SQL Server Tutorial

Part 73 - Non repeatable read example in sql server

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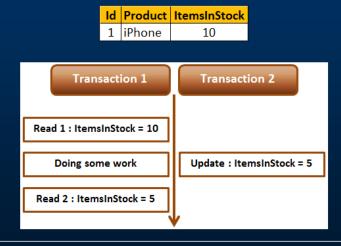PRAGIM Technologies | 9900113931 | www.pragimtech.com | www.facebook.com/pragimtech

1

In this session we will learn

- Non repeatable read concurrency problem

Link to Dot Net Basics, ASP.NET, C#, ADO.NET and SQL Server video series
http://www.youtube.com/user/kudvenkat/playlists

Suggested Videos
Part 70 - SQL Server concurrent transactions
Part 71 - SQL Server dirty read example
Part 72 - SQL Server lost update problem

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Non repeatable read example

Non repeatable read happens when one transaction reads the same data twice and another transaction updates that data in between the first and second read of transaction one.

Id	Product	ItemsInStock
1	iPhone	10

Transaction 1	Transaction 2
Read 1 : ItemsInStock = 10	
Doing some work	Update : ItemsInStock = 5
Read 2 : ItemsInStock = 5	

Non repeatable read example

```
-- Transaction 1                          -- Transaction 2
Begin Transaction                         Update tblInventory
Select ItemsInStock                       set ItemsInStock = 5 where Id = 1
from tblInventory where Id = 1


-- Do Some work
waitfor delay '00:00:10'


Select ItemsInStock
from tblInventory where Id = 1
Commit Transaction
```

Repeatable read or any other higher isolation level should solve the non-repeatable read problem. To fix the non-repeatable read problem, set transaction isolation level of Transaction 1 to repeatable read. This will ensure that the data that Transaction 1 has read, will be prevented from being updated or deleted elsewhere. This solves the non-repeatable read problem

Isolation Level	Dirty Reads	Lost Update	Nonrepeatable Reads	Phantom Reads
Read Uncommitted	Yes	Yes	Yes	Yes
Read Committed	No	Yes	Yes	Yes
Repeatable Read	No	No	No	Yes
Snapshot	No	No	No	No
Serializable	No	No	No	No

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Additional Resources

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Resources:

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5