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| **Memento** |
| **Line** | **Code** |
| **1****2****3****4****5****6****7****8****9****10****11****12****13****14****15****16****17****18****19****20****21****22****23****24****25****26****27****28****29****30****31****32****33****34****35****36****37****38****39****40****41****42****43****44****45****46****47****48****49****50****51****52****53****54****55****56****57****58****59****60****61****62****63****64****65****66** | **using** System;**using** System.Collections.Generic;**namespace** Memento { **class** Memento { **private string** state; **public** Memento(**string** state) { **this**.state = state; } **public string** GetState() { **return** state; } } **class** Originator { **private string** state; **public void** SetState(String state) { **this**.state = state; } **public string** GetState() { **return** state; } **public** Memento saveStateToMemento() { **return new** Memento(state); } **public void** getStateFromMemento(Memento memento) { state = memento.GetState(); } } **class** CareTaker { **private readonly** List<Memento> mementoList = **new** List<Memento>(); **public void** Add(Memento state) { mementoList.Add(state); } **public** Memento **this**[**int** index] { **get** { **return** mementoList[index]; } } } **class** Program { **static void** Main(**string**[] args) { Originator originator = **new** Originator(); CareTaker careTaker = **new** CareTaker(); originator.SetState("State #1"); originator.SetState("State #2"); careTaker.Add(originator.saveStateToMemento()); originator.SetState("State #3"); careTaker.Add(originator.saveStateToMemento()); originator.SetState("State #4"); Console.WriteLine("Current State: " + originator.GetState()); originator.getStateFromMemento(careTaker[0]); Console.WriteLine("First saved State: " + originator.GetState()); originator.getStateFromMemento(careTaker[1]); Console.WriteLine("Second saved State: " + originator.GetState()); Console.ReadKey(); } }} |