

FULLSTACK- EXPERIMENT - 3.3

Experiment: Person Class Hierarchy with Student and Teacher Subclasses

Person Class Hierarchy with Student and Teacher Subclasses

AIM

Understand and apply the concept of inheritance in JavaScript by creating a base Person class and extending it into Student and Teacher subclasses.

CODE

// Base Person class

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

// Student subclass extending Person

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

// Teacher subclass extending Person

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

// Creating instances

```
const student1 = new Student('Alice', 20, 'Computer Science');  
const teacher1 = new Teacher('Mr. Smith', 40, 'Mathematics');
```

// Calling methods

```
student1.displayInfo();  
teacher1.displayInfo();
```

OUTPUT

```
Student Name: Alice, Age: 20, Course: Computer Science  
Teacher Name: Mr. Smith, Age: 40, Subject: Mathematics
```