goto; conference aarhus

AN ALTERNATIVE ALT.NET

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factor10

About Jimmy Nilsson

Primarily a developer/architect

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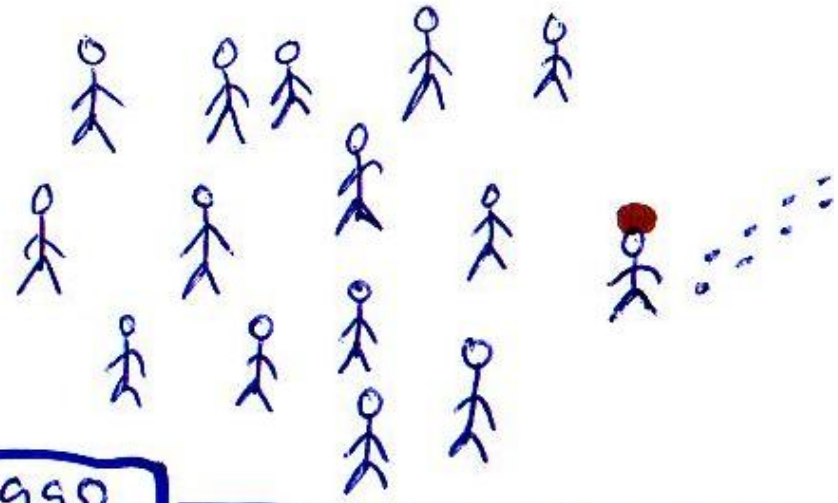
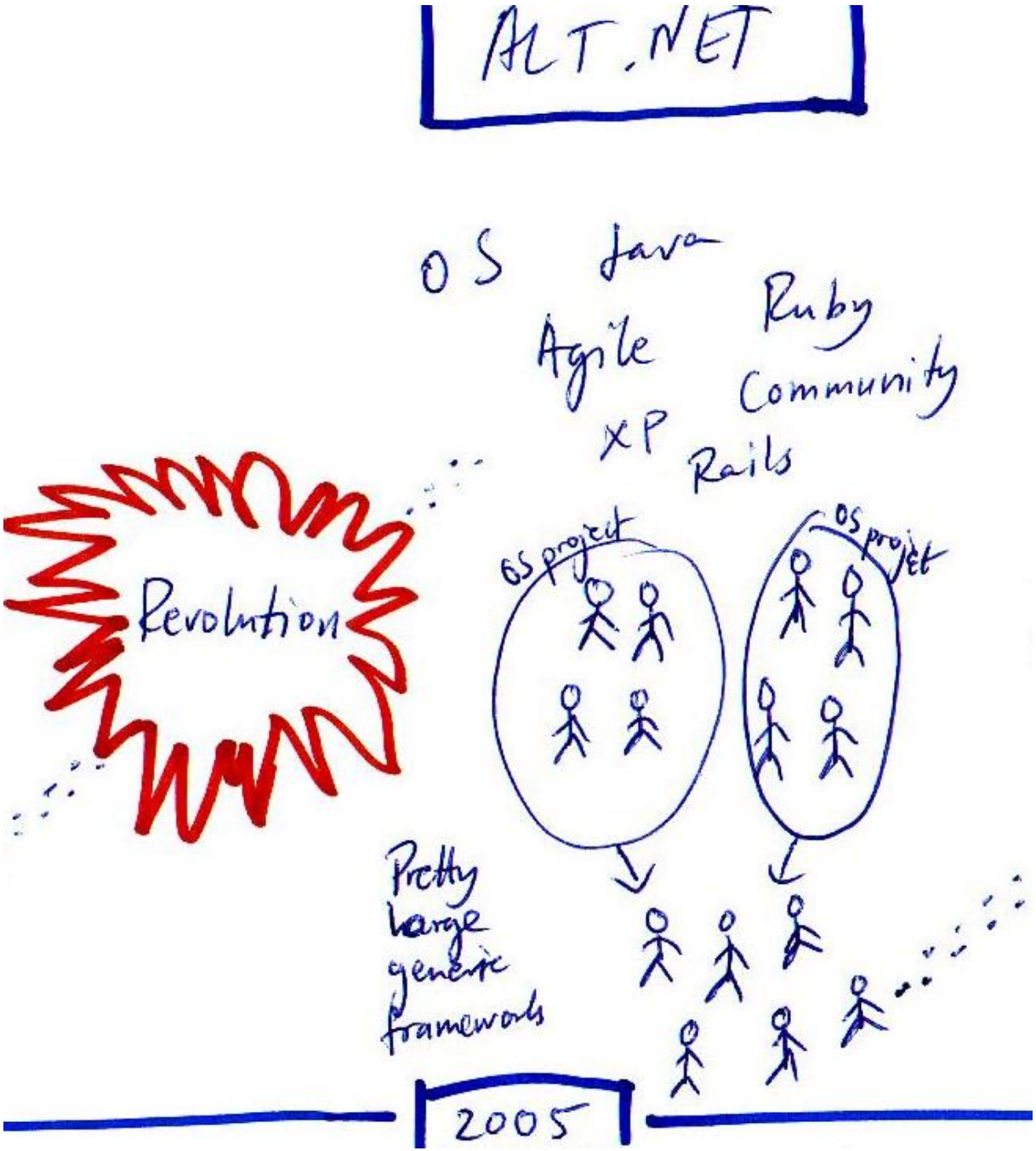
Author of ”*Applying Domain-Driven Design and Patterns*” and ”*.NET Enterprise Design*”

Co-founder and CEO of factor10

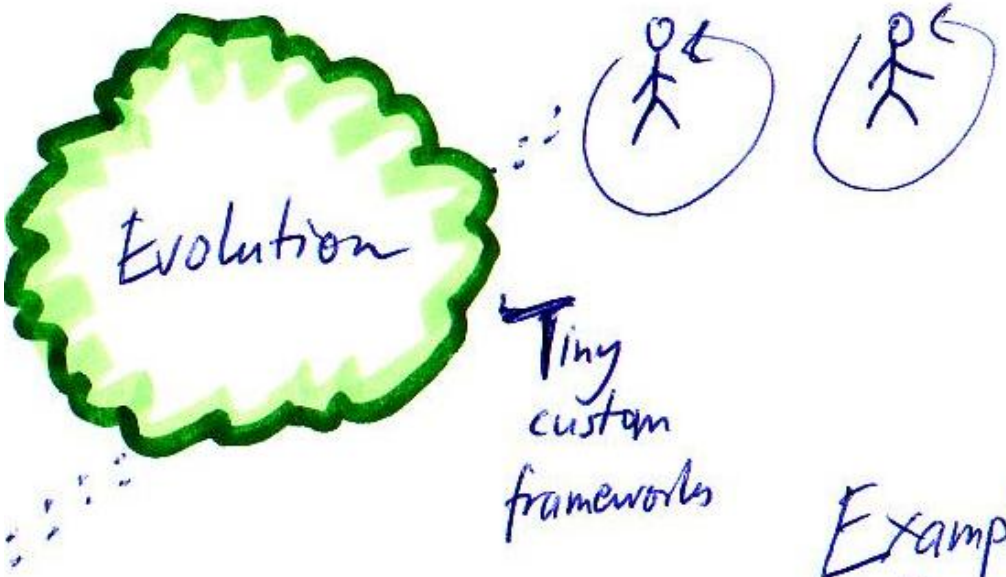
The MSDN way



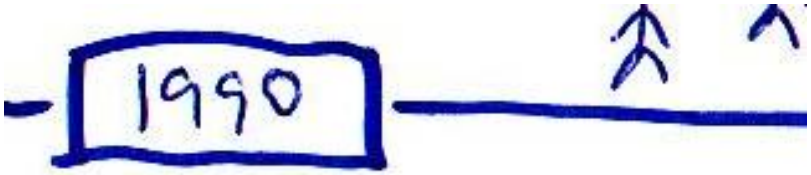
1990


ALT.NET
OS
Java
Agile
Ruby
Community
XP
Rails
Revolution
OS project
OS project
Pretty
large
generic
frameworks
2005

An alternative
ALT.NET



2010



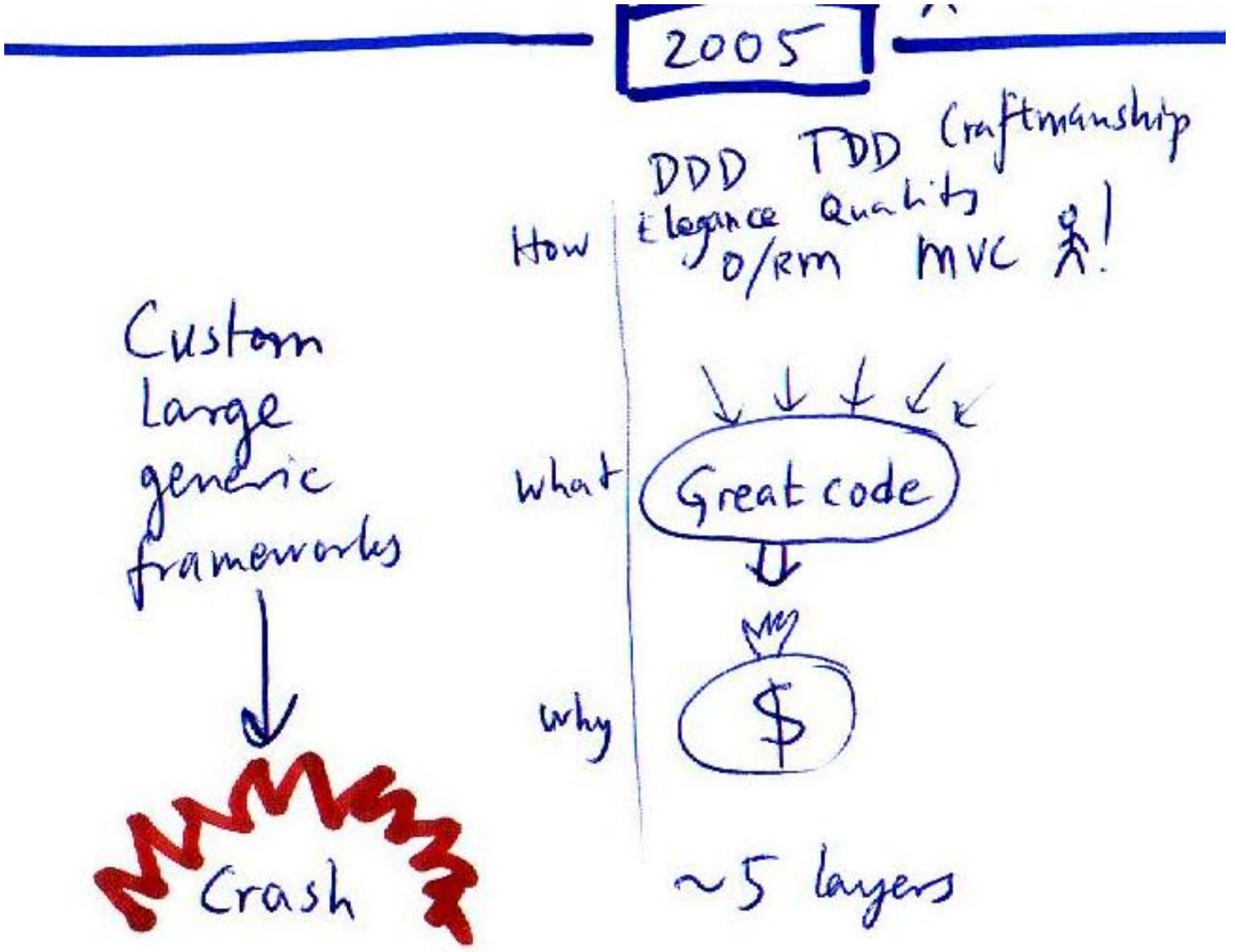
Wizards

Datasets

Drag till you drop

Webforms

~ 11 layers


2005
How
DDD TDD Craftmanship
Elegance Quality
O/RM MVC
What
Great code
Why
$
~5 layers
Custom
Large
generic
frameworks
Crash

2010

BDD

REST

Real DDD

DSL

NO. NET ==

Not Only

Tiny!

great code

3 layers

BDD helps with a red thread

- The step definitions points out which unit test to write now
- That unit test points out what real code to write now
- When done, check that BDD test is green too

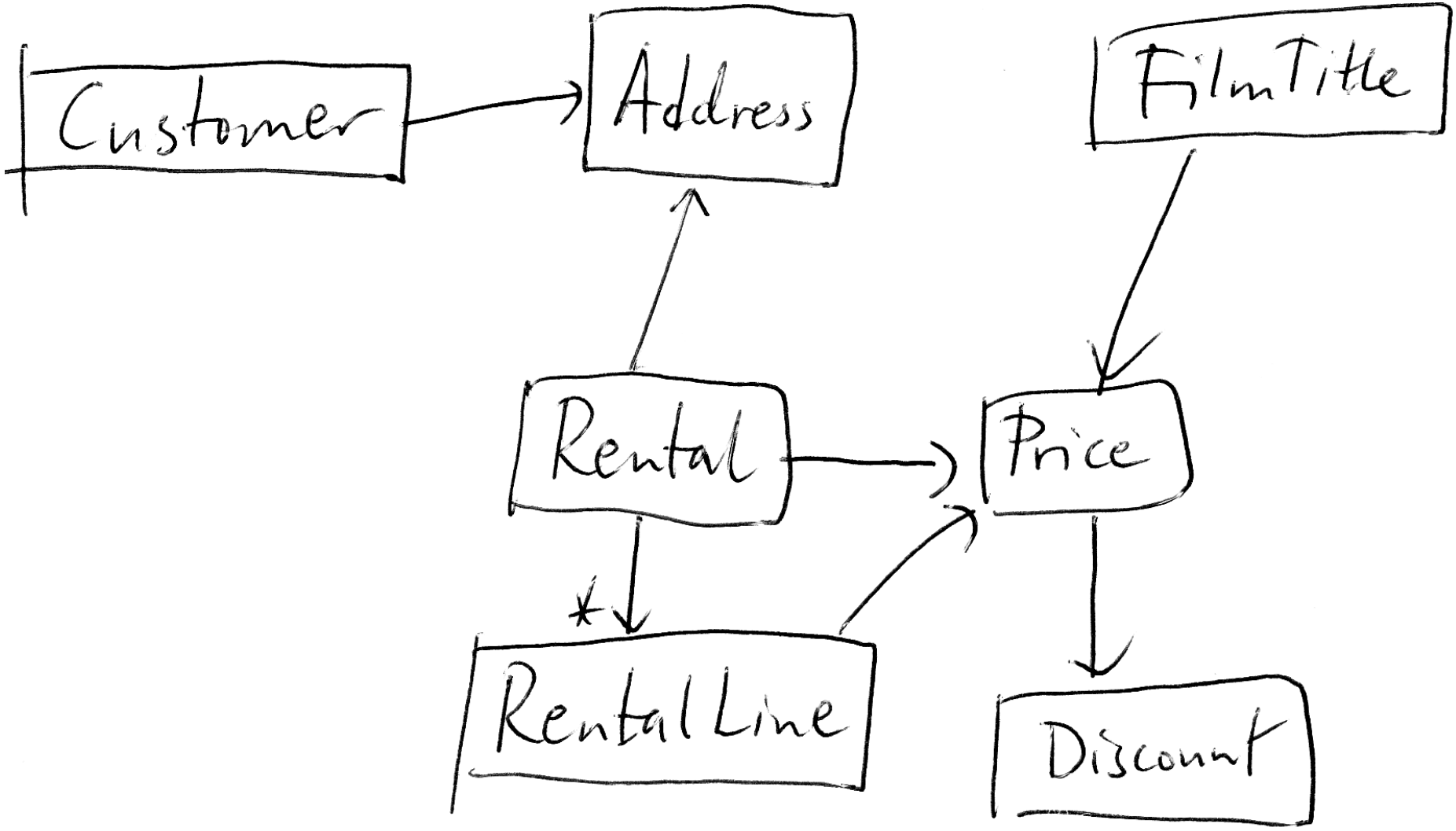
What is DDD?

Domain-Driven Design is an approach to the development of complex software in which we:

- Focus on the *core domain*
- Explore *models* in a creative collaboration of domain practitioners and software practitioners
- Speak a *ubiquitous language* within an explicitly *bounded context*

http://domainlanguage.com/ddd/patterns/DDD_Reference_2011-01-31.pdf

Value Objects

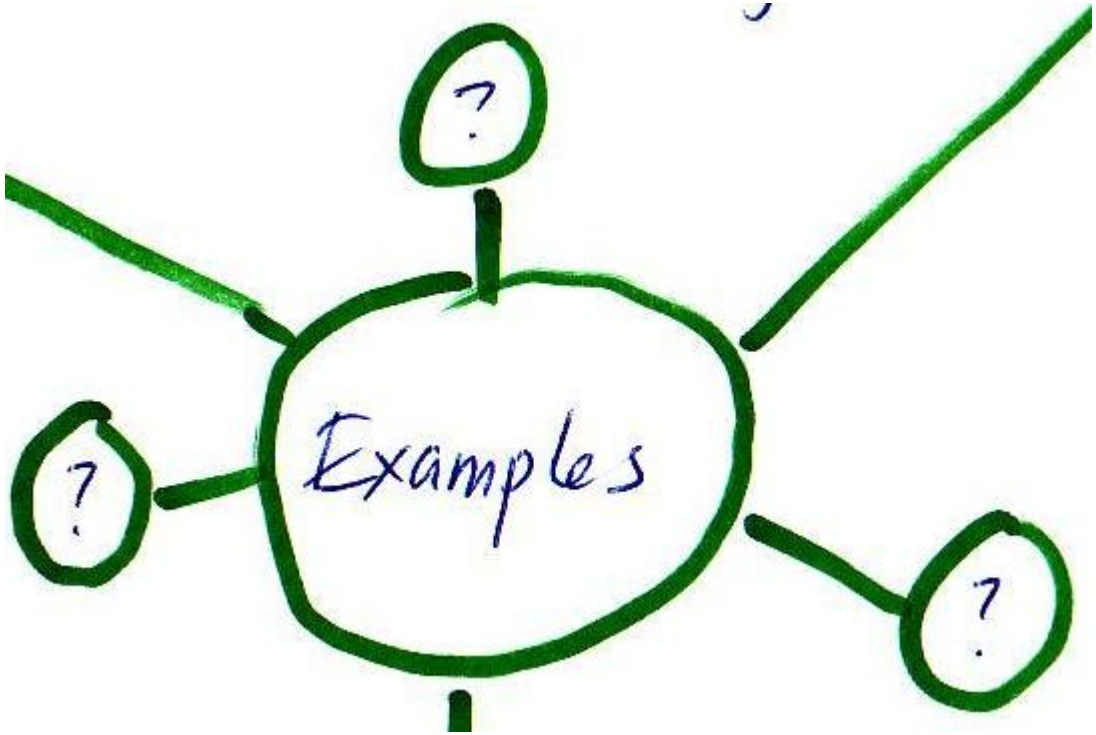


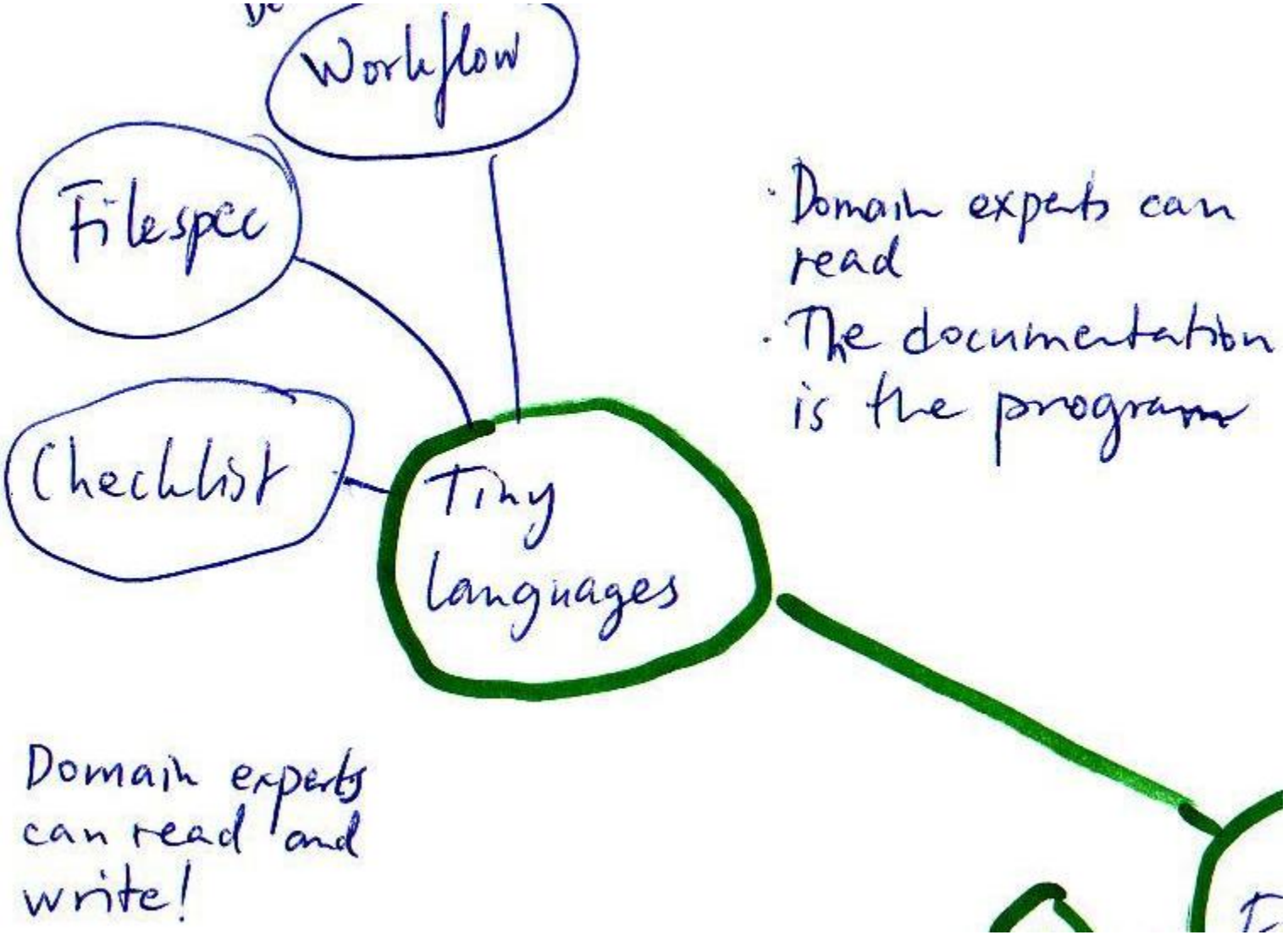
Like this?

```
var stinasÄgg = 7 * 12;

var pellesÄgg = 3 * 20;

var antaletIÄggkorgen = stinasÄgg + pellesÄgg;

Assert.AreEqual(144, antaletIÄggkorgen);
```

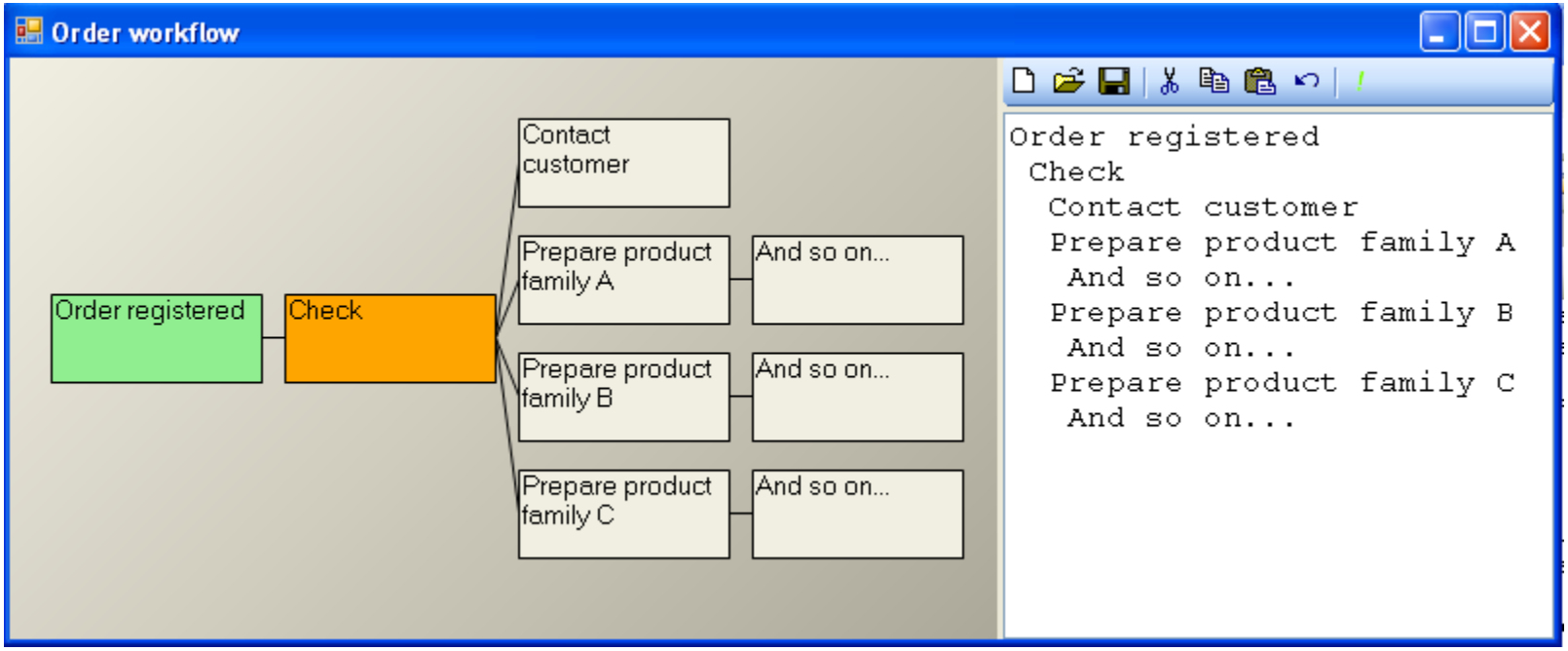
Or more like this?

```
var stinasÄgg = Antal.Dussin(7);

var pellesÄgg = Antal.Tjog(3);

var antaletIÄggkorgen = stinasÄgg + pellesÄgg;

Assert.AreEqual(144, antaletIÄggkorgen.IStyck);
```


?
?
Examples
?


Workflow
Filespec
Checklist
Tiny languages
· Domain experts can read
· The documentation is the program
Domain experts can read and write!

Workflow example



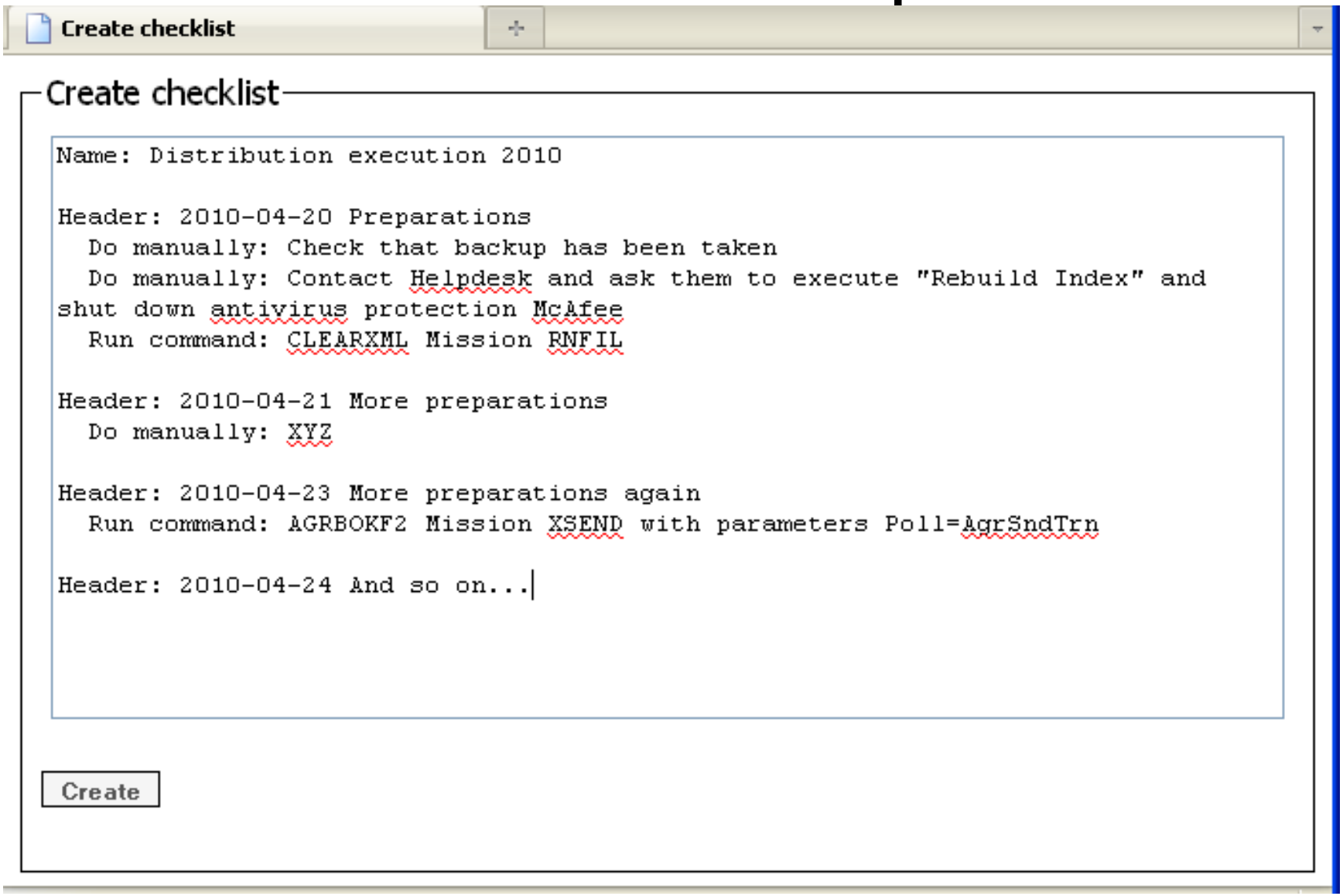
Filespec example

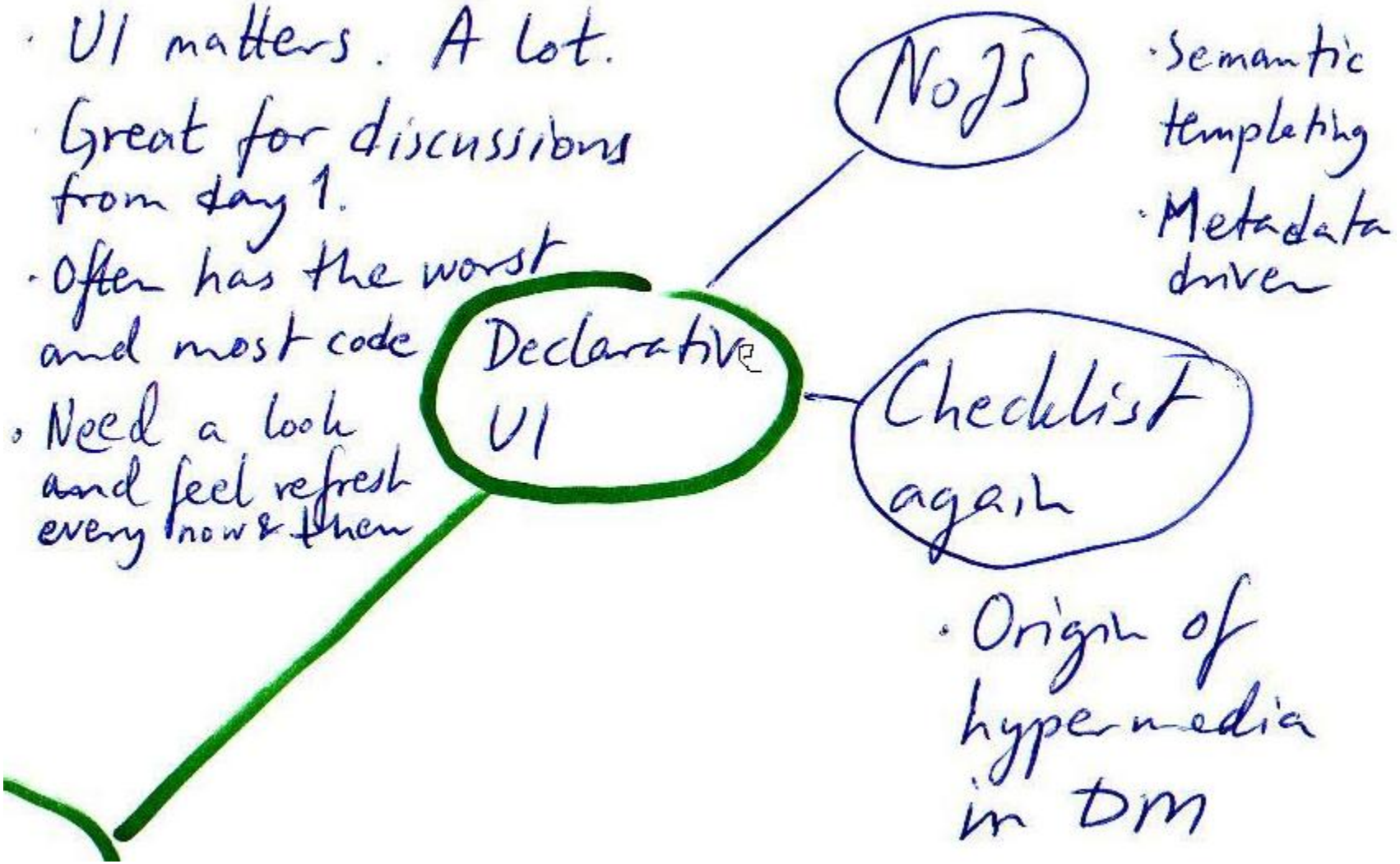
ABC.filespec - Notepad

File Edit Format View Help

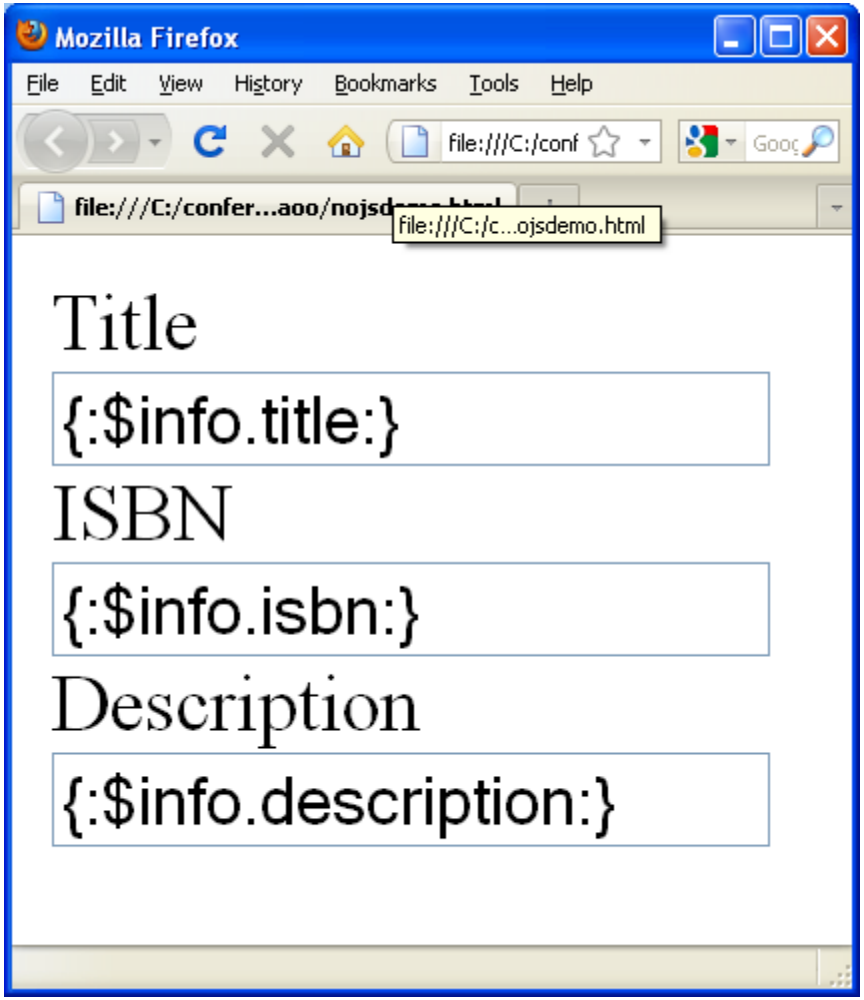
```
Filetype ABC
        Matches files that contain the text nd ABC
        The file uses tab as field separator and the first row should be skipped

Fields in the file:
        Administrator is text
        Department is text
        PlanId is text
        ExportDate is date of format yyyy-MM-dd with default 9999-12-31
        CustomerGroup is text
        SSNPOH is text
        Product is text
        Amount is decimal with typeconverter DecimalConverter
        < cut for demo... >
        CustomerNumber is text
        InsuranceCompany is text
        FirstName is text
        FamilyName is text
        < cut for demo... >

The identity of a row is decided by the fields SSNPOH, Product, PlanId

Mappings:
        FirstName is mapped to FirstName on Person
        FamilyName is mapped to FamilyName on Person
        SSNPOH is mapped if it has value to SSN on Person
        CustomerNumber is mapped if it has value to SSN on Person
        < cut for demo... >

        Administrator is mapped to FromAdministrator on Insurance
        Department is mapped to Department on Insurance
        PlanId is mapped to PlanId on Insurance
        ExportDate is mapped to ExportDate on Insurance
        CustomerGroup is mapped to CustomerGroup on Insurance
        SSNPOH is mapped to SSNPOH on Insurance
        SSNPOH is mapped if it has value to SSNinsured on Insurance
```

Checklist example

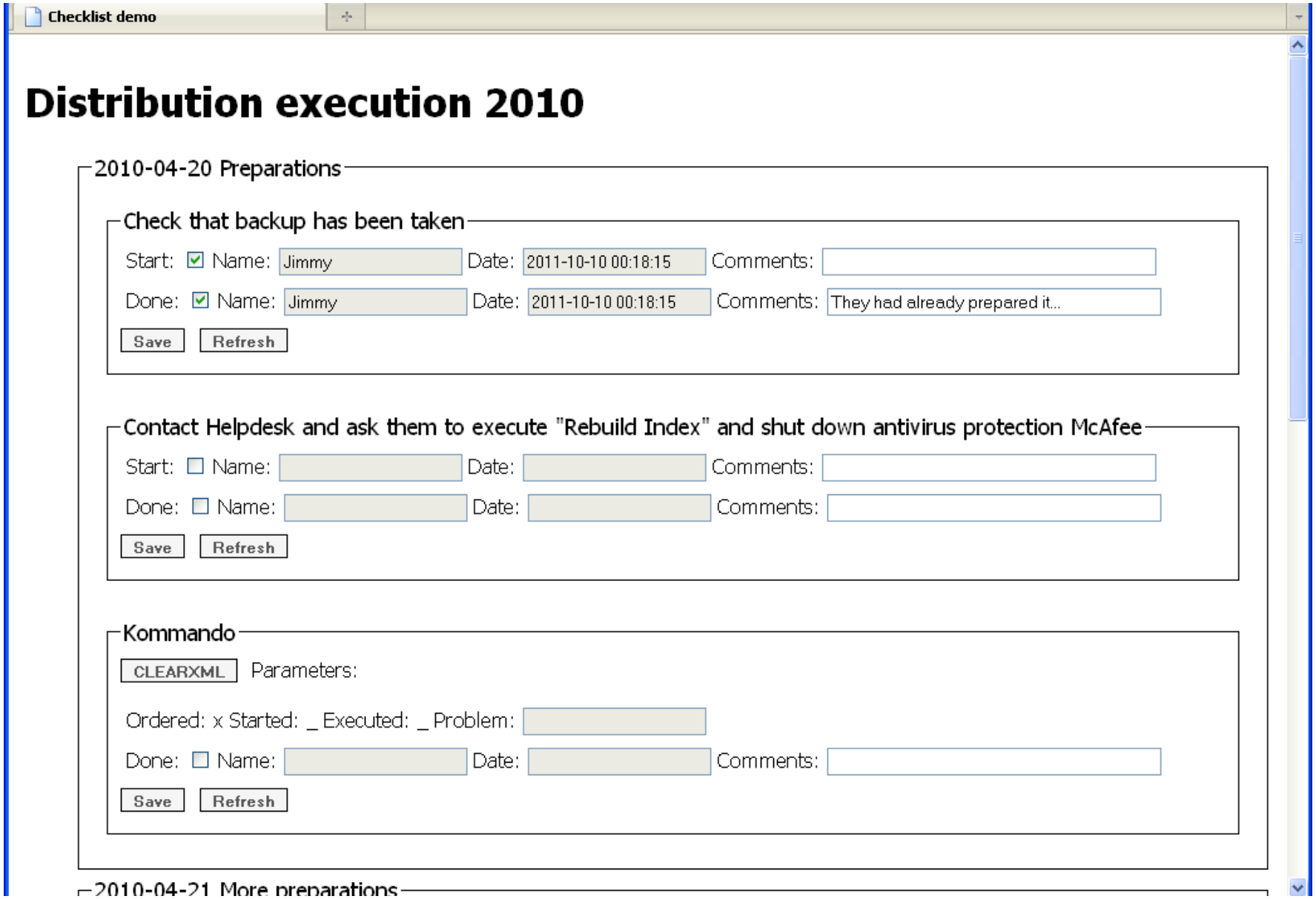



· UI matters. A lot.
· Great for discussions from day 1.
· Often has the worst and most code
· Need a look and feel refresh every now & then
Declarative UI
NoJS
· Semantic templating
· Metadata driven
Checklist again
· Origin of hypermedia in DM

NoJS example



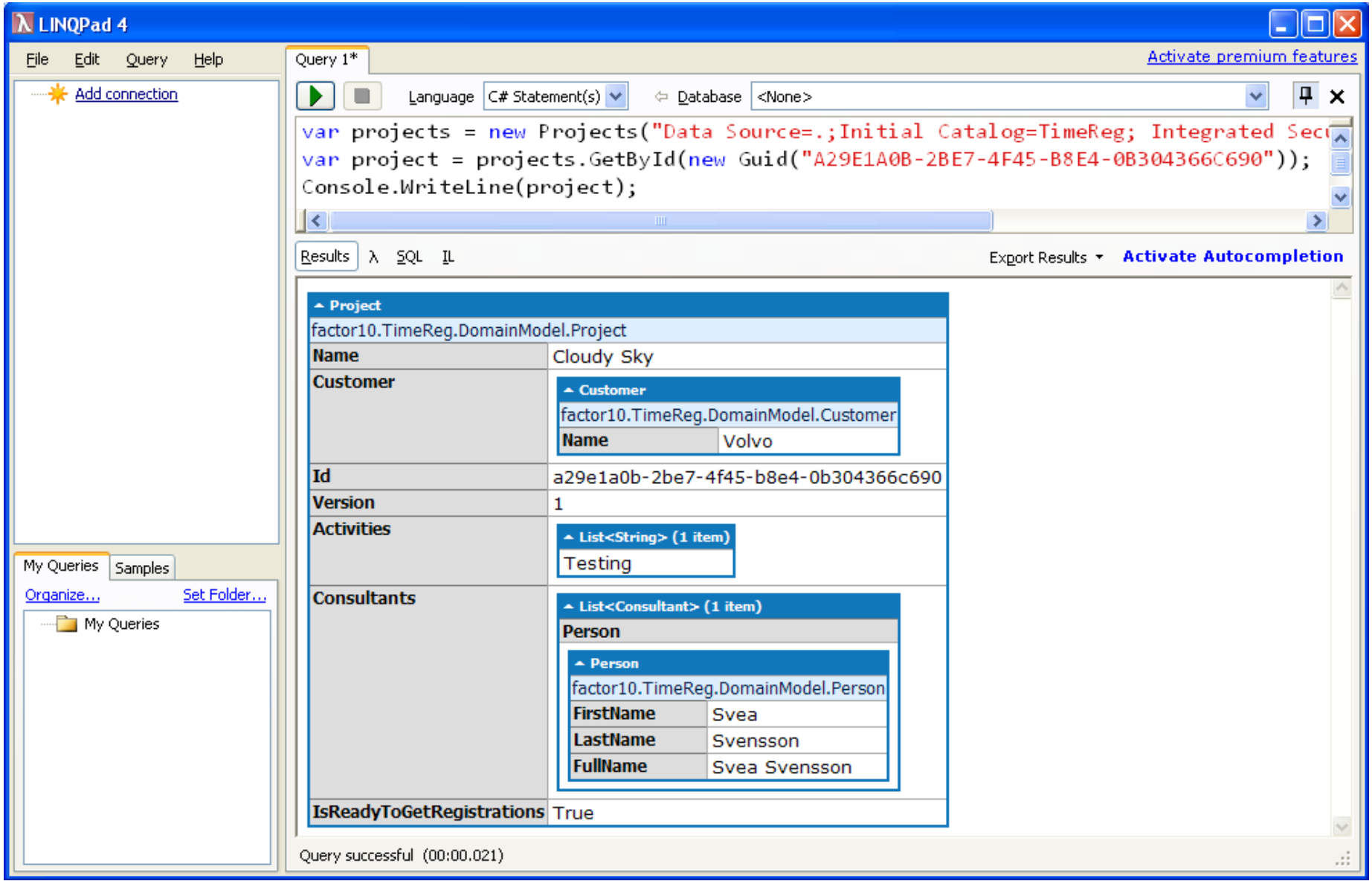
Checklist example again

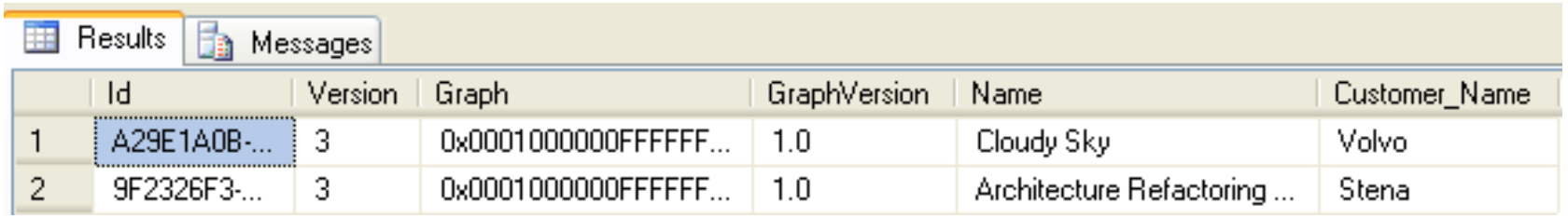


- Not all problems are relational... :-)
- But strangely, Oracle/SQL Server is almost mandatory

- Avoids "global db"
- Code disappears
- True aggregates
- Perf increases
- Operations says OK
- Good for big graphs
- Protobuf
- Listings are relational
- migrations

Custom storage example





Results | Messages

	Id	Version	Graph	GraphVersion	Name	Customer_Name
1	A29E1A0B-...	3	0x0001000000FFFFFF...	1.0	Cloudy Sky	Volvo
2	9F2326F3-...	3	0x0001000000FFFFFF...	1.0	Architecture Refactoring ...	Stena

```
public Project GetById(Guid id)
{
    return storageMetadata.GetById(id);
}


public IEnumerable<ProjectForListing> ThatHasCustomerWithName
    (string customerName)
{
    return storageMetadata.GetListByCriteria<ProjectForListing>
        ("Customer_Name", customerName);
}
```

```
projects.GetCreateScript();
```

Summary

ALT.NET was important

But the potential is way bigger

Let’s unleash it!