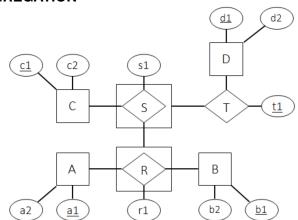
CS2102 ER Models & Relational Schemas

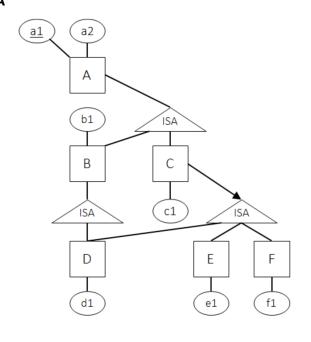
AY21/22 SEM 1 · github/jovyntls

AGGREGATION



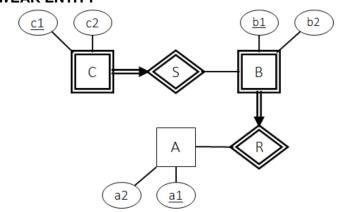
```
DROP TABLE IF EXISTS A, B, C, D, R, S, T CASCADE;
CREATE TABLE A (
 al INTEGER PRIMARY KEY,
 a2 INTEGER
CREATE TABLE B (
 b1 INTEGER PRIMARY KEY,
 b2 INTEGER
);
CREATE TABLE C (
 c1 INTEGER PRIMARY KEY,
 c2 INTEGER
CREATE TABLE D (
 d1 INTEGER PRIMARY KEY,
 d2 INTEGER
);
CREATE TABLE R (
 al INTEGER REFERENCES A,
 b1 INTEGER REFERENCES B,
 r1 INTEGER,
 PRIMARY KEY (a1, b1)
CREATE TABLE S ( a1 INTEGER,
 b1 INTEGER,
 c1 INTEGER REFERENCES C,
 s1 INTEGER,
 PRIMARY KEY (a1, b1, c1),
 FOREIGN KEY (a1, b1) REFERENCES R
CREATE TABLE T (
 al INTEGER,
 b1 INTEGER,
 c1 INTEGER,
 d1 INTEGER REFERENCES D,
 t1 INTEGER,
 PRIMARY KEY (a1, b1, c1, d1, t1),
 FOREIGN KEY (a1, b1, c1) REFERENCES S
```

IS-A



```
DROP TABLE IF EXISTS A, B, C, D, E, F CASCADE;
CREATE TABLE A (
 al INTEGER PRIMARY KEY,
  a2 INTEGER
);
CREATE TABLE B (
 al integer primary key references a on delete cascade,
);
CREATE TABLE C (
 al INTEGER PRIMARY KEY REFERENCES A ON DELETE CASCADE,
 c1 INTEGER
);
CREATE TABLE D (
  al INTEGER PRIMARY KEY REFERENCES B REFERENCES C ON DELETE
      CASCADE.
 d1 INTEGER
);
CREATE TABLE E (
 al INTEGER PRIMARY KEY REFERENCES C
 ON DELETE CASCADE, e1 INTEGER
);
CREATE TABLE F (
 al INTEGER PRIMARY KEY REFERENCES C
 ON DELETE CASCADE, f1 INTEGER
```

WEAK ENTITY



```
DROP TABLE IF EXISTS A, B, C CASCADE;
CREATE TABLE A (
 al INTEGER PRIMARY KEY,
 a2 INTEGER
);
CREATE TABLE B (
 al INTEGER REFERENCES A ON DELETE CASCADE,
 b1 INTEGER,
 b2 INTEGER,
 PRIMARY KEY (a1, b1)
CREATE TABLE C (
 al INTEGER,
 b1 INTEGER,
 c1 INTEGER,
 c2 INTEGER,
 PRIMARY KEY (a1, b1, c1),
 FOREIGN KEY (a1, b1) REFERENCES B ON DELETE CASCADE
```