

LEARN MOR



# Andrés Joaquín, Hiroshi Hiromoto Applying Technical Practices outside IT







Systems Engineer. Helps organization and teams as a consultant in Kleer. Collaborates with Argentine public education as a professor at UTN University.

Rosarino • Argentine • 16yr in Agile

**K** kleer



# HIROSHI HIROMOTO

Helps organizations to design more adaptable ecosystems that delivers high value to its customers and employees.

Nikkei ⊙ Peruvian ⊙ Part-time traveler ⊙ 12yr in Agile

**S** Ment



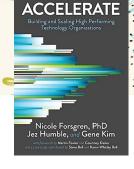
# **Organizational Performance**

# Profitability Market Share Customer Satisfaction



## **Software Delivery Performance**





https://dora.dev/

### **Software Delivery Performance**

**Stability** 

Change Failure Rate
Mean Time To Recovery

**Speed** 

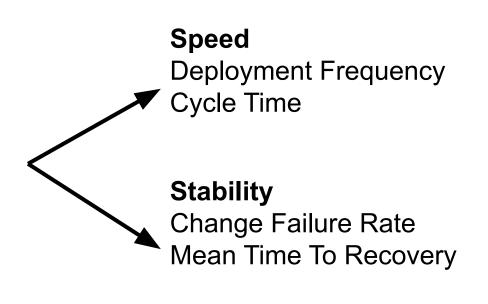
Deployment Frequency
Cycle Time





## **Continuous Delivery Drivers**

Test Automation **Deployment Automation Trunk-Based Development Shift Left on Security Loosely Coupled Architecture Empowered Teams Continuous Integration Version Control Test Data Management Monitoring Proactive Notifications** 

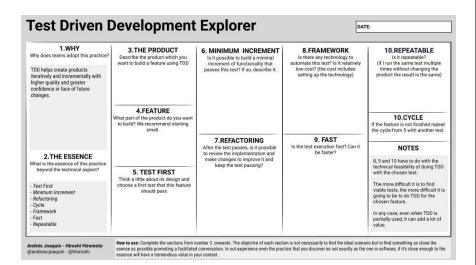






### The Explorers

- Explore and discover over predicting
- A sort of canvas, so it has a structure that helps your with the discovering.
- Based on the essence of the technical practices and guiding questions







### and we started with 4 practices

Based on our experiences we choose to start building explorers around this 4 practices:

- Test Driven Development
- Continuous Integration
- Modular Architecture
- Feature Flags

From which we extracted their essence and built a explorer to work around them.





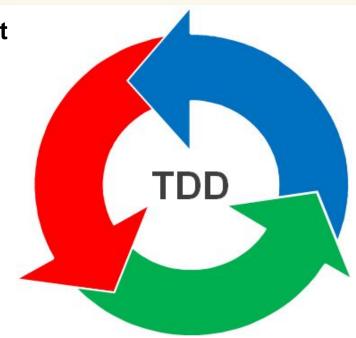
### **Test First**

Given a feature, think a little about its design and choose a first test that this feature should pass.

Write the test.

Run the test.

It shouldn't pass because we didn't build anything yet. (Red)









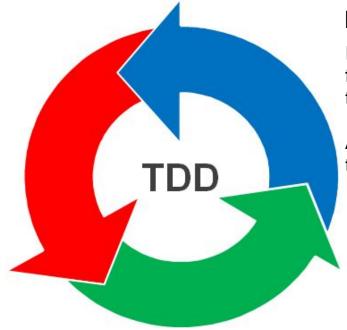
### **Minimum Increment**

Build the simplest possible solution that will make the test pass. If we run the test it will pass (Green).





**Test First** 



### Refactoring

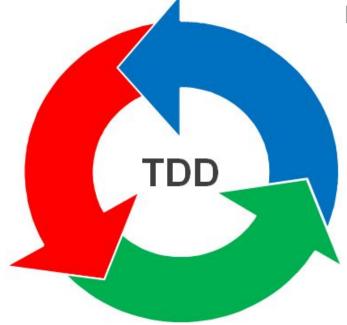
If needed. We modify the feature to improve its technical quality (Refactor).

And we run the test to verify that is still working.





**Test First** 



Refactoring

### - Cycle

If the feature is not ready we choose another test and we repeat the cycle with this test.





Test First Refactoring



### - Framework

We rely on Technology that provides us with:

- Low test construction cost
- Simple execution (automated)
- Simple result (red or green)





**Test First** 

**Minimum Increment** 

Refactoring

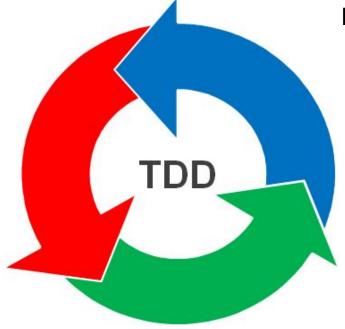
- Cycle
- Framework
- Fast and Repeatable

We look for tests to be fast and repeatable so that we can use them many times in short cycles.





**Test First** 



Refactoring

- Cycle
- Framework
- Fast and Repeatable







# **Test Driven Development Explorer**

DATE:

#### **1.WHY**

Why does teams adopt this practice?

2.THE ESSENCE

What is the essence of this practice

- Test First

- Refactoring

- Repeatable

- Cvcle - Framework

- Fast

- Minimum Increment

TDD helps create products iteratively and incrementally with higher quality and greater confidence in face of future changes.

### 4.FEATURE

3.THE PRODUCT

Describe the product which you

want to build a feature using TDD

What part of the product do you want to build? We recommend starting small.

### 5. TEST FIRST

should pass

### 6. MINIMUM INCREMENT

Is it possible to build a minimal increment of functionality that passes this test? If so, describe it.

### 8.FRAMEWORK

Is there any technology to automate this test? Is it relatively low cost? (the cost includes setting up the technology)

### 10.REPEATABLE

Is it repeatable? (if I run the same test multiple times without changing the product the result is the same)

### 7.REFACTORING

After the test passes, is it possible to review the implementation and make changes to improve it and keep the test passing?

### 9. FAST

Is the test execution fast? Can it be faster?

### **NOTES**

10.CYCLE

If the feature is not finished repeat

the cycle from 5 with another test.

8. 9 and 10 have to do with the technical feasibility of doing TDD

with the chosen test.

The more difficult it is to find viable tests, the more difficult it is going to be to do TDD for the chosen feature.

In any case, even when TDD is partially used, it can add a lot of value.

### beyond the technical aspect?

Think a little about its design and choose a first test that this feature

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi

How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.

## Wikispeed - IT Technical Practices Building a Car

номе

NTACT

CAR

#### **WIKISPEED**

ULTRA FAST - ULTRA EFFICIENT - ULTRA FUN



ULTRA FAST - ULTRA EFFICIENT - ULTRA FUN



https://wikispeed.com/



Book by Paolo Sammicheli



Joe Justice @ Agile2012





# **Test Driven Development Explorer**

**DATE:** 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

TDD helps create products iteratively and incrementally with higher quality and greater confidence in face of future changes.

### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Test First
- Minimum Increment
- Refactoring
- Cycle
- Framework
- Fast

### 3.THE PRODUCT

Describe the product which you want to build a feature using TDD

A new Car

#### 4.FEATURE

What part of the product do you want to build? We recommend starting small.

Crashworthiness of the car

#### 5. TEST FIRST

Think a little about its design and choose a first test that this feature should pass

Five-star crashworthiness score according to the official regulations.

#### 6. MINIMUM INCREMENT

Is it possible to build a minimal increment of functionality that passes this test? If so, describe it.

Yes. We can run the test with a version of the car that is not the final.

Of course at some point we should still test with the final version to comply with regulations.

#### 7.REFACTORING

After the test passes, is it possible to review the implementation and make changes to improve it and keep the test passing?

Yes. The architecture of the car is optimized to be able to be modified in a simple way.

#### 8.FRAMEWORK

Is there any technology to automate this test? Is it relatively low cost? (the cost includes setting up the technology)

Real Crash Test, but it is expensive.

A simulation it is a better option with relatively low cost.

### 9. FAST

Is the test execution fast? Can it be faster?

Yes, is fast enough...

### 10.REPEATABLE

Is it repeatable?
(if I run the same test multiple times without changing the product the result is the same)

Yeah. Both the Real Crash Test and the simulation are repeatable.

#### 10.CYCLE

If the feature is not finished repeat the cycle from 5 with another test.

#### **NOTES**

8, 9 and 10 have to do with the technical feasibility of doing TDD with the chosen test.

The more difficult it is to find viable tests, the more difficult it is going to be to do TDD for the chosen feature.

In any case, even when TDD is partially used, it can add a lot of value.

### according to the official

- Repeatable

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.

# **Test Driven Development Explorer**

DATE: 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

TDD helps create products iteratively and incrementally with higher quality and greater confidence in face of future changes.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Test First
- Minimum Increment
- Refactoring
- Cvcle
- Framework
- Fast
- Repeatable

### 3.THE PRODUCT

Describe the product which you want to build a feature using TDD

Conference Session

#### 4.FEATURE

What part of the product do you want to build? We recommend starting small.

Abstract

#### 5. TEST FIRST

Think a little about its design and choose a first test that this feature should pass

If someone reads the title and we

#### 6. MINIMUM INCREMENT

Is it possible to build a minimal increment of functionality that passes this test? If so, describe it.

Yes. We can write only the title. The rest of the abstract could be iust a draft, expressing the idea in a very general way.

### 7.REFACTORING

After the test passes, is it possible to review the implementation and make changes to improve it and keep the test passing?

Yes. It is easy to modify a title.

### 8.FRAMEWORK

Is there any technology to automate this test? Is it relatively low cost? (the cost includes setting up the technology)

Yes We could ask ChatGPT

But it is also really easy to do a semi-automated test using a very simple google form with real people..

9. FAST

Is the test execution fast? Can it

Is it repeatable? (if I run the same test multiple times without changing the product the result is the same)

10.REPEATABLE

Yeah, Both with ChatGPT and with a form.

#### 10.CYCLE

If the feature is not finished repeat the cycle from 5 with another test.

#### **NOTES**

8. 9 and 10 have to do with the technical feasibility of doing TDD with the chosen test.

The more difficult it is to find viable tests, the more difficult it is going to be to do TDD for the chosen feature.

In any case, even when TDD is partially used, it can add a lot of

ask them what the session is about, they should describe what we have in mind for the abstract.

### be faster?

Yes, is fast enough.

value.

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi

How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.



### **Single Source of Truth**

We maintain a single repository where the last integrated version of the product is.







**Single Source of Truth** 

### **Daily integration (at least)**

Everyone upload their advances and integrate it at least one time per day.







**Single Source of Truth** 

**Daily integration (at least)** 



### **Integrity self-verified**

Every time the product is integrated its coherence is self-verified (structurally correct)





**Single Source of Truth** 

**Daily integration (at least)** 

**Integrity self-verified** 

### Fix errors immediately

The errors that are detected while integrated are fixed immediately.







**Single Source of Truth** 

**Daily integration (at least)** 

Integrity self-verified

Fix errors immediately

### **Transparency**

Everyone can see the current state of the product







**Single Source of Truth** 

**Daily integration (at least)** 

Integrity self-verified



Fix errors immediately

**Transparency** 

Easy access

Make it Easy for Anyone to Get the
Latest Version





**Single Source of Truth** 

**Daily integration (at least)** 

Integrity self-verified



Fix errors immediately

**Transparency** 

Easy access





### **Single Source of Truth**

We maintain a single repository where the last integrated version of the product is.

### **Daily integration (at least)**

Everyone upload their advances and integrate it at least one time per day.

### Integrity self-verified

Every time the product is integrated its coherence is self-verified (structurally correct)

### Fix errors immediately

The errors that are detected while integrated are fixed immediately.



### **Transparency**

Everyone can see the current state of the product

### Easy access

Make it Easy for Anyone to Get the Latest Version







# **Continuous Integration Explorer**

DATE:

#### 1.WHY

Why does teams adopt this practice?

On the whole the greatest and most wide ranging benefit of Continuous Integration is reduced risk. At all times you know where you are, what works, what doesn't, the outstanding issues you have in your product.

### 3.THE PRODUCT

Describe the product which you want to continuous integrate it

#### **5.EASY ACCESS**

Is the single repository accessible to everyone in the team? Is it easy to access? If so, describe how can people access to it.

# 7.INTEGRITY SELF-VERIFIED

Is it possible that every time a change is integrated, the integrity and coherence of the product is self-verified? If so, describe how it will be implemented.

### 9.TRANSPARENCY

Does everyone can see the state of the product at any given time? If so, describe how can people see that state without needing other people.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Single source of truth
- Daily integration (at least)
- Integrity self-verified
- Fix errors immediately
- Transparency
- Easy access

# 4.SINGLE SOURCE OF TRUTH

Is it possible to have a single place where the most updated version of the product is available? If so, describe it.

### **6.DAILY INTEGRATION**

Describe how will you promote that the team integrates the advances of the product at least one time per day

# 8.FIX ERRORS IMMEDIATELY

Describe how will you ensure that every time something fails while integrating, the issues arises are fixed.

### NOTES

The sections 4,6 and 8 are the core of the practice and without them the practice loses its value.

Ideally the section number 7 is automated using some kind of software.

#### Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi

# **Continuous Integration Explorer**

**DATE:** 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

On the whole the greatest and most wide ranging benefit of Continuous Integration is reduced risk. At all times you know where you are, what works, what doesn't, the outstanding issues you have in your product.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Single source of truth
- Daily integration (at least)
- Integrity self-verified
- Fix errors immediately
- Transparency
- Easy access

### **3.THE PRODUCT**

Describe the product which you want to continuous integrate it

Building a new Car to participate on an innovation competition

4.SINGLE SOURCE OF

**TRUTH** 

Is it possible to have a single place

where the most updated version of

the product is available? If so,

describe it.

Team member uploads a new 3d

Windows SkyDrive, or any of the

file sharing technologies in use, to

drawing to DropBox, Box,net.

a single shared drive.

#### **5.EASY ACCESS**

Is the single repository accessible to everyone in the team? Is it easy to access? If so, describe how can people access to it.

All team members has access to the drive that contains the 3d designs.

### 6.DAILY INTEGRATION

Describe how will you promote that the team integrates the advances of the product at least one time per day

Team members uploads a 3d drawing everytime they have a new design

# 7.INTEGRITY SELF-VERIFIED

Is it possible that every time a change is integrated, the integrity and coherence of the product is self-verified? If so, describe how it

will be implemented. WIKISPEED can simulate crash tests and stress tests on the part using FEA and a software package like LS Dyna247. Can simulate airflow, aerodynamics, fluid flow, heat transfer, and electrical propagation using CFD

#### 9.TRANSPARENCY

Does everyone can see the state of the product at any given time? If so, describe how can people see that state without needing other people.

It's easy to know what the current best part is; the version of record is whatever part in CAD has passed all tests with the most green lights.

### 8.FIX ERRORS IMMEDIATELY

Describe how will you ensure that every time something fails while integrating, the issues arises are fixed.

Whenever a new CAD shows up and write out a 1-page report with a list of red or green lights. Green lights mean the test is the same or better than the current version or passes an explicit test for that part or module.

#### **NOTES**

The sections 4,6 and 8 are the core of the practice and without them the practice loses its value.

Ideally the section number 7 is automated using some kind of software.

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.

# **Continuous Integration Explorer**

**DATE:** 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

On the whole the greatest and most wide ranging benefit of Continuous Integration is reduced risk. At all times you know where you are, what works, what doesn't, the outstanding issues you have in your product.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Single source of truth
- Daily integration (at least)
- Integrity self-verified
- Fix errors immediately
- Transparency
- Easy access

#### 3.THE PRODUCT

Describe the product which you want to continuous integrate it

Marketing and Legal copies of the digital channels of a bank.

#### **5.EASY ACCESS**

Is the single repository accessible to everyone in the team? Is it easy to access? If so, describe how can people access to it.

All team members including the legal and marketing team has access to the wiki platform.

### 7.INTEGRITY SELF-VERIFIED

Is it possible that every time a change is integrated, the integrity and coherence of the product is self-verified? If so, describe how it will be implemented.

Basic text formatting, spell checking and length is verified in each integration.

### 9.TRANSPARENCY

Does everyone can see the state of the product at any given time? If so, describe how can people see that state without needing other people.

Anyone in the team can see the progress status of any copy.

### 4.SINGLE SOURCE OF TRUTH

Is it possible to have a single place where the most updated version of the product is available? If so, describe it.

All the text are in a wiki page

### **6.DAILY INTEGRATION**

Describe how will you promote that the team integrates the advances of the product at least one time per day

Everytime there is a new version of any copy to review, people upload it.

### 8.FIX ERRORS IMMEDIATELY

Describe how will you ensure that every time something fails while integrating, the issues arises are fixed.

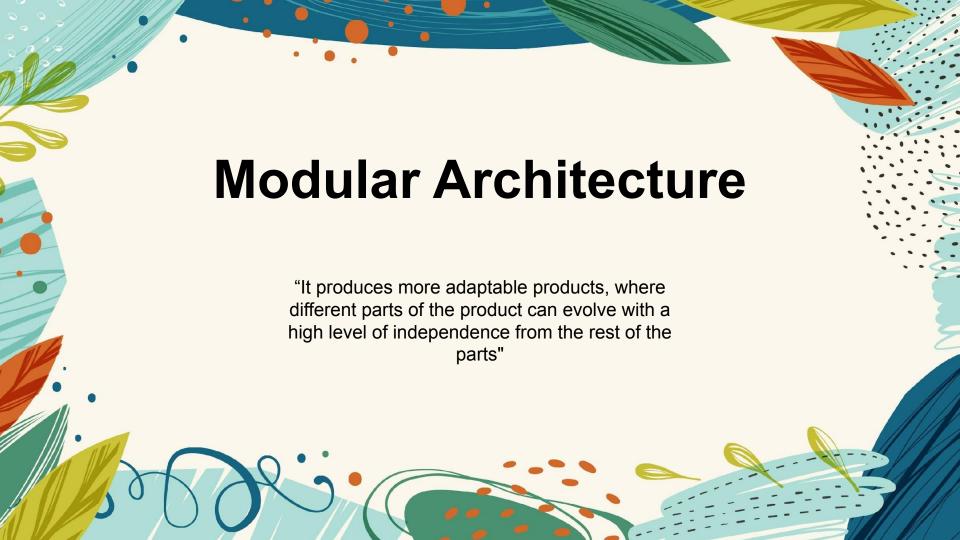
Integrity has real-time feedback and after reviews an automated mail for fixing errors are sent. So team member upload a fix as soon as possible.

#### **NOTES**

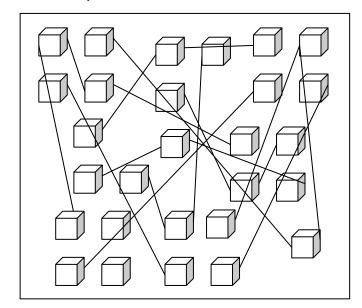
The sections 4,6 and 8 are the core of the practice and without them the practice loses its value.

Ideally the section number 7 is automated using some kind of software.

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.



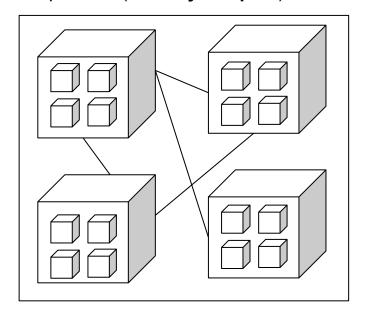
A Product has a Non-Modular Architecture (or Design) when it includes a lot of internal components with a lot of interdepencies between them.







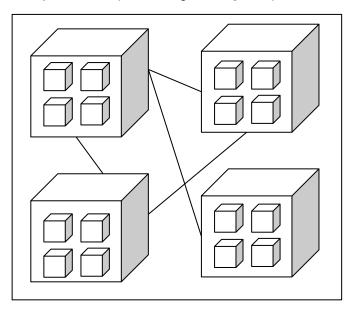
With a Modular Architecture we design and group components on less dependent (**Loosely Coupled**) modules







With a Modular Architecture we design and group components on less dependent (**Loosely Coupled**) modules



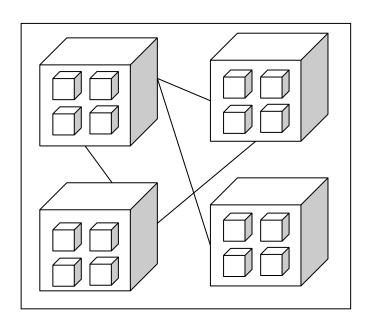
### **Wikispeed Modular Architecture**





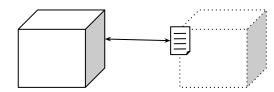


### **Loosely Coupled Modules**



### **Contract First Design**

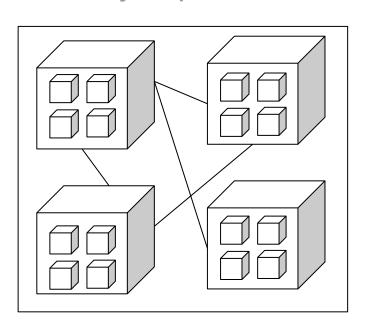
Each module is designed thinking first on the contract (API) with other modules



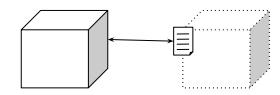




### **Loosely Coupled Modules**



### **Contract First Design**



### **Automated Tests**

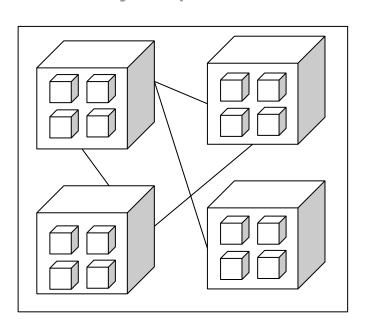
Contracts have automated tests



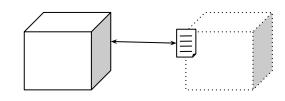




### **Loosely Coupled Modules**



### **Contract First Design**



**Automated Tests** 



### **Minimum Version**

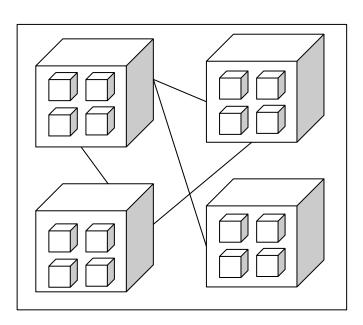
Contracts can begin to be implemented with an minimum version. You don't need the perfect version to start.



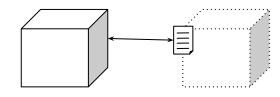








**Contract First Design** 



**Automated Tests** 

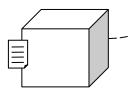


**Minimum Version** 



**Emergent Design** 

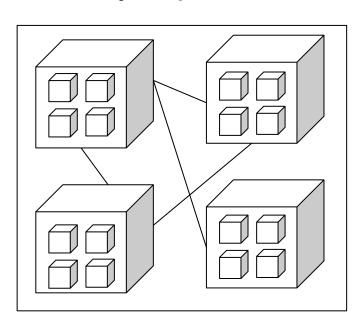
Initial designs can evolve without having to start from 0 in each evolution.



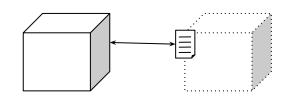




### **Loosely Coupled Modules**



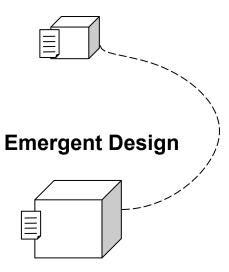
### **Contract First Design**



**Automated Tests** 

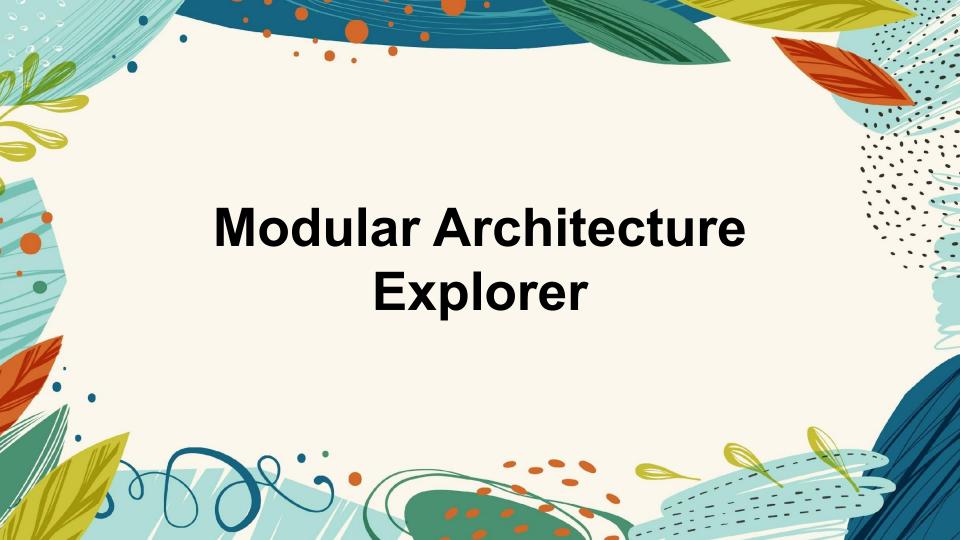


### **Minimum Version**









## **Modular Architecture Explorer**

DATE:

#### 1.WHY

Why does teams adopt this practice?

It produces more adaptable products, where different parts of the product can evolve with a high level of independence from the rest of the parts.

It makes it easier to change the product.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Loosely Coupled Modules
- Contract First Design
- Contract First Design - Minimum Version
- Emergent Design
- Automated Tests

### 3.THE PRODUCT

Describe the product which you want to build

## 5.CONTRACT FIRST DESIGN

Can these modules be designed starting by agreeing their contracts with other modules?

#### 7.EMERGENT DESIGN

Can this version evolve without necessarily having to start from 0 each time?

#### NOTES

If in general the answers to these questions is yes, then we are getting closer to what we need in terms of architecture.

## 4. LOOSELY COUPLED MODULES

Can it be divided into modules with low dependency on each other? How many? Can they be more?

### 6.MINIMUM VERSION

Can you start with minimal versions that fulfill the contracts?

### 8.AUTOMATED TESTS

Are there tests that allow you to test changes in a module in an automated way?

#### NO I E S

Andrés Joaquín - Hiroshi Hiromoto
@andrescjoaquin - @hhiroshi

How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.

## **Modular Architecture Explorer**

DATE: 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

It produces more adaptable products, where different parts of the product can evolve with a high level of independence from the rest of the parts.

It makes it easier to change the product.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Loosely Coupled Modules
- Contract First Design
- Minimum Version
- Emergent Design
- Automated Tests

#### 3.THE PRODUCT

Describe the product which you want to build

Car

## 5.CONTRACT FIRST

Can these modules be designed starting by agreeing their contracts with other modules?

Yes. The API between these modules can be defined at the beginning.

### **DESIGN**

necessarily having to start from 0

Sometimes ves and other times no. In this sense it is important to leave free physical space for growth when possible.

7.EMERGENT DESIGN

Can this version evolve without

each time?

#### NOTES

If in general the answers to these questions is yes, then we are getting closer to what we need in terms of architecture.

### 4. LOOSELY COUPLED **MODULES**

Can it be divided into modules with low dependency on each other? How many? Can they be more?

Yes 8 modules

### 6.MINIMUM VERSION

Can you start with minimal versions that fulfill the contracts?

Yes

#### 8.AUTOMATED TESTS

Are there tests that allow you to test changes in a module in an automated way?

Yes

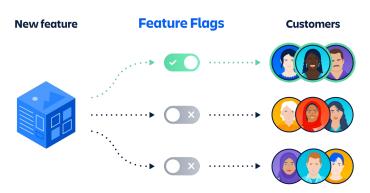
#### Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi

How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.



### **Flags Objective**

We choose the goal of the feature flags. It could be hide a feature for a release, experiment with something new, enable something to a user group or test different options for a single feature









### **Toggle Points**

We design how the toggle will work and the options that we will applied the flags on if applicable







Flags Objective



**Target Audience** 

When we test different options within different target audience we need to design those target audience

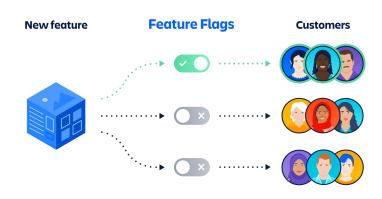
**Toggle Points** 





Flags Objective

**Toggle Points** 



**Target Audience** 

### Router

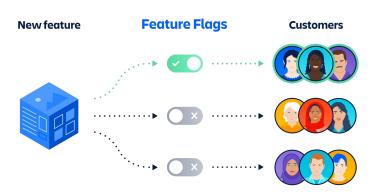
We use a router that determines the flag state (on/off) without modifying the product







**Toggle Points** 



### **Monitoring**

Options are monitored in relation to their usage and performance in order to make decisions about them

**Target Audience** 

Router





**Flags Objective** 

**Target Audience** 

**Toggle Points** 

Router

Monitoring



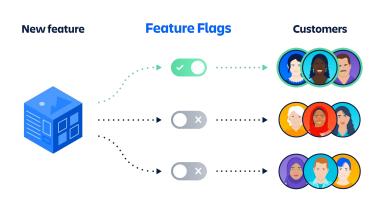


### Flags Objective

We choose the goal of the feature flags. It could be hide a feature for a release, experiment with something new, enable something to a user group or test different options for a single feature

### **Toggle Points**

We design how the toggle will work and the options that we will applied the flags on if applicable



### **Monitoring**

Options are monitored in relation to their usage and performance in order to make decisions about them

### **Users Groups**

When we test different options within different user groups we need to design those user groups

### Router

We use a router that determines the flag state (on/off) without modifying the product







## **Feature Flags Explorer**

DATE:

#### **1.WHY**

Why does teams adopt this practice?

Feature Flags allows teams to experiment, test hypothesis and add flexibility to products thru unlock dynamic control of features without rebuilding the product.

When we mention dynamic control it means for example turning on or off a specific feature or showing different options of a feature to different user groups.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Flags Objective
- Toggle Points
- User Groups
- Router

#### 3.THE PRODUCT

Describe the product you are going to work on

### 5.FLAGS OBJECTIVE

What is the goal of this Feature Flag?

#### 7. TARGET AUDIENCE

Which is the target audience to which we will present the different options? If they are not fixed groups describe the selection mechanism

#### 9. MONITORING

How are you going to monitor of the performance of the different options to make decisions later about them?

### 4.FEATURE

What feature do you want to use Feature Flags on?

#### **6.TOGGLE POINTS**

How are you going to turn on/off the feature? What are the options available? (if applicable)

#### 8.ROUTER

What's the mechanism you will use to determine when a flag is on or off? How it will activates or deactivates the flags?

#### NOTES

The section 5 will determine what kind of flag you will implement, so the subsequent sections will depend on that decision.

The section 6 is the core of the practice.

The section 8 is also a core of the practice when we have different options.

### - Monitoring

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi

How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.

**DATE**: 07/27/2023

#### **1.WHY**

Why does teams adopt this practice?

Feature Flags allows teams to experiment, test hypothesis and add flexibility to products thru unlock dynamic control of features without rebuilding the product.

When we mention dynamic control it means for example turning on or off a specific feature or showing different options of a feature to different user groups.

#### 2.THE ESSENCE

What is the essence of this practice beyond the technical aspect?

- Flags Objective
- Toggle Points
- User Groups
- Router
- Monitoring

#### 3.THE PRODUCT

Describe the product you are going to work on

Car

#### **5.FLAGS OBJECTIVE**

What is the goal of this Feature Flag?

Enable a the capability of heating the rear seats of the car based on the subscription type of the car owner.

#### 7.TARGET AUDIENCE

Which is the target audience to which we will present the different options? If they are not fixed groups describe the selection mechanism

The customer with a Premium Subscription has the feature on.

#### 9. MONITORING

How are you going to monitor of the performance of the different options to make decisions later about them?

We collect data about the usage of the heating seat system that is collected daily from the car.

#### 4.FEATURE

What feature do you want to use Feature Flags on?

Rear-heated seats

#### **6.TOGGLE POINTS**

How are you going to turn on/off the feature? What are the options available? (if applicable)

The capability of heating the rear seats are built on the car but an electronic component turn them on and off.

#### 8.ROUTER

What's the mechanism you will use to determine when a flag is on or off? How it will activates or deactivates the flags?

The main car panel controller validates the user subscription type and interacts with the electronic component of the heating seat system to turn it on or off.

#### NOTES

The section 5 will determine what kind of flag you will implement, so the subsequent sections will depend on that decision.

The section 6 is the core of the practice.

The section 8 is also a core of the practice when we have different options.

Andrés Joaquín - Hiroshi Hiromoto @andrescjoaquin - @hhiroshi How to use: Complete the sections from number 3 onwards. The objective of each section is not necessarily to find the ideal scenario but to find something as close the esense as possible promoting a facilitated conversation. In out experience even the practice that you discover es not exactly as the one in software, if it's close enough to the essence will have a tremendous value in your context.



## **Explorers in practice - 15 minutes**

### In groups of 2 or 3

- •Think about a context in yours organization (outside IT) where the use of technical practices could be of benefit. It can be any domain/business unit you're working with. It can be a Product but it can also be a Service. **Choose one.**
- •Choose one of the explorer that you have available at the table and complete it using the context selected.
- •If you want a digital copy you can find it here (Gmail account required)
- •If you have any doubts while completing the explorer, just call us out!







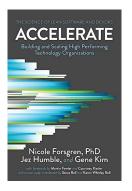
### What's next?

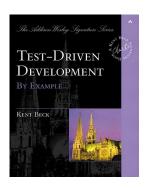
- •You can use this presentation (available in the conference site) to **present the technical practices and the explorer** to teams working outside IT.
- •The explorers can be used directly by those teams or you can use it to **guide a conversation** with them.
- •If you use the explorers and found them useful or have feedback, **please reach** out so we can continue iterating over this idea (our contact information is in a following slide).

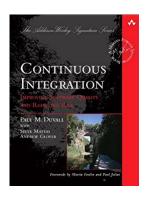


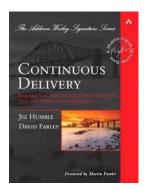


## Resources to deep dive

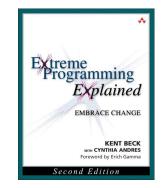












#### Recommended session



Today at 3:45 PM - 5:00 PM Coastal Ballroom B,4,5





# ¡Thanks!

## ANDRÉS JOAQUÍN



@andrescjoaquin https://www.linkedin.com/in/andresjoaquin andres.joaquin@kleer.la



HIROSHI HIROMOTO

@hhiroshi https://www.linkedin.com/in/hhiroshi hiro@ment.la

