DROP DATABASE IF EXISTS cs122a_sp19;
CREATE DATABASE cs122a_sp19;
USE cs122a_sp19;

CREATE TABLE User(
    phlid VARCHAR(8),
    email VARCHAR(70) NOT NULL,
    pswd CHAR(32) NOT NULL,
    PRIMARY KEY (phlid)
);

CREATE TABLE PHLogger(
    phlid VARCHAR(8),
    name VARCHAR(50) NOT NULL,
    address_street VARCHAR(50) NOT NULL,
    address_city VARCHAR(20) NOT NULL,
    address_state CHAR(2) NOT NULL,
    address_pcode VARCHAR(10) NOT NULL,
    PRIMARY KEY (phlid),
    FOREIGN KEY (phlid) REFERENCES User (phlid) ON DELETE CASCADE
);

CREATE TABLE Supporter(
    phlid VARCHAR(8),
    phone VARCHAR(20) NOT NULL,
    role VARCHAR(20) NOT NULL,
    PRIMARY KEY (phlid),
    FOREIGN KEY (phlid) REFERENCES User (phlid) ON DELETE CASCADE
);

CREATE TABLE Contact(
    phlid VARCHAR(8),
    number VARCHAR(20),
    PRIMARY KEY (phlid,number),
    FOREIGN KEY (phlid) REFERENCES PHLogger (phlid) ON DELETE CASCADE
);

CREATE TABLE Interest(
    iname VARCHAR(20),
    description VARCHAR(300) NOT NULL,
    topic VARCHAR(20) NOT NULL,
    date DATETIME NOT NULL,
    PRIMARY KEY (iname)
CREATE TABLE Thought(
    phlid     VARCHAR(8),
    tnum      INTEGER,
    text      VARCHAR(300) NOT NULL,
    date      DATETIME NOT NULL,
    PRIMARY KEY (phlid,tnum),
    FOREIGN KEY (phlid) REFERENCES PHLogger (phlid) ON DELETE CASCADE
);

CREATE TABLE Event(
    eid       VARCHAR(8),
    phlid     VARCHAR(8) NOT NULL,
    ename     VARCHAR(50) NOT NULL,
    start     DATETIME NOT NULL,
    end       DATETIME,
    origin    VARCHAR(100),
    PRIMARY KEY (eid),
    FOREIGN KEY (phlid) REFERENCES PHLogger(phlid) ON DELETE CASCADE
);

CREATE TABLE Observation(
    observation_id VARCHAR(8),
    phlid       VARCHAR(8),
    start       DATETIME NOT NULL,
    end         DATETIME,
    PRIMARY KEY (observation_id),
    FOREIGN KEY (phlid) REFERENCES User(phlid) ON DELETE CASCADE
);

CREATE TABLE Observer(
    observer_id   VARCHAR(8),
    phlid         VARCHAR(8) NOT NULL,
    kind          VARCHAR(50) NOT NULL,
    manufacturer  VARCHAR(50) NOT NULL,
    model         VARCHAR(50) NOT NULL,
    software_version VARCHAR(50),
    PRIMARY KEY (observer_id),
    FOREIGN KEY (phlid) REFERENCES PHLogger(phlid) ON DELETE CASCADE
);

CREATE TABLE Observable(
```sql
CREATE TABLE Observation(
    observation_id VARCHAR(8),
    observer_id VARCHAR(8),
    kind ENUM('observable','heartrate','bloodpressure','picture') NOT NULL,
    rate INTEGER,
    diastolic INTEGER,
    systolic INTEGER,
    picture VARBINARY(65000),
    label VARCHAR(100),
    text VARCHAR(300),
    PRIMARY KEY (observation_id),
    FOREIGN KEY (observation_id) REFERENCES Observation(observation_id) ON DELETE CASCADE,
    FOREIGN KEY (observer_id) REFERENCES Observer(observer_id) ON DELETE CASCADE;
)

CREATE TABLE PHLG_obs(
    observation_id VARCHAR(8),
    text VARCHAR(300) NOT NULL,
    PRIMARY KEY (observation_id),
    FOREIGN KEY (observation_id) REFERENCES Observation(observation_id) ON DELETE CASCADE);

CREATE TABLE About(
    phlid VARCHAR(8),
    tnum INTEGER,
    iname VARCHAR(20),
    PRIMARY KEY (phlid,tnum,iname),
    FOREIGN KEY (phlid,tnum) REFERENCES Thought(phlid,tnum) ON DELETE CASCADE,
    FOREIGN KEY (iname) REFERENCES Interest(iname) ON DELETE CASCADE);

CREATE TABLE Member(
    phlid VARCHAR(8),
    iname VARCHAR(20),
    PRIMARY KEY (phlid,iname),
    FOREIGN KEY (phlid) REFERENCES PHLogger(phlid) ON DELETE CASCADE,
    FOREIGN KEY (iname) REFERENCES Interest(iname) ON DELETE CASCADE);

CREATE TABLE Indicate(
    eid VARCHAR(8),
    observation_id VARCHAR(8),
    PRIMARY KEY (eid,observation_id),
    FOREIGN KEY (observation_id) REFERENCES Observation(observation_id) ON DELETE CASCADE,
    FOREIGN KEY (eid) REFERENCES Indicate_eid(eid) ON DELETE CASCADE)
```
PRIMARY KEY (eid, observation_id),
FOREIGN KEY (eid) REFERENCES Event(eid) ON DELETE CASCADE,
FOREIGN KEY (observation_id) REFERENCES Observation(observation_id) ON DELETE CASCADE
);