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SQL DDLs for Entities and their supporting tables

```
DROP DATABASE IF EXISTS cs122a;
```

```
CREATE DATABASE cs122a;
```

```
USE cs122a;
```

```
CREATE TABLE USER(  
    phlid VARCHAR(20),  
    email VARCHAR(30) NOT NULL,  
    pswd VARCHAR(20) NOT NULL,  
    PRIMARY KEY (phlid)  
);
```

```
CREATE TABLE PHLOGGER(  
    phlid VARCHAR(20),  
    Log_name VARCHAR(30) NOT NULL,  
    addr_street VARCHAR(30) NOT NULL,  
    addr_city VARCHAR(30) NOT NULL,  
    addr_state VARCHAR(30) NOT NULL,  
    aadr_pcode VARCHAR(10) NOT NULL,  
    PRIMARY KEY(phlid),  
    FOREIGN KEY(phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE CONTACT(  
    phlid VARCHAR (20),  
    phone_number VARCHAR (20) NOT NULL,  
    PRIMARY KEY (phlid),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE SUPPORTER(  
    phlid VARCHAR(20),  
    phone VARCHAR(20) NOT NULL,  
    spt_role VARCHAR(30) NOT NULL,  
    PRIMARY KEY (phlid),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE OBSERVER(  
    phlid VARCHAR(20),  
    observer_id VARCHAR(20) NOT NULL,  
    kind VARCHAR(20) NOT NULL,  
    manufacturer VARCHAR(20) NOT NULL,  
    model VARCHAR(20) NOT NULL,  
    software_version VARCHAR(30) NULL,  
    PRIMARY KEY (observer_id),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE OBSERVATION(  
    phlid VARCHAR(20),  
    observation_id VARCHAR(20),  
    start_time DATETIME NOT NULL,  
    end_time DATETIME NOT NULL,  
    PRIMARY KEY (observation_id),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid)  
);
```

```
CREATE TABLE PHLG_OBS(  
    observation_id VARCHAR(20),  
    content_text VARCHAR(100) NOT NULL,  
    PRIMARY KEY(observation_id),  
    FOREIGN KEY(observation_id) REFERENCES OBSERVATION (observation_id) ON DELETE CASCADE  
);
```

```
CREATE TABLE OBSERVABLE(  
    observer_id VARCHAR(20),  
    kind ENUM("Heart_rate", "Blood_prsr", "Picture"),  
    observation_id VARCHAR(20),  
    diastolic DECIMAL(3,2),  
    systolic DECIMAL(3,2),  
    heart_rate INTEGER,  
    picture VARCHAR(200),  
    label VARCHAR(20),  
    text_str VARCHAR(100),  
    PRIMARY KEY (observation_id),  
    FOREIGN KEY (observation_id) REFERENCES OBSERVATION (observation_id) ON DELETE CASCADE,  
    FOREIGN KEY (observer_id) REFERENCES OBSERVER (observer_id)  
);
```

```
CREATE TABLE EVENT(  
    phlid VARCHAR(20),  
    eid VARCHAR(20) NOT NULL,  
    start_t DATETIME NOT NULL,  
    end_t DATETIME NOT NULL,  
    orgin VARCHAR(100) NOT NULL,  
    PRIMARY KEY (eid),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE INTEREST(  
    phlid VARCHAR (20),  
    iname VARCHAR(20),  
    description_ VARCHAR(100) NOT NULL,  
    topic VARCHAR(50) NOT NULL,  
    date_ DATE NOT NULL,  
    PRIMARY KEY (iname),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

```
CREATE TABLE THOUGHT(  
    phlid VARCHAR(20) NOT NULL,  
    tnum INTEGER,  
    comment_text VARCHAR (100) NOT NULL,  
    date__ DATE NOT NULL,  
    PRIMARY KEY (phlid,tnum),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE  
);
```

SQL DDLs for Relationships

```
CREATE TABLE INDICATE(  
    eid VARCHAR(20),  
    observation_id VARCHAR(20),  
    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  
);
```

```
CREATE TABLE MEMBER(  
    phlid VARCHAR(20),  
    iname VARCHAR(20),  
    PRIMARY KEY (phlid, iname),  
    FOREIGN KEY (phlid) REFERENCES USER_ (phlid) ON DELETE CASCADE,  
    FOREIGN KEY (iname) REFERENCES INTEREST (iname) ON DELETE CASCADE  
);
```

```
CREATE TABLE ABOUT(  
    phlid VARCHAR(20),  
    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  
);
```