

Consensus Design and the Collaboration Method.

March 11, 2008

by

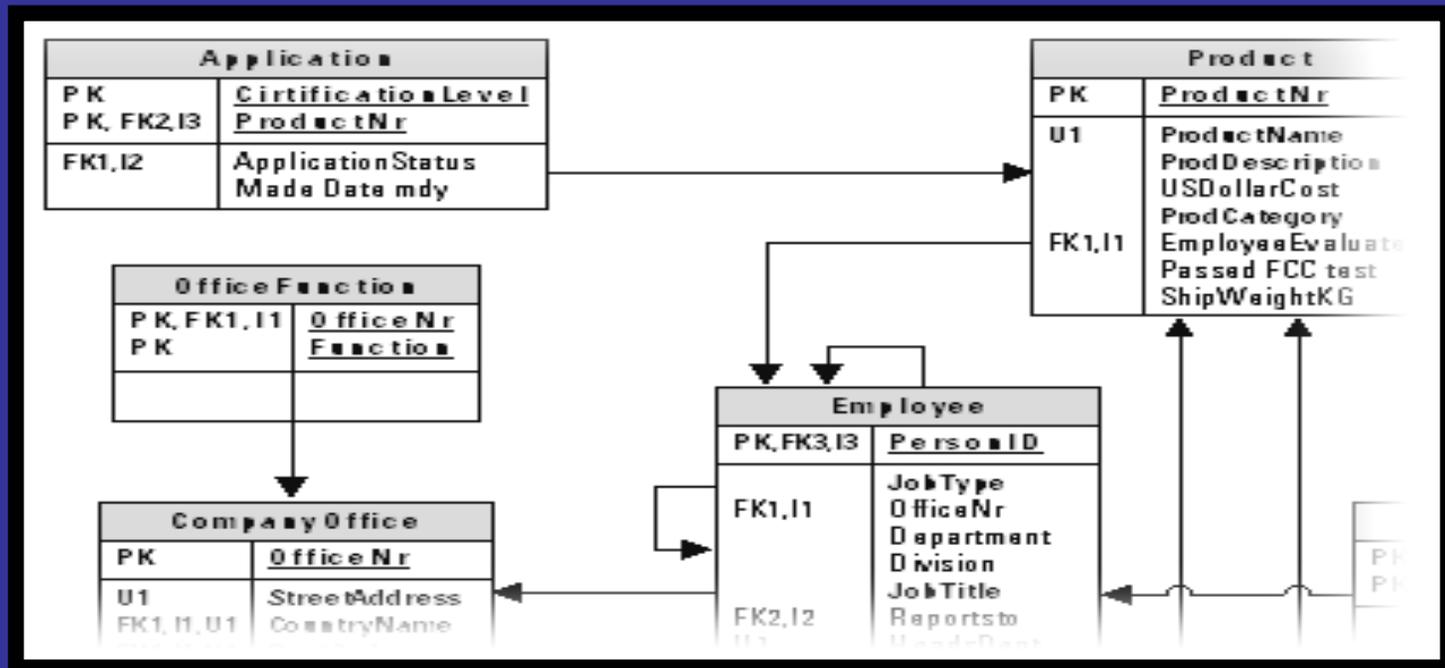
Joshua Feinstein-Plummer

Introduction

- Accessing data is a core aspect of any n-tier system.
- From a traditional development lifecycle point of view, there are three popular ways in which the application developers works with the emerging schema/database.
 1. The database tables/views have been fully implemented via the data architect and the DBA. Therefore, the developer must do his or her best to work with what has been put into place.
 2. The developer has carte-blanche to dictate the type of tables/views that will be built and/or accessed.
 3. Collaboration and consensus between the application developer(s), the DBA and the data architect.

Developer exclusion from design & analysis

- Full physical implementation already in place
- Developer must make do with what he/she is given



Developer exclusion from design & analysis

- Challenges/Risks of excluding the developer
 1. Risk of missed opportunity to build trust and confidence between co-workers/groups
 2. Missed opportunity of getting input from experienced developers.
 3. Possibility of application or O/R mapping inefficiencies.

Developer Carte-Blanche

- The most challenging scenario. Provides the most amount of potential for downside risk.
- Despite having the largest potential for downside risk, technical surveys show that there is often persistent push by engineers to implement based on this methodology.

Developer Carte-Blanche

To: The Data Architect

From : The Developers

Subject: New table needed for XYZ

We need new table to store ABC info for XYZ packages.

Structure should be something like this:

id number short

type char(3) : 'PKG', 'MOD', 'PRD'

name char(20)

brief char(80)

description char(1024)~

image char(80)

annualprice number(8.2)

quarterprice number(8.2)

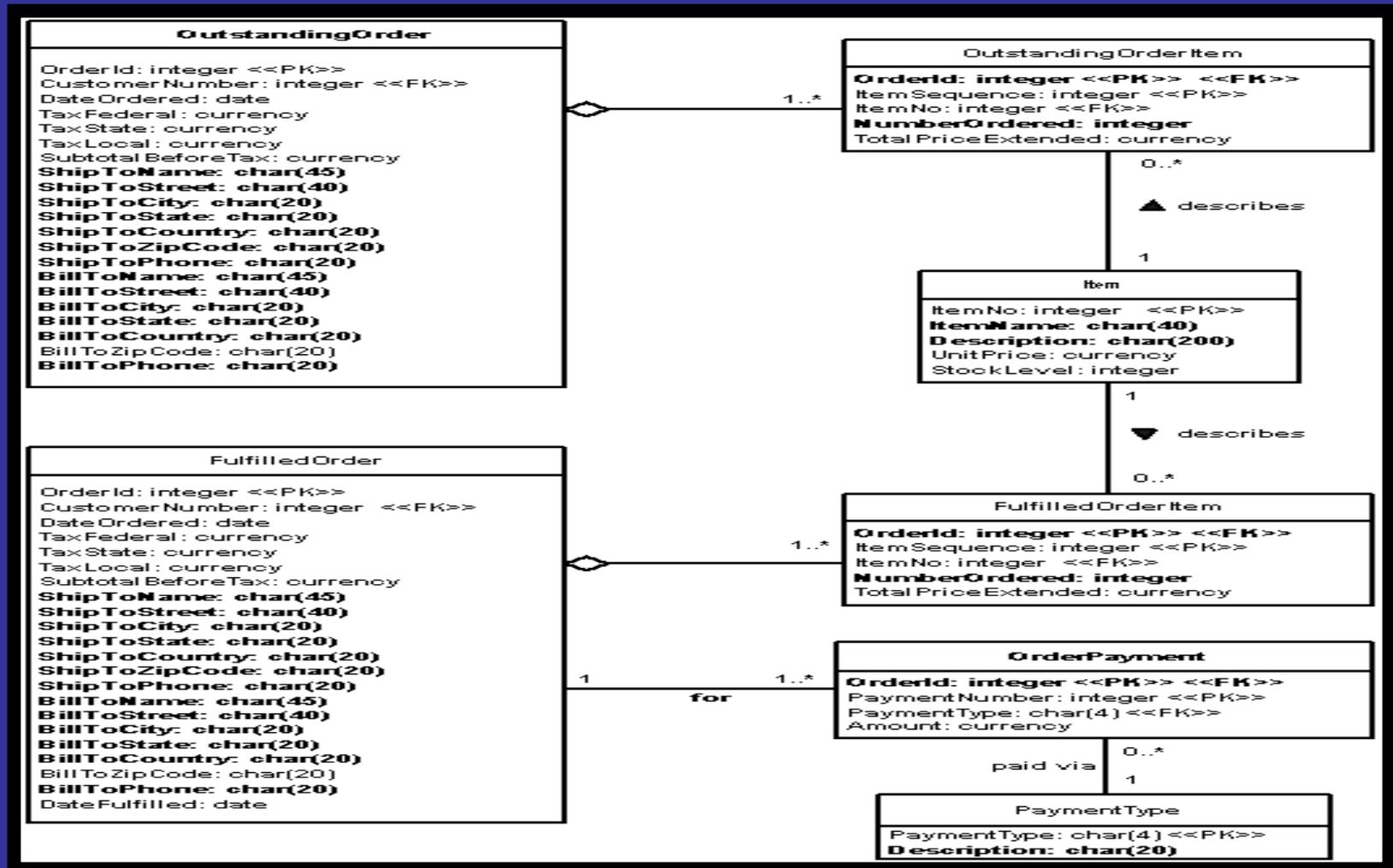
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What do you think ? Can I get it fairly quickly ?

Thanks,

Developer Carte-Blanche



Developer Carte-Blanche

- The database implementation often becomes merely an extension of the application being built.
- Implementation does not scale
- Data migration headaches
- Maintenance nightmare

Developer Carte-Blanche

- Developer Carte-Blanche is often assumed to be strictly associated with small to medium size projects.
- Large projects are not immune when the lead systems architect(s) and/or application architect(s) may have a disproportionately large influence on the data architecture.
- The resulting design and implementation in this case may suffer from issues highlighted in the previous slide.*

Collaboration Method

- Balances experience and strengths of all parties involved in the system development lifecycle process.
- Utilizes the concept of Managed Democracy.
- Can be understood in terms of development flow.

Collaboration Method

- From a data architect point of view, he/she has the need to fully understand business and functionality requirements.
- Data architect ideally will be able to conduct interviews with the business analysts, business owners and end users . Business analysts and data architect will do walk-throughs from a purely business requirements perspective.
- In addition to working with the business stakeholders, business analysts and high level systems architects, the DA also reaches out to the development team.

Collaboration Method

- Developer has the opportunity to explain technical functionality requirements and contribute to the design process
 - Developers, data architect walk through functionality requirements together.
 - Data architect listens to developers, team-members work together, offering suggestions and guidance through white-board sessions.

Collaboration Method

- A quick word on the development of the logical data model
- Depending on project size, timeline, resources, logical data model may be 'skipped'.
- Hopefully this will not be the case.

Collaboration Method Scenario I

- Data Architect interviews/consults with business analysts and/or business owners and end users to gather requirements.
- Data Architect, business analysts and/or system architect, and developers work together in creation of logical data model and physical data model.
- Data architect provides guidance to DBA (and developers) during physical implementation.

Collaboration Method Scenario II

- Data Architect interviews/consults with business analysts and/or business owners and end users to gather requirements.
- Data Architect works with business analysts and system architects in creation of logical model.
- Data Architect works with developers to create physical model from logical model.
- Data architect provides guidance to DBA (and developers) during physical implementation.

Before Using the Collaboration Method...

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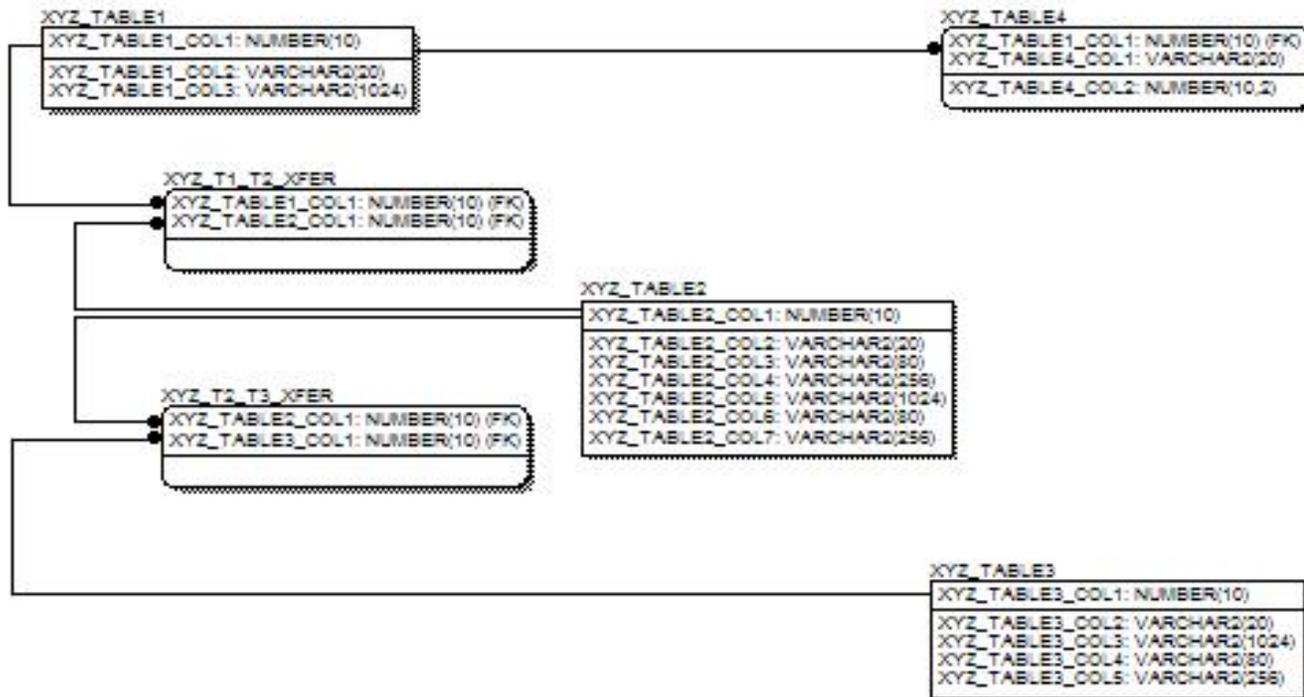
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Using the Collaboration Method...



Follow-up on Scenarios

- Discussion on naming conventions.
- Revisit Scenario I to gauge success of project & methodology.
- Revisit Scenario II to gauge success of project & methodology.
- Methodology and scenario effectiveness

Q&A Session