

## Tower Defense Game | Ocean Pollution

Pieces of trash try to move from starting point to ending point

Each type of trash has different amount of health

each type has different speed

Man-made machines(towers) to the rescue to stop trash from reaching end.

Different machines different abilities

different ranges

different shooting speeds

different effects

Certain amount of money at the start of each level to buy machines to place on board

money regained from "recycling/disposing" of trash

Score based on trash collected.

as levels progress routes from start to finish change.

Countdown to beginning of level

start early(bonus money based on how early);

Objects:

Towers

Different machines

Trash

Different types

Maps(preGen)

Towers

cost	//cost to build tower
size	//grid cost (amount of space)
rateOfFire	//how fast they fire with things within range
ammo	//what the object fires
rangeOfSight(ellipse)	//area of effect for the tower
buildTime	//time cost to build the tower
target	//what the tower is currently firing at within its range

Ammo

type	//Defines each type of ammo
damage	//amount of damage a particular type of ammo does
movement	//movement from tower object to trash object
speed	//speed at which bullet moves from a-b

Trash

Health	//amount of hp the trash has
collision	//detect if hit by piece of ammo and reduces health
movement	//able to move along path
Speed	//how fast moves from start to finish
reward(money)	//amount of money awarded to player for killing trash

Map

	grid	//set amount of tiles
	pathOfTrash	//path per level that the trash travels
	towerSpots(isFilled)	//takes away parts of maps that contain towers
levels		
	trash	//number of trash objects that will go through the level
	map	//pregenerated map
	initialStartingCash	//starting cash to start each level + %remaining cash from level before