

## FSD Experiment 3.3

Create a base Person class that has properties like name and age, and a method to display basic information.

Then, create two subclasses: Student and Teacher, each extending Person.

The Student class should include an additional property like grade or course, and the Teacher class should include a property like subject or department.

Each subclass should override or extend methods as needed to display complete details. Finally, create instances of both subclasses and demonstrate calling their methods to show how inheritance and method overriding work.

### Solution

This experiment is to understand basic concept of Object Oriented Programming using JavaScript using Node.js

Use **class** keyword to create a class.

Use **constructor** keyword to define the constructor inside the class.

Use **this** keyword to refer the current object.

Use **super** keyword to refer the parent class

Use **extends** keyword to inherit a parent class into child class

Use **new** keyword to create instance of a class

**Important Note:** Don't use **function** keyword while creating functions inside a class.

Create a file as Person.cs and save the following code into it

```
class Person {  
  constructor(name, age) {  
    this.name = name;  
    this.age = age;  
  }  
  
  showInfo() {  
    console.log(`Name: ${this.name}`);  
  }  
}
```

```
    console.log(`Age: ${this.age}`);  
  }  
}
```

```
class Student extends Person {  
  constructor(name, age, course) {  
    super(name, age);  
    this.course = course;  
  }  
  
  showInfo() {  
    super.showInfo();  
    console.log(`Course: ${this.course}`);  
  }  
}
```

```
class Teacher extends Person {  
  constructor(name, age, subject) {  
    super(name, age);  
    this.subject = subject;  
  }  
  
  showInfo() {  
    super.showInfo();  
    console.log(`Subject: ${this.subject}`);  
  }  
}
```

```
const p=new Person('Sanjay Kumar',34);  
const s = new Student("Rohit Kumar", 21, "Computer Science");  
const t = new Teacher("Dr Raman", 45, "Full Stack Development");
```

```
console.log('Person Infomation =>')  
p.showInfo();  
console.log('Student Infomation =>')  
s.showInfo();  
console.log('Teacher Infomation =>')  
t.showInfo();
```

Run the file on local machine use Node.js on command line  
node Person.js

You can also download the code file from GitHub  
<https://github.com/technicaltrainingsaitcse/react>

### How to submit on Nimbus Submissions?

Open Nimbus

Create a new project using HTML template as FSD Experiment 3.3

Open **index.html** file. Create basic structure of HTML page.

Add the above code under<script></script> tag in head section. Run the code

Nothing will be displayed on the page.

Right Click on the web page. Select **Inspect**

Now select the **Console** to view the output

Create Live URL and submit it