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# VMWARE Nested Transactions Code Review

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# Terminologies:

1. READ : To read and print the value of the associated key from memory.
2. WRITE : To write or overwrite the key - value data in the memory.
3. DELETE : Removes all the key - value from memory.
4. START : Initiate the Transition.
5. COMMIT : Saving the Transition as permanent memory.
6. ABORT : Cancel the Transition, and revert will the changes done during the transition.
7. QUIT : To exit the project and whole process.

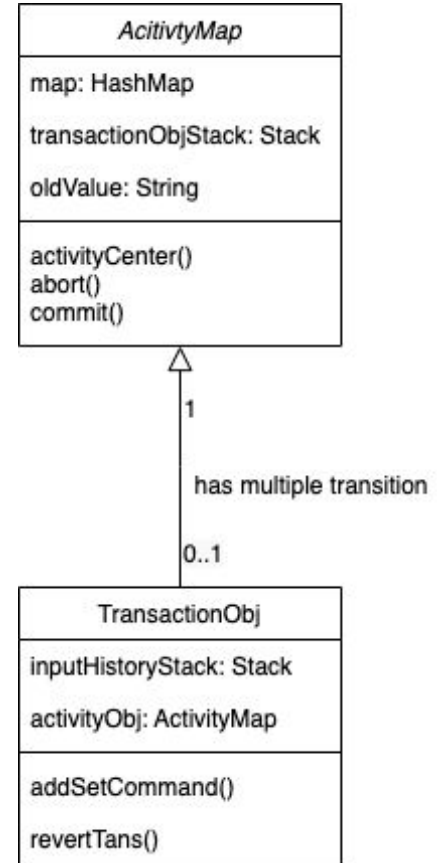
## Drawback:

1. No Backup of COMMITTED Transition.
2. Does not support multithreading.
3. Takes only one word key and one word value.

# Class Diagram:

## World's largest coral reef system

1. Class ActivityMap:
  - a. activityCenter() - - TC: O(1)
  - b. abort() - - TC: O(1)
  - c. commit() - - TC: O(1)
2. Class TransactionObj:
  - a. addSetCommand() - - TC: O(1)
  - b. revertTrans() - - TC: O(commands in transition)



# Output:

```
WELCOME TO KEY VALUE INMEMORY PROJECT  
Tip: 'QUIT' for exiting the project.
```

```
-----  
  
WRITE a hello  
READ a  
hello  
DELETE a  
READ a  
Key not found: a  
WRITE a helloWorld  
READ a  
helloWorld  
START
```

```
-----Transition Started-----
```

```
WRITE b helloVmware  
READ a  
helloWorld  
WRITE a justHello  
READ a  
justHello  
COMMIT
```

```
-----Transition Saved-----
```

```
READ a  
justHello  
READ b  
helloVmware  
START
```

```
-----Transition Started-----
```

```
READ a  
justHello  
WRITE a faultText  
READ a  
faultText  
READ c TESTING  
Key not found: c  
WRITE c TESTING  
READ c  
TESTING  
ABORT
```

```
-----Transition Aborted-----
```

```
READ a  
justHello  
READ c  
Key not found: c  
QUIT  
Exiting...
```