**Memento Design Pattern:** The Memento design pattern is a [behavioral pattern](https://www.geeksforgeeks.org/behavioral-design-patterns) that is used to capture and restore an object’s internal state without violating encapsulation. It allows you to save and restore the state of an object to a previous state, providing the ability to undo or roll back changes made to the object.

* As your application progresses, you may want to save checkpoints in your application and restore them to those checkpoints later.
* The intent of the Memento Design pattern is without violating encapsulation, to capture and externalize an object’s internal state so that the object can be restored to this state later.

**Components of Memento Design Pattern**

**1. Originator**

- it represents the object, for which state need to be saved & restored.

- Expose Methods to save & restore its state using Memento Object.

**2. Memento**

- It represents the object which holds the state of an originator

**3. Caretaker**

- Manages the list of states (I.e. list of Memento)

**4. Client**

Typically represented as the part of the application or system that interacts with the Originator and Caretaker to achieve specific functionality. The client initiates requests to save or restore the state of the Originator through the Caretaker.





