# Entity.h hitbox -> rectangular hitbox object velocity -> speed of object set\_alive -> boolean damage\_type -> String health -> int epipen\_cost -> int attacking -> boolean row\_based -> boolean update() -> update current object's position, attacks, and lifetime resolveCollision() -> attack when collision borders are touching getDrawable() -> get entities that need drawn

Greatly simplified,
each group of functions
set the attributes of all
entities in that section

So makeZombieEntities() includes functions that return entities like SoyBoy, DiabeticDave, and so on

## Entities.h

makeProjectileEntities() -> functions that make projectile entities makePlantEntities() -> functions that make plant entities makeZombieEntities() -> functions that make zombie entities makeStorePlants() -> make the plants that are displayed and are draggable from shop

### GameController.h

plants -> list of plants entities
zombies -> list of zombie entities
projectiles -> list of projectile entities
mutex\_lock

updateList() -> update list of entites stored in lists
processCollisions() -> process entity hitbox collisions
update() -> update entites shown on screen
swapBuffers()
cleanup()

### World.h

time -> float epipens -> int

update() -> update the game screen
getDrawables() -> get the sprites for entities
getMousePosition() -> get position of player's mouse
processCollisions() -> process collisions
remove\_dead() -> remove dead entities from game screen
update\_list() -> update all entities in a list

# ComponentDefinitions.h

Also simplified

makeMovementComponent() -> set an entity's position
makeAttackComponent() -> set an entity's attack interval and damage
makeGraphicsComponent() -> sets an entity's sprites

ClickableMovementComponent() -> for entities that are clickable (epipens)