Improving Team Collaboration using Database Projects and Azure DevOps

Van Steenlandt Olivier

About me

BI Teamlead – X²O

Core member @ dataMinds







Oliviervs.be



olivier@oliviervs.be



@Oli_VSteenlandt

Schedule



Current Situation



Moving forward



How to get started?



What's next?



Summary

Current Situation

Environments



Development Production

Process



Tracking changes manually

Tools



SQL Server Management Studio Use cases from the field (1/4)

Moving Big Projects to Production



Use cases from the field (2/4)

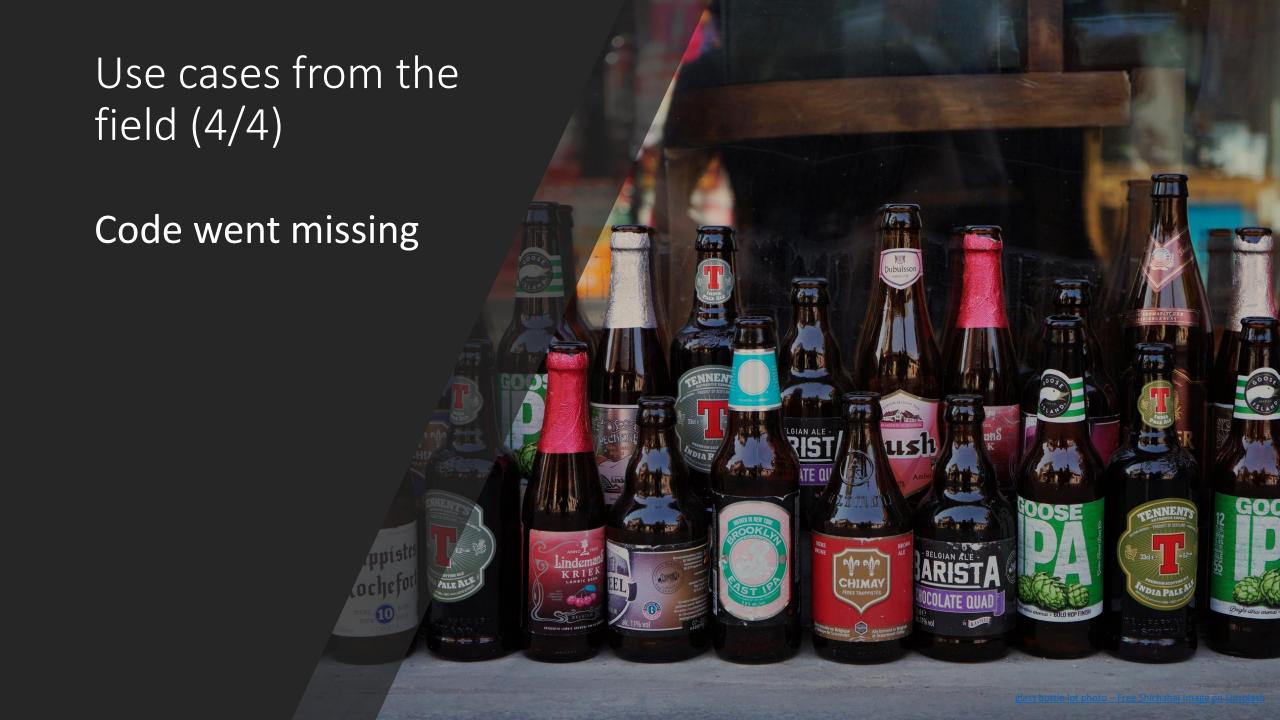
Priority changes



Use cases from the field (3/4)

Unwanted changes in Production





Summary - What goes wrong?

Human Mistake

Team Communication

Code management

New Situation

Environments



Development Acceptance Production Process



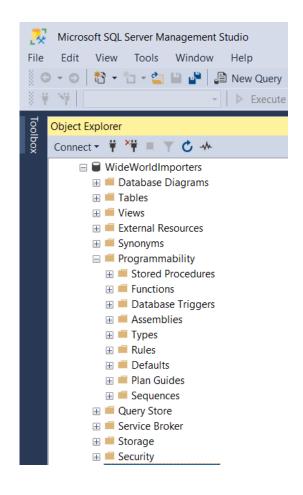
Automatic Change Tracking Tools

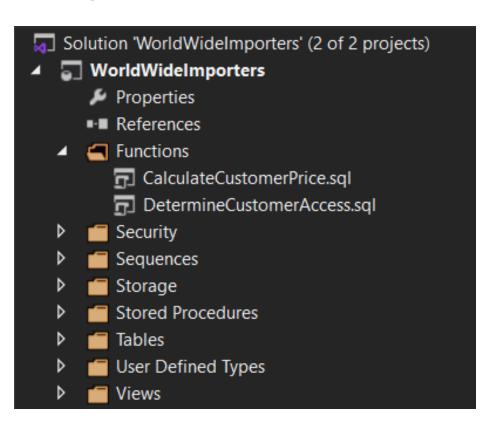


GIT
Azure DevOps
Visual Studio
(Azure Data Studio)
SSMS

Database Projects

Project Oriented Database Development





Database Projects

Database names in scripts

Indexes

Publishing Profiles

Azure DevOps

```
Repos
(Pipelines)
(Test Plans)
(Artifacts)
(Boards)
```

Repos - Git

Distributed Version Control System

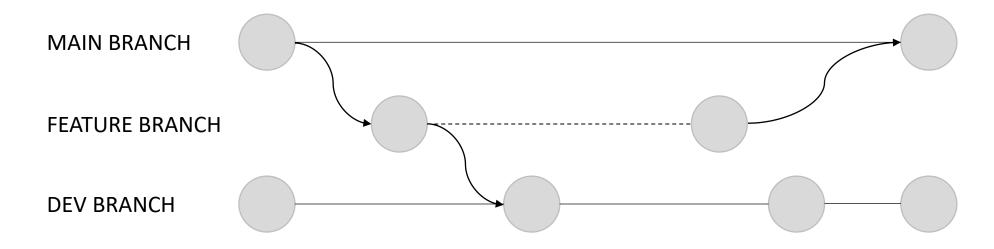
Branching

Most important Commands

- Pull
- Push
- Merge

Azure DevOps – Repos

>Branching / Feature



Source Control - Challenges

Merge Conflicts (.sqlproj file)

Pull → Merge

Branch Maintenance

People

Demo



Moving Forward

Database Project Setup 🍑

Branching **S**

Using Pull Requests **③**

Test Automation

Deployment Automation

Benefits & Challenges

Benefits

Easy to setup

Clear Changelog

Efficiency of Deploying

Pull Requests

Improving Development Quality

Challenges

Changing habits (way of working)

Questions?

BI Teamlead - X²O

Core member @ dataMinds

Feedback?

oliviervs.be/feedback

Slides?

Github.com/oliviervs/sessions



Oliviervs.be



olivier@oliviervs.be



@Oli_VSteenlandt