## Chapter 7.3 Serializable Realization by Using Lock

In this Chapter, we consider the architecture that used most in the Schedule, and this architecture maintain ‘Lock’ on the Database Element to prevent Non - Serializable Behavior.

More directly, it means that *Transaction gets Lock on the Required Database Element, to prevent other Transactions accessing these Database Elements at the same time, which would cause any possibilities of Non - Serializable situation.*

*Introduction:*

In this Chapter, we would introduce one simple Locking Module to introduce the concept of Locking. This module has only one Lock, it is a must when the Transaction wants to do any Operations on this Database Elements.

In Chapter 7.4, there would introduce much more realistic Locking Mode, in which the Locking Mode can use multi - Lock, which includes *Sharing Lock/Exclusive Lock which correspond to Write Authority and Read Authority.*

Chapter 7.3.1 Lock

Chapter 7.3.2 Lock Schedule

Chapter 7.3.3 Two Phase Lock

Chapter 7.3.4 Reason Why Two Phase Lock Take Effect