

CS 635 Advanced Object-Oriented Design & Programming
Fall Semester, 2018
Doc 12 Assignment 3
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Memento

Store an object's internal state, so the object can be restored to this state later
without violating encapsulation

```
class Memento {  
    public int degrees;           Violates encapsulations  
    etc.  
}
```

Who can create the Memento?

Visitor

Intent

Represent an operation to be performed on the elements of an object structure

Visitor lets you define a new operation **without changing the classes of the elements** on which it operates

```
TurnExpression extends Expression {  
    public Memento getMemento() {  
        etc  
    }  
}
```

```
TurnExpression extends Expression {  
    public TurnExpression(Turtle turtle)  
        this.turtle = turtle;  
}  
  
    public int evaluate() {  
        turtle.move(self.value())  
    }  
}
```

```
TurnExpression extends Expression {  
    public TurnExpression()  
}  
  
    public int evaluate(Turtle turtle) {  
        turtle.move(self.value())  
    }  
}
```

AssignmentExpression extends Expression