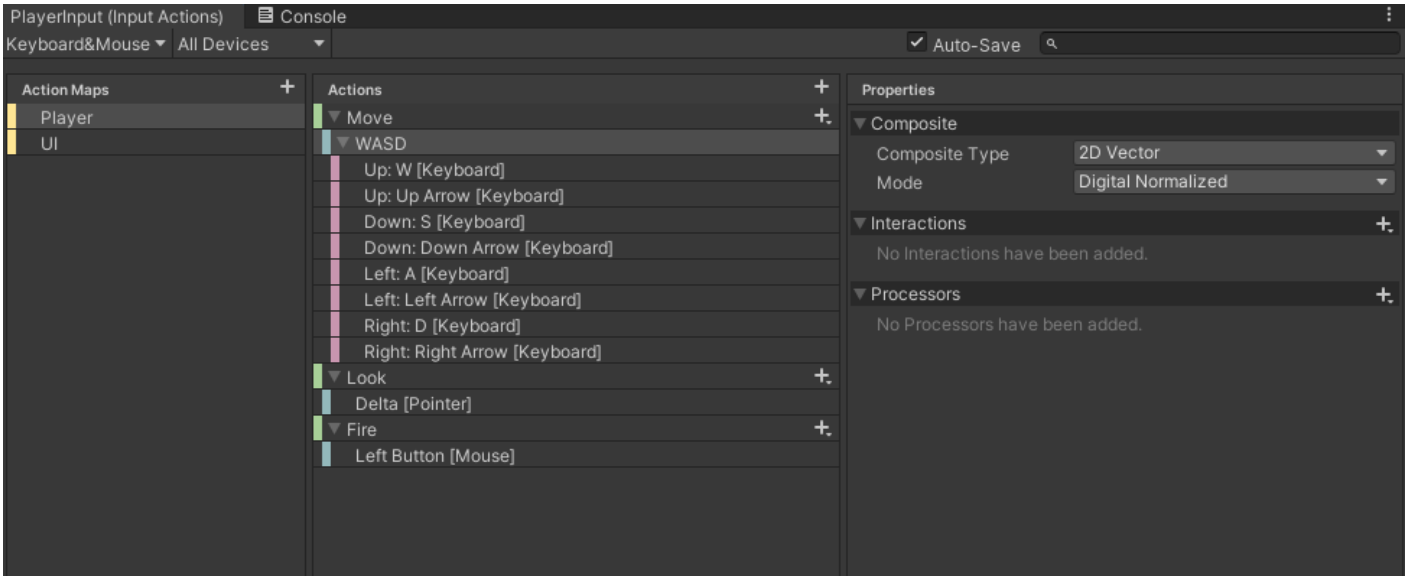
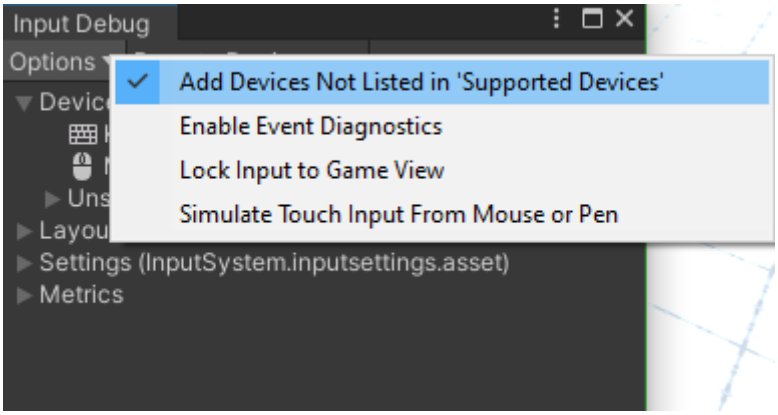
New Input System

Setup

Using the default configuration for a keyboard&mouse / Gamepad `Input Actions` asset in unity, we can implement universal controls given various input devices.



> Issues getting an input device to work? Click `Window->Analysis->Input Debugger` and at the top-left of the new window select `Options->Add Devices Not Listed in 'Supported Devices'` and any input device that was not previously working should now be passing input to unity.
>
> This was a weird bug for me to figure out, so I thought it was worth a mention. For me, I had to do this in order to get Unity to accept input from my Corsair gaming mouse. I searched up a lot of information on this new input system thinking I was using it wrong, and later found that my mouse was not passing input to unity and my code was correct.



Use

We can call a specific function from a specific component

Using PlayerInput component->Behavior->Invoke Unity Events -

```
Rigidbody playerRigidbody;
public PlayerControls controls;
Vector2 playerVelocity;
public float playerSpeed = 5.0f;

void Awake() {
  playerRigidbody = GetComponent<Rigidbody>();
  controls = new PlayerControls();
}

void OnEnable() {
  controls.Player.Enable();
}

void OnDisable() {
  controls.Player.Disable();
}

public void OnMove(InputAction.CallbackContext context) {
  print("Moving: " + context.ReadValue<Vector2>());
  playerVelocity = context.ReadValue<Vector2>();
}

public void OnLook(InputAction.CallbackContext context) {
  print("Look: " + context.ReadValue<Vector2>());
}

public void OnFire(InputAction.CallbackContext context) {
  print("Bang");
}

void Update()
{
```

```
  playerRigidbody.position += new Vector3(playerVelocity.x * Time.deltaTime * playerSpeed,
    0,
    playerVelocity.y * Time.deltaTime * playerSpeed);
}
```

Or we can let Unity call functions defined using the naming convention `void On\[ActionName\](InputValue value)`

Using PlayerInput component->Behavior->Send Messages -

```
Rigidbody playerRigidbody;
public PlayerControls controls;
Vector2 playerVelocity;
public float playerSpeed = 5.0f;



void Awake() {
  playerRigidbody = GetComponent<Rigidbody>();
  controls = new PlayerControls();
}

void OnEnable() {
  controls.Player.Enable();
}

void OnDisable() {
  controls.Player.Disable();
}

public void OnMove(InputValue value) {
  playerVelocity = value.Get<Vector2>();
  print("Moving: " + value.Get<Vector2>());
}



public void OnMove(InputValue value) {
  playerVelocity = value.Get<Vector2>();
  print("Moving: " + value.Get<Vector2>());
}
```

```
void Update()
{
  playerRigidbody.position += new Vector3(playerVelocity.x * Time.deltaTime * playerSpeed,
    0,
    playerVelocity.y * Time.deltaTime * playerSpeed);
}
```

Broadcast messages is the same as Send Messages, except broadcasting invokes the same methods on all child objects who have a component with function definitions that match this naming convention.

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