



Title:- Implementation of properties in any applications.

Theory:-

Properties are an important feature of C# programming language. They are used to provide access to class members and encapsulation their implementation details. Properties help to control the state of object and its behavior. In this paper, we will explore the implementation of properties in any C# application with syntax and examples.

Syntax of Properties in C#

Properties in C# are defined as a special kind of method. They have a get accessor and a set accessor that can be used to get and set the value of a private field in a class. The syntax for a property is as follow.

Syntax:-

```
access_modifier data_type property_name  
{
```

```
    get  
    {
```

```
        // Property getter code
```

```
    }
```

```
    set  
    {
```

```
        // Property setter code
```

```
    }
```

```
}
```

SIGN. :

J.J.M.C.O.E.





examples:-

```
class Person {  
    private String name;  
    private int age;  
    public String name  
    { get { return name; } }  
    set { name = value; }  
}
```

```
    public int Age.  
    { get { return age; }  
      set { age = value; }  
    }
```

```
    public void Display()  
    { Console.WriteLine("Name: {0}", Name);  
      Console.WriteLine("Age: {0}", Age);  
    }
```

```
    static void main(String[] args)  
    { Person person = new Person();  
      person.Name = "Omkar";  
      person.Age = 23;  
      person.Display();  
    }
```

Advantage of Using Properties in C#

1) Encapsulation: Properties provide encapsulation by hiding implementation details of a class. They allow user to access and modify state of an object without knowing detail of its implementation.





### 2) Validation:

Properties can be used to validate input values before setting them to a private field. This helps to maintain the consistency and integrity of object.

### 3) Access control:

Properties provide access control by allowing user to set or get value of private field based on accessibility level specified by programmer.

### 4) Readability:

Properties make code more readable by providing a simple syntax for accessing and modifying the state of an object.

### Conclusion:

Properties are an important features of C# programming language that allows programmer to encapsulate implementation details of class and control access to its state.