

Credit Name: Inheritance and Polymorphism

Assignment Name: UEmployee

### Error Log Entry

What error message did you encounter (if any)?

 8 Implicit super constructor UEmployee() is undefined. Must explicitly invoke another constructor

What unexpected behavior did your program exhibit?

- The method declaration was underlined with an error message

What caused the issue? (e.g., syntax error, logic error, incorrect function usage, etc.)

- The variables were declared within the Faculty and Staff classes, rather than using super() to call the superclass constructor.

Include a screenshot of specific lines of code.

```
package MasteryEmployee;

public class Faculty extends UEmployee
{
    private String depart;

    public Faculty(double s, String n, String d)
    {
        salary = s;
        name = n;
        depart = d;
    }

    public String getDepart()
    {
        return depart;
    }
}
```

How did you fix the issue?

- I replaced "salary = s," and "name = n," with "super(s, n);"

Provide the corrected code or solution using a screenshot.

```
package MasteryEmployee;

public class Faculty extends UEmployee
{
    private String depart;

    public Faculty(double s, String n, String d)
    {
        super(s, n);
        depart = d;
    }

    public String getDepart()
    {
        return depart;
    }
}
```

Credit Name: Inheritance and Polymorphism

Assignment Name: Vehicle

### Error Log Entry

What error message did you encounter (if any)?

N/A

What unexpected behavior did your program exhibit?

- When running the program, the numbered details of each vehicle were all listed as “0”

What caused the issue? (e.g., syntax error, logic error, incorrect function usage, etc.)

- I assigned the values of the constructor variables to the vehicle variables, instead of vice versa, which would mean the values of the vehicle variables were set to 0.

Include a screenshot of specific lines of code.

```
//Constructor
public Vehicle(double fEC, double fEH, int sC, double cV)
{
    fEC = fuelEconomyCity;
    fEH = fuelEconomyHwy;
    sC = seatingCapacity;
    cV = cargoVolume;
}
```

```
- Car Details
Fuel economy (City): 0.0 L/100km
Fuel economy (Highway): 0.0 L/100km
Seats: 0
Cargo Volume: 0.0 Litres
Electric: Yes

- Minivan Details
Fuel economy (City): 0.0 L/100km
Fuel economy (Highway): 0.0 L/100km
Seats: 0
Cargo Volume: 0.0 Litres
Sunroof: Has

- Truck Details
Fuel economy (City): 0.0 L/100km
Fuel economy (Highway): 0.0 L/100km
Seats: 0
Cargo Volume: 0.0 Litres
Winter Tires: Has
```

How did you fix the issue?

- I made sure the vehicle detail variables came before the assignment operator.

Provide the corrected code or solution using a screenshot.

```
//Constructor
public Vehicle(double fEC, double fEH, int sC, double cV)
{
    fuelEconomyCity = fEC;
    fuelEconomyHwy = fEH;
    seatingCapacity = sC;
    cargoVolume = cV;
}

public abstract void showDetails();
```

```
- Car Details
Fuel economy (City): 10.0 L/100km
Fuel economy (Highway): 7.0 L/100km
Seats: 4
Cargo Volume: 500.0 Litres
Electric: Yes

- Minivan Details
Fuel economy (City): 12.0 L/100km
Fuel economy (Highway): 9.0 L/100km
Seats: 6
Cargo Volume: 3000.0 Litres
Sunroof: Has

- Truck Details
Fuel economy (City): 15.0 L/100km
Fuel economy (Highway): 12.0 L/100km
Seats: 2
Cargo Volume: 2000.0 Litres
Winter Tires: Has
```