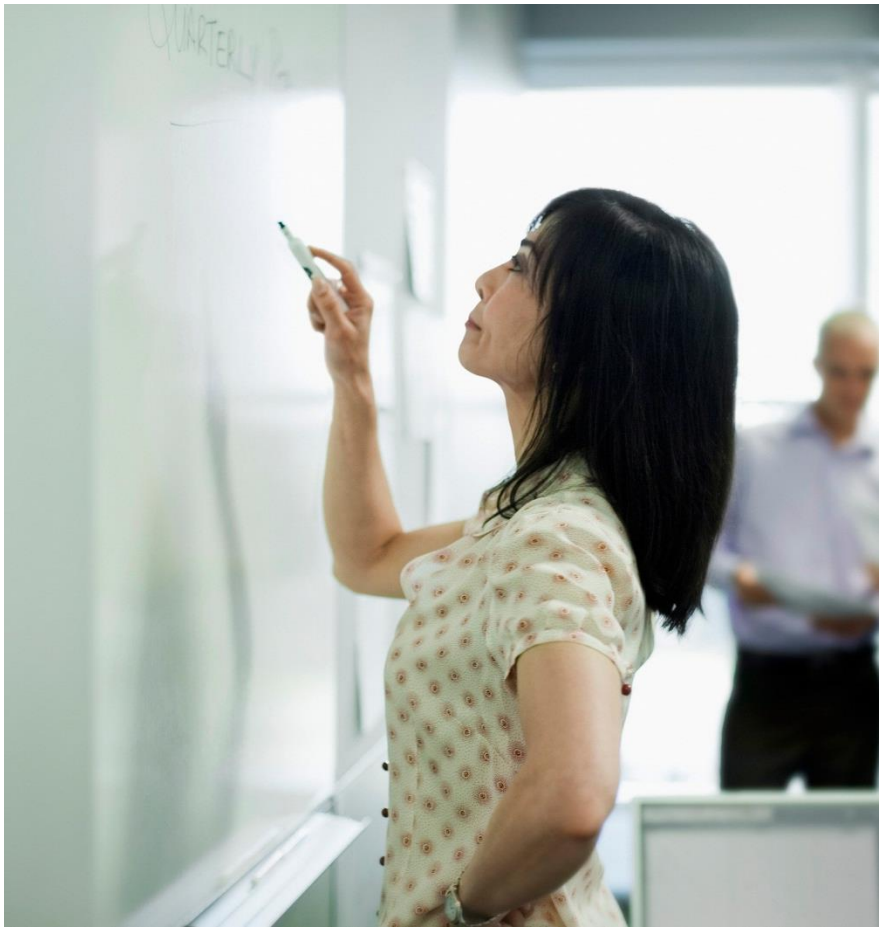
Week 2 Unit 2:
Existing Code: What About Performance?

Existing Code: What About Performance?
Outline

Content

- Performance Considerations & Guidelines
- Static Code Checks for Performance Optimization Potential



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Existing Code: What About Performance?

Migration to SAP HANA

1. Detect

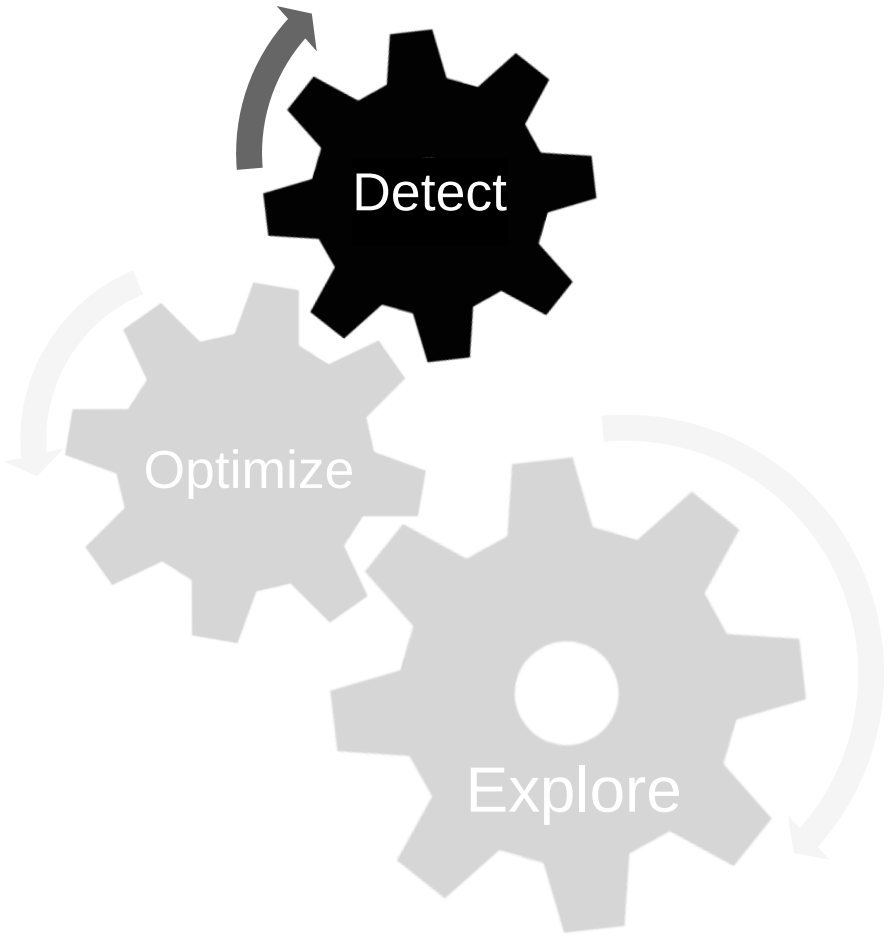
- Functional correctness
- **Performance optimization potential**

2. Optimize

- Database-oriented programming

3. Explore

- Use SAP HANA-specific features
- Rethink & innovate



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Existing Code: What About Performance?

Performance Considerations

Performance!

Does SAP HANA automatically improve performance of my ABAP coding?

Recommendations?

- Performance guidelines
- Tool-based performance analysis

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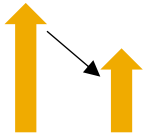
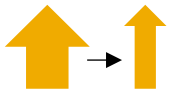
Classical Performance Guidelines and Additions



Keep result sets small



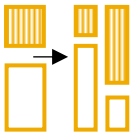
Minimize amount of transferred data

Minimize number of data transfers

Even more important; one specific aspect of **code-to-data** paradigm

Minimize search overhead

Less important; but still relevant **in some cases**



Keep unnecessary load away from DB

Don’t burden the DB with **unnecessary** operations

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Code Inspector Check Variant PERFORMANCE_DB

Additional Material

Checks ABAP code to determine where code can most likely be optimized, for example

SELECT statements

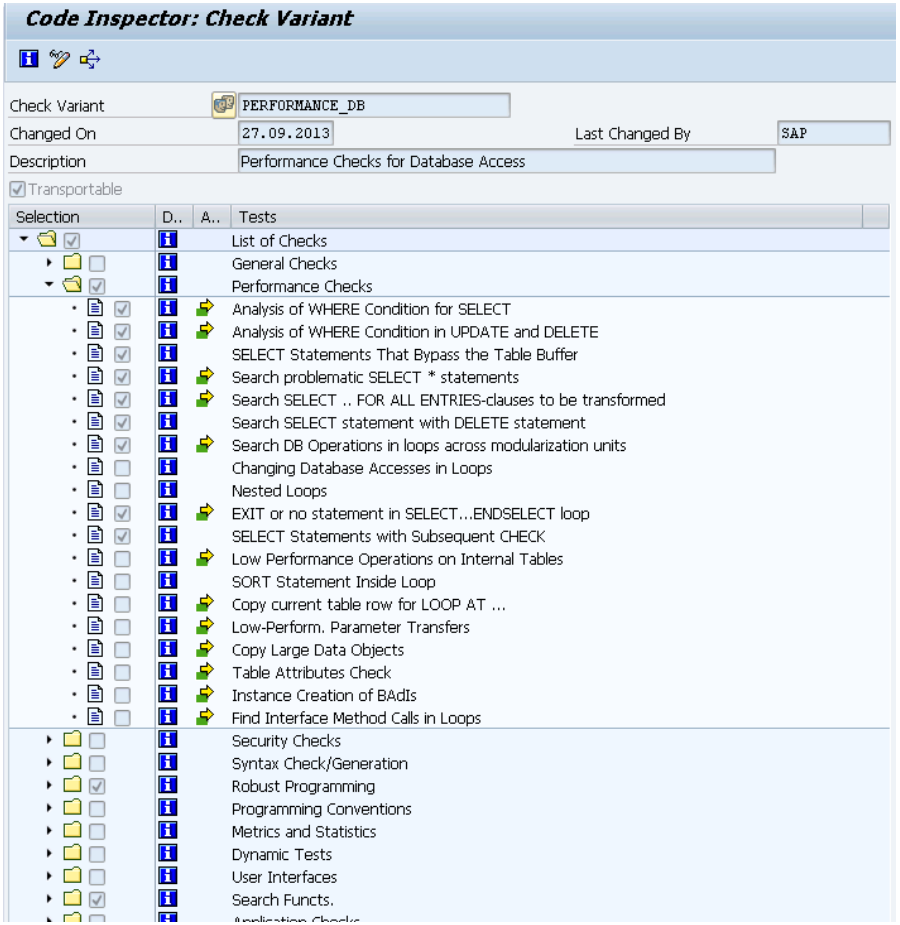
- Nested SELECT statements (across modularization units)
- EXIT in SELECT loop

Data transfer

- Problematic SELECT * statements
- Missing WHERE condition

Other performance aspects

- Statements that bypass the table buffer



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Static Code Analysis: Demo

Check for Optimization Potential

- Overview of the available performance checks
- Analysis example of ABAP coding with the ABAP Test Cockpit

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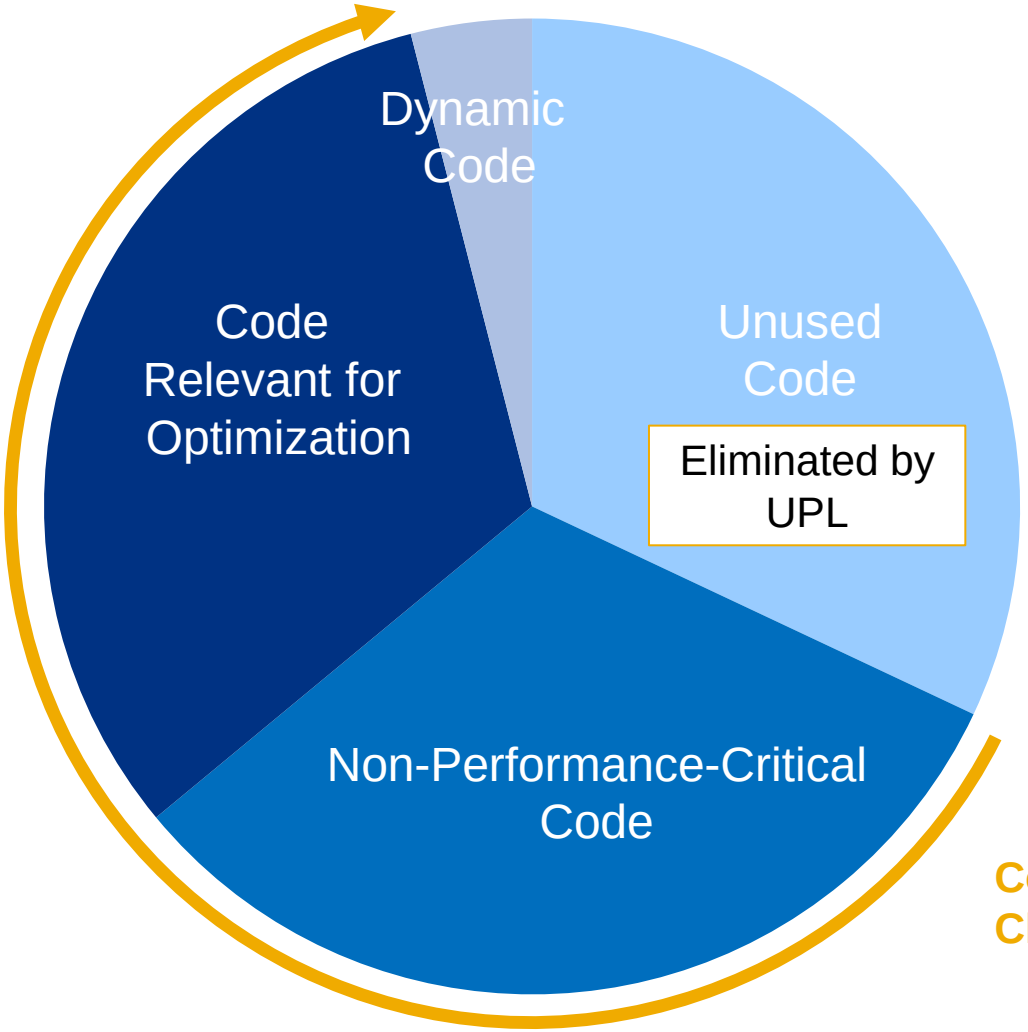
Static Performance Check Coverage



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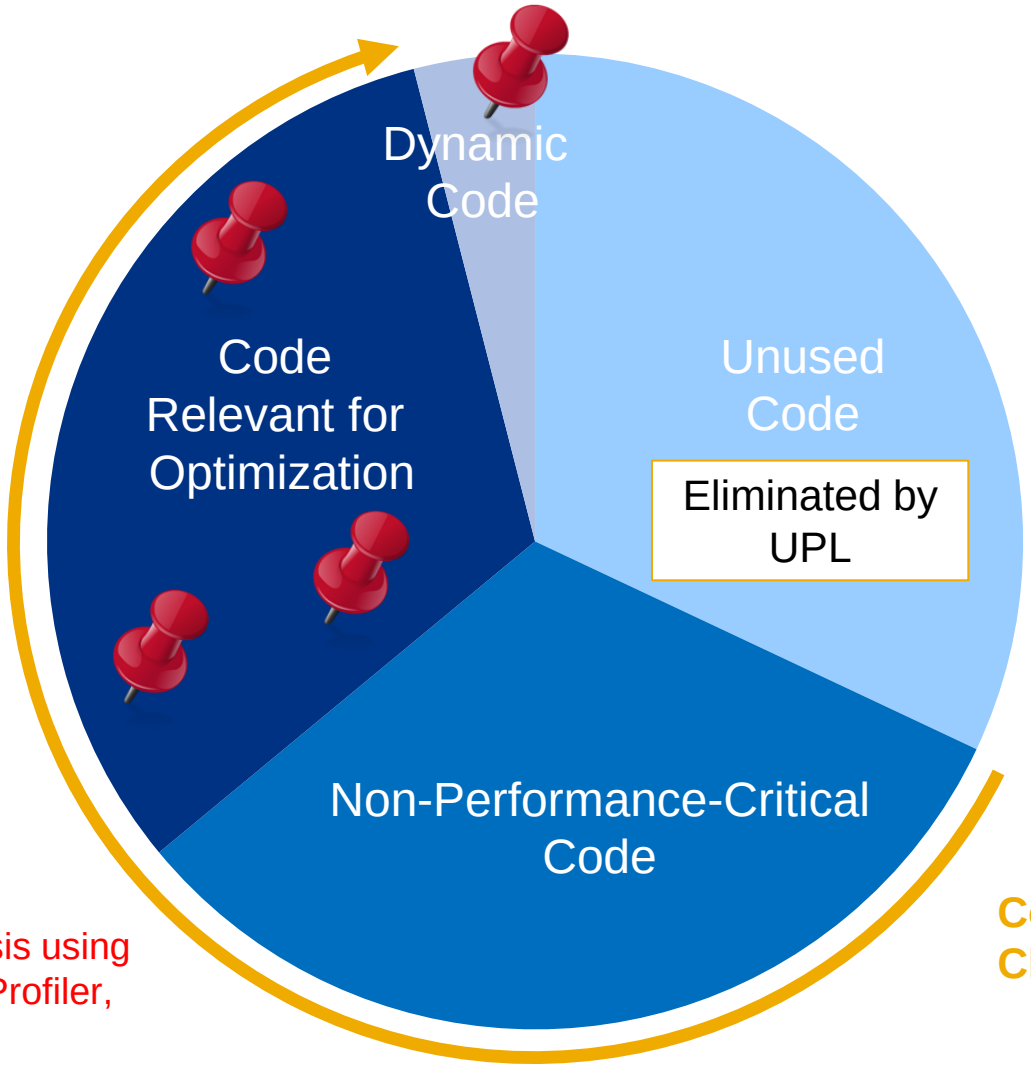
Static Performance Check Coverage



Runtime analysis using SAT or ABAP Profiler, for example

Covered by Static Checks

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What's Next?

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Thank you

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