

## I'm looking at you

The Look At action make a model orient itself to look at the targeted object, player or specific object in the Scene.

On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Look At
- Speed
- Rotate
- Time
- Pause



### Idea



Combine the Look At action with a Nearby trigger and Shoot action to make a dangerous enemy that shoots directly at you when you enters its area.



Makes the model look at the player or a specific object

# Action: Lose

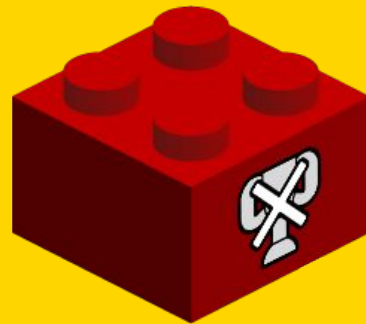
## Try Again!

The Lose action make the player lose the game.

On its own, the action will trigger when the game starts, meaning without a trigger brick you will lose immediately — unfair!

Available properties you can configure:

- Audio



## Idea



Combine the Lose action with a Timer trigger to transform your game into a time trial game mode. Complete the game before the timer runs out!



It will make you lose the game :(

# Action: Move

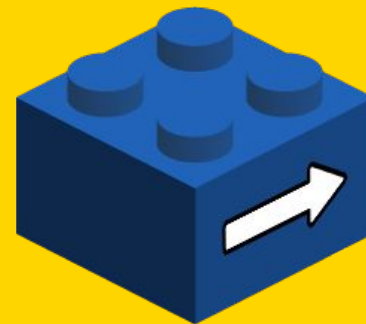
## Move, move, move

The Move action moves a model in a desired direction.

On its own, the action will trigger when the game starts.

Available properties you can configure:

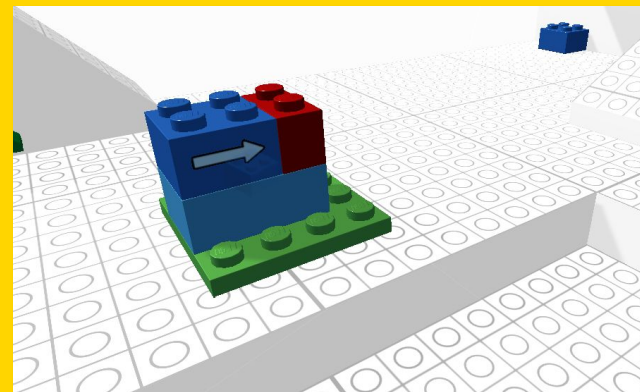
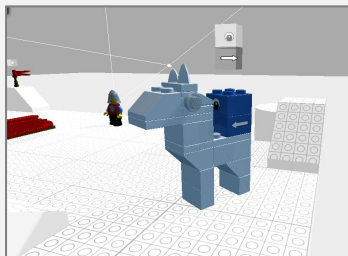
- Audio
- Distance
- Time
- Pause
- Collide



Idea



Combine the Move action with the Look At action to make your trusted horse move towards you.



Moves the connected model in the direction of the arrow

# Action: Pickup

## Collectables or items for your game

The Pickup action can be used to create collectables for your game, but is also useful to create items such as keys for doors. On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Scope
- Effect

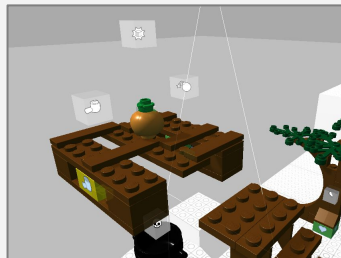


Makes the attached model become a collectable object.

 Idea



Combine the Pickup action with a Touch trigger and Explode action to make a trap for your player.



# Action: Platform

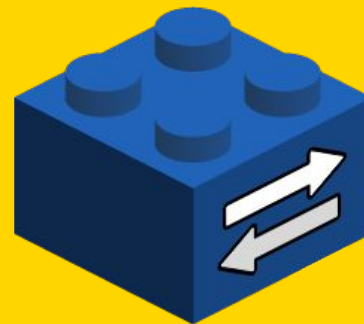
## Makes the LEGO® model move forward and backwards

The Platform action makes a model move forward and backwards allowing you to create platforms, doors and many other things.

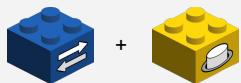
On its own, the action will trigger when the game starts.

Available properties you can configure:

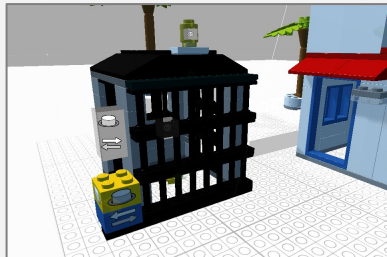
- Audio
- Distance
- Time
- Pause
- Collide



### Idea



Combine the Platform action with an Input trigger to make a door that you can open and close by pressing a button.



Moves the platform forward and backwards

# Action: Rotate

## Getting dizzy, rotating

The Rotate action makes the model rotate around, enabling you to create platforms, doors, obstacles and evil machines.

On its own, the action will trigger when the game starts.

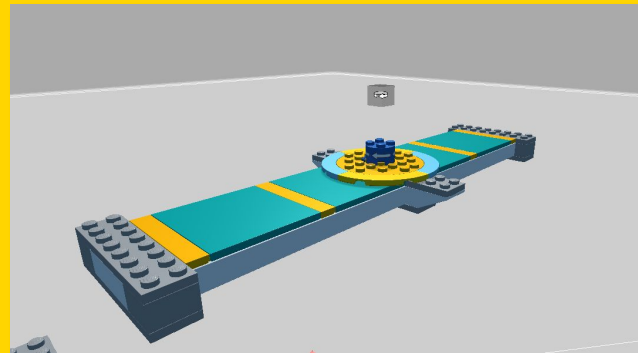
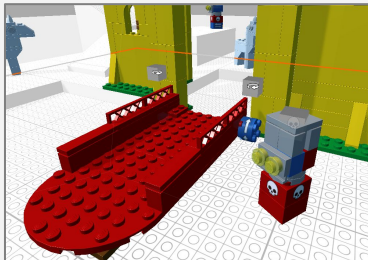
Available properties you can configure:

- Audio
- Angle
- Time
- Pause
- Collide

 Idea



Combine the Rotate brick with a remote Touch trigger to open and lower the castle bridge gate.



Make the connected model rotate



# Action: Shoot

## Shoot bananas, lasers, pizzas anything!

The Shoot action can be used to create dangerous enemies and traps.

On its own, the action will trigger when the game starts.

Available properties you can configure:

- Audio
- Projectile
- Velocity
- Accuracy
- Lifetime
- Pause
- Gravity



### Idea



Combine the Shoot action with a Nearby trigger to create a dangerous pizza oven that shoots pizzas when you get close



Make an obstacles that shoots dangerous... bananas

# Action: Win

## You Win!

The Win action makes the player win the game.

On its own, the action will trigger when the game starts – meaning without a trigger brick you will win immediately, too easy!

Available properties you can configure:

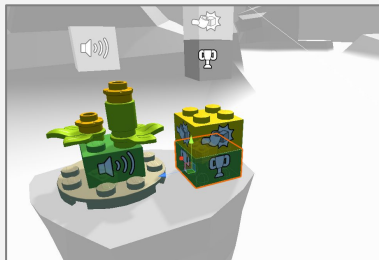
- Audio



## Idea



Combine the Win action with a Pickup trigger to create a game mode where you have to collect all the objects in the game to win.



It will make you win the game :)

# Triggers

# Trigger: Input

## The model needs your input

The Input trigger can be used to register keyboard inputs to trigger specific actions, for example opening doors or waking up enemies.

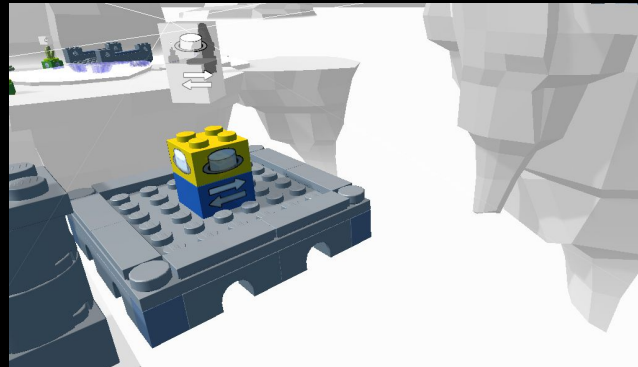
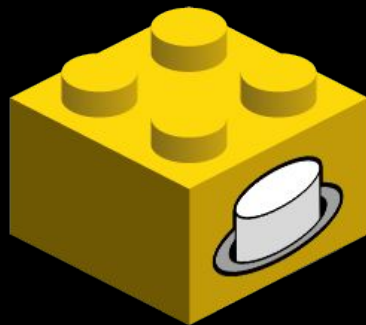
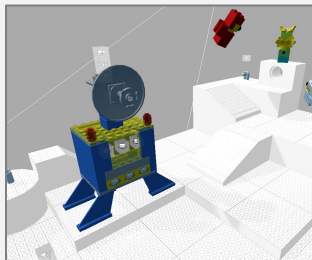
Available properties you can configure:

- Target
- Input
- Other Key
- Enable
- Distance
- Show Prompt

### Idea



Combine the Input trigger with Shoot and Rotate action bricks to make a laser cannon you can control from a control panel.



Use the assigned keyboard key to make the platform move

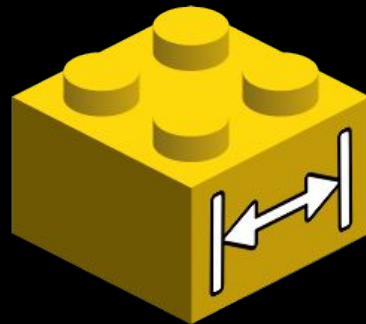
# Trigger: Nearby

## Get close to this one

The Nearby trigger can be used to trigger actions when a Player or other object is near the brick.

Available properties you can configure:

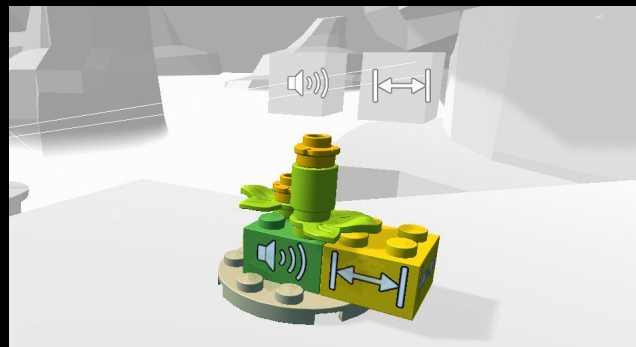
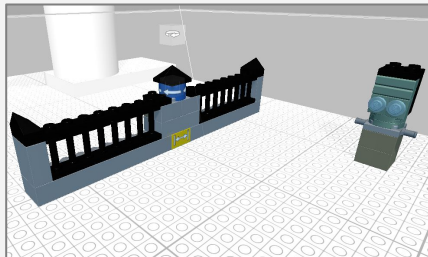
- Scope
- Target
- Sense
- Distance
- Repeat



## Idea



Combine Nearby trigger with a Rotate action to make fun obstacles that triggers when you get close to it.



Get near the plants to trigger the Audio action

# Trigger: Pickup

## Pick up an object

The Pickup trigger is useful to create unique win conditions or obstacles that requires the player to pickup a specific object.

Available properties you can configure:

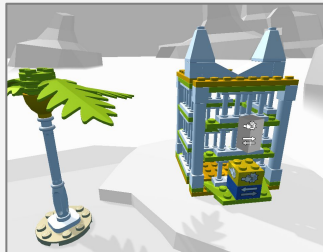
- Target
- Mode
- Repeat



### Idea



Combine Pickup trigger with a Platform action to make a door that requires a key to unlock. Define a collectable in the scene as key and have it trigger the Platform action once collected.



Triggers the Win action if all pickups has been collected

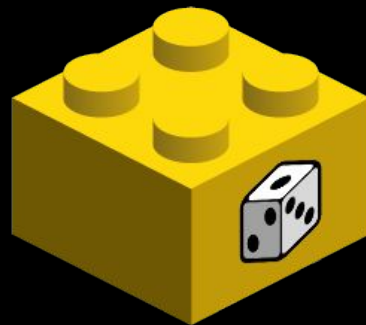
# Trigger: Random

## A dice roll

The Random trigger can be used to create less predictable behaviours for your game.

Available properties you can configure:

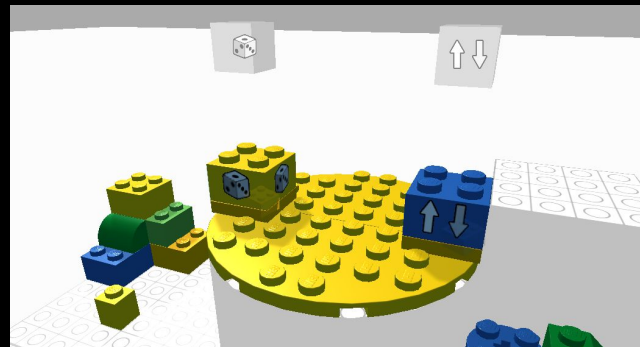
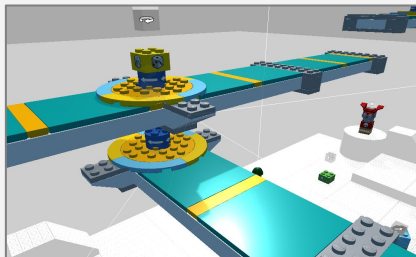
- Target
- Min Time
- Max Time



## Idea



Combine the Random trigger with a Rotate action to create difficult obstacles for the player.



Moves the platform up and down, at random intervals

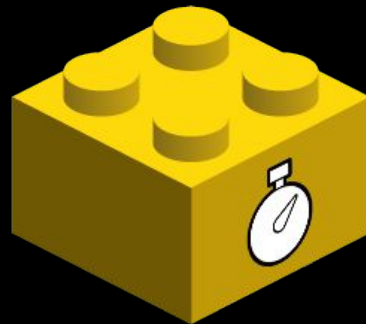
# Trigger: Timer

## Like clockwork

The Timer trigger is useful to trigger actions at specific time intervals.

Available properties you can configure:

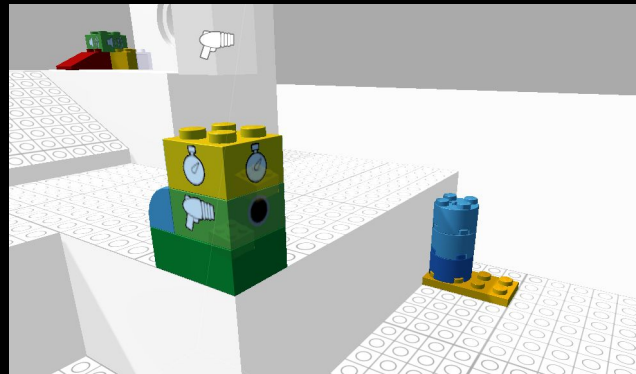
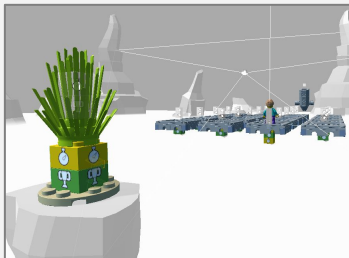
- Target
- Time



! Idea



Combine Timer trigger with the Win action to create game modes where you have a specific amount of time to get points.



Shoots projectiles at a specified time interval



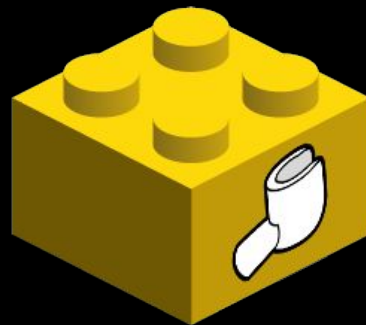
# Trigger: Touch

## Touch the model

The Touch trigger is useful to trigger actions when a Player or other game object in the Scene touches the brick.

Available properties you can configure:

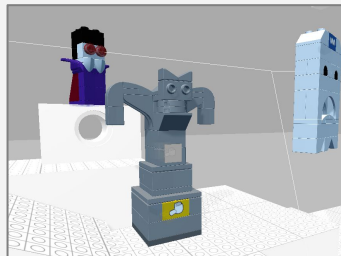
- Scope
- Target
- Sense
- Repeat



### Idea



Combine the Touch trigger with a Move action to make the statue move away when the player touches it.



Reach the end of the level to win the game