MODELISER UNE ABSENCE POTENTIELLE DE VALEUR

OPTION

MIAGE M2 - QUALITÉ DU SI - THOMAS HAESSLÉ

```
type weapon
type target
type impacted = | Impacted
type 'a option =
 Some of 'a
  None
let arm your bow : weapon option = None
let targeted monster : target option = None
let hit monster : weapon -> target -> impacted option =
  fun w t -> None
```

```
class Weapon {}
class Target {}
class Impacted{}
interface Option<A>{}
class None<A> implements Option<A>{}
class Some<A> implements Option<A>{
  protected A value;
Option<Weapon> armYouBow = new None();
Option<Target> targetMonster = new None();
Option<Impacted> hitMonster(Weapon w, Target t) {
        return new None();
```

```
import java.util.Optional;
class Weapon {}
class Target {}
class Impacted{}
Optional<Weapon> armYouBow = Optional.empty();
Optional<Target> targetMonster = Optional.empty();
Optional < Impacted > hitMonster (Optional < Weapon > w,
Optional<Target> t) {
        return Optional.empty();
```

```
type weapon
type target
type impacted = Impacted
let arm your bow : weapon option = None
let targeted monster : target option = None
let hit monster : weapon -> target -> impacted option =
 fun w t -> None
```

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OPTION

```
import java.util.Optional;
class Weapon {}
class Target {}
class Impacted{}

Optional<Weapon> armYouBow = Optional.empty();
Optional<Target> targetMonster = Optional.empty();
Optional<Impacted> hitMonster(Optional<Weapon> w,
Optional<Target> t) {
        return Optional.empty();
}
```

```
type weapon
type target
type impacted = | Impacted

let arm_your_bow : weapon option = None
let targeted_monster : target option = None
let hit_monster : weapon -> target -> impacted option =
  fun w t -> None
```

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TRAITER LES VALEURS OPTIONNELLES

```
Optional<Impacted> hitMonsterIf(Optional<Weapon> w,
Optional<Target> t) {
    if (w.isPresent() && t.isPresent()) {
        return Optional.of(new Impacted());
    }else{
        return Optional.empty();
    }
}
```