***VOOGASalad Event/Action Definitions***

* **General Flow: Event causes Action**
* **An Event needs to be able to trigger multiple actions!! (collision with enemy >>> destroy enemy AND add to score). This can just be an option at the bottom of the Add Event… window where Actions are defined.**
* **Potentially good idea: every Action definition is allowed exactly one optional conditional modifier that determines whether or not the Action actually executes so that, for example, a valid progression of Events for a “powerup\_box” could be:**
  + **[Collision with "player\_char" on Bottom] is an Event in "powerup\_box" that triggers [Create Instance Of "mushroom"] at instance location and [Set Variable isBroken to 1] *ONLY IF isBroken is currently 0 (false)*.**
  + **This would alleviate the need to have Conditional Blocks that can nest within themselves and other Actions (big headache)**

***Events:***

Collision (with another user created type, i.e. Collision with createdwall)

Two fields [object collided with, direction colliding from (left, right, top, bottom, any)]

*\*\*Direction colliding from is important because it allows user to define unique behavior for landing on an enemy rather than running into it, which might trigger different results\*\**

Conditional (i.e. if xspeed > 30, implies at any point in time after the object is created)

Instance Created (useful for setting initial properties of an instance uniquely)

Input (i.e. user presses ‘W’ key, must activate continuously for every frame key is being pressed to sustain triggered action, i.e. xspeed = 50)

Timer (i.e. Timer1 reaches 5 seconds)

***Actions:***

Set Variable

\*\**Variable values are not static across instances of an object type, each instance can, for example, have a different xspeed*\*\*

(i.e. set lives, set score, set xspeed, set uservar)

2 fields [variable name, new value]

*\*\*The following 4 Actions are essentially just a glorified Set Variable action presented in a more user friendly way for an important object property\*\**

Set My Size

2 fields [new width, new height]

Set My Speed

2 fields [new xspeed, new yspeed]

Set My Position

2 fields [new xpos, new ypos]

Set My Gravity

1 field [new gravity]

Set My Facing

1 field [up, down, left, right]

Go To Level

1 fields [new level]

Reset Current Level

0 fields []

Destroy Self

0 fields []

Create Instance Of

(i.e. create “fireball” object at current object position when a certain key is pressed)

3 fields [object type, relativex, relativey]

Reset Timer

(i.e. start a timer that can trigger an Event when a certain time is reached)

1 field [Timer index]

Play Sound

(i.e. play jump sfx when “space” is pressed)

1 field [sound asset]

Change Image

(i.e. change to “damaged” sprite after colliding with an enemy)

1 field [new image]

Destroy Nearest Instance Of

1 field [object type]

Set Checkpoint

0 fields []

Restore Checkpoint

0 fields []