CA RESSEMBLERAIT À QUOI XP EN 2022 ?

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WHO AM I ?

TECHNICAL AGILE COACH, SOFTWARE CRAFTSMAN

I'M YOAN THIRION (FREELANCE)

- DESIGN SOFTWARE SINCE MORE THAN 12 YEARS
- FUNDAMENTAL TO SUCCEED IN THAT AREA : AGILITY AND TECHNICAL EXCELLENCE
- HELP TEAMS DELIVER WELL CRAFTED SOFTWARE
- IMPLEMENTATION OF AGILE AND TECHNICAL PRACTICES (EXTREME PROGRAMMING, REFACTORING, DDD, MOB PROGRAMMING, ...)

MY SERVICES

TECHNICAL AGILE COACHING

COMMUNITIES OF PRACTICE

CULTURAL CHANGE

DEVOPS

BROWN BAGS

SERIOUS GAMES

LET'S CONNECT

FOLLOW ON

HTTPS://WWW.YOAN-THIRION.COM/

ACCELERATE

- Effective development matters for organizational success
- You can measure development organizations effectiveness objectively
- Particular behaviors and technical practice drive better metrics

Type	Metric	Elite	Low
THROUGHPUT	Deployment Frequency	Multiple per day	1 - 6 months
	Lead Time for Changes	Less than 1 day	1 - 6 months
STABILITY	Mean Time to Restore	Less than 1 hour	1 - 4 weeks
	Change Failure Rate	0 - 15 %	46 - 60 %

ACCELERATE

Capabilities

Continuous Delivery (8)
Architecture (2)
Product & Process (4)
Lean Management & Monitoring (5)
Cultural (5)

Metrics

Success

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QUEL EST LE RAPPORT AVEC XP ?

EXTREME PROGRAMMING

PRATIQUES ASSOCIÉES

5 VALEURS

COMMUNICATION
COURAGE
FEEDBACK
RESPECT
SIMPLICITÉ

BOUCLES DE FEEDBACK

MÉTHODE AGILE NÉE EN 95 / 96
KENT BECK MAJORITAIREMENT

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XP : 1 SOURCE D'INSPIRATION

HTTPS://WWW.LINKEDIN.COM/POSTS/MAUROSTRIONE_SCRUM-AGILE-DEVOPS-ACTIVITY-6650103984235298819-ZB5A

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XP ET ACCELERATE

Continuous Delivery	Continuous Delivery	Continuous Delivery	Continuous Delivery	Continuous Delivery	Continuous Delivery	Continuous Delivery	Continuous Delivery
Version control	Deployment automation	Continuous integration	Trunk-based development	Test automation	Test data management	Shift left on security	Continuous delivery
Product & Process	Product & Process	Product & Process	Product & Process	Lean Management & Monitoring	Lean Management & Monitoring	Lean Management & Monitoring	Lean Management & Monitoring
Customer feedback	Value stream visibility	Working in small batches	Team experimentation	Change approval process	Monitoring	Proactive notification	WIP limits
Lean Management & Monitoring	Architecture	Architecture	Cultural	Cultural	Cultural	Cultural	Cultural
Visualizing work	Loosely coupled architecture	Empowered teams	Westrum organizational culture	Supporting learning	Collaboration among teams	Job satisfaction	Transformational leadership

Source : https://www.slideshare.net/OCTOTechnology/accelerate-la-vitesse-conditionne-lexcellence

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XP ET ACCELERATE

Coding Standard
Refactoring
Continuous Integration
Test Driven Development
Pair Programming

Customer Tests
Planning game
Small Releases
Metaphor

Simple Design

Whole team
Collective ownership
Sustainable pace

Source : https://www.slideshare.net/OCTOTechnology/accelerate-la-vitesse-conditionne-lexcellence

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QU'EST CE QU'ON Y AJOUTERAIT EN 2022 ?

SÛREMENT QUELQUES PRATIQUES TECHNIQUES

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MOB PROGRAMMING

- renforcer le collective ownership / s'aligner
- diffuser la connaissance
- apprendre ensemble

Mob Programming

All the brilliant minds working on

the same thing...
at the same time...
in the same space...
on the same computer...

Just like a real mob.

Continuous Delivery	Architecture	Cultural	Cultural	Cultural
Continuous delivery	Empowered teams	Westrum organizational culture	Supporting learning	Collaboration among teams

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APPROVAL TESTING

Continuous Delivery

Test automation

- Aussi appelé : Snapshot Tests ou Golden Master
- outputs qui ont besoin d'une approbation humaine permettant de dire si la fonctionnalité est implémentée comme attendue

```
@Test
public void updateQuality() {
    CombinationApprovals.verifyAllCombinations(
            this::callUpdateQuality,
            new String[]{"a common item",
                    "Aged Brie",
                    "Backstage passes to a TAFKAL80ETC concert",
                    "Sulfuras, Hand of Ragnaros"},
            new Integer[]{-1, 0, 11},
            new Integer[]{0, 1, 49, 50}
    );
}
```

MOINS D'ASSERTIONS / MOINS DE TESTS
MUST HAVE POUR TRAVAILLER SUR DU CODE LEGACY
UN ATOUT POUR DU TDD

https://yoan-thirion.gitbook.io/knowledge-base/software-craftsmanship/code-katas/gilded-rose-approval-testing

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PROPERTY-BASED TESTING

- identifier et tester des invariants / propriétés
- quelque chose qui sera toujours vrai, quelles que soient les données que vous fournissez à votre c[illegible]e

EXAMPLE-BASED

```
@Test
public void when_I_add_2_to_2_I_expect_4() {
    Assert.assertEquals(expected: 4, Calculator.add(x: 2, y: 2));
}
```

```
Given (x, y, ...)
When I [call the subject under test] with (x, y, ...)
Then I expect this (output)
```

PROPERTY-BASED

```
for all (x, y, ...)
such that property (x, y, ...)
is satisfied
```

```
@Property
public void associative(int randomX) {
    int result1 = Calculator.add(randomX, 1);
    result1 = Calculator.add(result1, 1);
    int result2 = Calculator.add(randomX, 2);

    Assert.assertEquals(result1, result2);
}
```

https://yoan-thirion.gitbook.io/knowledge-base/software-craftsmanship/code-katas/improve-your-software-quality-with-property-based-testing/a-journey-to-property-based-testing

MIKADO

- décomposer les tâches de refactoring en plus petites
- le code ne se trouve pratiquement JAMAIS DANS un état instable.

https://yoan-thirion.gitbook.io/knowledge-base/software-craftsmanship/code-katas/mikado-method
https://yoan-thirion.gitbook.io/knowledge-base/software-craftsmanship/code-katas/refactoring-journey-kata

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CODE ANALYSIS

Continuous Delivery | Architecture
Continuous delivery | Empowered teams

Static + Comportemental

NE PAS ATTENDRE LA FIN POUR EN UTILISER
COMMENCER DÈS LES PREMIÈRES MINUTES

sonarqube sonarcloud

Quality: code health

Relevance: development hotspots

Checkmarx

CodeScene™
Powered by Empear

Hotspot analysis
Code coupling
Knowledge diffusion
System Health

HTTPS://YOAN-THIRION.GITBOOK.IO/KNOWLEDGE-BASE/SOFTWARE-CRAFTSMANSHIP/SOFTWARE-DESIGN-X-RAYS/WORKSHOP

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DOMAIN DRIVEN DESIGN

- Une approche de développement
- Des patterns stratégiques / tactiques

https://yoan-thirion.gitbook.io/knowledge-base/software-architecture/ddd-re-distilled

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MUTATION TESTING

Une technique permettant de jauger de la qualité de nos tests

- GENERATE MUTANTS
- LAUNCH TESTS
- CHECK RESULT / GENERATE REPORT

Math Mutator (MATH)

Active by default

The math mutator replaces binary arithmetic operations for either integer or floating-point arithmetic with another operation. The replacements will be selected according to the table below.

Original conditional	Mutated conditional
+	-
-	+
*	/
/	*
%	*
&	|
|	&
^	&
<<	>>
>>	<<
>>>	<<

GildedRose.java

Mutations

```
12  1. changed conditional boundary + KILLED
    2. negated conditional + KILLED
13  1. negated conditional + KILLED
14  1. negated conditional + KILLED
15  1. changed conditional boundary + KILLED
    2. negated conditional + KILLED
16  1. negated conditional + KILLED
17  1. Replaced integer subtraction with addition + KILLED
21  1. changed conditional boundary + KILLED
    2. negated conditional + KILLED
22  1. Replaced integer addition with subtraction + KILLED
24  1. negated conditional + KILLED
25  1. changed conditional boundary + SURVIVED
    2. negated conditional + KILLED
26  1. on
    2. ne  1
27  1. Re  Location : updateQuality
31  1. on  Killed by :
    2. ne  com.bil.mutation.testing.gildedrose.GildedRoseTest.Backstage_passes_quality_increase
    1. on  es_by_2_when_there_are_10_days_or_less(com.bil.mutation.testing.gildedrose.GildedRo
    2. ne  seTest)
32  1. Re
33  1. negated conditional + KILLED
40  1. Replaced integer subtraction with addition + KILLED
41  1. changed conditional boundary + SURVIVED
44  2. negated conditional + KILLED
45  1. negated conditional + KILLED
46  1. negated conditional + KILLED
47  1. changed conditional boundary + SURVIVED
    2. negated conditional + KILLED
48  1. negated conditional + KILLED
49  1. Replaced integer subtraction with addition + KILLED
53  1. Replaced integer subtraction with addition + KILLED
56  1. changed conditional boundary + NO_COVERAGE
    2. negated conditional + NO_COVERAGE
57  1. Replaced integer addition with subtraction + NO_COVERAGE
```

Mutation killer

Continuous Delivery

Test automation

HTTPS://YOAN-THIRION.GITBOOK.IO/KNOWLEDGE-BASE/SOFTWARE-CRAFTSMANSHIP/TESTING/MUTATION-TESTING

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DESIGN SESSIONS

1) OPEN A NEW ITEM

WHOLE TEAM

2) AGREE ON ITEM'S DEFINITION

3) ALIGN ON FLOWS TO IMPLEMENT

PUZZLE DRIVEN DEVELOPMENT

AGREE ON THE NAMING / PARAMETERS / CONTRACTS

4) WRITE THE CODE SKELETON

5) PART OR WHOLE TEAM WORKS ON THE IMPLEMENTATION

Architecture	Cultural	Cultural	Cultural
Empowered teams	Westrum organizational culture	Supporting learning	Collaboration among teams

HTTPS://YOAN-THIRION.GITBOOK.IO/KNOWLEDGE-BASE/SOFTWARE-CRAFTSMANSHIP/PRACTICES/DESIGN-SESSIONS

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ARCHITECTURE DECISION RECORDS

- CAPTURER LES DÉCISIONS D'ARCHITECTURE AFIN DE COMPRENDRE POURQUOI ET LEURS CONSÉQUENCES
- LOG LES ÉLÉMENTS QUI ONT JUSTIFIÉ UNE DÉCISION

Dupliquer les données des navires

- Statut : Déprécié
- Date : 2017-01-10

Contexte et énoncé du problème

Les données statiques des navires (nom, pays, longueur, tirant d'eau) sont utilisées par deux services : le service de suivi de position des navires et celui de réservation d'un emplacement dans un port.

Ces deux services se veulent indépendants, mais partagent actuellement une table de la base de données pour ces informations.

Options envisagées

- Choix d'un service propriétaire de la table et ajout d'une dépendance dans l'autre service
- Création d'un service dédié aux données statiques des navires
- Duplication des données dans deux bases Pour chacune des bases, le service propriétaire est clairement identifié comme le service qui l'utilise

Décision

Option sélectionnée : Duplication des données dans les deux bases, car

- Ajouter un nouveau service serait lourd
- Ajouter une dépendance d'un service à l'autre n'aurait pas de sens du point de vue métier
- Le volume de données est peu important
- Les données sont statiques et ne devraient donc pas diverger

Conséquences positives

- Les deux services deviennent réellement indépendants, et peuvent faire évoluer leurs modèles respectifs en toute autonomie.

Conséquences négatives

- Le code qui gère l'accès à cette table est également dupliqué. Étant donné que ce code ne contient pas de logique métier, cette conséquence est considérée comme acceptable.

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TECH RADAR

- Une seule source de vérité : qu'est-ce qu'on doit/peut utiliser
- Organiser le veille technologique de l'organisation

HTTPS://GITHUB.COM/YTHIRION/TECH-RADAR

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CO-DESIGN

ARCHITECTURE

PORTEUR DE LA

VISION TECHNIQUE

MATÉRIALISÉE PAR

ADR

KNOWLEDGE BASE

TECHRADAR

SOLUTION DESIGN

CO-CONSTRUIT DIFFUSE

CO-DESIGNS

ALIMENTE

PARTICIPE / PROPOSE

TECH LEADS / DEV

PARTICIPE / PROPOSE

SÉCU

PARTICIPE / PROPOSE

OPS

PARTICIPE / PROPOSE

EXPERTS

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https://yoan-thirion.gitbook.io/knowledge-base/software-craftsmanship/practices/co-designs

ET PLEIN D'AUTRES...

- CQRS / Event sourcing
- Consumer driven contract testing
- 12 Factor apps
- Functional programming paradigms
- Functional core imperative shell
- ...

- Togaf
- Enterprise Integration patterns
- Micro-services
- ATDD / BDD
- Cloud computing
- ...

HTTPS://WWW.THOUGHTWORKS.COM/RADAR

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LA TECHNIQUE MAIS PAS QUE...

POUR BIEN VIVRE EN ÉQUIPE ?

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SAVOIR ÊTRE / COMMUNICATION

- Pour bien vivre en équipe
- Se comprendre les uns les autres

CNV PNL

DONNER / RECEVOIR DU FEEDBACK

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FACILITATION (INTERACTIONS, ATELIERS)

7 P CANVAS

LIBERATING STRUCTURES

ÉVÉNEMENTS (RÉTROSPECTIVES, STAND-UPS, ...)

EVENT STORMING, STORY MAPPING, CASSER LES SILOS / ALIGNEMENT

EVENT STORMING

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LEADERSHIP

HOST LEADERSHIP

Cultural	Cultural	Cultural	Cultural	Cultural
Westrum organizational culture	Supporting learning	Collaboration among teams	Job satisfaction	Transformational leadership

https://yoan-thirion.gitbook.io/knowledge-base/leadership/learn-leadership-from-the-navy-seals

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COACHER / ENSEIGNER

SOLUTION FOCUS

Cultural	Cultural	Cultural	Cultural	Cultural
Westrum organizational culture	Supporting learning	Collaboration among teams	Job satisfaction	Transformational leadership

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POUR RÉSUMER

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APPRENTISSAGE CONTINU

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APPRENTISSAGE CONTINU...

MAIS COMMENT ?

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APPRENTISSAGE CONTINU

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COMMUNAUTÉ DE PRATIQUES

- connecter les gens / casser les silos
- partager la connaissance
- Apprendre ensemble
- résoudre des problèmes (intelligence collective)

https://yoan-thirion.gitbook.io/knowledge-base/agile-coaching/how-to-run-a-community-of-practices-cop

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LEARNING HOURS / MENTORING

CODING DOJO

CODE KATAS
DELIBERATE PRACTICE

M.E.N.T.O.R MODEL

- Mission
- Engagement
- Networking
- Trust
- Opportunity
- Review / Renewal

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XTREM(S)

- Stimuler l'intelligence collective
  - Lecture
  - Veille technologique
- Partager connaissance / Passions
- Apprendre en groupe

Des ouitils pour tendre vers l'entreprise apprenante

XTREM READING

XTREM WATCH

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CONFÉRENCES / MEETUPS

Software Craftsmanship Luxembourg

Luxembourg, Luxembourg
343 membres · Groupe public
Organisé par Yoan T. et 3 autres personnes

meetup

Partager :

- Apprendre des autres
- Se tenir à jour

La situation sanitaire a poussé les événements à se faire en ligne

Sur tout, depuis n'importe où

craft
SOFTWARE DELIVERY CRAFT MATTERS
MAY 27 - JUNE 4, 2021
ONLINE

DevTernity
the only IT conference you can't miss

{ newcrafts }

SC London

DEVOXX™

skills matter

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COACHING TECHNIQUE

Technical Coaching is a way of describing a training approach, where the focus is on **upskilling your team with technical, people and business skills**, and how to apply them in their current context.

Coaches help teams overcome technical challenges they are facing in their **daily work,** as well as equipping them with new skills, theoretical understanding. Together they work to solve them in a structured and safe manner.

codurance
craft at heart

AIDER LES ÉQUIPES À GRANDIR :

LEARNING HOURS, CODE KATAS, PAIR PROGRAMMING, MOB PROGRAMMING, AGILE, COACHING, ...

HTTPS://PHILIPPE.BOURGAU.NET/THE-STORY-ABOUT-HOW-WE-DO-AGILE-TECHNICAL-COACHING/

"CREATE YOUR OWN PROCESS, DON'T FOLLOW SOMEONE ELSE'S PRESCRIPTION." - ALLAN KELLY

METTEZ EN PLACE CE QUI FAIT DU SENS DANS VOTRE CONTEXTE : EXPÉRIMENTEZ / APPRENEZ

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MERCI

TECHNICAL AGILE COACH, SOFTWARE CRAFTSMAN

ON RESTE CONNECTÉ

FOLLOW ON

HTTPS://WWW.YOAN-THIRION.COM/

MES BROWN BAGS

HTTPS://WWW.YOAN-THIRION.COM/FILES/BROWN-BAG-OFFER.PDF

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