# Lecture Notes

## Physical Structure of DBs

- DBs generally accessed using web applications or other intermediate programs

- SSMS is just a tool to work with the SQL server

- DBs are distributed between multiple harddrives etc – something we need to think about

- the physical database should be considered when designing the database system – some implementations can be faster than others on certain types of hardware

- data that is spread across multiple hard drives will be seen as one logical unit for the SQL server

- stuff is organized in file groups

- the actual data is organized in data pages – which are organized in data files

- a table can be made up of many data pages

- a data page has a size of 8KB – 10% of that is meta data, 90% actual data

- info about what tables we have is stored in sys.tables, sys.colums, sys.foreign_keys ... database structure

- primary file group

  - .mdf, .ndf data files
    * extents (8 pages)
      · 8 pages a 8KB

- .ldf log files

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