University of Niagara Falls Canada

CPSC-500 - 2

SQL Database

Assignment 1

Group -3

Dhruv Patel | NF1000200

Nidhi Tailor | NF1018012

Yuvraj Singh | NF1016125

Professor

Sundus Shanef

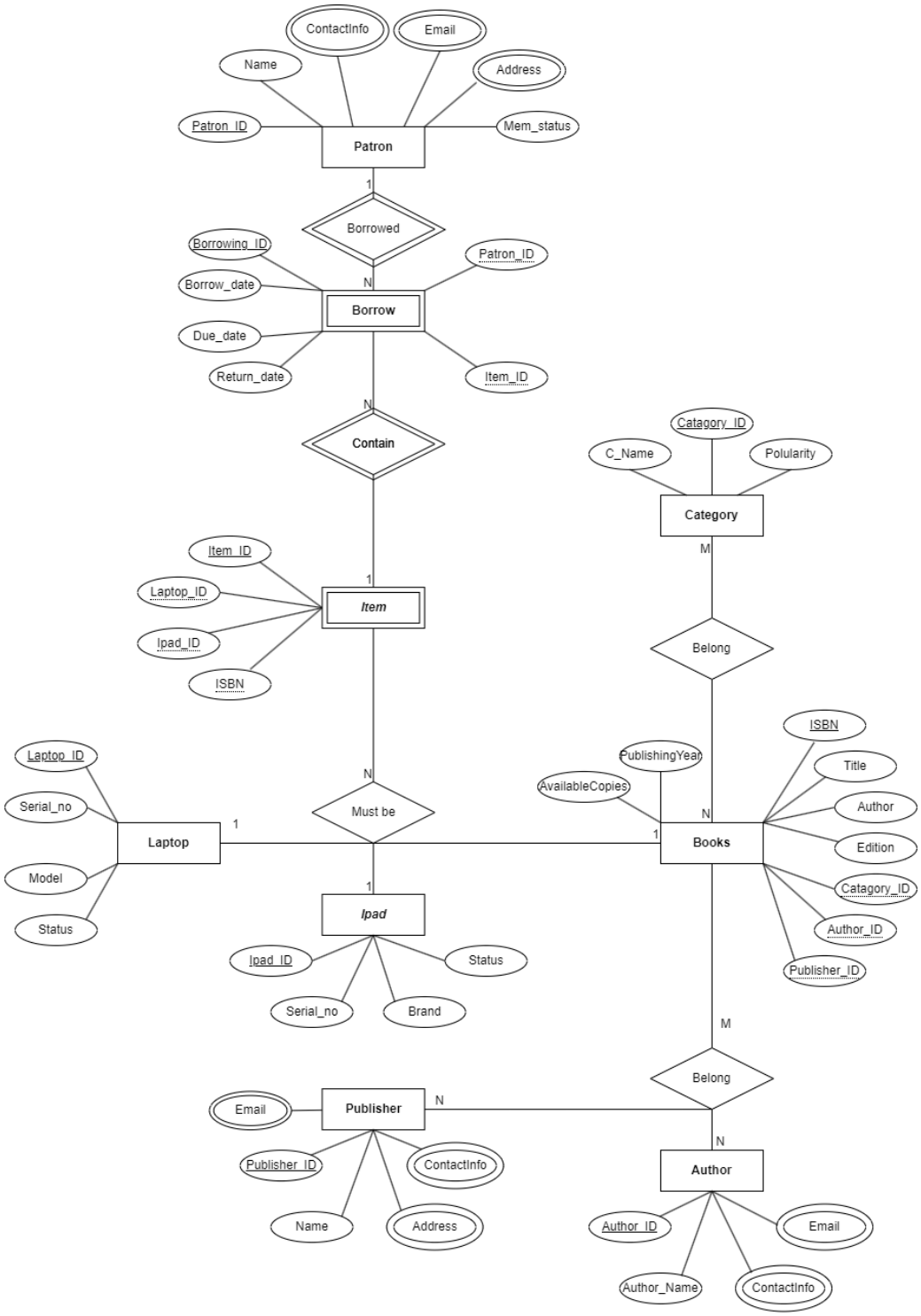
February 9th, 2025

Question 1

ER Diagram Chain Notation:(Link)

ER_Library_Chain_Notation.drawio.pdf

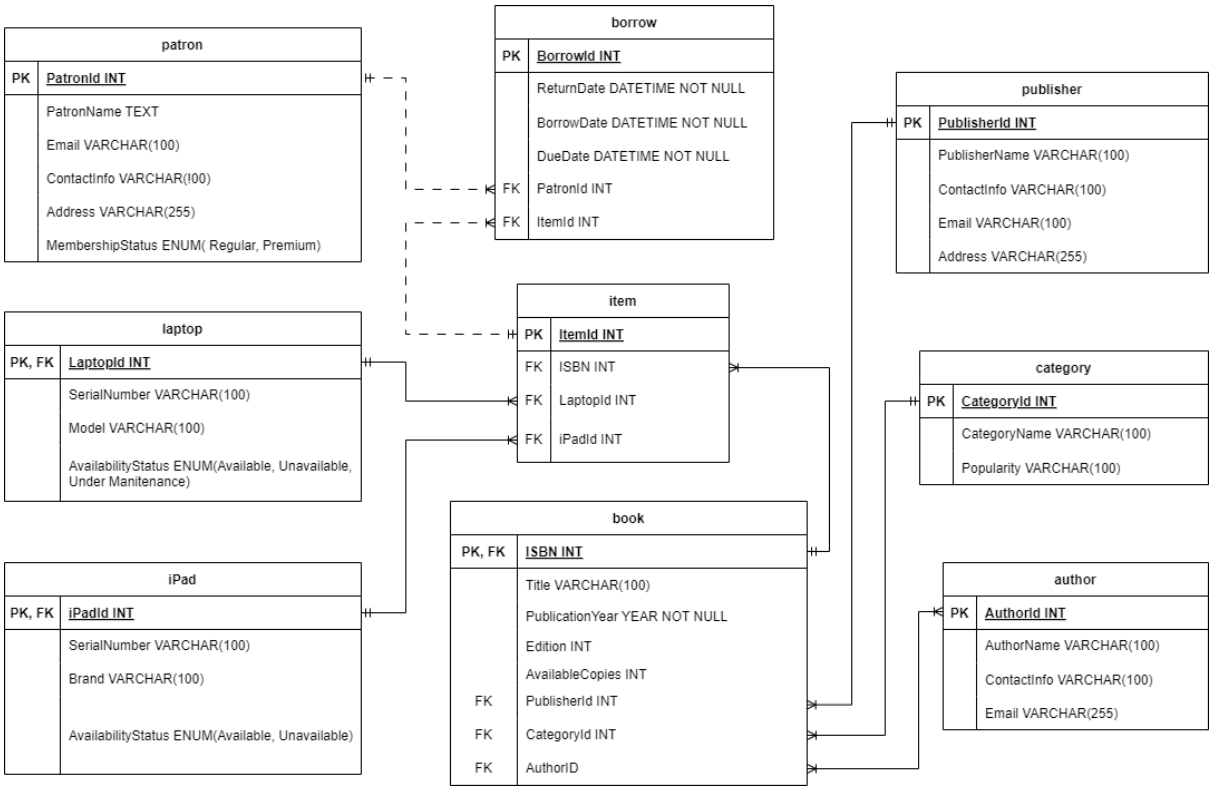
ER_Library_Chain_Notation.drawio



ER Diagram Crow Foot Notation(Link)

ER_Library_Crow_Foot.drawio

ER_library_crow_foot.drawio.pdf



Question 2

A) Write a query using MySQL to return all countries included in the World database.

World_(A).sql

```
1   -- A) Write a query using MySQL to return all countries included in the World database.--
2
3 • USE world;
4 • SELECT
5       Name
6   FROM
7       world.country;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name
Aruba
Afghanistan
Angola
Anguilla
Albania
Andorra
Netherlands Antilles
United Arab Emirates
Argentina
Armenia
American Samoa
Antarctica
French Southern ter...
Antigua and Barbuda
Australia
Austria
Azerbaijan
Burundi
Belgium
Benin
Burkina Faso
Bangladesh
Bulgaria
Bahrain
Bahamas
Bosnia and Herzego...
Belarus

country 2 ×

B) Write a query using MySQL that returns all countries in Europe.

World_(B).sql

```
1    -- B) Write a query using MySQL to return all countries Europe.--
2
3 •  USE world;
4 •  SELECT
5        Name, continent
6    FROM
7        world.country
8    WHERE
9        continent = 'Europe';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	continent
Albania	Europe
Andorra	Europe
Austria	Europe
Belgium	Europe
Bulgaria	Europe
Bosnia and Herzegovina	Europe
Belarus	Europe
Switzerland	Europe
Czech Republic	Europe
Germany	Europe
Denmark	Europe
Spain	Europe
Estonia	Europe
Finland	Europe
France	Europe
Faroe Islands	Europe
United Kingdom	Europe
Gibraltar	Europe
Greece	Europe
Croatia	Europe
Hungary	Europe
Ireland	Europe
Iceland	Europe
Italy	Europe

country 2

C) Write a query using MySQL to return all countries that speaks English as an official language with percentage greater than or equal to 70.

World_(C).sql

```
1   /* C) Write a query using MySQL to return all countries that
2         speaks English as an official language with percentage
3         greater than or equal to 70.*/
4
5   USE world;
6   SELECT
7       a.Name,
8       b.language,
9       b.IsOfficial,
10      b.percentage
11  FROM
12      world.country a
13  JOIN
14      world.countrylanguage b ON a.Code = b.CountryCode
15  WHERE
16      b.Language = 'English'
17  AND
18      b.IsOfficial = 'T'
19  AND
20      b.Percentage >= 70;
21
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	language	IsOfficial	percentage
Australia	English	T	81.2
Bermuda	English	T	100.0
United Kingdom	English	T	97.3
Gibraltar	English	T	88.9
Ireland	English	T	98.4
New Zealand	English	T	87.0
United States	English	T	86.2
Virgin Islands, U.S.	English	T	81.7

D) Write a query using MySQL to return all countries that received their independence in the 18th century.

World_(D).sql

```
1   /*D) Write a query using MySQL to return all countries
2       that received their independence in the 18th century.*/
3
4   USE world;
5   SELECT
6       Name, IndepYear
7   FROM
8       world.country
9   WHERE
10      IndepYear
11  BETWEEN
12      1700 AND 1799;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	IndepYear
Nepal	1769
United States	1776

E) Write a query using MySQL that returns the following dataset.

Name	CountryCode	District
Delhi	IND	Delhi
Ludhiana	IND	Punjab
Amritsar	IND	Punjab
Jalandhar (Jullundur)	IND	Punjab
New Delhi	IND	Delhi
Patiala	IND	Punjab
Bhatinda (Bathinda)	IND	Punjab
Pathankot	IND	Punjab
Hoshiarpur	IND	Punjab
Moga	IND	Punjab
Abohar	IND	Punjab
Delhi Cantonment	IND	Delhi

World_(E).sql

```sql
/* E) Write a query using MySQL that returns the given dataset. */

USE world;

SELECT
    Name,
    CountryCode,
    District
FROM
    world.city

WHERE
    CountryCode = 'IND'
AND
    District ='Punjab'
OR
    District ='Delhi' ;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	CountryCode	District
Delhi	IND	Delhi
Ludhiana	IND	Punjab
Amritsar	IND	Punjab
Jalandhar (Jullundur)	IND	Punjab
New Delhi	IND	Delhi
Patiala	IND	Punjab
Bhatinda (Bathinda)	IND	Punjab
Pathankot	IND	Punjab
Hoshiarpur	IND	Punjab
Moga	IND	Punjab
Abohar	IND	Punjab
Delhi Cantonment	IND	Delhi