HMIN103
Données du Web

Rendu TD/TP 4 - XQuery

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1. Xquery : Trains (suite)

Question 1

Le numéro des trains possédant une voiture-bar :

```
for $train in /gare/train
    where $train//bar
        return $train/@numero/string()
```

Question 2

Le nom des usages ayant au moins une réservation :

```
let $id_reservations := //resa/@id
for $usager in /gare/usager
    where $usager/@id = $id_reservations
        return $usager/@nom/string()
```

Question 3

La reservation avec le plus grand identifiant (dans l'ordre lexicographique) :

```
let $x := for $resa in //resa order by $resa/@numero
    return $resa return $x[last()]
```

Question 4

Le numéro des trains dont au moins2places sont réservées :

```
for $x in //train
    where $x[count(.//resa) > 1]
        return $x/@numero/string()
```

Question 5

Le nom des personnes ayant réservé exactement deux fois :

```
for $x in //usager
    where count(//resa[@id = $x/@id]) = 2
        return $x/@nom/string()
```

Question 6

Les usagers n'ayant effectué aucune réservation :

```
for $x in //usager
    where count(//resa[@id = $x/@id]) = 0
        return $x/@nom/string()
```

2.XMark

Question 1

All the items :

```
//item
```

Question 2

The keywords in annotations of closed auctions :

```
for $x in //closed_auctions
    return $x//keyword
```

Question 3

All the keywords

```
//keywords
```

Question 4

The keywords in a paragraph item :

```
for $x in //item
    for $y in $x//keyword
        return $y
```

Question 5

The (either North or South.) American items :

```
let $x := //namerica/item
let $y := //samerica/item
return ($x,$y)
```

Question 6

The paragraph items containing a keyword :

```
for $x in //item
    for $y in $x//text
        where exists($y//keyword)
            return $y
```

Question 7

The mails containing a keyword :

```
for $x in //mail
    where $x//keyword
        return $x
```

Question 8

The open auctions in which a certain person issued a bid before another person :

```
for $x in //open_auction
    return $x[count(.//bidder) > 1]
```

Question 9

The past bidders of a given open auction :

NB : notre *'order by'* ne fonctionne pas, donc la requête ci-dessous renvoie tout les *bidders* sauf le dernier de la liste. Si il fonctionne correctement on aurait donc renvoyé tout les précédents *bidders*.

```
let $res :=
    for $x in //open_auction[@id='open_auction0']
        for $y in $x/bidder order by $y//date
            return $y
return $res[position() < last()]
```

Question 10

The items that follow, in document order, a given item :

NB : On ne savait pas si il fallait donner les frères et soeurs (following-sibling) ou bien l'ensemble au complet d'ou le fait qu'on propose deux requêtes différentes. Ici on as choisis pour item donné, l'item portant l'*id* suivant : *'item10'*

```
for $x in //regions//item[@id='item10'] return $x/following::item
ou
for $x in //regions//item[@id='item10'] return $x/following-sibling::item
```

Question 11

The text nodes that are contained in the keywords of the description element of a given item :

Ici on as choisis pour item donné, l'item portant l'*id* suivant : *'item20'*

```
for $x in //item[@id='item20']/description//keyword return $x
```

Question 12

People having an address and either a phone or a homepage :

```
for $x in //person
    where $x//address
        where $x//homepage or $x//phone
            return $x
```

Question 13

People having no homepage :

```
for $x in //person
        where not ($x//homepage)
                return $x
```

Question 14

The initial and last bidder of all open auctions :

```
let $x := //bidder[last()]
let $y := //bidder[position() = 1]
return ($x,$y)
```

Question 15

The open auctions having more than 5 bidders :

```
for $x in //open_auction
    where $x[count($x//bidder) > 5]
        return $x
```

Question 16

Mails sent in September :

```
for $x in //mail
    where matches($x//date, '09/.*/.*')
        return $x
```

Question 17

The items whose description contains the word ‘gold’ :

```
let $x := //description
return $x[contains(text,'gold')]
```