

State Pattern

Tillader at et objekt kan ændre dets adfærd. Objektet ser ud til at ændre klasse.

Context (Player)

- Har en instans af den nuværende state.

State

- Interface til alle states en Player skal kunne have.

Concrete State (WalkAround, Eat, Sleep)

- Ansvarlig for at beslutte hvad Player skal gøre.

```
class Player
{
    public State state
    {
        get;
        set;
    }
    public int hunger = 5;

    public Player(State state)
    {
        state = state;
    }

    public void DoSomething()
    {
        state.Handle(this);
    }
}
```

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```
abstract class State
{
    public abstract void Handle(Player context);
}
```

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```
class WalkAround : State
{
    public override void Handle(Player player)
    {
        Console.WriteLine("Walking around");
        player.hunger--;
        if (player.hunger <= 0)
            player.State = new Eat();
    }
}

class Eat : State
{
    public override void Handle(Player player)
    {
        Console.WriteLine("Eating");
        player.hunger = 5;
        player.State = new Sleep();
    }
}

class Sleep : State
{
    public override void Handle(Player player)
    {
        Console.WriteLine("Sleeping");
        player.State = new WalkAround();
    }
}
```

```

static void Main(string[] args)
{
    Player player = new Player(new WalkAround());

    for (int i = 0; i < 50; i++)
    {
        player.DoSomething();
    }

    Console.ReadLine();
}

```

E:\Projects\ProgrammingExam\StatePattern\bin\Debug\StatePattern.exe

```

Walking around
Walking around
Walking around
Walking around
Walking around
Eating
Sleeping
Walking around
Walking around
Walking around
Walking around
Walking around
Eating
Sleeping
Walking around
Walking around
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```

