

Java

ENCAPSULATION

Para sa PHCORNER by CodyScott



This is Java Encapsulation.....

ALL PROPERTIES ON THIS ISLAND ARE DECLARED **private**

Kung gusto **KUMUHA** ng data or value ng properties niya....
kailangan mong dumaan sa **GETTER methods** bridge

Kung gusto **PALITAN** ang data or value ng properties niya....
kailangan mong dumaan sa **SETTER methods** bridge

Under SETTER and GETTER methods,
dyan mo ilalagay ang mga logic....like certain **CONDITIONS** to meet para ma-approve ang
request to SET data or GET data
(if-then-else, while, do, etc.)

That's Java **ENCAPSULATION**....or “data hiding”...or “data security”....

(Code Example on next page)



```
1 public class TheIsland {
2     private String name;
3     private int numberOfBuildings;
4     private int population;
5     private boolean isThereSMMegamall;
6
7     //GETTERS
8     public String getName() {
9         return name;
10    }
11
12    public int getNumberOfBuildings() {
13        return numberOfBuildings;
14    }
15
16    public int getPopulation() {
17        return population;
18    }
19
20    public boolean isThereSMMegamall() {
21        return isThereSMMegamall;
22    }
23
24    //SETTERS
25    public void setName(String name) {
26        this.name = name;
27    }
28
29    public void setNumberOfBuildings(int numberOfBuildings) {
30        this.numberOfBuildings = numberOfBuildings;
31    }
32
33    public void setPopulation(int population) {
34        if(population<1000){
35            this.population += 1;
36        } else if (population>1000 && population<2000){
37            this.population +=2;
38        } else {
39            this.population +=0;
40        }
41    }
42
43    public void setThereSMMegamall(boolean isThereSMMegamall) {
44        this.isThereSMMegamall = isThereSMMegamall;
45    }
46
47 }
48
```

lihat PRIVATE

we set some "security" conditions

Then, dito, we “went” to the island (or use the TheIsland object)
...para magpalit ng data
..para kumuha ng data

```
1
2 public class MainApp {
3
4     public static void main(String[] args) {
5
6         //welcome tayo sa island
7         TheIsland isla = new TheIsland();
8
9         //SETTING DATA
10
11        //puwede nating BAGUHIN ang pangalan ng island
12        //pero gagamitin ang SETTER method
13        isla.setName("Ang Isla ni Mang Kiko");
14
15        //baguhin natin ang population
16        //at meron tayo nilagay na CONDITIONS dito
17        isla.setPopulation(1500);
18
19        //GETTING DATA
20
21        //subukan natin mag-GET ng data
22        System.out.println("The island name is: " + isla.getName());
23        System.out.println("Ang population ng island ay: " + isla.getPopulation());
24        System.out.println("May SM Megamall sa isla: " + isla.isThereSMMegamall());
25
26    }
27
28 }
```

Yan na yon....
Java Encapsulation.
Hindi kailangan i-memorize.
The more you code in java the more you will understand the importance.

Hanggang sa muli.... keep coding!

:)