

La triche sur un Serious Game

I-Learning

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Maître de stage : Henri DARMET

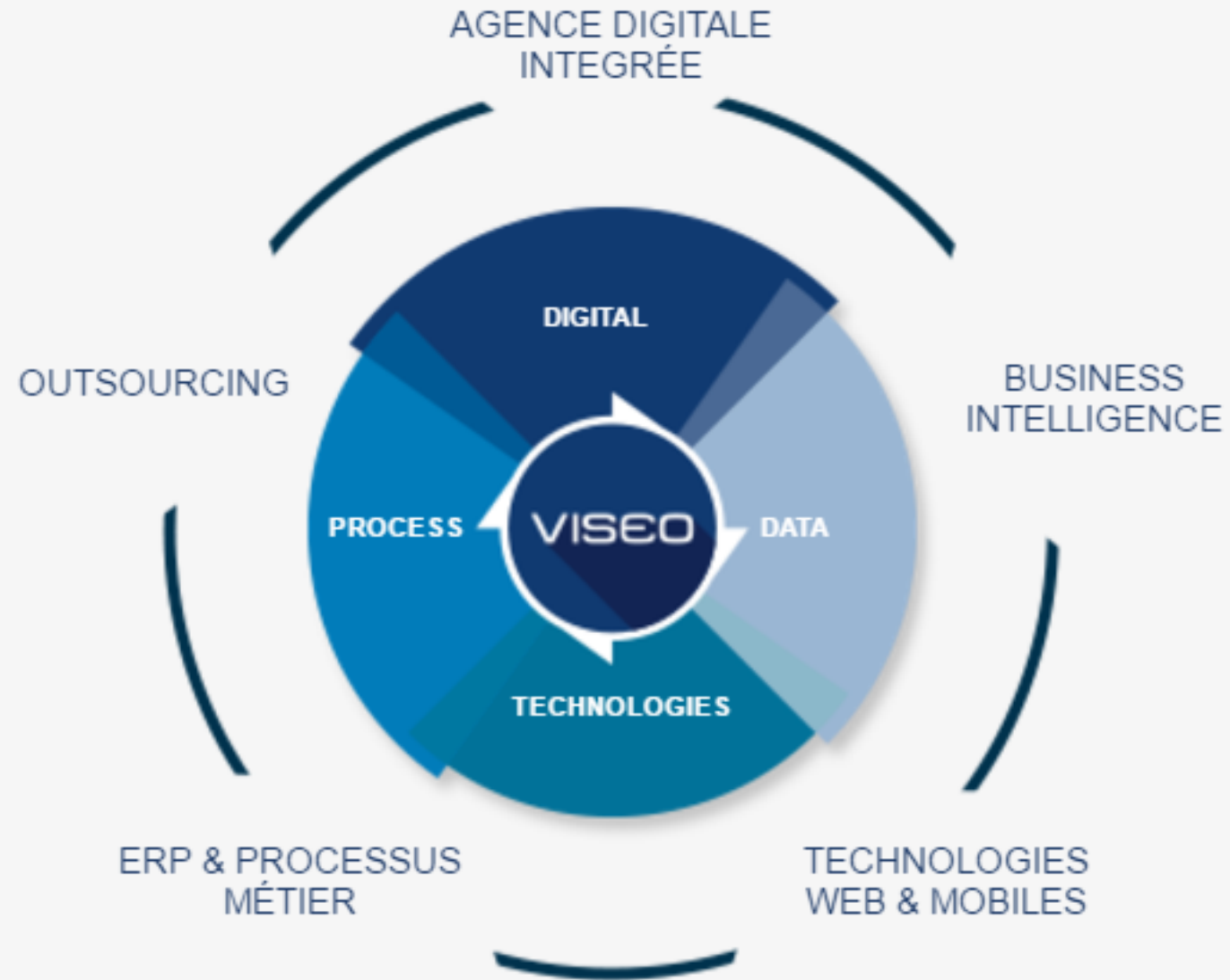
Enseignants tuteurs : Fabrice LEGOND-AUBRY

Année 2016 - 2017

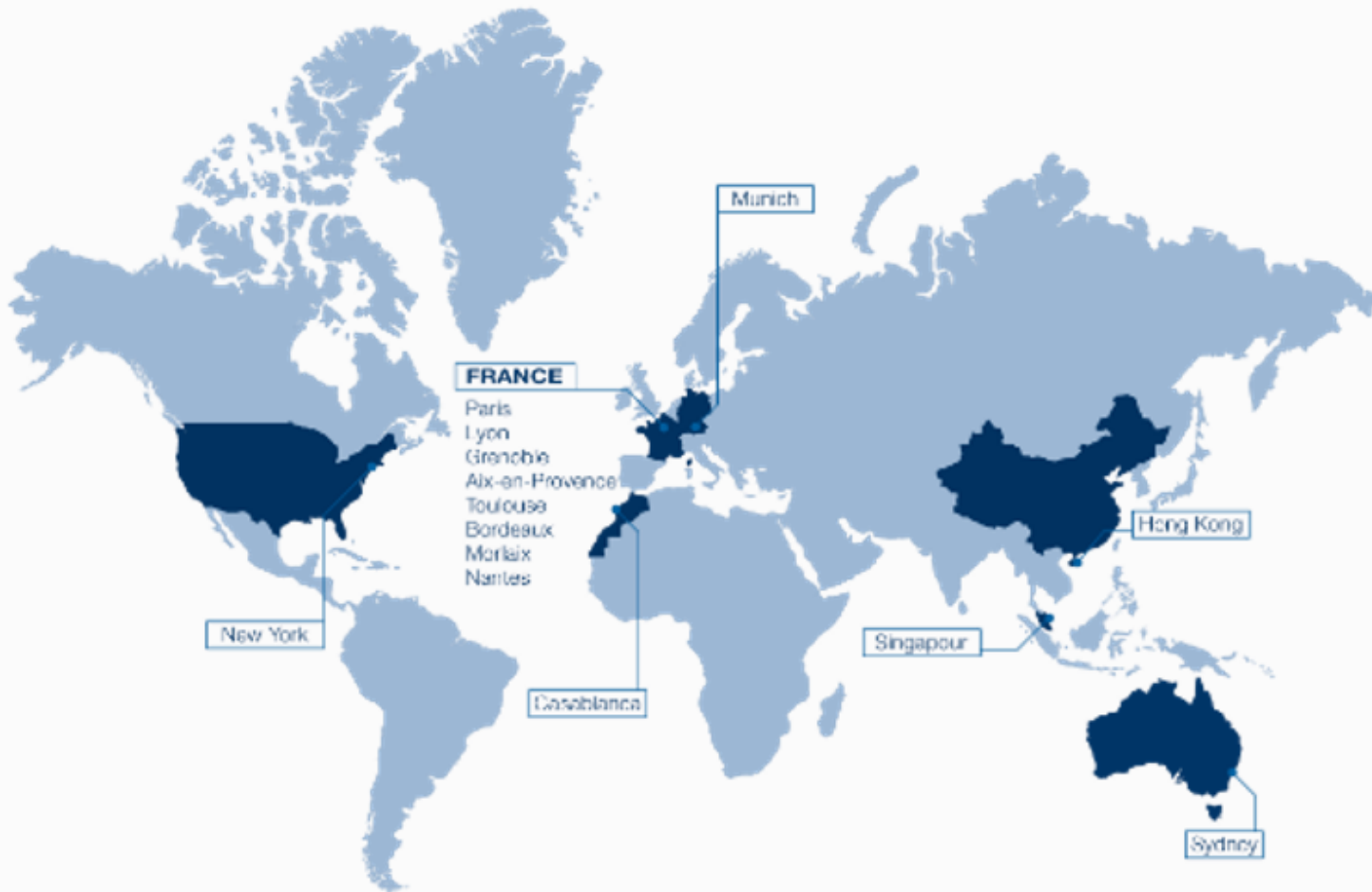
Executive summary

- *VISEO*
- *I-Learning*
- *Missions*
- *La triche*
- *Problématique*
- *Solutions*
- *Bilan*

WISEO : Activités



VERSEO : Chiffres clés



Chiffre d'affaire



2016

130M€

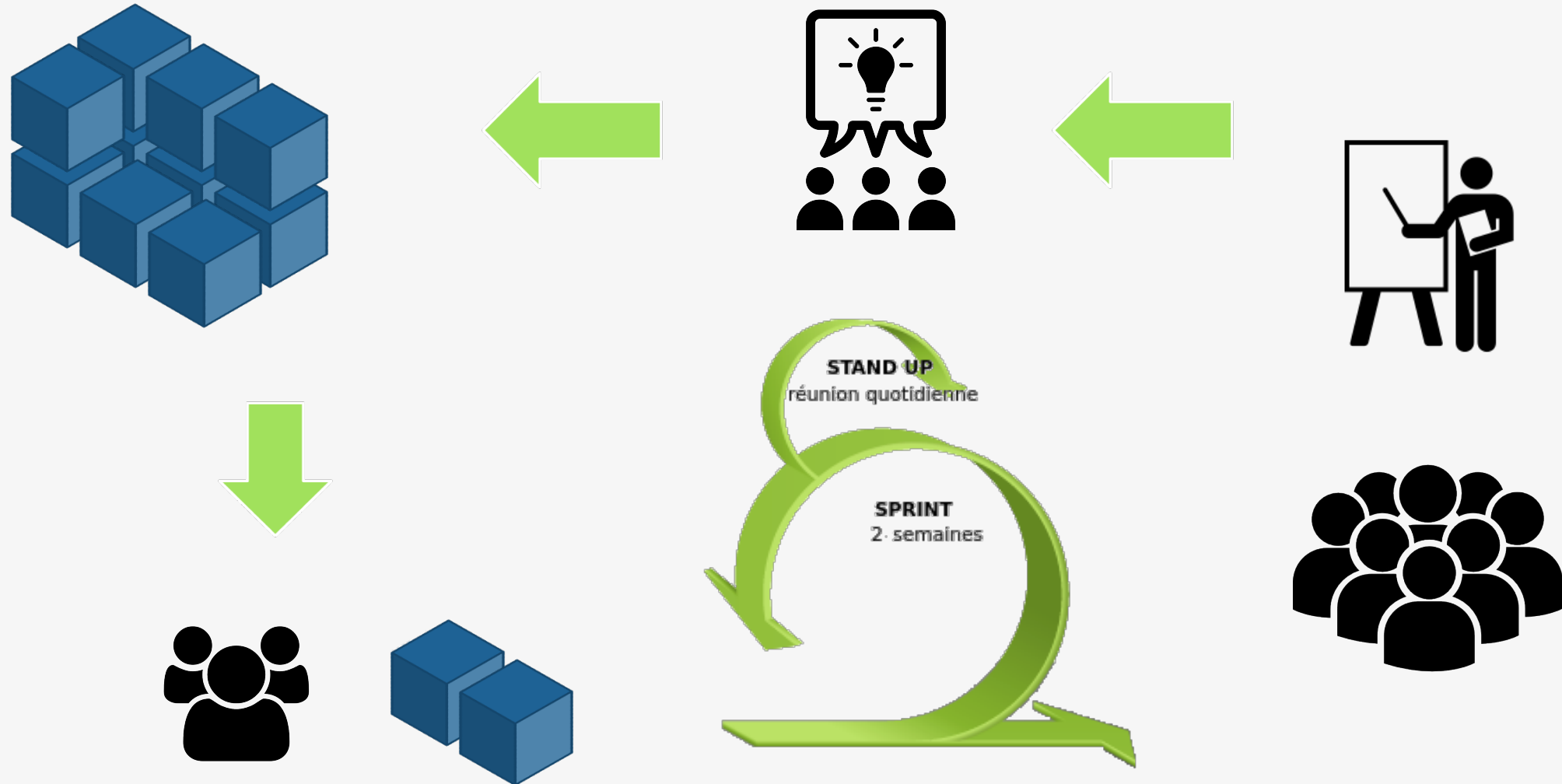
Effectif



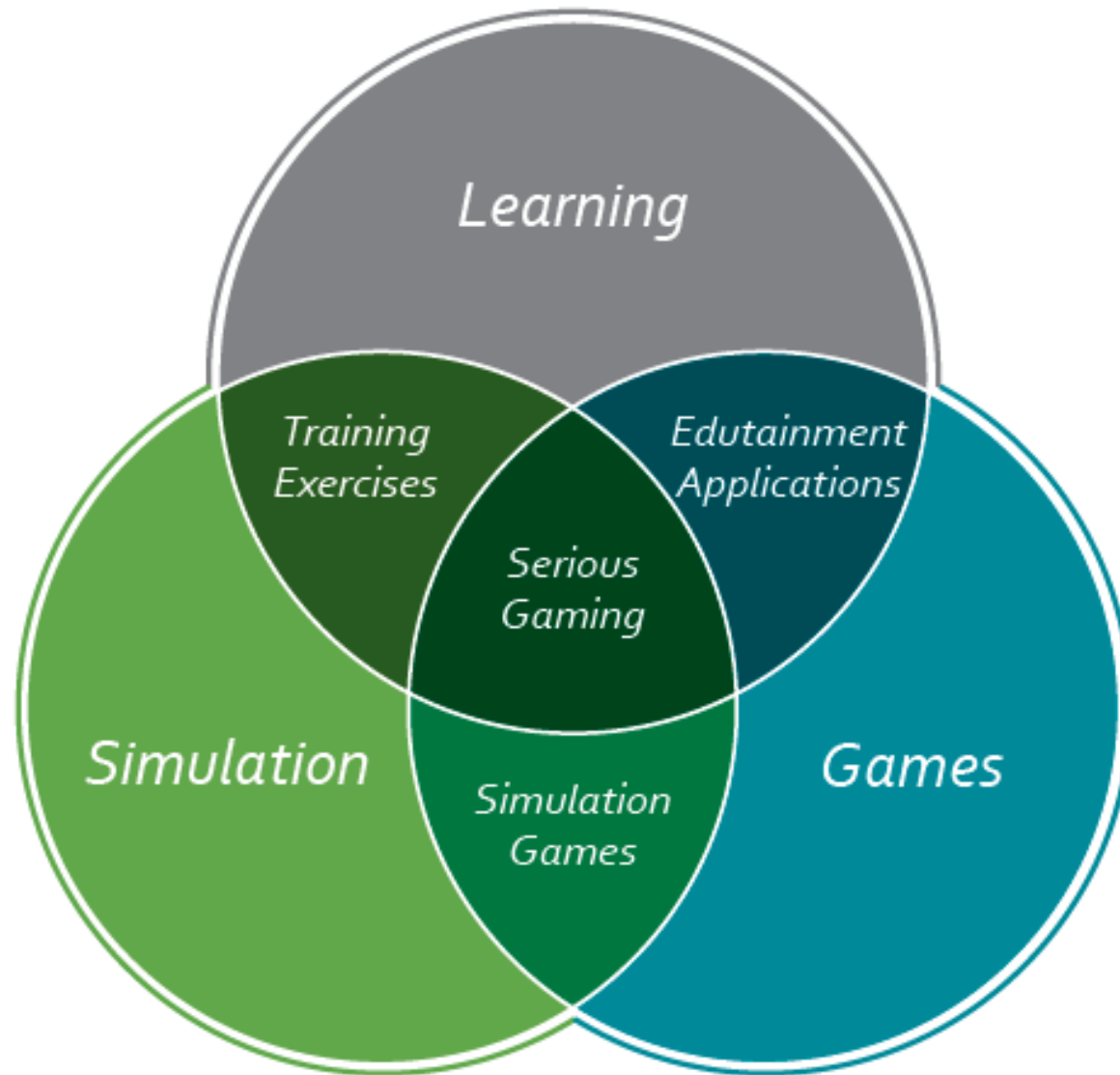
2016

1200

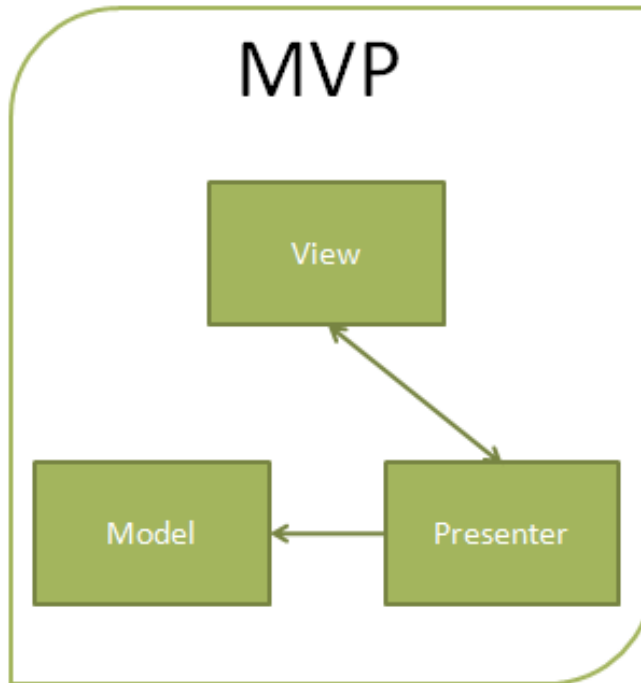
VERSEO : Agilité



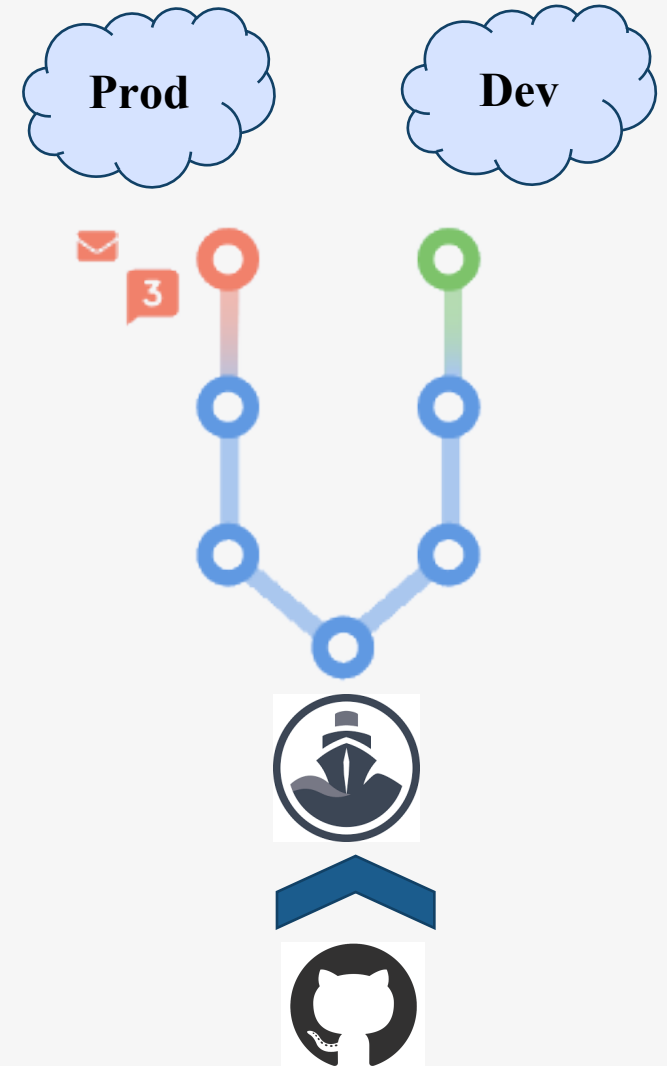
I-Learning : L'objectif



I-Learning : Ingénierie

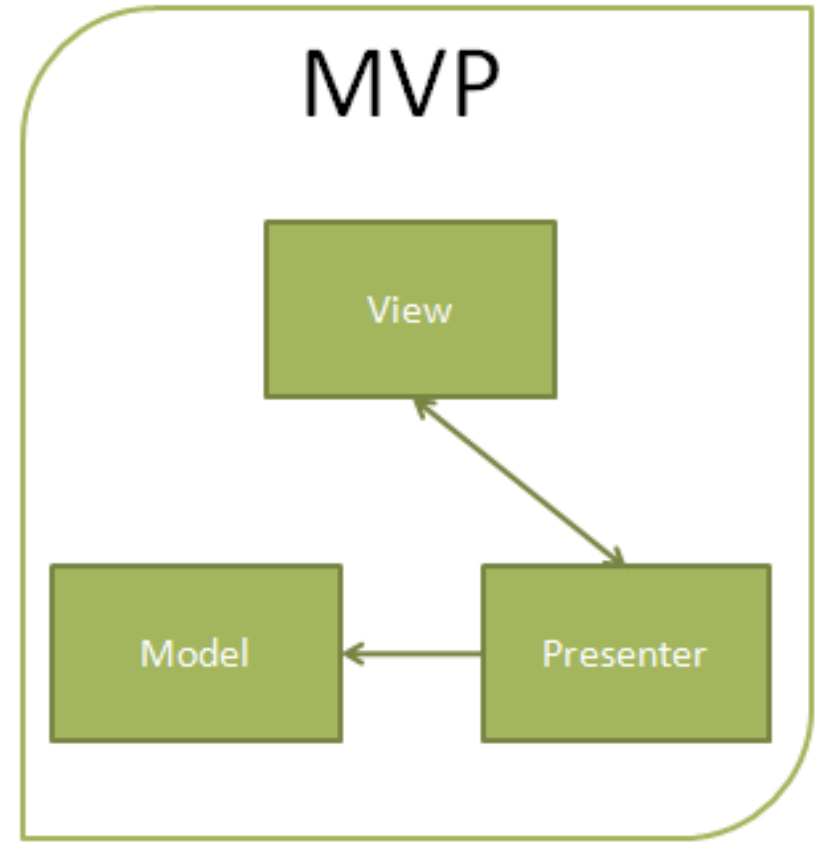
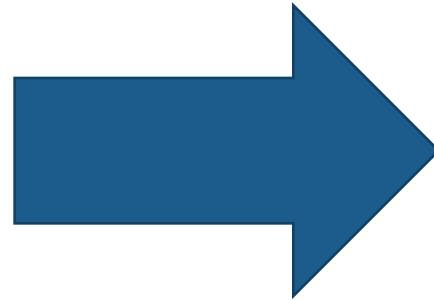
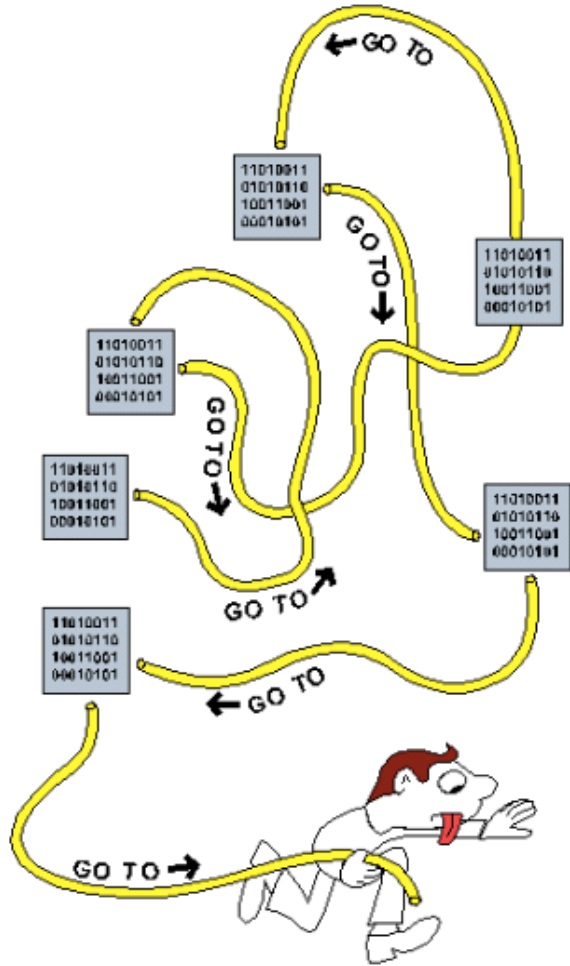


{ REST }



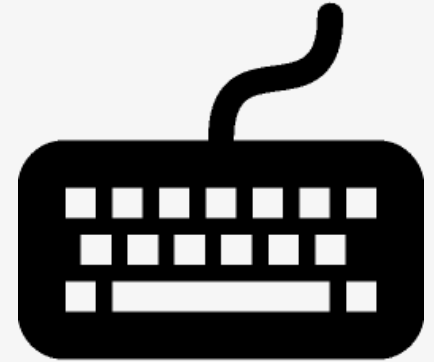
Missions

- *Correction, refactoring du code (MVP)*



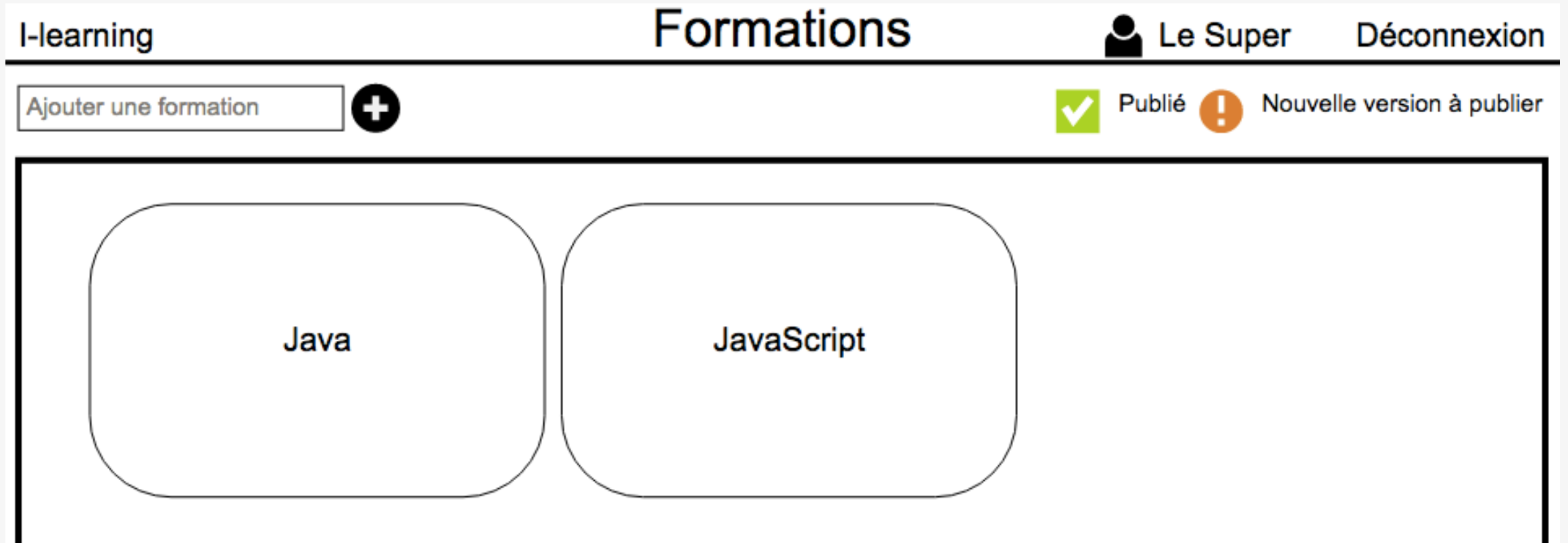
Missions

- *Développement service REST*
- *Réalisations des tests*



Missions

- *Développement design*




Missions

- *Développement design*

I-learning



Dashboard

 Le Super



Déconnexion



Ajouter une formation

+

 Editée  Publiée

Formations :

 Java 


 JavaScript 

Missions

- *Développement de nouveaux jeux*

I-learning

Quiz 0

 Minh-Huy LE




Déconnexion



[< Retourner à la formation](#)

hashCode() renvoie

int

boolean





cliquez sur une réponse pour passer à la question suivante

[< Retourner aux formations](#)

Créer un exercice :

Poupée 0

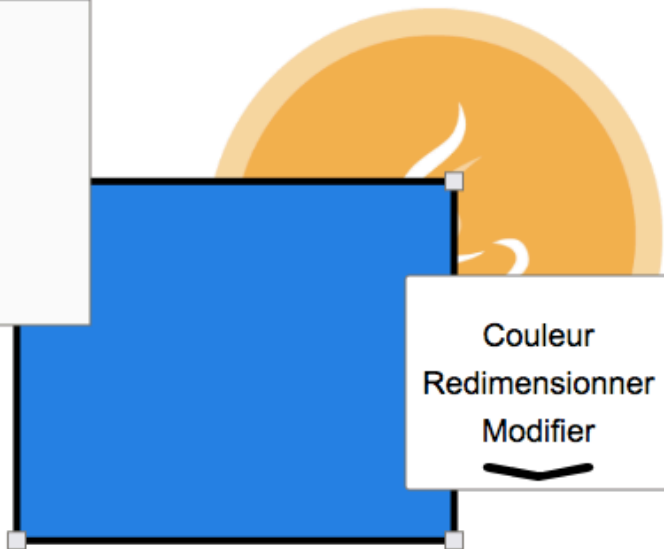
Enoncé

Règles

T



Zone text



Définissez les objectifs :

Ajouter

Définissez les réponses :

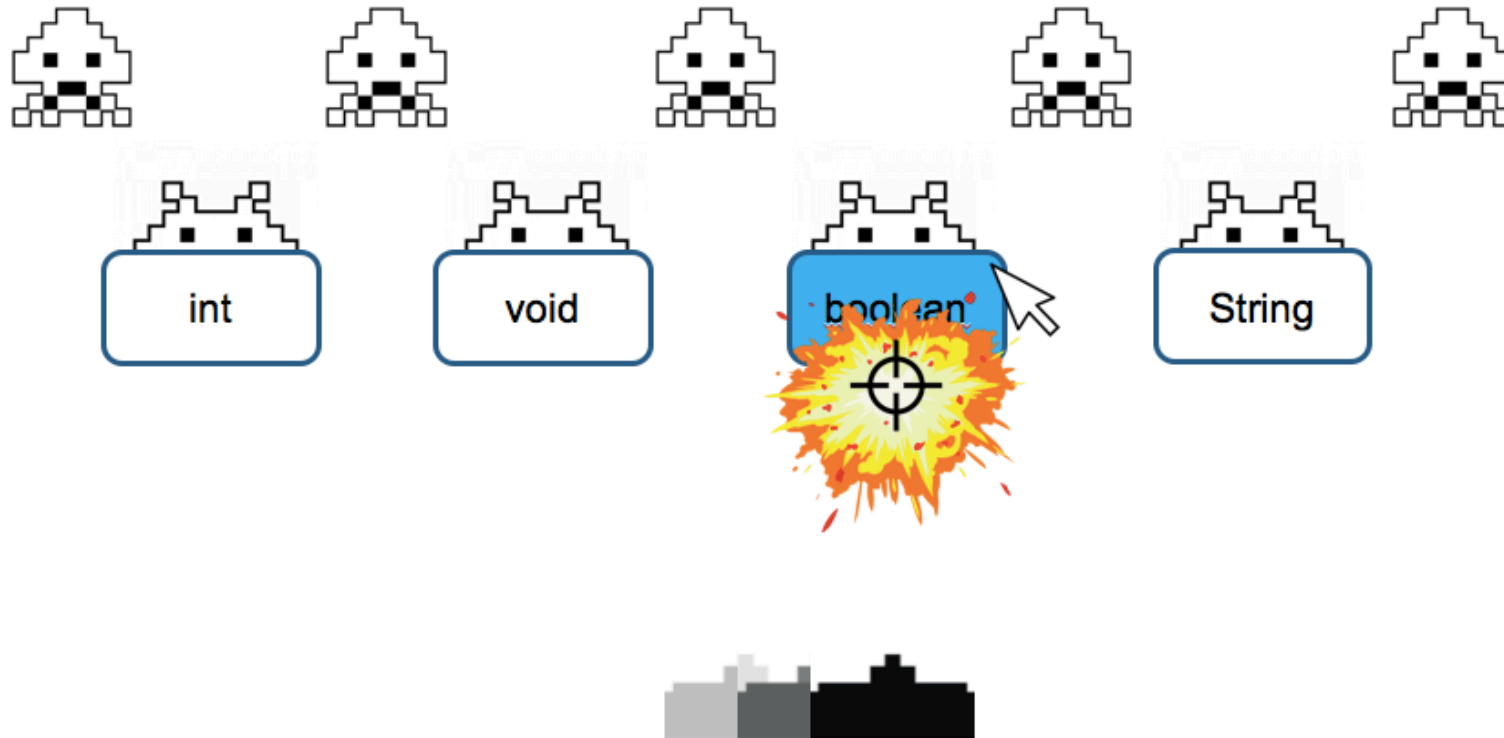
Ajouter

Sauvegarder

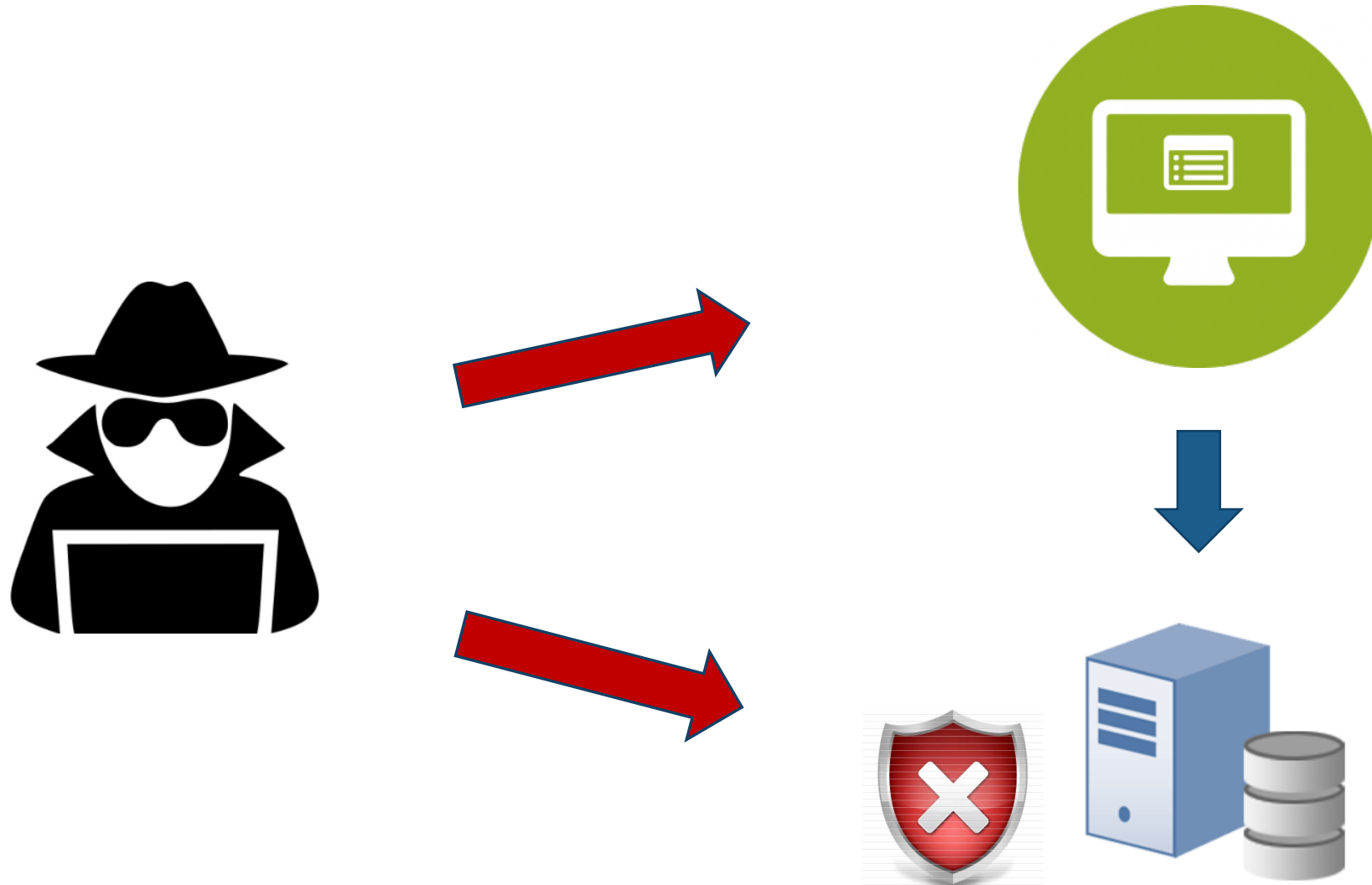
Missions

- *Proposition de nouveaux jeux*

hashCode retourne



La triche



La triche : Top 10 des attaques

OWASP Top 10 – 2013 (New)

A1 – Injection

A2 – Broken Authentication and Session Management

A3 – Cross-Site Scripting (XSS)

A4 – Insecure Direct Object References

A5 – Security Misconfiguration

A6 – Sensitive Data Exposure

A7 – Missing Function Level Access Control

A8 – Cross-Site Request Forgery (CSRF)

A9 – Using Known Vulnerable Components

A10 – Unvalidated Redirects and Forwards

Merged with 2010-A7 into new 2013-A6

La triche : Code inspection

I-learning Quiz 0 Minh-Huy LE Déconnexion

< Retourner à la formation

hashCode() renvoie

int boolean

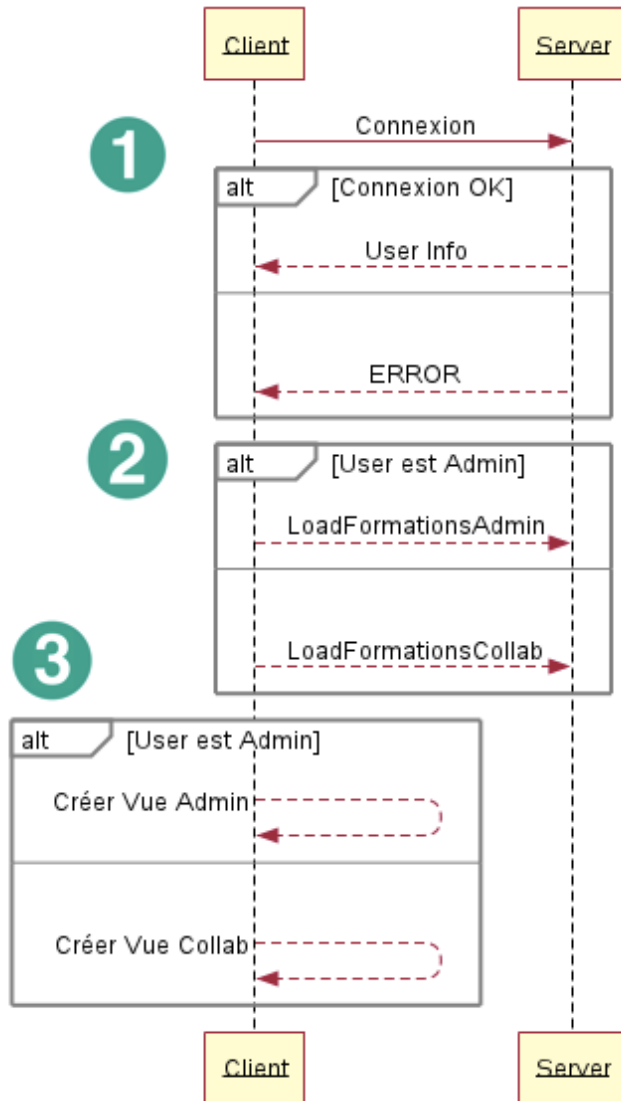
cliquez sur une réponse pour passer à la question suivante

```
1473  
1474 this.openPopIn && this.openPopIn();  
1475 this.openPopIn = null;  
1476
```

```
▼ this: QuestionVueCollab  
  ► answersManipulator: Manipulate  
  ► border: Polygon  
  ► content: Text  
    fontSize: 20  
    height: 222.79999999999998  
    imageLoaded: true  
    imageSrc: ""  
    invalidLabelInput: false  
  ► invalidQuestionPictogramManip  
    label: "hashCode() renvoie "
```

```
▼ rightAnswers: Array(1)  
  ▼ 0: AnswerVueCollab  
    ► border: Polygon  
    ▼ content: Text  
      anchorText: "middle"  
      ► component: text  
        fontName: "Arial"  
        fontSize: 20  
        id: "answerElementContent1"  
        lineSpacing: 40  
      ► lines: Array(0)  
        messageText: " int "  
        originalText: " int "
```

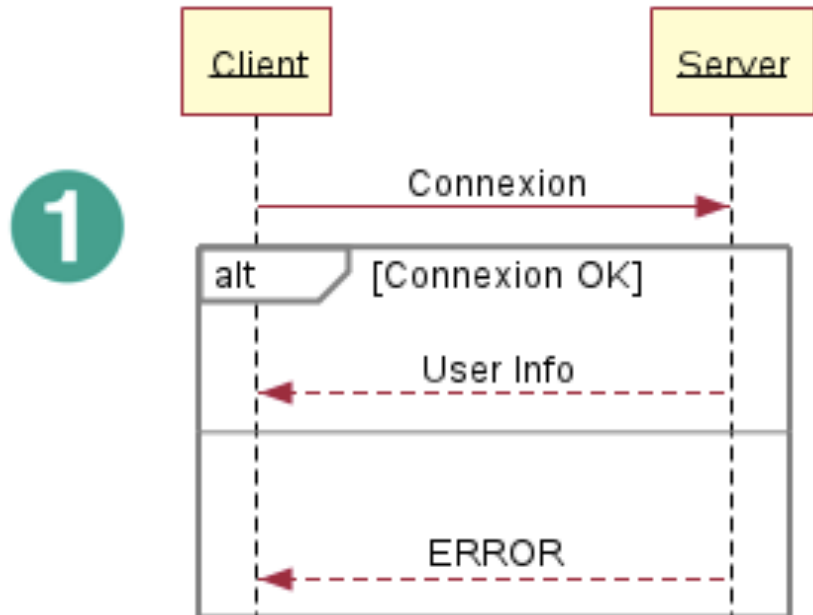
La triche : Code modification



▼ Event Listener Breakpoints

- ▶ ☐ Animation
- ▶ ☐ Canvas
- ▶ ☐ Clipboard
- ▶ ☐ Control
- ▶ ☐ Device
- ▶ ☐ DOM Mutation
- ▶ ☐ Geolocation
- ▶ ☐ Drag / drop
- ▶ ☐ Keyboard
- ▶ ☐ Load
- ▶ ☐ Media
- ▶ ☐ Mouse
- ▶ ☐ Notification
- ▶ ☐ Parse
- ▶ ☐ Pointer
- ▶ ☐ Script
- ▶ ☐ Timer
- ▶ ☐ Touch
- ▶ ☐ Window
- ▶ ☐ XHR

La triche : NoSQL Injection



Forme initiale :

```
{
  "email": "minhhuyle"
  "password": "motdepassecomplicuer"
}
```

Forme injecté :

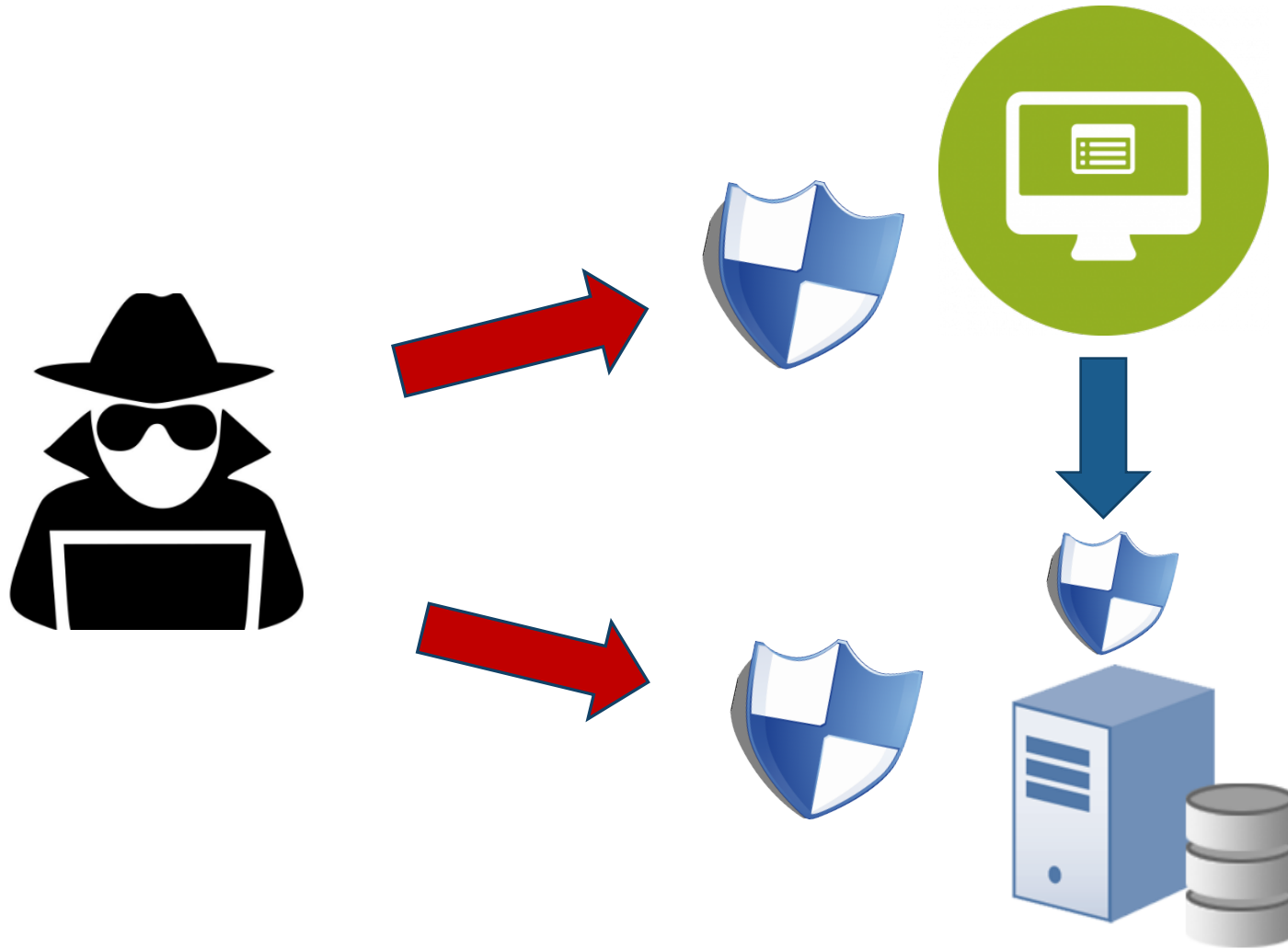
```
{
  "email": { $qt : "" }
  "password": { $qt : "" }
}
```

La triche : NoSQL Injection

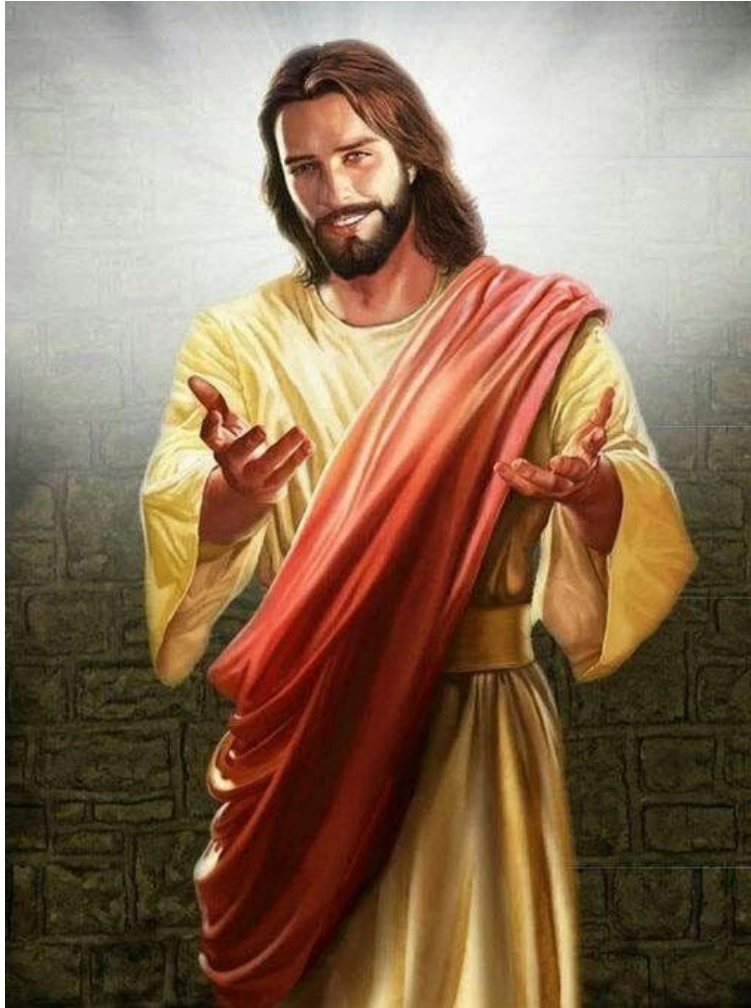
```
Var query = { $where: "this.login === '" + req.body.login + "'" }  
db.collection('users').find(query)
```

\$ne	➔	!=
\$eq	➔	==
\$gt	➔	>
\$lt	➔	<

Problématique



Solutions



Bilan

1

Sensibiliser

2

Identifier
&
Protéger

3

Coût

4

Choix



Vous avez des questions ?