-- Project Part 2

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-- PART A: Table Creation Queries

**CREATE TABLE** Person (

email **varchar(80) PRIMARY KEY**,

password **char(64) NOT NULL**,

first\_name **varchar(50)**,

last\_name **varchar(50)**

);

**CREATE TABLE** FriendGroup (

owner\_email **varchar(80)**,

fg\_name **varchar(80)**,

description **varchar(250)**,

**PRIMARY KEY** (owner\_email, fg\_name),

**FOREIGN KEY** (owner\_email) **REFERENCES** Person(email)

);

**CREATE TABLE** Belongs (

member\_email **varchar(80)**,

fg\_name **varchar(80)**,

owner\_email **varchar(80)**,

**PRIMARY KEY** (owner\_email, fg\_name, member\_email),

**FOREIGN KEY** (owner\_email, fg\_name)

**REFERENCES** FriendGroup(owner\_email, fg\_name),

**FOREIGN KEY** (member\_email) **REFERENCES** Person(email)

);

**CREATE TABLE** ContentItem (

item\_id **int** **AUTO\_INCREMENT PRIMARY KEY**,

post\_time **timestamp default CURRENT\_TIMESTAMP,**

file\_path **varchar(200) NOT NULL**,

item\_name **varchar(80)**,

is\_pub **boolean** **default** false

);

**CREATE TABLE** Tag (

tagger\_email **varchar(80),**

taggee\_email **varchar(80),**

item\_id **int**,

tag\_time **timestamp** **default CURRENT\_TIMESTAMP**,

status **int**,

**PRIMARY KEY** (tagger\_email, taggee\_email, item\_id),

**FOREIGN KEY** (item\_id) **REFERENCES** ContentItem(item\_id),

**FOREIGN KEY** (tagger\_email, taggee\_email)

**REFERENCES** Person(email, email)

);

**CREATE TABLE** Rate (

item\_id **int**,

rater\_email **varchar(80)**,

rate\_time **timestamp default CURRENT\_TIMESTAMP**,

emoji **char(1)**,

**PRIMARY KEY** (item\_id, rater\_email),

**FOREIGN KEY** (item\_id) **REFERENCES** ContentItem(item\_id),

**FOREIGN KEY** (rater\_email) **REFERENCES** Person(email)

);

**CREATE TABLE** Posted (

item\_id **int**,

poster\_email **varchar(80)**,

**PRIMARY KEY** (item\_id, poster\_email),

**FOREIGN KEY** (item\_id) **REFERENCES** ContentItem(item\_id),

**FOREIGN KEY** (poster\_email) **REFERENCES** Person(email)

);

**CREATE TABLE** Shares (

item\_id **int**,

owner\_email **varchar(80)**,

fg\_name **varchar(80),**

**PRIMARY KEY** (item\_id, owner\_email, fg\_name),

**FOREIGN KEY** (item\_id) **REFERENCES** ContentItem(item\_id),

**FOREIGN KEY** (owner\_email, fg\_name)

**REFERENCES** FriendGroup(owner\_email, fg\_name)

);

-- PART B: Insert Queries

**INSERT INTO** Person **VALUES** ("AA@nyu.edu", SHA2("AA", 256), "Ann", "Anderson"),

("BB@nyu.edu", SHA2("BB", 256), "Bob", "Baker"),

("CC@nyu.edu", SHA2("CC", 256), "Cathy", "Cheng"),

("DD@nyu.edu", SHA2("DD", 256), "David", "Davidson"),

("EE@nyu.edu", SHA2("EE", 256), "Ellen", "Ellenberg"),

("FF@nyu.edu", SHA2("FF", 256), "Fred", "Fox"),

("GG@nyu.edu", SHA2("GG", 256), "Gina", "Gupta"),

("HH@nyu.edu", SHA2("HH", 256), "Hellen", "Harper")

**INSERT INTO** FriendGroup **VALUES** ("AA@nyu.edu", "family", NULL),

("BB@nyu.edu", "family", NULL),

("AA@nyu.edu", "roommates", NULL)

**INSERT INTO** Belongs **VALUES** ("AA@nyu.edu", "family", "AA@nyu.edu"),

("CC@nyu.edu", "family", "AA@nyu.edu"),

("DD@nyu.edu", "family", "AA@nyu.edu"),

("EE@nyu.edu", "family", "AA@nyu.edu"),

("BB@nyu.edu", "family", "BB@nyu.edu"),

("FF@nyu.edu", "family", "BB@nyu.edu"),

("EE@nyu.edu", "family", "BB@nyu.edu"),

("AA@nyu.edu", "roommates", "AA@nyu.edu"),

("GG@nyu.edu", "roommates", "AA@nyu.edu"),

("HH@nyu.edu", "roommates", "AA@nyu.edu")

**INSERT INTO** ContentItem (file\_path, item\_name)

**VALUES** ("/pic/of/cat.jpg", "Whiskers"),

("/pic/of/food.jpg", "leftovers in fridge"),

("/pic/of/rover.jpg", "Rover");

**INSERT INTO** Posted **VALUES** (1, "AA@nyu.edu"),

(2, "AA@nyu.edu"),

(3, "BB@nyu.edu");

**INSERT INTO** Shares **VALUE** (1, "AA@nyu.edu", "family"),

(2, "AA@nyu.edu", "roommates"),

(3, "BB@nyu.edu", "family")

-- PART C: Query to get the ID and name of each content item that is shared with David

**SELECT DISTINCT** c.item\_id, c.item\_name **FROM** ContentItem **AS** c

**NATURAL JOIN** Shares

**NATURAL JOIN** FriendGroup

**NATURAL JOIN** Belongs **AS** b

**WHERE** b.member\_email = "DD@nyu.edu" **OR** c.is\_pub = true