# 3DINFINITE RUNNER



3D Infinite Runner Toolkit

Develop by : DreamDev Studio

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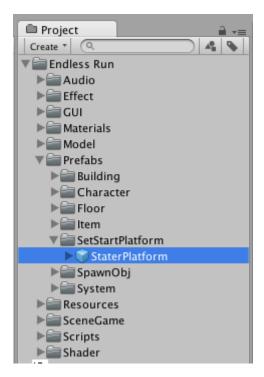
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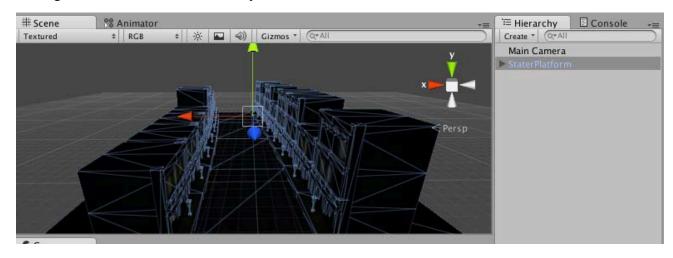
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# **Setting Starter Pattern**

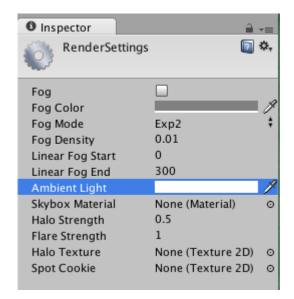
1. Go to Project > Prefabs > StarterPlatform



2. Drag "StarterPlatform" to hierarchy



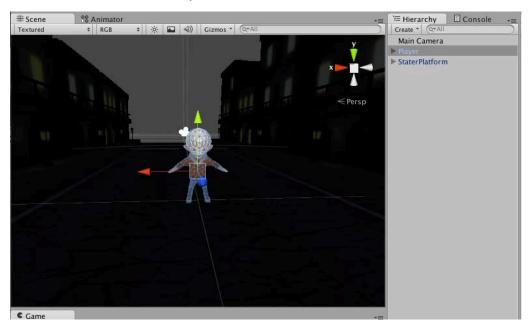
- 3. Go to Edit > Render Setting
- 4. Adjust "Ambient Light" to brightness up



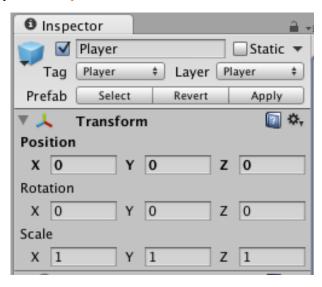
=====Complet Setting Starter Pattern======

# **Setting Character Controller**

1. Paste "Model" to hierarchy

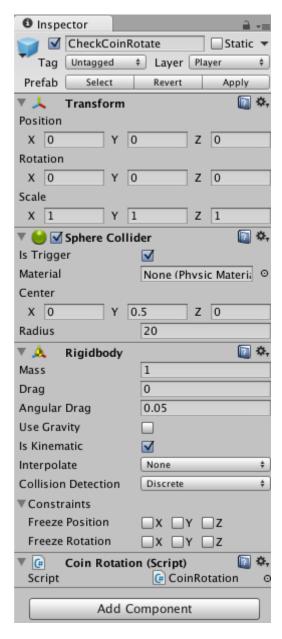


- 2. Rename this model to "Player" and add tag to "Player"
- 3. Setting this model layer to "Player"



4. Add script > Controller to this model

- 5. Create detection collision coin (use to detect coin)
  - 5.1. Go to GameObject -> Create Empty and rename it to "CheckCoinRotate"
  - 5.2. Add component "Sphere Collider", "Rigidbody", "CoinRotate(Script)" and setting follow a picture.

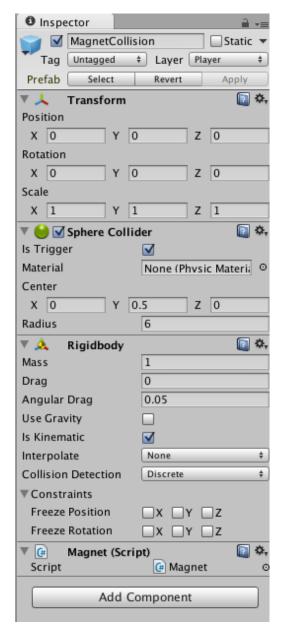


5.3 Drag "CheckCoinRotate" to parent with "Player"



## 6. Create magnet effect detection

- 6.1 Go to GameObject -> Create Empty and rename it to "MagnetCollision"
- 6.2 Add component "Sphere Collider", "Rigidbody", "Magnet(Script)" and setting follow a picture



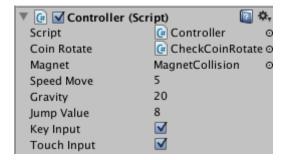
6.3 Drag "MagnetCollision" to parent with "Player"



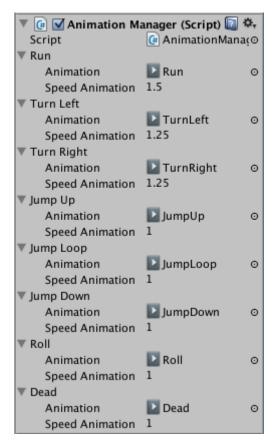
- 7. Go to "Controller(Script)" in inspector
- 8. Drag "MagnetCollision" put to "Magnet" and drag "CheckCoinRotate" put to "Coin

#### Rotate"

9. Setting attribute follow a picture.



- 10. Go to "Animation Manager(Script)" in inspector
- 11. Add animation
- 12. Adjust speed animation



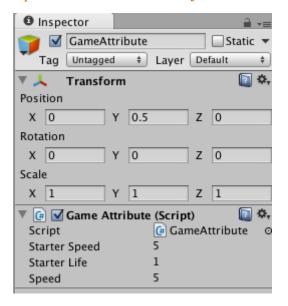
- 13. Go to "Character Controller" in inspector
- 14. Setting size of character controller to fit a model
- 15. Make model player to prefab
- 16. Delete model player in hierarchy



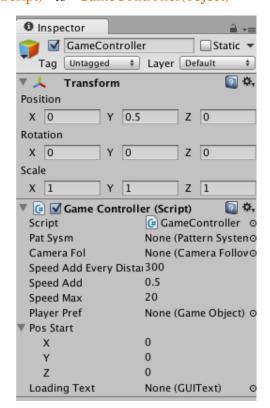
=====Complet Setting Character Controller=====

## Create GameController and GameAttribute

- 1. Go to GameObject -> Create Empty and rename it to "GameAttribute"
- 2. Add "GameAttribute (Script)" to "GameAttribute(object)"



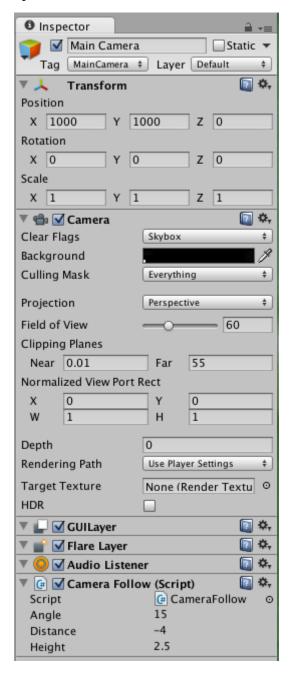
- 3. Go to GameObject -> Create Empty and rename it to "GameController"
- 4. Add "GameController (Script)" to "GameController(object)"



=====Complete Create GameController & Game Atrribute======

## **Create Camera**

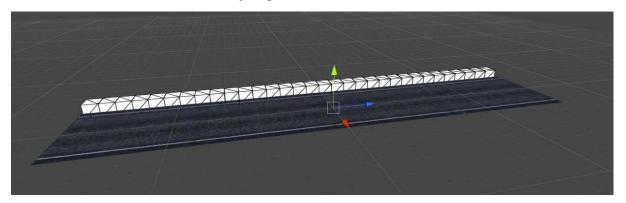
- 1. In hierarchy select "Main Camera"
- 2. Add "Camera Follow(Script)" to main camera
- 3. Setting attribute follow a picture

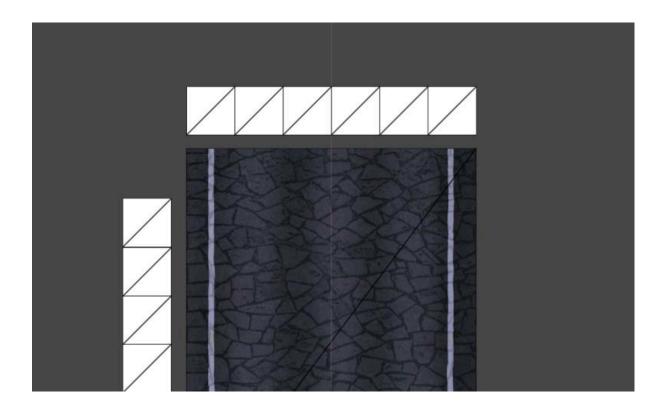


=====Complete Create Camera======

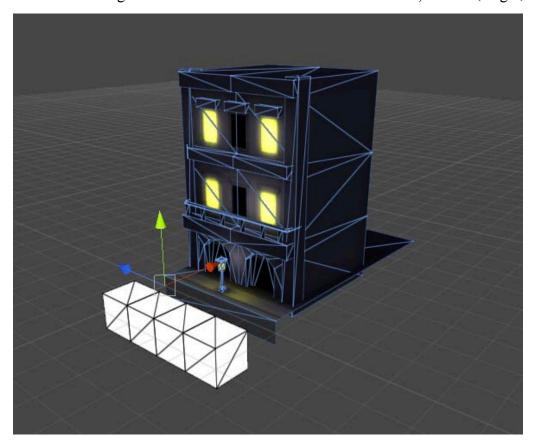
# How to setting building model

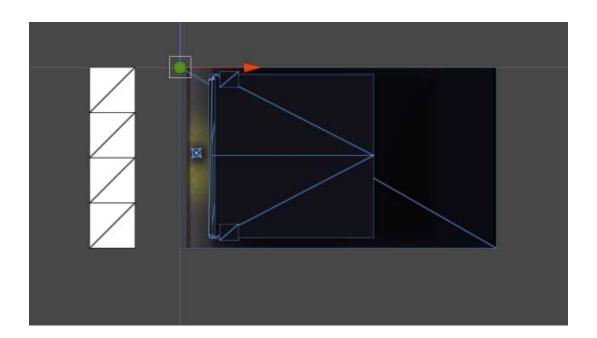
1. Floor width 6 meter depth 32 meter, you can measure in unity by create cube and arrange for count, cube is 1 \* 1 meter and adjust pivot to center





2. Model building in side road must size : width Axis Z 4 meter , Axis X (height) is unlimited

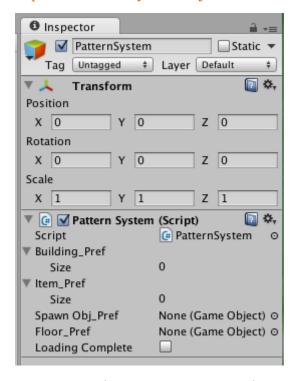




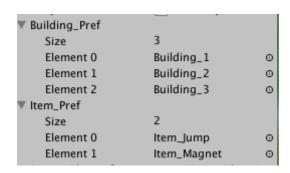
3.All item in game: Width x axis should not exceed 1.7 meters. Axis y is unlimited, But will
affect the arrangement Pattern.
Note* Item should measure the size for use when Setting Pattern.
=====Complete Setup Building======

## **Create PatternSystem**

- 1. Go to GameObject -> Create Empty and rename it to "PatternSystem"
- 2. Add "PatternSystem (Script)" to "PatternSystem (object)"



- 3. Building\_Pref is a prefab of building (use to show in wayside), Adjust size of building according to use
- 4. Drag prefab from Folder Prefabs > Building to array of Building\_Pref
- 5. Item\_Pref is prefab of item (use to spawn on the road) Adjust size of item according to use
- 6. Drag prefab form Folder Prefab > Item to array of Item Pref



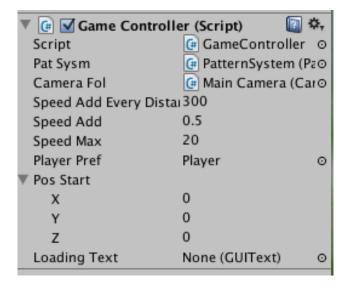
- 7. Spawn Obj\_Pref Drag prefab from Folder Prefab > SpawnObj to it
- 8. Floor\_Pref Drag prefab from Folder Prefab > Floor to it

Spawn Obj_Pref	SpawnObj	0
Floor_Pref	Floor	0

=====Complete Create Pattern System======

## **Setting GameController**

- 1. Select "GameController" in hierarchy to setting
- 2. Pat Sysm Drag "PatternSystem" from hierarchy to it
- 3. Camera Fol Drag "Main Camera" to it
- 4. PlayerPref Drag prefab "Player" to it

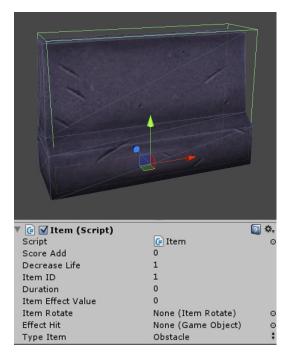


=====Complete Setting GameController======

## **Setting Item**

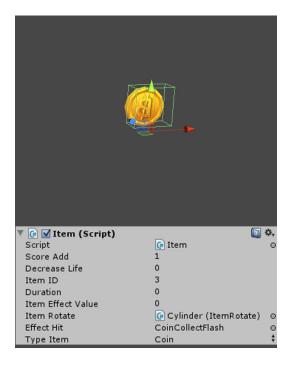
#### All item is in Prefabs > Item

#### 1. Barrier



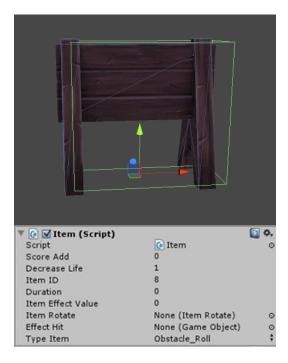
- Score Add it mean a coin, set 0 because this item is obstacle
- Decrease Life when character hit this object it will decrease a character hp , you can
   set more than 1 if you character have a life more than 1
- Item ID
- Duration it mean duration item effect, set 0 because this is not item effect
- Item Effect Value it use only ItemSprint and ItemMultiply, set 0 because this is not itemSprint or itemMultiply
- Item Rotate it use only Coin (coin is always rotate around), set null because this object don't need a rotate
- Effect Hit it will spawn particle effect when character hit this object, set null because this object don't need a effect
- Type Item this item is type "Obstacle"

#### 2. Coin



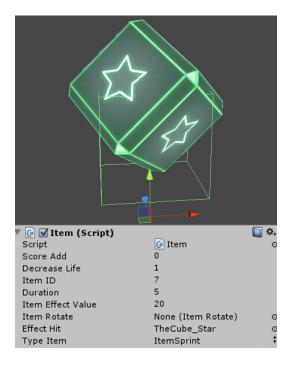
- Score Add it mean a coin, set 1 because when character hit this it will increase a coin (can set more than 1)
- Decrease Life when character hit this object it will decrease a character hp, set 0
   because this item is coin
- Item ID
- Duration it mean duration item effect, set 0 because this is not item effect
- Item Effect Value it use only ItemSprint and ItemMultiply, set 0 because this is not itemSprint or itemMultiply
- Item Rotate set script ItemRotate because this object need a rotate
- Effect Hit it will spawn particle effect when character hit this object
- Type Item this item is type "Coin"

#### 3. Obstacle Roll



- Score Add it mean a coin, set 0 because this item is obstacle
- Decrease Life when character hit this object it will decrease a character hp , you can
   set more than 1 if you character have a life more than 1
- Item ID
- Duration it mean duration item effect, set 0 because this is not item effect
- Item Effect Value it use only ItemSprint and ItemMultiply, set 0 because this is not itemSprint or itemMultiply
- Item Rotate it use only Coin (coin is always rotate around), set null because this
  object don't need a rotate
- Effect Hit it will spawn particle effect when character hit this object, set null because this object don't need a effect
- Type Item this item is type "Obstacle Roll" because this item is can dodge by roll

### 4. Item Sprint

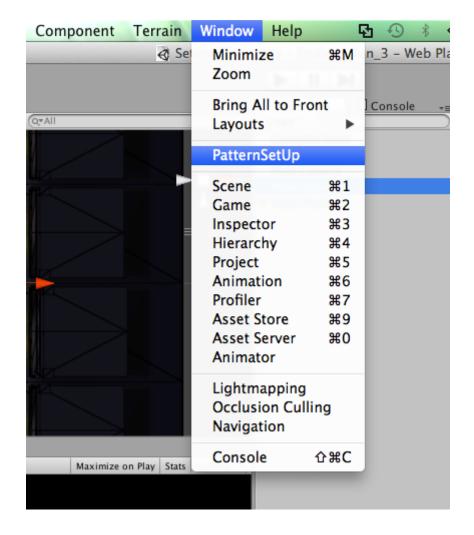


- Score Add it mean a coin, set 0 because this item isn't coin
- Decrease Life when character hit this object it will decrease a character hp, set 0
   because this item is item effect
- Item ID
- Duration it mean duration item effect, set 5 (seconds)
- Item Effect Value it use only ItemSprint and ItemMultiply, set 20, when hit this item speed character is change to 20 and character is invincible
   (if you set item effect value on ItemMultiply example set 2 = x2 Coin, set 3 = x3 Coin)
- Item Rotate it use only Coin (coin is always rotate around), set null because this
  object don't need a rotate
- Effect Hit it will spawn particle effect when character hit this object
- Type Item this item is type "ItemSprint"

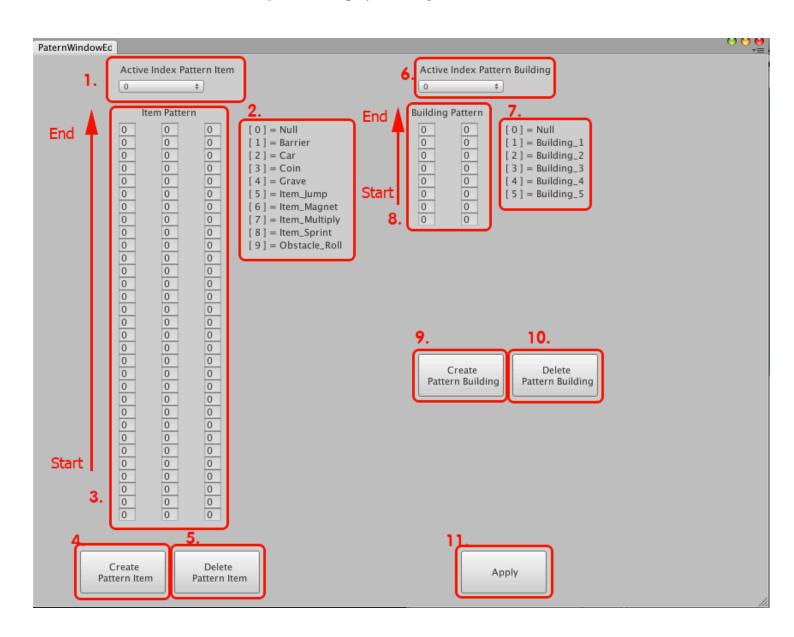
## **Setting Pattern**

- 1. Select "PatternSystem" in hierarchy for setting
- 2. Go to Window > PatternSetUp

Note\* Don't unselect PatternSystem in hierarchy



3. After click "PatternSetUp" it will display a Setting Pattern Window



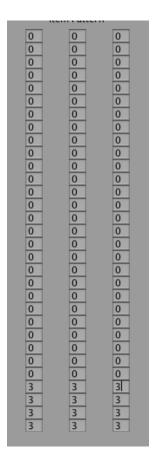
- 1. Active Index Pattern is a now selected index
- 2. Item List
- 3. Item Pattern is a slot of item in 1 Pattern (31 block(1block = 1\*1 meter) each 1 lane)
- 4. Create Pattern Item Add a new Pattern Item, can change index at "Active Index
   Pattern Item"

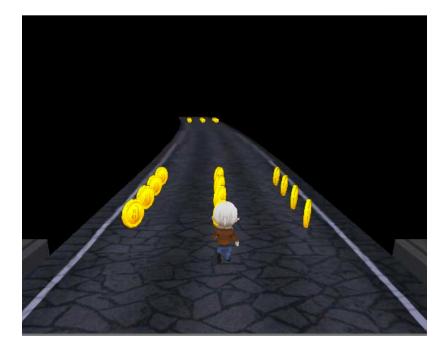
- 5. Delete Pattern Item Delete current Pattern Item
- 6. Active Index Pattern Building is a now selected index
- 7. Building List
- 8. Building Pattern is slot of building in 1 Pattern
- 9. Create Pattern Building Add a new Pattern Building, can change index at "Active Index Pattern Building"
- 10. Delete Pattern Building Delete current Pattern Building
- 11. Apply Press it if want to save a pattern (Should press every time before Run Game)

Note\* when Pattern index have more than 1, system will be random pattern when play

Note2\* Item pattern - The distance between the lane Axis X length 1.8 meter and the distance each axis z 1 meter ,Item must place calculate View Item width of the piece as well.

## Example





- Example coin setup

## Example 2

Item Pattern	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0



- This picture is false setup because Item Car is too long. Both front and rear about it need a spaced. Item is in the next one to leave a slot by slot.

# Example 3

Item Pattern	
	[ 0 ] = Null [ 1 ] = Barrier [ 2 ] = Car [ 3 ] = Coin [ 4 ] = Grave [ 5 ] = Item_Jump [ 6 ] = Item_Magnet [ 7 ] = Item_Multiply [ 8 ] = Item_Sprint [ 9 ] = Obstacle_Roll



- This picture is **correct** setup