Flowchart

Block Placement

# Block Object

A block object is a pixel art block that has four pivot points, one for each side. The idea of the pivot points are so blocks can easily snap to each other, allowing the player to quickly build simple geometric shapes with blocks that are perfectly lined up.

Cube (sprite object)

Pivot point (2D circle trigger collider)

# Flowcharts

## GhostBlock.cs

Start

**Variables**

private bool **followMouse** = true

private Vector3 **mousePos**

private Vector3 **snapPos**

**At start…**

Player has just opened build menu

followMouse == true?

Yes

No

**mousePos** = mouse position

Ghost block pos = **mousePos**

Show ghost block

Build menu closed?

No

Hide ghost block

Stop

Yes

## GhostBlock.cs (continued)

SnapToPivot

**followMouse** = false

**Parameters**

Vector3 **snapOffset**

Vector3 **pivotPos**

Quaternion **pivotRot**

**snapPos** = **pivotPos** + **snapOffset**

Ghost block pos = **snapPos**

UnsnapFromPivot

**followMouse** = true

Ghost block rot = **pivotRot**

## PivotPoint.cs

Start

Mouse entered pivot collider?

**Variables**

public float **offsetAmountX**

public float **offsetAmountY**

private GameObject **ghostBlock**

private GhostBlock **ghostBlockScript**

private Vector3 **snapOffset**

No

Yes

**snapOffset** = new Vector3

(**offsetAmountX**, **offsetAmountY**, 0)

Call **ghostBlockScript**.SnapToPivot with parameters

(**snapOffset,** pivot point pos, pivot point rot)

Mouse exited pivot collider?

No

Call **ghostBlockScript**.UnsnapFromPivot

Stop