JAVA PROGRAMMING COURSE

EXERCISE

OVERRIDES IN JAVA



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EXERCISE OBJECTIVE

Create a program to implement the concept of overwriting methods in Java. At the end we should observe the following:

```
ile Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
                       <default config>
                                   Projects X Files
              Services
                      Favorites
    Overrides

☐ ☐ ☐ Source Packages

                                         package test;
    in test
           Employee.java
                                         public class OverridingTest {
           Manager.java
          OverridingTest.java
                                             public static void main(String[] args) {
      Test Packages
                                                 Employee employee = new Employee("John", 1000);
       libraries
                                                System.out.println( employee.getDetails());
       Test Libraries
                                                Manager manager = new Manager("Katy", 2000, "Finance");
                                                System.out.println( manager.getDetails());
```

1. CREATE A NEW PROJECT

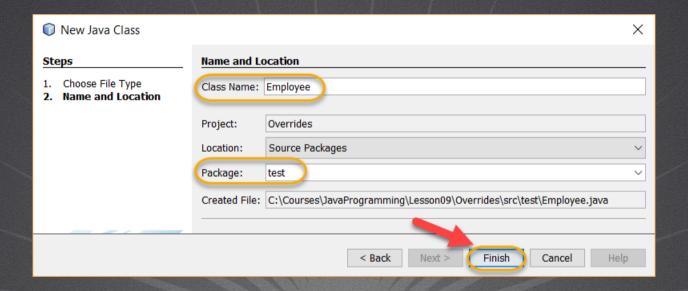
Create a new project:

New Java Application			×
Steps	Name and Location		
Choose Project Name and Location	Project Name:	Overrides	
	Project Location:	C:\Courses\JavaProgramming\Lesson09	Browse
	Project Folder:	C:\Courses\JavaProgramming\Lesson09\Overrides	
	Use Dedicated Folder for Storing Libraries		
	Libraries Folde	r:	Browse
		Different users and projects can share the same compilation libraries (see Help for details).	
h	Create Main C	Class overrides.Overrides	
		< Back Next > Finish Cancel	Help

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2. CREATE A NEW CLASS

Create a new class:



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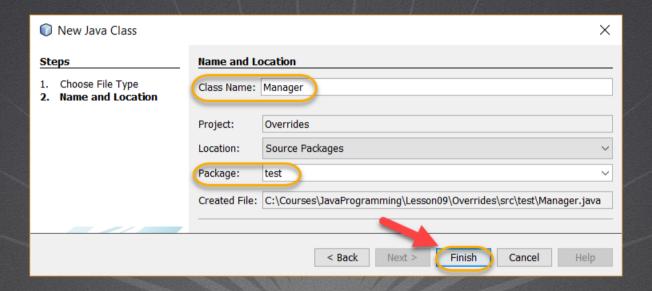
3. MODIFY THE CODE

Employee.java:

```
package test;
public class Employee {
   protected String name;
    protected double salary;
    protected Employee(String nombre, double sueldo) {
        this.name = nombre;
        this.salary = sueldo;
    public String obtenerDetalles() {
        return "Name: " + name
               + ", salary: " + salary;
    public String getName() {
        return name;
    public void setName(String name) {
        this.name = name;
    public double getSalary() {
        return salary;
    public void setSalary(double salary) {
        this.salary = salary;
```

4. CREATE A NEW CLASS

Create a new class:



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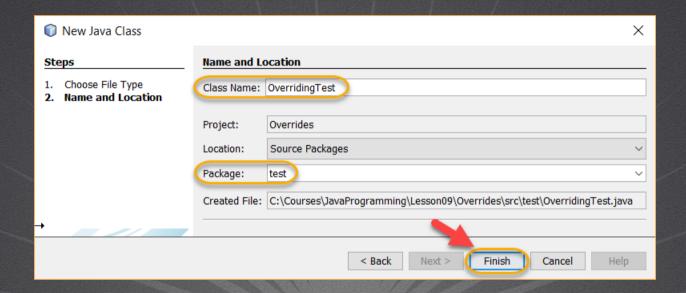
5. MODIFY THE CODE

Manager.java:

```
package test;
public class Manager extends Employee{
   private String department;
    public Manager(String name, double salary, String department) {
        super(name, salary);
        this.deparment = deparment;
    //Override the inherited method
    public String getDetails(){
        //Observe how we directly access the inherited attribute
        //because it is declared as protected in the parent class
        //and therefore the child class inherits it and accesses directly
        return "Name: " + name +
                ", salary: " + salary +
                ", department: " + department;
     public String getDeparment() {
        return deparment;
    public void setDeparment(String department) {
        this.deparment = deparment;
```

6. CREATE A NEW CLASS

Create a new class:



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7. MODIFY THE CODE

OverridingTest.java:

```
package test;

public class OverridingTest {

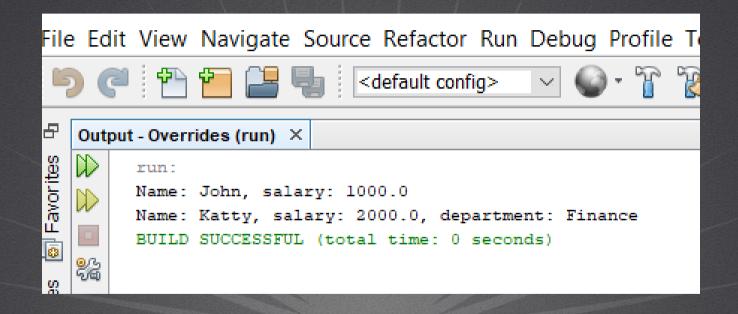
   public static void main(String[] args) {
        Employee employee = new Employee("John",1000);
        System.out.println( employee.getDetails());

        Manager manager = new Manager("Katy",2000,"Finance");
        System.out.println( manager.getDetails());
    }
}
```

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8. EXECUTE THE PROJECT

The result is as follows:



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EXERCISE CONCLUSION

- With this exercise we have put into practice the concept of overriding methods in Java.
- We have seen how overriding is a simple but powerful concept in object-oriented programming, so its application and clear understanding will allow us to advance more quickly in Java language learning.



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