

# Code1st & STATE MANAGEMENT

Monday, 23 January 2023 4:18 pm

In our project we have

## SQL SERVER and WEB APPLICATION

SQL server ka ik alg container

Web application ka alag container bne ga

Now we have 2 containers  
How to connect these 2 containers. Explore Docker compose

## NEXT WEEK APPLICATION CONTAINARIZE HOCHUKE HO

## STATE MANAGEMENT

Http is a stateless protocol  
Stateless maintain means state maintain ni hote. Like user ne kuch select kya then request generate ki,  
ab dobara request generate ki to previous state is not saved

To make statefull we have 2 ways

- Cookies
- session

State save krna hai ya to client end pr ya server end pr

Cookies save data on client end  
Sessions save data on server end

## COOKIES

Jb request jaye gi to  
At 1st server pr cookie bne ge,, having key value pairs  
Jb server se response ata to cookies bhi return hoti hai  
Aur wo cookie client ke machine pr save hoti  
Now jb agle request send ki to us request me cookie bhi jarhe hoti ,, because cookie me previous state  
hote hai

## COVERT DB1ST APPROACH TO CODE1ST

- **1st use db1st approach**
  - Install packages
  - Execute scaffold command
  - Yahan tk db context and classes against table bn gye hain  
Plus DB bhu bn gya hai

- **Now do code1st**
  - Execute migration
    - Jb bhi migration CREATE KRTE to ik file/code bnta having 2 methods UP AND DOWN, Up has data add and table create statements , down has remove statements. Up has add/create statements, down has remove statements. Up will do jitne classes honge uske tables bn jaye gi. We will comment up code, because db bne we hogi already. Down wala code bhi ura deingai beacause tables already bne we hogi. Migration me agr down ka code chl gya to db delete hojaye gi
  - Execute Database update command
    - db ke andar ik new table bn jaye ga migrations ka, it keeps update ke kon konse migration pehle execute hochuke aur kon kon se reh gye hain
  - Now db1st code 1st me convert ho chuka hai, ab db ko ni cheerna ab changes code me krrhe honge. Table me new column add krna to code me add krke migration krna then database update run krna to ik new migration hojaye gi aur db bhi update hojaye gi.

To create MIGRATION

**Add-Migration InitialCreate** (execute this command on package manager console. )

MIGRATION KE NAME KA IK FOLDER WILL BE CREATED having a class and that class HAVE UP AND DOWN METHOD

COMMENT UP WALA CODE :)

Remove down code. Because hmne tables drop ni krne

Now write PMconsole

**Update-Database**

Database me migration history ke name ka table will be created aur ik row add hojaye gi jiske andar current migration jo abhi ki uske details insert hojaye gi.

## Now project has been converted into code 1st

Ab make another migration using add migration command ik aur class bne gi having up and down methods

Now up and down ke andar empty hai

It means db and code are in same state

This is test migration (bs check krrhe thee ke code and db same state me agye hain ya ni

To you can remove this migration

Remove-migration (it will remove last migration).

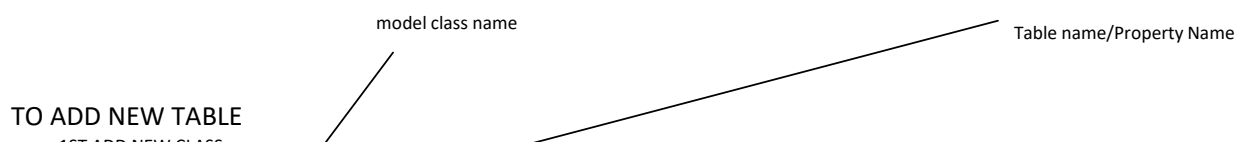
NOW we are in code1st

Add new column In existing table in code

And do add migration again and update database

Database will be updated and migration me add column ka code likha wa hoga

JB BHI KOYE CHANGE KRTE HAIN TO DOBARA SE NEW MIGRATION BNATE HAIN JOKE DB KO UPDATE KRDETA HAI



## TO ADD NEW TABLE

- 1ST ADD NEW CLASS
- ADD below LINES IN DBCONTEXT FILE
- `Public virtual DbSet<Customer> Customers {get; set;} =null ;` (iske zroorat isliye because zroori ni ke hr class ka hm table bnana chahte). Agr bnana chahte then add this line
- Now do migration
- Add Migration `addedNewTable`
- Update- database