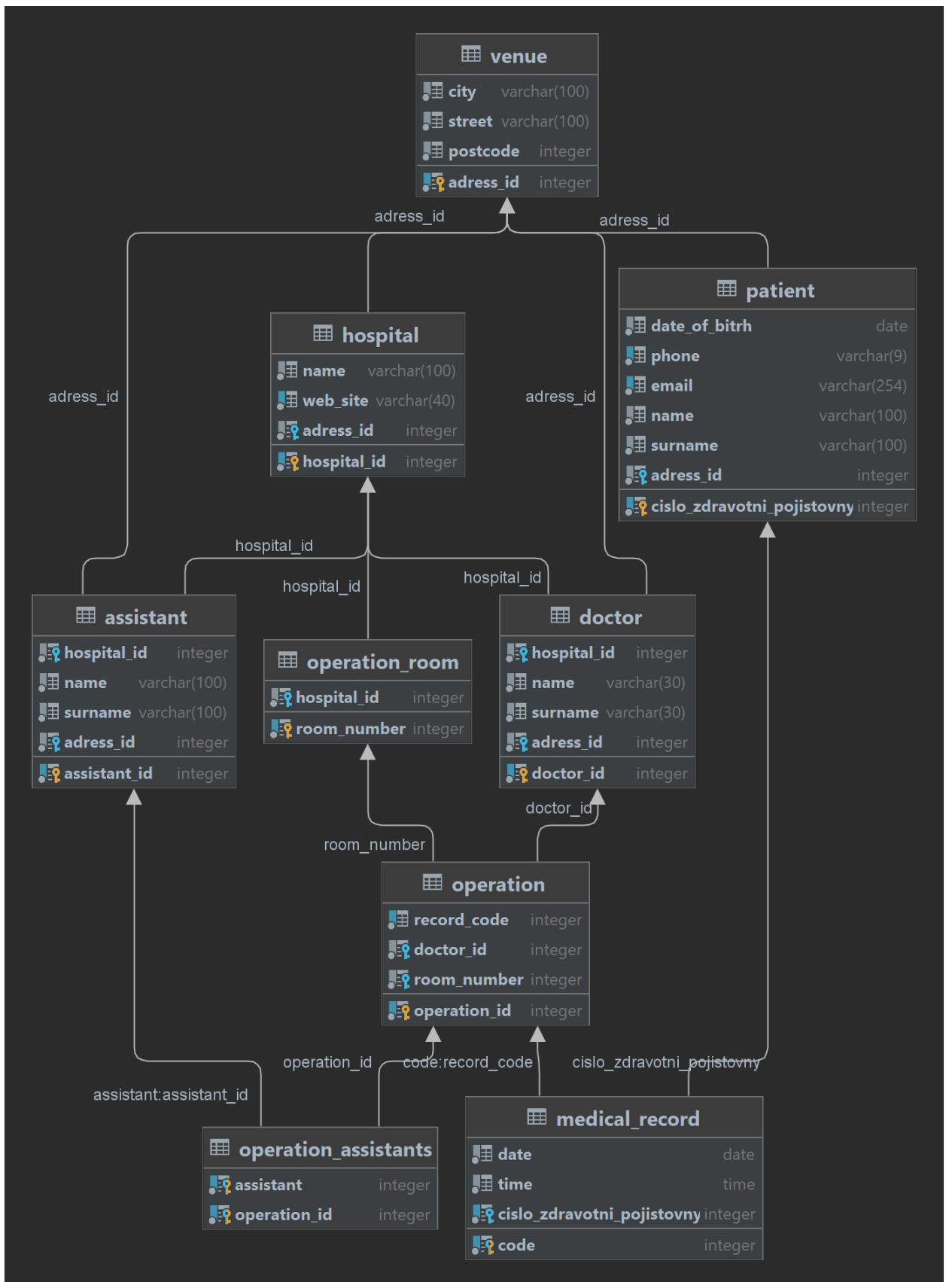


CP3 SQL

ER MODEL



```

/*dropping tables if exists*/
DROP TABLE IF EXISTS hospital CASCADE;
DROP TABLE IF EXISTS Operation_room CASCADE;
DROP TABLE IF EXISTS doctor CASCADE;
DROP TABLE IF EXISTS operation CASCADE;
DROP TABLE IF EXISTS medical_record CASCADE;
DROP TABLE IF EXISTS patient CASCADE;
DROP TABLE IF EXISTS venue CASCADE;
DROP TABLE IF EXISTS assistant CASCADE;
DROP TABLE IF EXISTS operation_assistants CASCADE;
/*hospital*/
CREATE TABLE if not exists hospital(
    hospital_id serial ,
    name VARCHAR(100) NOT NULL DEFAULT 'name',
    web_site VARCHAR(40) NOT NULL UNIQUE DEFAULT
'https://www.ftn.cz/',
    adress_id int NOT NULL,
    CONSTRAINT hospital_pk PRIMARY KEY (hospital_id)
);
/*operation room*/
CREATE TABLE Operation_room (
    hospital_id int NOT NULL,
    room_number serial NOT NULL,
    CONSTRAINT Operation_room_pk PRIMARY KEY ( room_number )
);
/*doctor*/
CREATE TABLE doctor (
    hospital_id INT NOT NULL,
    doctor_id INT NOT NULL,
    name VARCHAR(30) NOT NULL DEFAULT '8',
    surname VARCHAR(30) NOT NULL DEFAULT '8',
    adress_id INT NOT NULL DEFAULT 21,
    CONSTRAINT doctor_pk PRIMARY KEY (doctor_id)
);
/*operation*/
CREATE TABLE operation (
    operation_id SERIAL PRIMARY KEY,
    record_code INTEGER NOT NULL UNIQUE,
    doctor_id INT NOT NULL,
    room_number INT NOT NULL
);
/*medical_record*/
CREATE TABLE medical_record (
    code INTEGER NOT NULL,
    date DATE NOT NULL,
    time TIME NOT NULL,
    cislo_zdravotni_pojistovny INTEGER NOT NULL UNIQUE,
    CONSTRAINT medical_record_pk PRIMARY KEY (code)
);

```

```

/*patient*/
CREATE TABLE patient (
    cislo_zdravotni_pojistovny INTEGER NOT NULL UNIQUE,
    date_of_bitrh DATE NOT NULL DEFAULT '2005-02-03',
    phone VARCHAR(9) NOT NULL UNIQUE DEFAULT '721542786',
    email VARCHAR(254) NOT NULL UNIQUE DEFAULT 'lmao@gmail.com',
    name VARCHAR(100) NOT NULL DEFAULT 'John',
    surname VARCHAR(100) NOT NULL DEFAULT 'Week',
    adress_id INTEGER NOT NULL DEFAULT 5,
    CONSTRAINT patient_pk PRIMARY KEY
(cislo_zdravotni_pojistovny)
);
/*venue*/
CREATE TABLE venue (
    adress_id INTEGER NOT NULL DEFAULT 15,
    city VARCHAR(100) NOT NULL DEFAULT 'Praha',
    street VARCHAR(100) NOT NULL DEFAULT 'Dejvicka 9',
    postcode INTEGER NOT NULL DEFAULT 14500,
    CONSTRAINT venue_pk PRIMARY KEY (adress_id)
);
/*assistant*/
CREATE TABLE assistant (
    hospital_id INTEGER NOT NULL,
    assistant_id INTEGER NOT NULL,
    name VARCHAR(100) NOT NULL DEFAULT 'Simona',
    surname VARCHAR(100) NOT NULL DEFAULT 'Novakova',
    adress_id INTEGER NOT NULL DEFAULT 4,
    CONSTRAINT assistant_pk PRIMARY KEY (assistant_id)
);
/*operation_assistants*/
CREATE TABLE operation_assistants (
    assistant int NOT NULL,
    operation_id int NOT NULL,
    CONSTRAINT operation_assistants_pk PRIMARY KEY (assistant
, operation_id)
);
/*creating foreign keys for tables in database*/

ALTER TABLE hospital ADD CONSTRAINT hospital_fk0 FOREIGN KEY
( adress_id ) REFERENCES venue ( adress_id );

ALTER TABLE Operation_room ADD CONSTRAINT Operation_room_fk0
FOREIGN KEY ( hospital_id ) REFERENCES hospital ( hospital_id
);

ALTER TABLE doctor ADD CONSTRAINT doctor_fk0 FOREIGN KEY (
hospital_id ) REFERENCES hospital ( hospital_id );
ALTER TABLE doctor ADD CONSTRAINT doctor_fk1 FOREIGN KEY (
adress_id ) REFERENCES venue ( adress_id );

ALTER TABLE operation ADD CONSTRAINT operation_fk0 FOREIGN
KEY ( doctor_id ) REFERENCES doctor ( doctor_id );

```

```

ALTER TABLE operation ADD CONSTRAINT operation_fk1 FOREIGN
KEY ( room_number ) REFERENCES Operation_room ( room_number );

ALTER TABLE medical_record ADD CONSTRAINT medical_record_fk0
FOREIGN KEY (code) REFERENCES operation (record_code);
ALTER TABLE medical_record ADD CONSTRAINT medical_record_fk1
FOREIGN KEY ( cislo_zdravotni_pojistovny ) REFERENCES patient (
cislo_zdravotni_pojistovny );

ALTER TABLE patient ADD CONSTRAINT patient_fk0 FOREIGN KEY (
adress_id ) REFERENCES venue ( adress_id );

ALTER TABLE assistant ADD CONSTRAINT assistant_fk0 FOREIGN
KEY ( hospital_id ) REFERENCES hospital ( hospital_id );
ALTER TABLE assistant ADD CONSTRAINT assistant_fk1 FOREIGN
KEY ( adress_id ) REFERENCES venue ( adress_id );

ALTER TABLE operation_assistants ADD CONSTRAINT
operation_assistants_fk0 FOREIGN KEY ( assistant ) REFERENCES
assistant (assistant_id);
ALTER TABLE operation_assistants ADD CONSTRAINT
operation_assistants_fk1 FOREIGN KEY ( operation_id )
REFERENCES operation ( operation_id );

```

SQL requests to take data from database

1. Request to get data from table venue

```

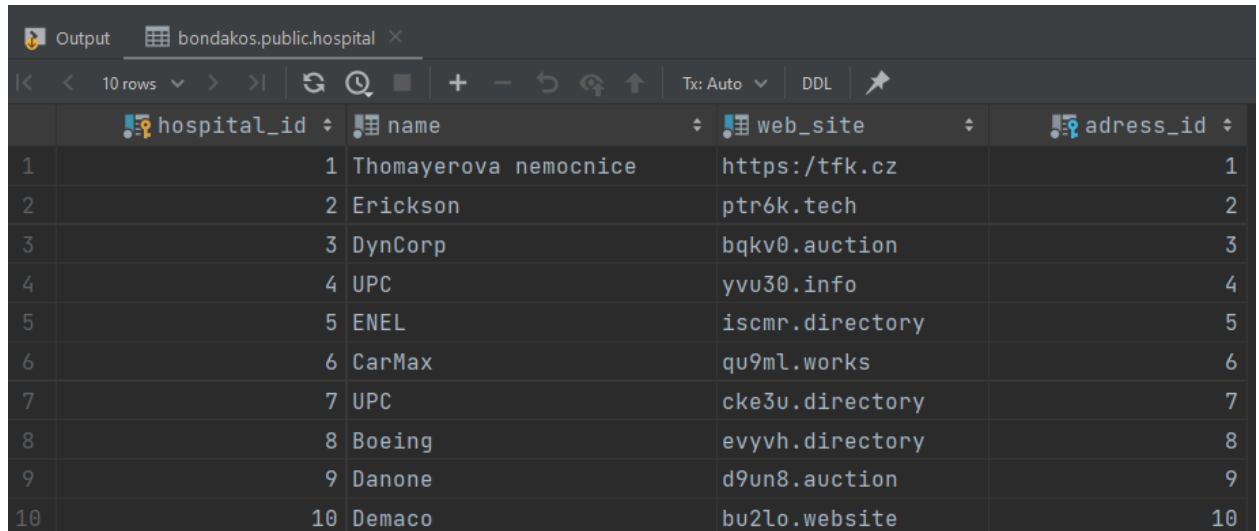
SELECT adress_id,
       city,
       street,
       postcode
FROM venue

```

	address_id	city	street	postcode
1	1	Honolulu	St. Jamess Route	9153
2	2	Fort Lauderdale	Balfe Crossroad	6782
3	3	Lyon	Chatsworth Pass	37664
4	4	Escondido	Hampden Road	18918
5	5	Dallas	Howard Walk	44067
6	6	Kansas City	Coley Rue	86415
7	7	Lisbon	Angela Avenue	69615
8	8	Lakewood	Angel Street	16731
9	9	Long Beach	Union Walk	56599
10	10	Lyon	Timber Boulevard	5230

2. Hospital by address_id left join

```
SELECT hospital_id, name, web_site, hospital.adress_id
FROM hospital
left join venue
on venue.adress_id = hospital.adress_id
```



The screenshot shows a database query output window with the title "Output" and a tab labeled "bondakos.public.hospital". The query results are displayed in a table with 5 columns: "hospital_id", "name", "web_site", and "adress_id". The table contains 10 rows of data. The "name" column contains the names of various companies, and the "web_site" column contains their respective websites. The "adress_id" column contains the address IDs for each company.

	hospital_id	name	web_site	adress_id
1	1	Thomayerova nemocnice	https://tfk.cz	1
2	2	Erickson	ptr6k.tech	2
3	3	DynCorp	bqkv0.auction	3
4	4	UPC	yvu30.info	4
5	5	ENEL	iscmr.directory	5
6	6	CarMax	qu9m1.works	6
7	7	UPC	cke3u.directory	7
8	8	Boeing	evyvh.directory	8
9	9	Danone	d9un8.auction	9
10	10	Demaco	bu2lo.website	10

3. Request on date of birth, where patients are elder than 23 and whom address_id is smaller than 5

```
SELECT *
FROM patient WHERE patient.date_of_bitrh < '2000-04-17'
AND adress_id < 5
```