



Рисунок 1 – ER-диаграмма связей в бд crack-a-book

BEGIN;

CREATE TABLE IF NOT EXISTS public.genres

```
(
    genre_id serial NOT NULL,
    genre_name text COLLATE pg_catalog."default" NOT NULL,
    CONSTRAINT genres_pkey PRIMARY KEY (genre_id)
);
```

CREATE TABLE IF NOT EXISTS public.publication_types

```
(
    type_id serial NOT NULL,
```

```
type_name text COLLATE pg_catalog."default" NOT NULL,  
CONSTRAINT publication_types_pkey PRIMARY KEY (type_id)  
);
```

```
CREATE TABLE IF NOT EXISTS public.publications  
(  
    inventory_number character varying(20) COLLATE pg_catalog."default" NOT  
NULL,  
    author text COLLATE pg_catalog."default" NOT NULL,  
    title text COLLATE pg_catalog."default" NOT NULL,  
    type_id integer,  
    genre_id integer,  
    publisher_id integer,  
    publication_year integer NOT NULL,  
    page_count integer,  
    total_quantity integer,  
    available_quantity integer,  
    CONSTRAINT publications_pkey PRIMARY KEY (inventory_number)  
);
```

```
CREATE TABLE IF NOT EXISTS public.publishers  
(  
    publisher_id serial NOT NULL,  
    publisher_name text COLLATE pg_catalog."default" NOT NULL,  
    CONSTRAINT publishers_pkey PRIMARY KEY (publisher_id)  
);
```

```
CREATE TABLE IF NOT EXISTS public.readers  
(  
    reader_id serial NOT NULL,  
    full_name text COLLATE pg_catalog."default" NOT NULL,  
    birth_date date NOT NULL,  
    workplace text COLLATE pg_catalog."default",  
    phone text COLLATE pg_catalog."default",  
    address text COLLATE pg_catalog."default",
```

```

        email text COLLATE pg_catalog."default",
        CONSTRAINT readers_pkey PRIMARY KEY (reader_id)
    );

CREATE TABLE IF NOT EXISTS public.users
(
    user_id serial NOT NULL,
    login character varying(100) COLLATE pg_catalog."default",
    password character varying(20) COLLATE pg_catalog."default",
    CONSTRAINT db_users_pkey PRIMARY KEY (user_id)
);

ALTER TABLE IF EXISTS public.publications
    ADD CONSTRAINT publications_genre_id_fkey FOREIGN KEY (genre_id)
    REFERENCES public.genres (genre_id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION;

ALTER TABLE IF EXISTS public.publications
    ADD CONSTRAINT publications_publisher_id_fkey FOREIGN KEY
(publication_id, publisher_id)
    REFERENCES public.publishers (publisher_id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION;

ALTER TABLE IF EXISTS public.publications
    ADD CONSTRAINT publications_type_id_fkey FOREIGN KEY (type_id)
    REFERENCES public.publication_types (type_id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION;

END;
```

Рисунок 2 – SQL-код бд