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Week7Meet - 10 pts

Turn in on BBL as soon as complete, but before end of day Friday following the lecture.

Answer these questions as we progress through the meeting.

1. What code in Great Lakes Shipping is common among all shipping vehicles?

Variables: range, capacity

Methods/; load and unload

cargo<Pallet>

1. What would be a good identifier for the parent class of which Van, Boat and Truck are the children?

<<Interface>>

\*Fuelable

+addFuel(int): void

+getFuel(): int

\*Vehicle Class

-range: int

-capacity: int

-cargo: <Pallet>

+load(Pallet): bool

+unload(Pallet): Pallet

\*Boat Class \*Truck Class \*Van Class

-captain: String -driver: String +Van (3 const)

-topSpeed: int -weight: int +[getters]

-fuelGallons : int -fuelGallons : int +/-[setters]

+Boat (3 const) +Truck (3 const)

+[getters] +[getters]

+/-[setters] +/-[setters]

+addFuel(int) : void +addFuel(int) : void

+getFuel() : int +getFuel() : int

+dock() : String

\*Pallet

-num : int

-id : int

-height : int

-width : int

-depth : int

-origin : String

-destination : String

+Pallet( 3 const) (getters and setters)

+toString() : String

1. Design an inheritance tree for the things that Great Lakes ships. Start with boxes with class names, then add data to the boxes until you have UML diagrams. (You can paste a photo of what you did on paper)

Vehicles

Fuelable

Van

Truck

Boat

Pallet

A screenshot of a video game

Description automatically generated

1. Your breakout room partners: Ron, Mangesh, Ibrahim, Akshay  
   Your component: Shops  
   Your resultant hierarchy (photo is fine):

Diagram

Description automatically generated

1. Summarize your understanding of the “Resolving Differences” step:

Attractions is the class where we use all the data like time, location, name, peoplecount. Resolving the differences, we saw what common things in all the other classes like rides is, shows, meals, and shops. That we are not taking in our class Shops. The different things we are used as variables in our class is saleItems and type of products. And methods like getsaleItems and gettype that makes our sales class different and resolve the understanding what to do and how to think about it. Every other group use and work with different class where their variables names and methods are different.

1. Write a loop that makes use of polymorphism for the Great Lakes Shipping program:

public class VehiclePoly{

private Vehicle[] vehicleList;

public VehiclePoly()

{

vehicleList = new Vehicle[5];

vehicleList[0] = new Truck(“Mangesh”,50,100);

vehicleList[1] = new Truck(“Akshay”,30,500);

vehicleList[2] = new Boat(“Dayo”,200,10);

vehicleList[3] = new Boat(“Gowtham”,250,20);

vehicleList[4] = new Vehicles(100,200,Pallet p1);

}

public void print(){

for(int i=0;i<vehicleList.length;i++){

System.out.println(vehicleList[i]);

}

}

}

public class Testing{

public static void main(String a[]){

VehiclePoly vp = new VehiclePoly();

vp.print();

}

Reflect on your learning and your needs. After this class meeting, what topics do you feel like you learned and what topics do you feel like you need more information on to learn?

In class I learn how we create vehicle class that is abstraction and using that abstract class we use extends keyword to interact with boat truck and van classes. Polymorphism is the great concept I would like to learn more about it in next class.