[Memento Design Pattern]

The **Memento Pattern** is a behavioral design pattern that captures and stores the internal state of an object so that it can be restored to that state later. This pattern is commonly used to implement undo/redo functionality or checkpoints in applications.

Key Components:

1. **Originator**:
   - The object whose state needs to be saved and restored.
   - Creates mementos and uses them to restore its state.

2. **Memento**:
   - A value object that stores the internal state of the Originator.
   - Provides no operations that modify the state; it only exposes the stored state to the Originator.

3. **Caretaker**:
   - Manages the mementos and keeps track of their history.
   - Does not access or modify the contents of a memento.