Assignment 5

# Part I – Practicing XPath

### 1. Find the fall years (the node list of fallYear attributes) for the seasons stored in the XML

### document.

Query: //@fallYear

Result: 2 results, type fallYear attribute value: 2015 2016

### 2. Find all the entries (the node list of Entry elements) logged by the user with user name

### mari\_dahl.

Query: //Skier[@userName='mari\_dahl']/Log/Entry

59 results, type Entry elements

### 3. Find the logs (the node list of Log elements) for skiers in the 2015 season who skied for the

### club with id vindil and who skied more than 10 (kilometres).

Query: //Season[@fallYear='2015']/Skiers[@clubId='vindil']/\*/Log[sum(./\*/Distance)>10]

6 results, type Log elements

### 4. Find the user names (the node list of userName attributes) on skiers who in the 2016 season

### skied in an area having Venabygd as a part of the area name.

Query: //Season[@fallYear='2016']//\*[contains(Area,'Venabygd')]/../../@userName

17 results, type userName attribute

### 5. Find number of skiers who are considered young juniors (i.e., they are born between 2002 and

### 2004).

Query: count(//Skier[YearOfBirth>='2002' and YearOfBirth<='2004'])

Result: 42

### 6. Find the dates (the node list of Date elements) during the season of 2015 where the skier with

### user name idar\_kals1 skied in the are named Lygna.

Query: //Season[@fallYear='2016']//Skier[@userName='idar\_kals1']/\*/\*[Area='Lygna']/Date

3 results, type Date elements

### 7. Find the total distance logged during the 2015 season.

Query: sum(//Season[@fallYear='2015']//Distance)

Result: 20164

### 8. Find the total distance logged in the season of 2015 by skiers who were not skiing for a given

### club in that season.

Query: sum(//Season[@fallYear='2015']/Skiers[not(@clubId)]//Distance)

Result: 587

### 9. Find the skiers in the skier list (the nodelist of SkierLogs/Skiers/Skier elements) who

### skied for an Oppland club in the season of 2015.

Query: //SkierLogs/Skiers/Skier[@userName=../../Season[@fallYear='2015']/Skiers[@clubId=../../Clubs/Club[County='Oppland']/@id]/Skier/@userName]

34 results, type Skier elements

### 10. Find the skiers in the skier list (the nodelist of SkierLogs/Skiers/Skier elements) who

### skied in the area with the name Nordseter in the 2015 season but not in the 2016 season.

Query: //SkierLogs/Skiers/Skier[@userName=../../Season[@fallYear='2015']/Skiers/Skier/\*/Entry[Area='Nordseter']/../../@userName and not(@userName=../../Season[@fallYear='2016']/Skiers/Skier/\*/Entry[Area='Nordseter']/../../@userName)]

5 results, type Skier element