LEGEND - CLASS INTERFORE ANIMAC D"EXTENOS" boolean isNormalSize() "IMPLEMENTS" ABSTRACT (ITALICS) . <u>Size</u>dAnimal int length Boa Fish Dillo String name double salinity boolean isDead String eats MAKING AN OBJECT NEW DILLO(5, FALSE) => VILLO SDEAD SHARK "INNERITED" FROM SIZEDANIMAL. (AN SHELTON () STRING ATTACKS - CLASSES CLASSES ARE BUILT IN HIERARCHIES, FIELDS/ METHODS GET "COPIED DOWN " ("INHERITED") FROM SUBCLASS FROM SUPER CLASS. - "ABSTRACT" DISALLOWS "NEW" => USE WHEN MAKING A CLASS THAT'S ONLY FOR CODE SHARING! (IT DOESN'T MAKE SENSE TO HAVE A - "IMPLEMENTS" IS ALSO "COPIED DOWN" WHEN INHERITING, STEED ANIMAL "COPIED DOWN" WHEN INHERITING FROM & CLASS. (EG. BOA, DILLG, FISH MUST ALL IMPLEMENT IS NORMAL, SIZE () FROM (ANIMAL.

CREATING A SHARK LIARK NEW SMARK(...) =7 1ENGTH FROM SIZENANINAL ISLEN WITHIN! FROM FISH SALINITY) S AORMAL STREL) ~ WEARIOE! FROM SHARK ATTACKS ISNORMALSIZE() - SNARK IS NOT REQUIRED TO HAVE ITS OWN IS NORMAL SIZE () BECAUSE FISH NAS ONE. BUT, WE ADD AN ISNORMAL SIZE () to HAVE A SWARK-SPECIFIC VERSION. IF WE DO THIS IT "OVERRIDES" THE VERSION IN FISH.

MORE DIACRAM NOTATION YOU'LL SEE. Zoo IAnimal animal1 IAnimal animal2 MAL (boolean isNormalSize() SizedAnimal FruitFly int length $\sqrt{}$ ∇ Boa Fish Dillo String name double salinity boolean isDead String eats Д Shark int attacks THIS ARROW MEARS "CONTAINS" IE. Zoo CANTAINS FIELDS OF CLASS ZANIMAL.

UPDATING OBJECTS/FIELDS public class Boa { public string name; public int length; public string eats; public Boa (String name, int length, String eats) { this.name = name ; this.length = length ; IN THIS EXAMPLE ... this.eats = eats ; } } Boa boa1 = new Boa("slinky", 30, "apples");
 Boa boa2 = new Boa("slim", 30, "bugs"); WHAT IS (boal.eats = "tofu";)
boa2 = new Boa("slim", 15, "grass"); BOAL, EATS?? 🥑 Boa boa3 = boa1; boa3.eats = "donuts"; ENVIRONMENT (NAMES) HEAD (OBJECTS) 1) BOAL BOA "SUNKY" 3) FIELD UPDATES TROA (6) UPRATE THE (9) BOAL NOW REFERS FLELD NAME OF TO NEW OBJECT THIS OBJECT, (OLD ONE IS CLEANED UP) 131265 THE NAME BOAS OA NOW REFERS TO THE SAME OBJECT AS THE NAME "BOAL" END RESULT PRINT (BODI, EATS) => "DOUDTS" TWIS IS A VENY "6RASS" PRINT (BOA3. EATS) => "DONUTS" COMMON MISCONCEPTION! OKAY IF IT SEEMS WEIRD NOW.