

Spike: 17**Title:** Create Simple Blueprint in C++**Author:** Steven Efthimiadis, 1627406**Goals / deliverables:**

The goal is to create a c++ that holds x, y and z as float variables and you must be able to get and then set them to different values.

To create this spike, you require:

- Knowledge of c++ in OOP
- Blueprints

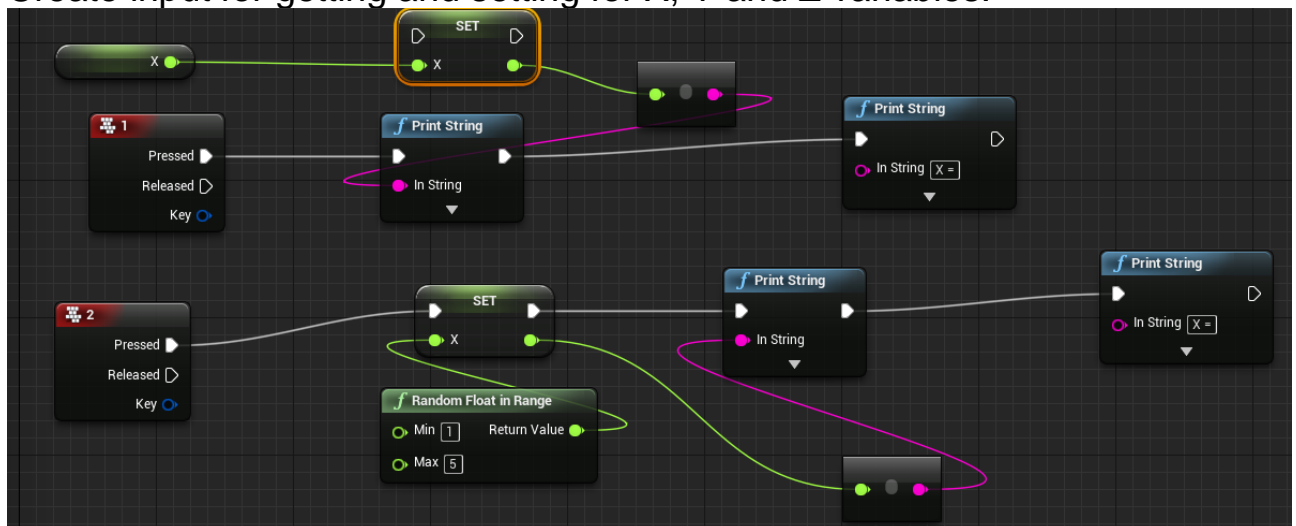
Technologies, Tools, and Resources used:

List of information needed by someone trying to reproduce this work

- Blueprints collaborating with c++
 - <https://forums.unrealengine.com/showthread.php?110892-40-step-by-step-C-tutorials-for-UE4>

Tasks undertaken:

- Create a Blueprint for 3D Vector
- Create a c++ class for 3D Vector.
- Add it to the blueprint.
- Create input for getting and setting for X, Y and Z variables.

**What we found out:**

- You need to compile the game or the blueprints won't recognize that you have created a c++ class.

- When creating the actor, you need to create it as an actor and then select it as an instance of the c++ file you created so you can access the variables you made.
- You need to create a new instance of the c++ class so the functions in the blueprints can link to it.

Open issues/ risks:

- The unreal tutorial doesn't explain how to add the variables from the c++ file to the program properly so:
 - When creating the actor, you need to create it as an actor and then select it as an instance of the c++ file you created so you can access the variables you made.
 - You need to create a new instance of the c++ class so the functions in the blueprints can link to it.