

ENCAPSULATION

Course Teacher : Lameya Islam

Course Title : Object Oriented Programming

Course Code : CSE 214



Sapnil Ahmed

221-15-5095



Mahmudul Hasan

221-15-4862



Table Of Content

- Introduction
- Benefits Of Encapsulation
- How to do Encapsulation
- Example Of Encapsulation
- Conclusion

Introduction

Encapsulation is the process of hiding the internal details of an object or function from the outside world, and restricting access to only the necessary components through a well-defined interface.

Benefits Of Encapsulation

- Data Hiding
- Reusable
- Easy Modification
- Easy Maintenance



How to do Encapsulation ?

- Declare the variables as private
- Provide public setter and getter method to modify and get the variables value.

Encapsulation Example

```
public class Student {  
  
    private String name;  
    private int id;  
  
    public void setName ( String name ) {  
        this.name = name ;  
    }  
    public String getName ( ) {  
        return name ;  
    }  
    public void setID (int id) {  
        this.id = id ;  
    }  
    public int getID ( ) {  
        return id ;  
    }  
}
```

```
public class EncapTest {  
    public static void main(String[] args) {  
  
        Student obj= new Student ( );  
        obj.setName("Carlord");  
        obj.setID(4895);  
        System.out.println ( obj.getName ( ) );  
        System.out.println ( obj.getID ( ) );  
    }  
}
```

Conclusion

Encapsulation is the one of the important feature of oop. It is used to wrap the data and function together in a single unit. Thus, it also provide inter independencies.



Reference :

- ✓ <https://youtu.be/5zanUOGTzk8>
- ✓ <https://www.programiz.com/java-programming>

Thank You