

Memento



Dmitri Nesteruk
QUANTITATIVE ANALYST

@dnesteruk <http://activemesa.com>



Overview



Motivation

Memento

Undo and Redo



Motivation



An object or system goes through changes

- E.g., a bank account gets deposits and withdrawals

There are different ways of navigating those changes

One way is to record every change (Command) and teach a command to 'undo' itself

Another is to simply save snapshots of the system



Memento

A token/handle representing the system state. Lets us roll back to the state when the token was generated.
May or may not directly expose state information.



Summary



Mementos are used to roll back states arbitrarily

A memento is simply a token/handle class with (typically) no functions of its own

A memento is not required to expose directly the state(s) to which it reverts the system

Can be used to implement undo/redo

Course Summary



Chain of Responsibility

- Objects taking successive turns to process a command/event/message

Command

- An object representing a request to do something

Interpreter

- A separate field of computer science related to lexing, parsing, type resolution, etc.

Iterator

- A 'smarter pointer' that lets you navigate different data structures

Mediator

- Lets other components talk to one another without direct references

Memento

- A token that lets us restore a system to a specific state

