Schema diagram:
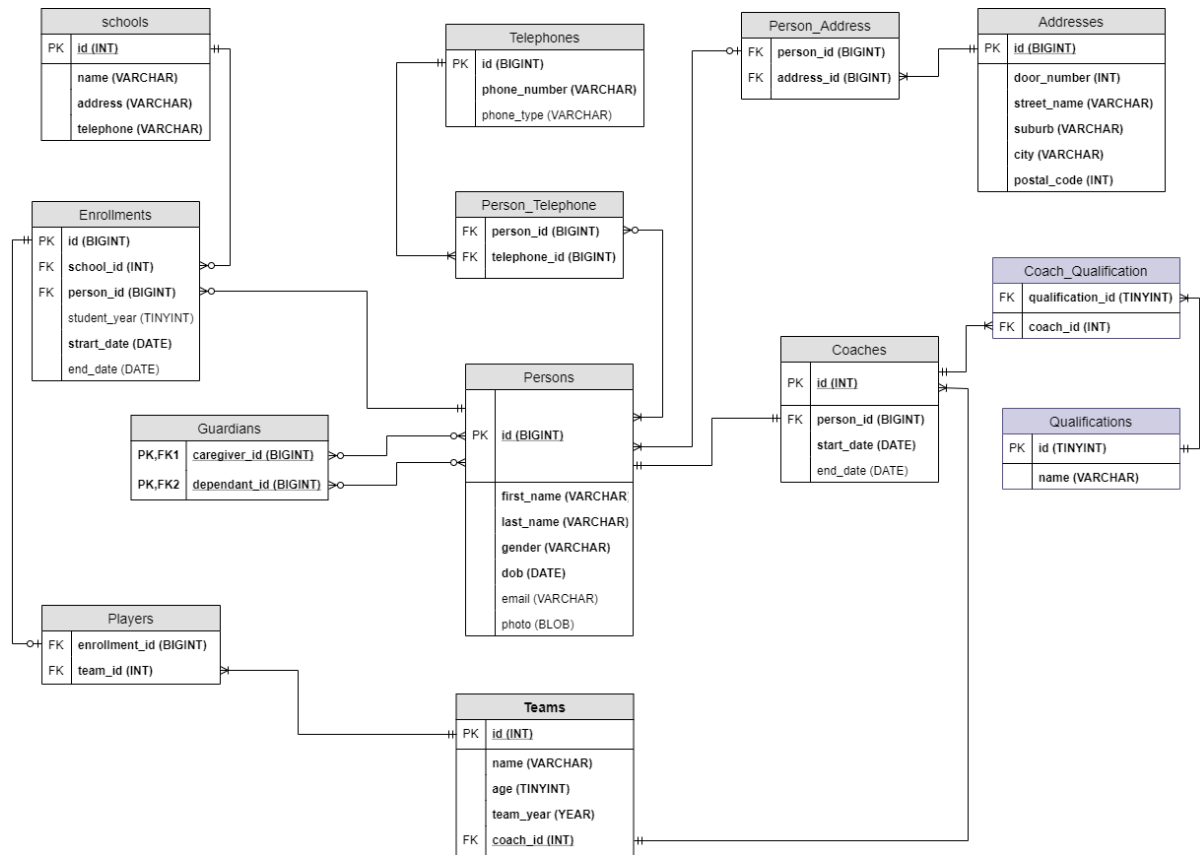
Jhonr1_schema.sql :

```sql
DROP DATABASE IF EXISTS jhonr1_rugby;

CREATE DATABASE jhonr1_rugby;

USE jhonr1_rugby;

CREATE TABLE persons(

id BIGINT AUTO_INCREMENT PRIMARY KEY,

first_name VARCHAR(25) NOT NULL,

last_name VARCHAR(25) NOT NULL,

gender VARCHAR(10) NOT NULL,

dob DATE NOT NULL,

email VARCHAR(100),

photo BLOB
)ENGINE=INNODB;


CREATE TABLE guardians(

caregiver_id BIGINT,

dependant_id BIGINT,

FOREIGN KEY (caregiver_id) REFERENCES persons(id) ON DELETE RESTRICT,

FOREIGN KEY (dependant_id) REFERENCES persons(id) ON DELETE RESTRICT
)ENGINE=INNODB;


CREATE TABLE addresses(

id BIGINT AUTO_INCREMENT PRIMARY KEY,

door_number INT NOT NULL,

street_name VARCHAR(40) NOT NULL,

suburb VARCHAR(30) NOT NULL,

city VARCHAR(30) NOT NULL,

postal_code INT NOT NULL
)ENGINE=INNODB;
```

```sql
CREATE TABLE person_address(

person_id BIGINT NOT NULL,

address_id BIGINT NOT NULL,

FOREIGN KEY (person_id) REFERENCES persons(id) ON DELETE RESTRICT,

FOREIGN KEY (address_id) REFERENCES addresses(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE telephones(

id BIGINT AUTO_INCREMENT PRIMARY KEY,

phone_number VARCHAR(20) NOT NULL,

phone_type VARCHAR(20)

)ENGINE=INNODB;


CREATE TABLE person_telephone(

person_id BIGINT NOT NULL,

telephone_id BIGINT NOT NULL,

FOREIGN KEY (person_id) REFERENCES persons(id) ON DELETE RESTRICT,

FOREIGN KEY (telephone_id) REFERENCES telephones(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE schools(

id INT AUTO_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

address VARCHAR(100) NOT NULL,

telephone VARCHAR(25) NOT NULL

)ENGINE=INNODB;


CREATE TABLE enrollments(

id BIGINT AUTO_INCREMENT PRIMARY KEY,

school_id INT NOT NULL,

person_id BIGINT NOT NULL,
```

```sql
student_year TINYINT,

start_date DATE NOT NULL,

end_date DATE,

FOREIGN KEY (person_id) REFERENCES persons(id) ON DELETE RESTRICT,

FOREIGN KEY (school_id) REFERENCES schools(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE coaches(

id INT AUTO_INCREMENT PRIMARY KEY,

person_id BIGINT NOT NULL,

start_date DATE NOT NULL,

end_date DATE,

FOREIGN KEY (person_id) REFERENCES persons(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE qualifications(

id TINYINT AUTO_INCREMENT PRIMARY KEY,

name VARCHAR(30) NOT NULL

)ENGINE=INNODB;


CREATE TABLE coach_qualification(

qualification_id TINYINT NOT NULL,

coach_id INT NOT NULL,

FOREIGN KEY (qualification_id) REFERENCES qualifications(id) ON DELETE RESTRICT,

FOREIGN KEY (coach_id) REFERENCES coaches(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE teams(

id INT AUTO_INCREMENT PRIMARY KEY,

name VARCHAR(25) NOT NULL,

age TINYINT NOT NULL,
```

```sql
team_year YEAR NOT NULL,

coach_id INT NOT NULL,

FOREIGN KEY (coach_id) REFERENCES coaches(id) ON DELETE RESTRICT

)ENGINE=INNODB;


CREATE TABLE players(

enrollment_id BIGINT NOT NULL,

team_id INT NOT NULL,

FOREIGN KEY (enrollment_id) REFERENCES enrollments(id) ON DELETE RESTRICT,

FOREIGN KEY (team_id) REFERENCES teams(id) ON DELETE RESTRICT

)ENGINE=INNODB;
```

Jhonr1_data.sql :

```sql
USE jhonr1_rugby;

INSERT INTO addresses (door_number, street_name, suburb, city, postal_code) VALUES

('1', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('2', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('3', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('4', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('5', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('6', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('7', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('8', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('9', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('10', 'Forth street', 'North dunedin', 'Dunedin', 9016),

('1', 'union street', 'North dunedin', 'Dunedin', 9016),

('2', 'union street', 'North dunedin', 'Dunedin', 9016),

('3', 'union street', 'North dunedin', 'Dunedin', 9016),

('4', 'union street', 'North dunedin', 'Dunedin', 9016),

('5', 'union street', 'North dunedin', 'Dunedin', 9016),
```

('6', 'union street', 'North dunedin', 'Dunedin', 9016),

('7', 'union street', 'North dunedin', 'Dunedin', 9016),

('8', 'union street', 'North dunedin', 'Dunedin', 9016),

('9', 'union street', 'North dunedin', 'Dunedin', 9016),

('10', 'union street', 'North dunedin', 'Dunedin', 9016),

('1', 'clyde street', 'North dunedin', 'Dunedin', 9016),

('2', 'clyde street', 'North dunedin', 'Dunedin', 9016),

('3', 'clyde street', 'North dunedin', 'Dunedin', 9016),

('4', 'clyde street', 'North dunedin', 'Dunedin', 9016),

('5', 'clyde street', 'North dunedin', 'Dunedin', 9016),

('6', 'clyde street', 'North dunedin', 'Dunedin', 9016);

INSERT INTO persons (first_name, last_name, gender, dob, email) VALUES

('Arianna', 'Monahan', 'Male', '1980-09-27', 'Meaghan_Greenholt@sabryna.ca'),

('Pearl', 'Cummings', 'Male', '2005-08-16', 'Tianna_Mraz@katarina.tv'),

('Werner', 'Lehner', 'Male', '1979-01-10', 'Corbin@jules.me'),

('Sigmund', 'Prohaska', 'Male', '2003-08-17', 'Monroe_Doyle@aleen.tv'),

('Anton', 'Bernier', 'Male', '1981-08-27', 'Abdiel@dulce.io'),

('Louie', 'Cummings', 'Male', '2005-12-17', 'Fred@ashley.tv'),

('Maximillia', 'Bogan', 'Male', '1983-06-20', 'Simone.Zboncak@hoyt.com'),

('Ivah', 'Roob', 'Male', '20061230', 'Gabe@dulce.biz'),

('Ford', 'Smith', 'Male', '19761130', 'Margot@isom.info'),

('Thomas', 'Lang', 'Male', '2002-10-12', 'Bettie@dangelo.ca'),

('Ericka', 'Grimes', 'Female', '19840218', 'Eda.Cummerata@makayla.ca'),

('Mohamed', 'Littel', 'Male', '20040218', 'Brionna@nellie.ca'),

('Micheal', 'Schoen', 'Male', '1986-02-24', 'Maxime@dale.org'),

('Wilber', 'West', 'Male', '2004-02-17', 'Demario@jake.tv'),

('Elinor', 'Frami', 'Female', '19830318', 'Velda_Streich@jarrod.me'),

('Godfrey', 'Rohan', 'Male', '2006-12-09', 'Britney_Cummerata@rowena.me'),

('Elfrieda', 'Hickle', 'Female', '19860418', 'Richard.Jones@kyleigh.net'),

('Stephen', 'Crist', 'Male', '2003-05-31', 'Jany_Mante@adell.co.uk'),

('Murphy', 'Thompson', 'Male', '1984/01/27', 'Modesto@sanford.us'),

('Prudence', 'McLaughlin', 'Male', '2006-08-29', 'Devonte@carleton.net'),

('Freeda', 'Beahan', 'Female', '19850318', 'Krystina@juvenal.net'),

('Benjamin', 'Corwin', 'Male', '2003-02-01', 'Breanna@concepcion.info'),

('Lolita', 'Klein', 'Female', '1986-04-30', 'Elenora@cleveland.ca'),

('Dorris', 'Lubowitz', 'Male', '2007-07-24', 'Lennie_Ullrich@annetta.net'),

('Camryn', 'Mayer', 'Male', '1982-05-03', 'Giovanna.Wolff@alexandria.name'),

('Stephen', 'Shields', 'Male', '2007-04-15', 'Nikit.Rohan@vidal.io'),

('Elmo', 'Hand', 'Female', '1986-04-09', 'Elmo.Hand@flossie.name'),

('Fletcher', 'Larkin', 'Male', '2007-04-09', NULL),

('Joshuah', 'Barrows', 'Male', '1980-10-09','Joshuah.Barrows@yahoo.com'),

('Ashleigh', 'Durgan', 'Male', '2004-04-13', 'Amelie.Rau@leonor.us'),

('Robb', 'Dicki', 'Male', '1983-04-23', 'Robb.Dicki@leonor.us'),

('Jose', 'Lebsack', 'Male', '2004-08-23', NULL),

('Tony', 'Savarimuthu', 'Male', '1981-05-17', 'tony.savarimuthu@gmail.com'),

('Rohan', 'Savarimuthu', 'Male', '2008-12-25', 'rohsav123@gmail.com'),

('Esther', 'Rogahn', 'Male', '1984-01-25', 'Esther.Rogahn@gmail.com'),

('Casey', 'Bashirian', 'Male', '2005-12-25', NULL),

('Paul', 'crawford', 'Male', '1980-12-25', 'Paul.crawford@gmail.com'),

('Lonie', 'fidel', 'Male', '2006-10-05', NULL),

('Tania', 'Johns', 'Female', '1983-05-31', 'Libby.Schowalter@vernice.info'),

('Charlene', 'Amore', 'Male', '2007-06-01', 'Cierra@virgie.me'),

('Eloy', 'Bergstrom', 'Male', '2005-10-12', 'Rollin@mike.biz'),

('Carole', 'Walsh', 'Male', '1976-04-15', 'Carole.Walsh@vidal.io'),

('Simeon', 'Zboncak', 'Male', '2006-03-15', NULL),

('Prince', 'Dickens', 'Male', '2002-04-14', NULL),

('Mauricio', 'Leffler', 'Male', '1978-07-06', 'Jose_Graham@dustin.info'),

('Brenden', 'Witting', 'Male', '2004-04-28', 'Johanna@nicola.name'),

('Cora', 'Toy', 'Male', '2006-03-18', 'Josiah_Wolff@nicolas.net'),

('Rosella', 'Smitham', 'Female', '1975-08-15', 'Rosella_Smitham@sydnie.ca'),

('Darby', 'Barrows', 'Male', '1979-12-23', 'Darby_Barrows@austin.net'),

('Laury', 'Crona', 'Male', '1976-11-05', 'Laury_Crona@shaun.co.uk');

INSERT INTO person_address (person_id, address_id) VALUES

(1,1),

(3,2),

(5,3),

(7,4),

(9,5),

(11,6),

(13,7),

(15,8),

(17,9),

(19,10),

(21,11),

(23,12),

(25,13),

(27,14),

(29,15),

(31,16),

(33,17),

(35,18),

(37,19),

(39,20),

(42,21),

(45,23),

(48,24),

(49,25),

(50,26);

INSERT INTO telephones (phone_number, phone_type) VALUES

('021 123 4567','mobile'),

('022 123 4567','mobile'),

('023 123 4567','mobile'),

('024 123 4567','mobile'),

('025 123 4567','mobile'),

('026 123 4567','mobile'),

('027 123 4567','mobile'),

('028 123 4567','mobile'),

('029 123 4567','mobile'),

('030 123 4567','mobile'),

('031 123 4567','mobile'),

('032 123 4567','mobile'),

('033 123 4567','mobile'),

('034 123 4567','mobile'),

('035 123 4567','landline'),

('036 123 4567','landline'),

('037 123 4567','mobile'),

('038 123 4567','mobile'),

('039 123 4567','mobile'),

('040 123 4567','landline'),

('041 123 4567','mobile'),

('042 123 4567','mobile'),

('043 123 4567','mobile'),

('044 123 4567','landline'),

('045 123 4567','mobile'),

('046 123 4567','landline');

INSERT INTO person_telephone (person_id, telephone_id) VALUES

(1,1),

(3,2),

(5,3),

(7,4),

(9,5),

(11,6),

(13,7),

(15,8),

(17,9),

(19,10),

(21,11),

(23,12),

(25,13),

(27,14),

(29,15),

(31,16),

(33,17),

(35,18),

(37,19),

(39,20),

(42,21),

(45,23),

(48,24),

(49,25),

(50,26);

INSERT INTO schools (name, address, telephone) VALUES

('Otago Boys school', '2 Arthur St, Dunedin, 9016', '03-477 5527'),

('John McGlashan College', '2 Pilkington St, Maori Hill, Dunedin 9010', '03-467 6620'),

('high school of the kings', '270 Bay View Rd, Dunedin 9012', '03-455 7547'),

('Kavanagh College', '340 Rattray St, Dunedin, 9016', '03-477 3408'),

('Abbotsford School', '72 North Taieri Road, Dunedin', '03-4882642'),

('Taieri College', 'Green Street, Mosgiel', '03-4893823'),

('Kaikorai Valley College', 'Kaikorai Valley Road, Dunedin', '03-453 6035'),

('Balmacewen Intermediate', '44 Chapman Street, Dunedin', '03-466 7251'),

('Amana Christian School', '14 Gordon Road, Mosgiel', '03-489 2113');

INSERT INTO enrollments (school_id, person_id, student_year, start_date) VALUES

(1, 2, 9, '2019/02/07'),

(1, 4, 10, '2019/03/07'),

(1, 6, 9, '2019/02/08'),

(2, 8, 9, '2019/04/05'),

(2, 10, 11, '2019/06/07'),

(2, 12, 10, '2019/01/05'),

(3, 14, 10, '2019/02/06'),

(3, 16, 9, '2019/02/08'),

(3, 18, 11, '2019/03/07'),

(4, 20, 9, '2019/02/17'),

(4, 22, 10, '2019/02/27'),

(4, 24, 7, '2019/04/07'),

(5, 26, 7, '2019/02/11'),

(5, 28, 7, '2019/03/06'),

(5, 30, 10, '2019/02/01'),

(6, 32, 10, '2019/04/15'),

(6, 34, 6, '2019/02/18'),

(6, 36, 9, '2019/05/07'),

(7, 38, 8, '2019/02/27'),

(7, 40, 7, '2019/04/07'),

(7, 41, 8, '2019/05/17'),

(8, 43, 9, '2019/05/18'),

(8, 44, 11, '2019/10/25'),

(9, 46, 11, '2019/10/17'),

(9, 47, 8, '2019/07/08');

INSERT INTO coaches (person_id, start_date) VALUES

(42, '2019-02-07'),

(45, '2019-01-05'),

(48, '2019-04-01'),

(49, '2019-03-15'),

(50, '2019-03-26');

INSERT INTO teams (name, age, team_year, coach_id) VALUES

('All Blacks', 10, 2017, 1),

('Heartland', 11, 2017, 2),

('Black Ferns', 12, 2017, 3),

('Otago', 10, 2017, 4),

('Highlanders', 10, 2017, 5),

('All Blacks', 10, 2018, 1),

('Heartland', 11, 2018, 2),

('Black Ferns', 12, 2018, 3),

('Otago', 10, 2018, 4),

('Highlanders', 10, 2018, 5),

('All Blacks', 10, 2019, 1),

('Heartland', 11, 2019, 2),

('Black Ferns', 12, 2019, 3),

('Otago', 10, 2019, 4),

('Highlanders', 10, 2019, 5);

INSERT INTO players (enrollment_id, team_id) VALUES

(1,1),

(2,1),

(3,1),

(4,1),

(5,1),

(6,2),

(7,2),

(8,2),

(11,3),

(12,3),

(13,3),

(16,4),

(17,4),

(18,4),

(19,4),

(21,5),

(22,5),

(23,5),

(24,5),

(3,6),

(4,6),

(5,6),

(6,7),

(7,7),

(8,7),

(11,8),

(12,8),

(13,8),

(16,9),

(17,9),

(19,9),

(21,10),

(22,10),

(23,10),

(1,11),

(2,11),

(3,11),

(4,11),

(6,12),

(7,12),

(8,12),

(10,12),

(12,13),

(13,13),

(15,13),

(16,14),

(17,14),

(18,14),

(20,14),

(21,15),

(25,15);

INSERT INTO qualifications (name) VALUES

('Teenage Coaching Course'),

('Learning Rugby Course'),

('Playing Rugby Course'),

('Rugby Administration Course'),

('Rugby Experts Course');

INSERT INTO coach_qualification (qualification_id, coach_id) VALUES

(1, 1),

(2, 2),

(3, 3),

(4, 4),

(5, 5);

INSERT INTO guardians VALUES

(1,2),

(3,4),

(5,6),

(7,8),

(9,10),

(11,12),

(13,14),

(15,16),

(17,18),

(19,20),

(21,22),

(23,24),

(25,26),

(27,28),

(29,30),

(31,32),

(33,34),

(35,36),

(37,38),

(39,40),

(39,41),

(42,43),

(42,44),

(45,46),

(45,47);

DROP FUNCTION IF EXISTS teamsize;

DELIMITER //

CREATE FUNCTION teamsize(tName VARCHAR(25), tYear YEAR)

returns int

BEGIN

```sql
SET @tSize = (SELECT COUNT(*) FROM players WHERE team_id IN (SELECT id FROM teams WHERE
name = tName AND tYear = team_year) );

RETURN @tSize;

END; //

DELIMITER ;


SELECT teamsize("All Blacks", '2019');


DROP VIEW IF EXISTS phonelist;


CREATE VIEW phonelist AS SELECT DISTINCT p.id AS ID, p.first_name AS Student, t.name AS Team,
per.first_name AS Caregiver, tel.phone_number FROM ((((((teams t JOIN players pl ON t.id =
pl.team_id) JOIN enrollments en ON pl.enrollment_id = en.id) JOIN persons p ON en.person_id =
p.id) JOIN guardians g ON p.id = g.dependant_id) JOIN persons per ON g.caregiver_id = per.id) JOIN
person_telephone pt ON pt.person_id = per.id) JOIN telephones tel ON pt.telephone_id = tel.id
ORDER BY p.id;
```