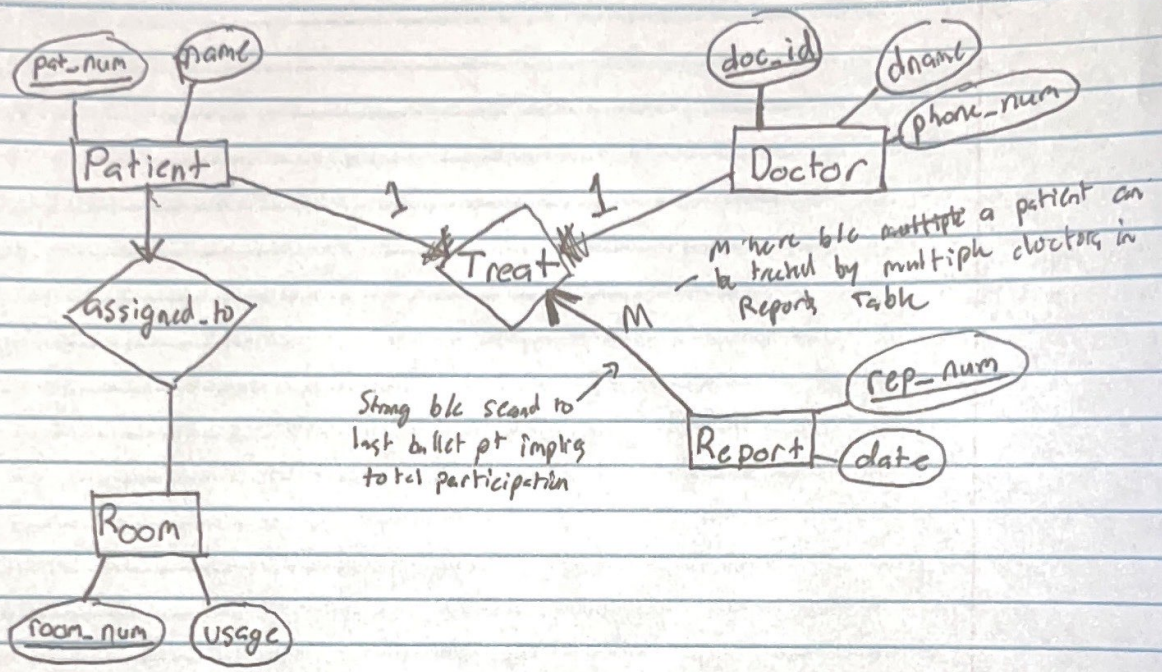
Ryan Shu
CS 442

I pledge my honor that I have abided by the Stevens Honor System.

Assignment 2

a)



b) Room(<u>room_num</u>, usage)

Patient(<u>pat_num</u>, pname, room_num)
FK: room_num ref. Room.room_num

Doctor(<u>doc_id</u>, dname, phone_num)

Report(<u>rep_num</u>, date)

Treat(<u>rep_num</u>, doc_id, pat_num)
FK: rep_num ref. Report.rep_num
FK: doc_id ref. Doctor.doc_id
FK: pat_num ref Patient.pat_num

b) (cont.)

```
CREATE TABLE Room(
    room_num INTEGER,
    Usage CHAR(40),
    PRIMARY KEY (room_num)
);

CREATE TABLE Patient(
    pat_num INTEGER,
    pname CHAR(40),
    FOREIGN KEY (room_num) REFERENCES Room,
    PRIMARY KEY (pat_num),
);

CREATE TABLE Doctor(
    doc_id INTEGER,
    dname CHAR(20),
    phone_num CHAR(10),
    PRIMARY KEY (doc_id),
    UNIQUE (phone_num)
);

CREATE TABLE Report(
    rep_num INTEGER,
    date DATE,
    PRIMARY KEY (rep_num)
);
```

```
CREATE TABLE TREAT(
    FOREIGN KEY (rep_num)        } one line
    REFERENCES Report,
    FOREIGN KEY (doc_id)         } one line
    REFERENCES Doctor,
    FOREIGN KEY (pat_num)        } one line
    REFERENCES Patient,
    PRIMARY KEY (rep_num),
    UNIQUE (doc_id),
    UNIQUE (pat_num)
```

UNIQUE (room_num)
(insert below P.K. in Patient)