Entity

name -> String

description -> String

bbox collision_box -> hitbox for collision

health -> int

damage() -> int

damage_type -> String

action_interval -> int

collision_action_interval -> int

---

scheduled_action()

collision_action()

move()

attack()

die()

Need to be defined by children ———>

Plants

scheduled_action()

collision_action()

attack()

die()

Zombies

scheduled_action()

collision_action()

move()

attack()

die()

Projectiles

scheduled_action()

collision_action()

move()

attack()

die()

GameController

background_elements -> list of background elements

plants -> list of plants entities

zombies -> list of zombie entities

projectiles -> list of projectile entities

ui_elements -> list of User Interface elements

---

add_objects() -> make entities and add them to cooresponding list

GameWindow

screen -> x/y coordinates?

clock -> float

dtime -> frames

running -> boolean

---

init_pygame() -> initialize pygame and all cooresponding elements

handle_input() -> handle keys pressed on keyboard

bbox_to_screen(bbox) ->

draw_entity(entity) ->

render() -> render all entities on screen

run() -> run all checks and windows

BoundingBox
position -> x,y coordinates
width -> int
height -> int
overlaps(other) ->
handle_input() -> handle keys pressed on keyboard