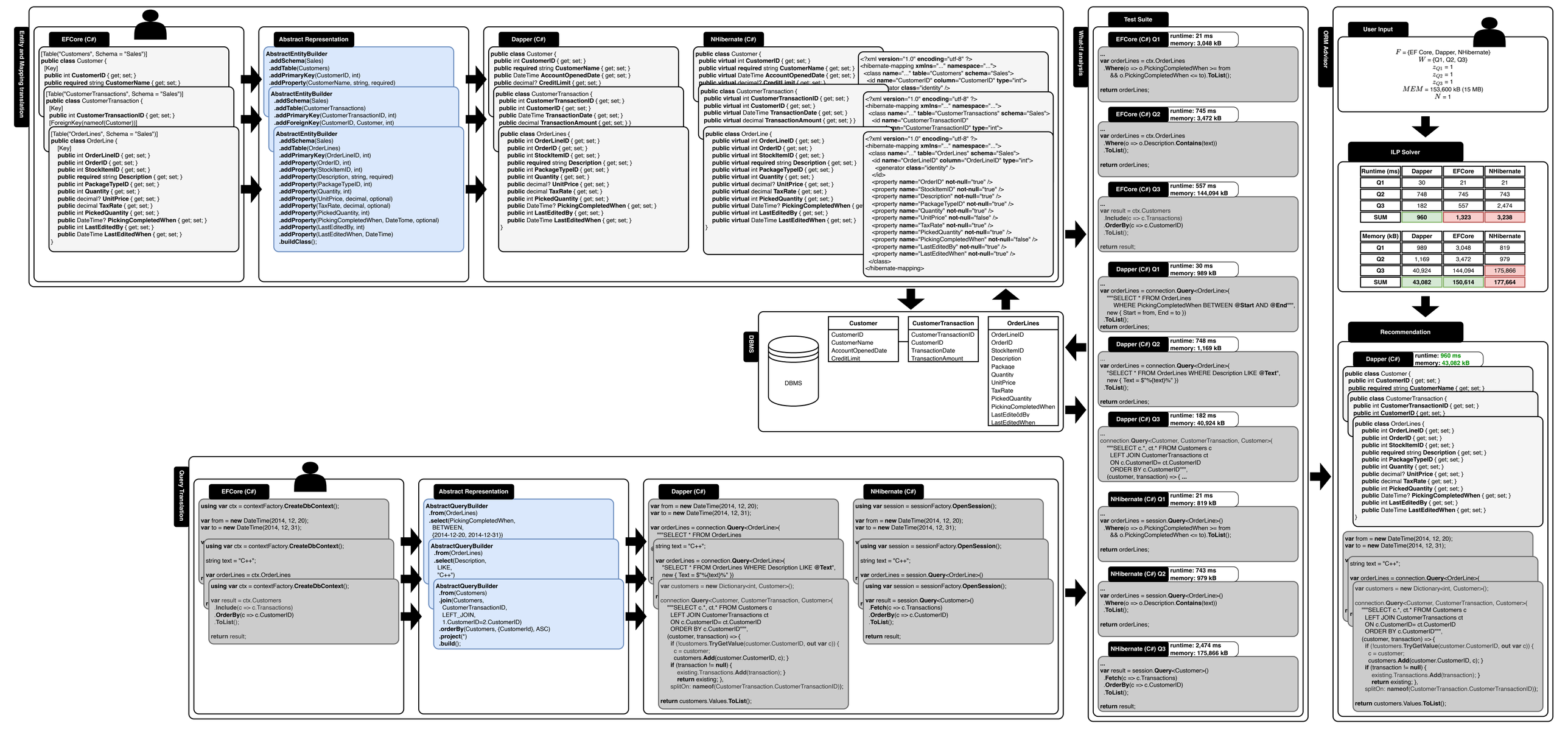
Entity and Mapping translation
EFCore (C#)
Abstract Representation
Dapper (C#)
NHibernate (C#)
DBMS
Customer
CustomerID
CustomerName
AccountOpenedDate
CreditLimit
CustomerTransaction
CustomerTransactionID
CustomerID
TransactionDate
TransactionAmount
OrderLines
OrderLineID
OrderID
StockItemID
Description
Package
Quantity
UnitPrice
TaxRate
PickedQuantity
PickingCompletedWhen
LastEditedBy
LastEditedWhen
What-if analysis
Test Suite
EFCore (C#) Q1
runtime: 21 ms
memory: 3,048 kB
EFCore (C#) Q2
runtime: 745 ms
memory: 3,472 kB
EFCore (C#) Q3
runtime: 557 ms
memory: 144,094 kB
Dapper (C#) Q1
runtime: 30 ms
memory: 989 kB
Dapper (C#) Q2
runtime: 748 ms
memory: 1,169 kB
Dapper (C#) Q3
runtime: 182 ms
memory: 40,924 kB
NHibernate (C#) Q1
runtime: 21 ms
memory: 819 kB
NHibernate (C#) Q2
runtime: 743 ms
memory: 979 kB
NHibernate (C#) Q3
runtime: 2,474 ms
memory: 175,866 kB
CRM Advisor
User Input
F = {EF Core, Dapper, NHibernate}
W = {Q1, Q2, Q3}
z_{Q1} = 1
z_{Q2} = 1
z_{Q3} = 1
MEM = 153,600 kB (15 MB)
N = 1
ILP Solver
Runtime (ms) | Dapper | EFCore | NHibernate
Q1 | 30 | 21 | 21
Q2 | 748 | 745 | 743
Q3 | 182 | 557 | 2,474
SUM | 960 | 1,323 | 3,238
Memory (kB) | Dapper | EFCore | NHibernate
Q1 | 989 | 3,048 | 819
Q2 | 1,169 | 3,472 | 979
Q3 | 40,924 | 144,094 | 175,866
SUM | 43,082 | 150,614 | 177,664
Recommendation
Dapper (C#)
runtime: 960 ms
memory: 43,082 kB
Query Translation
EFCore (C#)
Abstract Representation
Dapper (C#)
NHibernate (C#)