

Database Management Systems  
F28DB

Coursework 2 Report

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## Divided Work

Fraser was tasked with:

- Completing the XML File
- 2 Xpath expressions
- 1 xslt file

Matthew was tasked with:

- Completing the Schema
- 2 Xpath expressions
- 1 xslt file

## The XML File description

The XML file contains a Sports Centre that has Staff and Members. They must have a SSN, Name (first and last), a DOB, an email address. Staff are given a Staff ID, Salary and can have a manager (given by their respective Staff ID known as a Manager ID). Members have a type (eg. Gold, Silver or Bronze) and are given a membership ID on sign-up.

Members can make bookings where they specify a date and a time and will be given a room, equipment, a supervising staff member and a cost for the booking. The rooms are labelled with an ID a name and a building. Equipment is split up by ID's and the name of the equipment.

## Xpath Expressions

### Fraser's

- 1) Get the number of Gold membership type members

```
count (/SportsCentre/Members/member[memberType='Gold'])
```

Result:

3

- 2) Get the first name of staff with salary over 12000

```
/SportsCentre/People/person[@SSN = //staffMember[salary > 12000]/SSN/text()]/firstname/text()
```

Result:

```
<?xml version="1.0" encoding="UTF-8"?>
<result>
Fraser
Jodi
Louise
</result>
```

### Matthew's

- 1) Get the last names of all staff who have managers.

```
/SportsCentre/People/person[@SSN = //staffMember[ManagerID != 'NULL']/SSN/text()]/lastname/text()
```

Result:

```
<?xml version="1.0" encoding="UTF-8"?>
<result>
King
Henderson
Brydon
</result>
```

- 2) Get the first name of people with DOB 1997-11-26

```
/SportsCentre/People/person[DOB = '1997-11-26']/firstname/text()
```

Result:

Fraser