

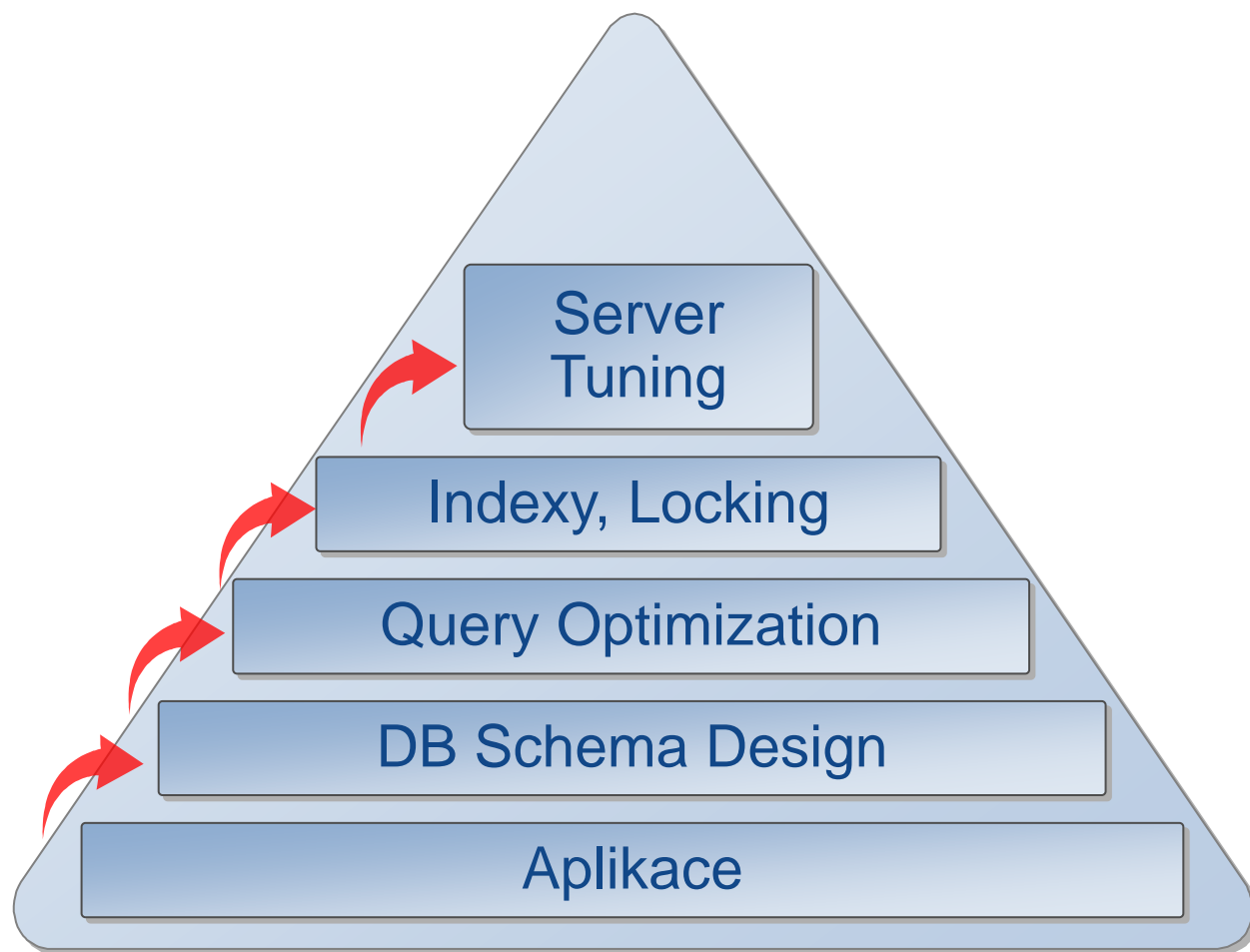


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# SQL Server Worst Practices

# Kde se toho dá nejvíc zkazit?



# DB Application Worst Practices

umístění logiky do DB vs App

client-side vyhodnocování queries

chybějící cachování

connection pooling

SQL injection



# Schema Worst Practices

špatné datové typy (varchar pro datum atp.)

přirozené PK, vícenásobné PK

vícehodnotové sloupce (PhoneNumbers)

vícenásobné sloupce (PhoneNumber1, PhoneNumber2)

hodnoty v názvech sloupců (ObratCZ, ObratSK, ObratUSA)

atributy závislé na jiném klíči než PK (Employee.DepartmentManagerName)

preventivní denormalizace, redundance

chybějící FK (DEMO)

hromadné číselníky



# Query Worst Practices

row-based vs. set-based logika

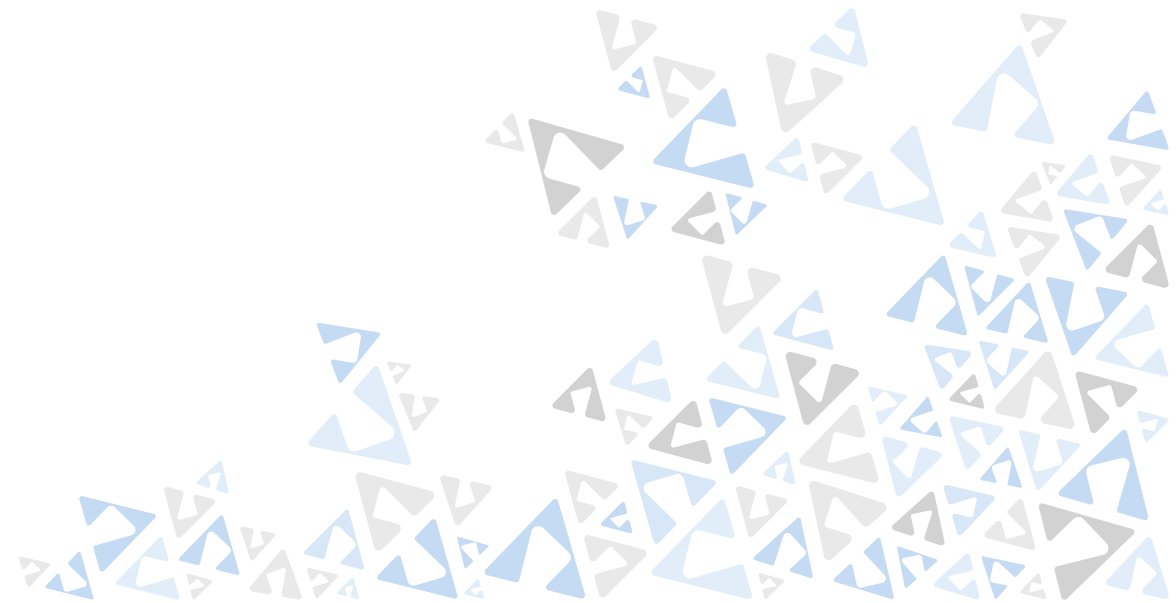
CURSOR, WHILE loop, ...

@@IDENTITY vs SCOPE\_IDENTITY()

pasti NULL

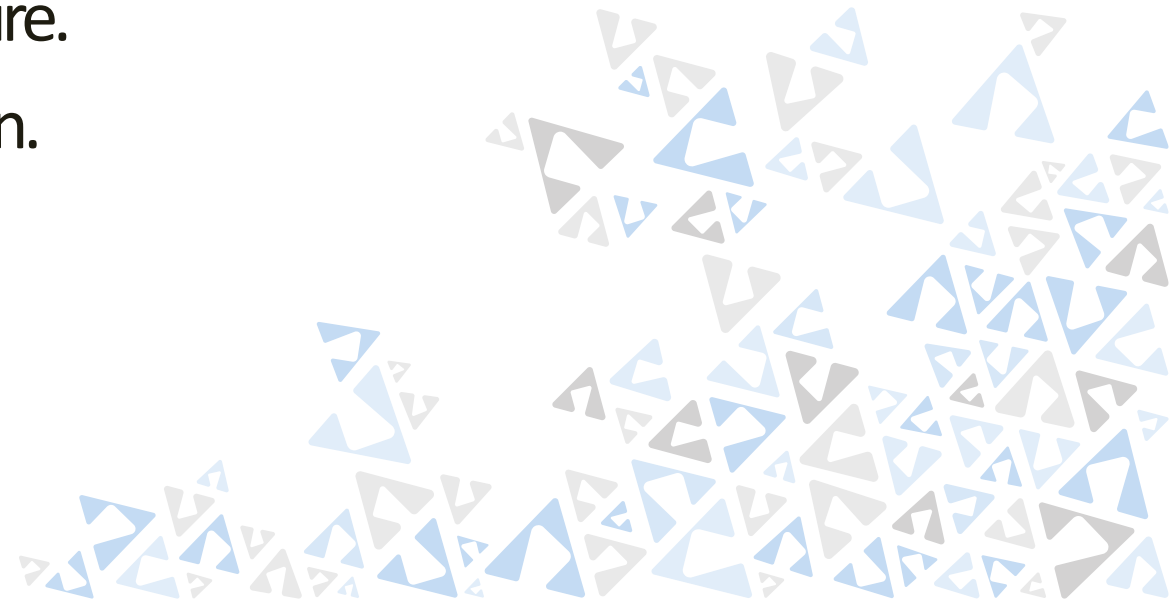
universal queries vs. Parameter Sniffing

ACID vs. transaction atomicity



# Atomicity vs. Statement Termination Errors

- Duplicate primary key. NOT NULL violation.
- Violation of CHECK or foreign-key constraint (FK).
- Attempt to execute non-existing stored-procedure.
- Invalid/missing stored-procedure parameter.
- Permission denied to table or stored procedure.
- ROLLBACK or COMMIT wo/ active transaction.
- ...



# References

## Dema

- <https://github.com/hakenr/SqlConnectionPoolingDemo>
- <https://github.com/hakenr/SqlInjectionDemo>
- <https://github.com/hakenr/PerformanceTuningDotnetCoreDemos> (caching)
- <https://github.com/hakenr/SqlQueryOptimization> (queries)

Blog – HAVIT Knowledge Base - <http://knowledge-base.havit.cz/> + .eu

Twitter - [@RobertHaken](https://twitter.com/RobertHaken)

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