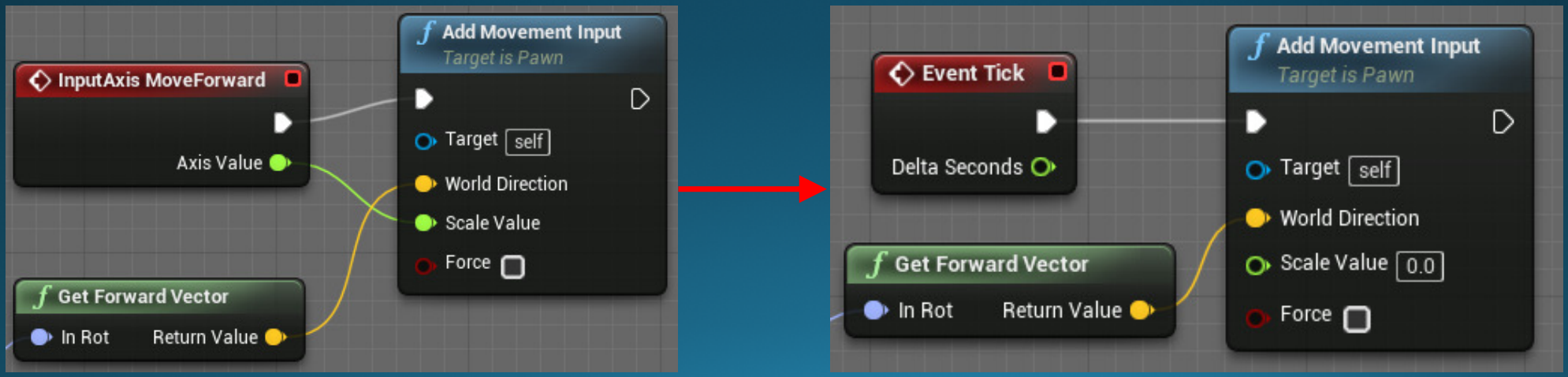
Steve Harris

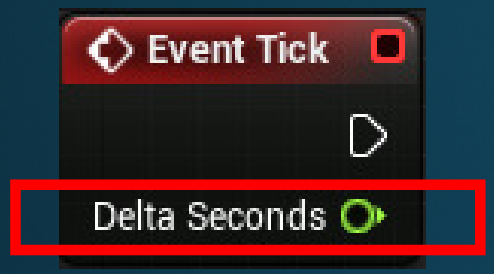
UE4: Endless Runner

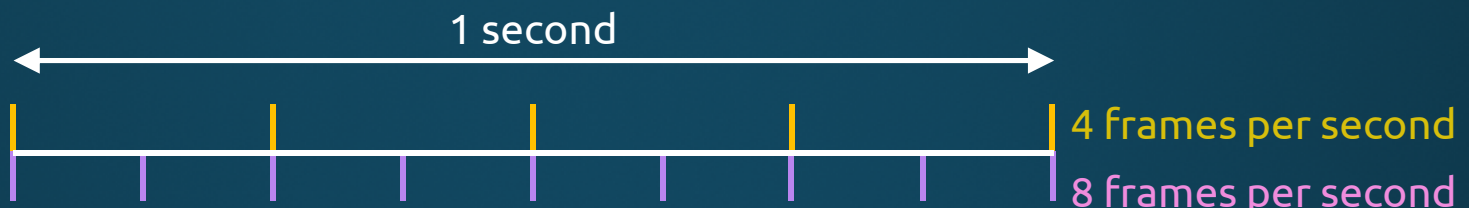
Third Person Blueprint Template

- Third Person Character blueprint
  - Remove key press for forward movement. Replace with ‘Game Tick’ to create constant forward motion.



Delta Time *(Delta Seconds in UE4)*



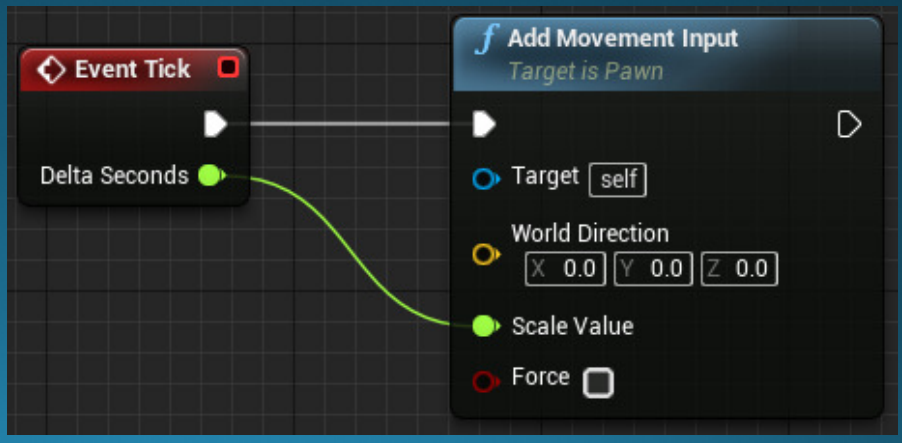


If object set to increment its movement by 1uu per game tick.
It will move 1uu per frame.

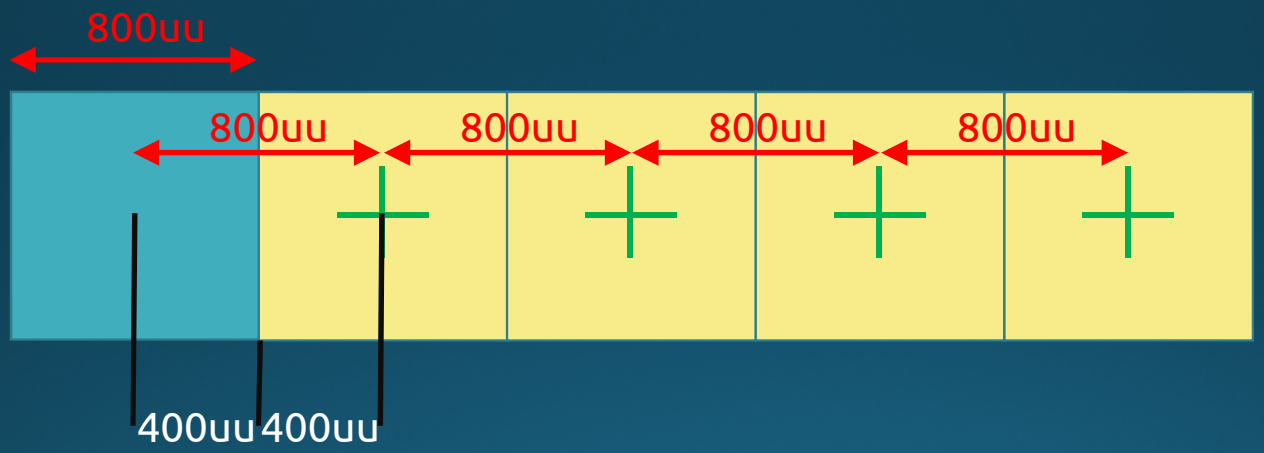
4 frames per second moves 4uu in one second

8 frames per second moves 8uu in one second

- Delta Seconds is the amount of time which has passed between last frame and current frame.
- Use this as the Scale Value to adjust movement up or down depending on current frame rate.
- Connect Delta Seconds to Scale value to implement this adjustment.

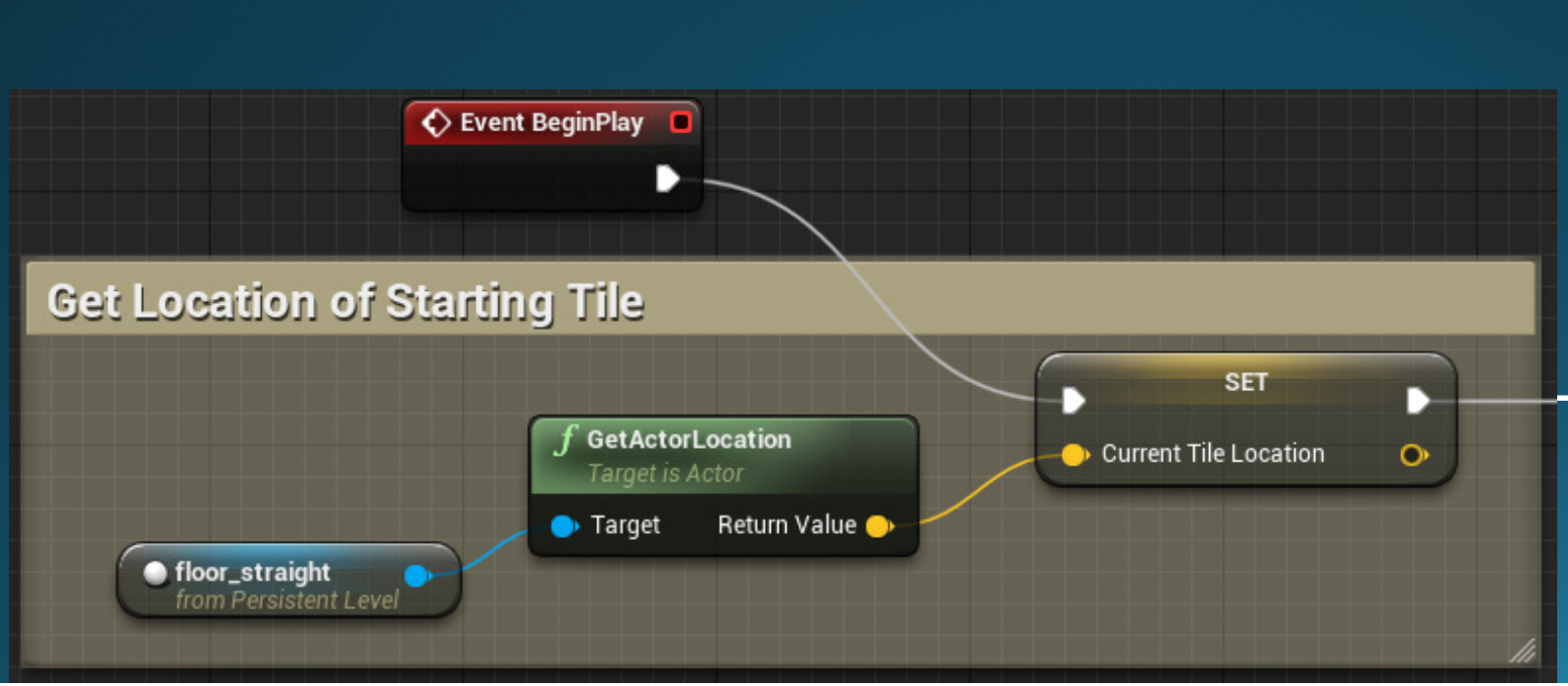


Tile Placement

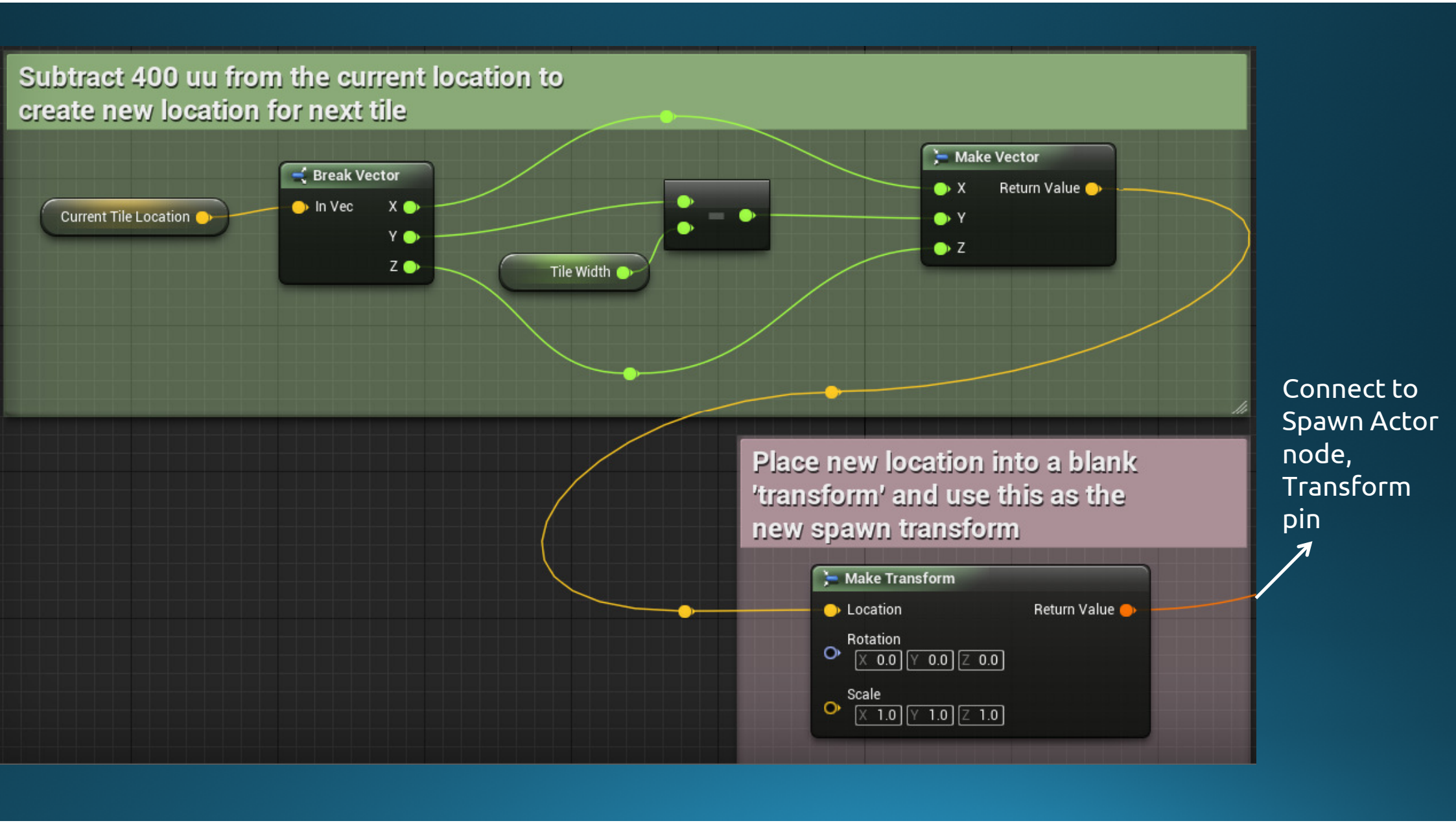


Setup

- In the Level Blueprint insert an ‘Event Begin Play’ node.
- Create a variable for the tile width and location of current tile.

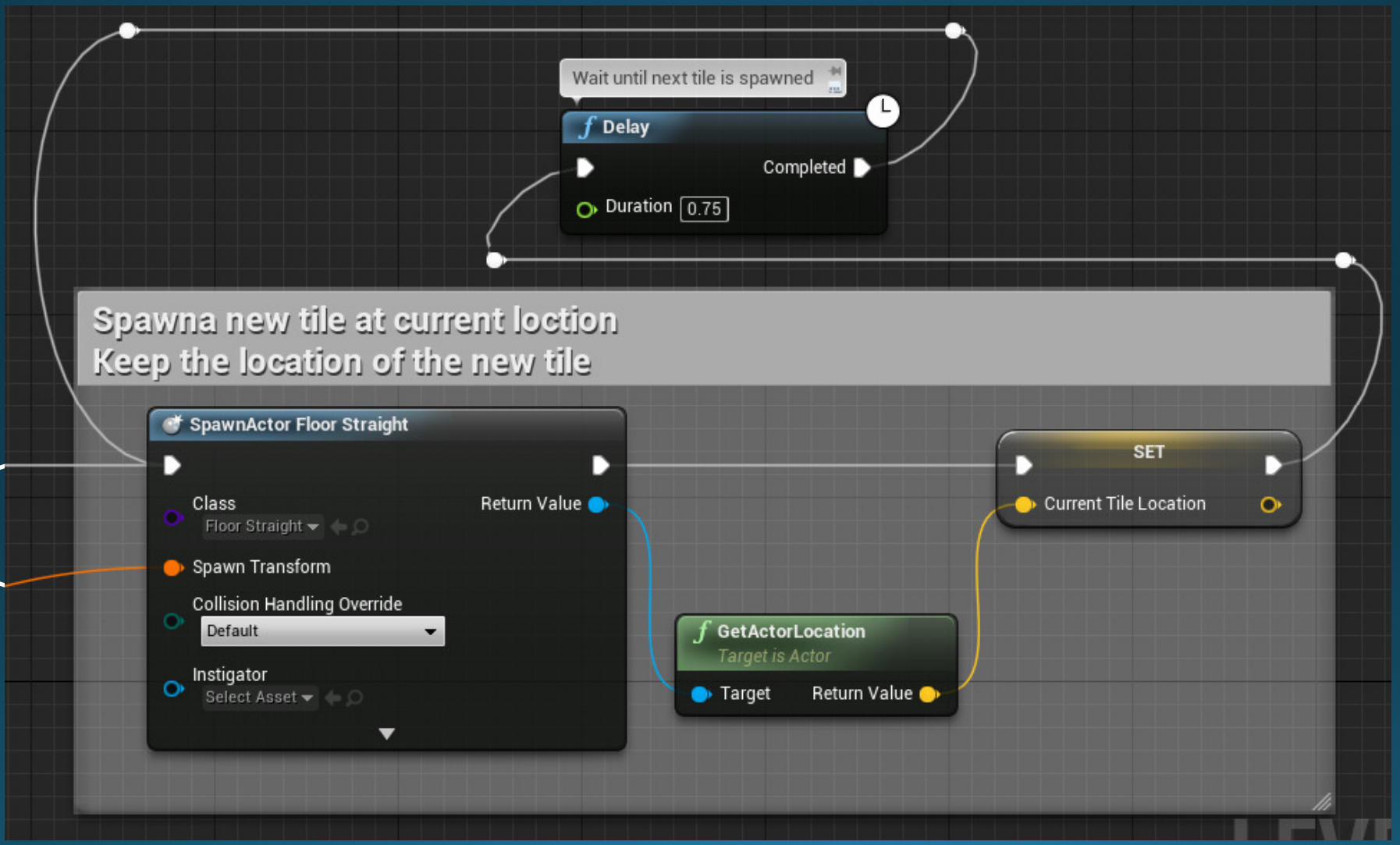


Connect to Spawn Actor node, white input logic pin

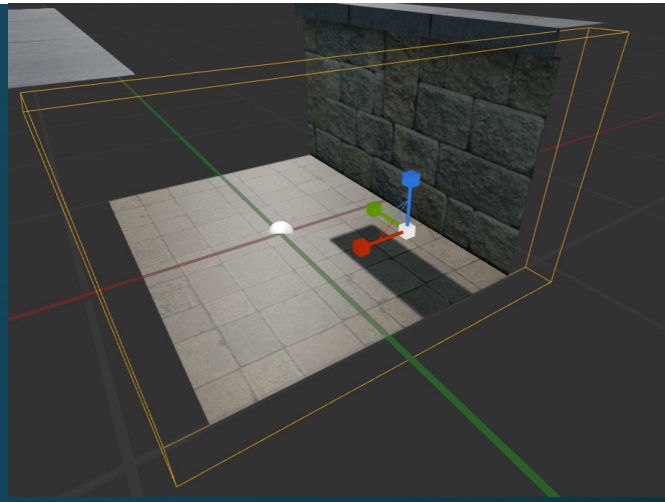


Connect to Spawn Actor node, Transform pin

From previous slide



Tile Actor



- Create a blueprint actor which contains the corridor static mesh.
- In the Event Graph for that actor, place a box Collision component on the exit location form the tile.
- In the Event Graph, when make the actor destroy itself after a short delay

Further Reading

- Delta Time in Unreal engine 4 https://goo.gl/Cnu5xj
- Endless Runner with Blueprint https://goo.gl/ReCVMK

Task

- Implement a simple endless runner using the techniques covered in the session.
  - Make sure that tiles are being destroyed behind the player.
    - Press F8 to jump out of the active viewport to use the mouse to fly around in-game.
  - How would you place obstacles/pickups in each tile so that they appear to be placed randomly ?