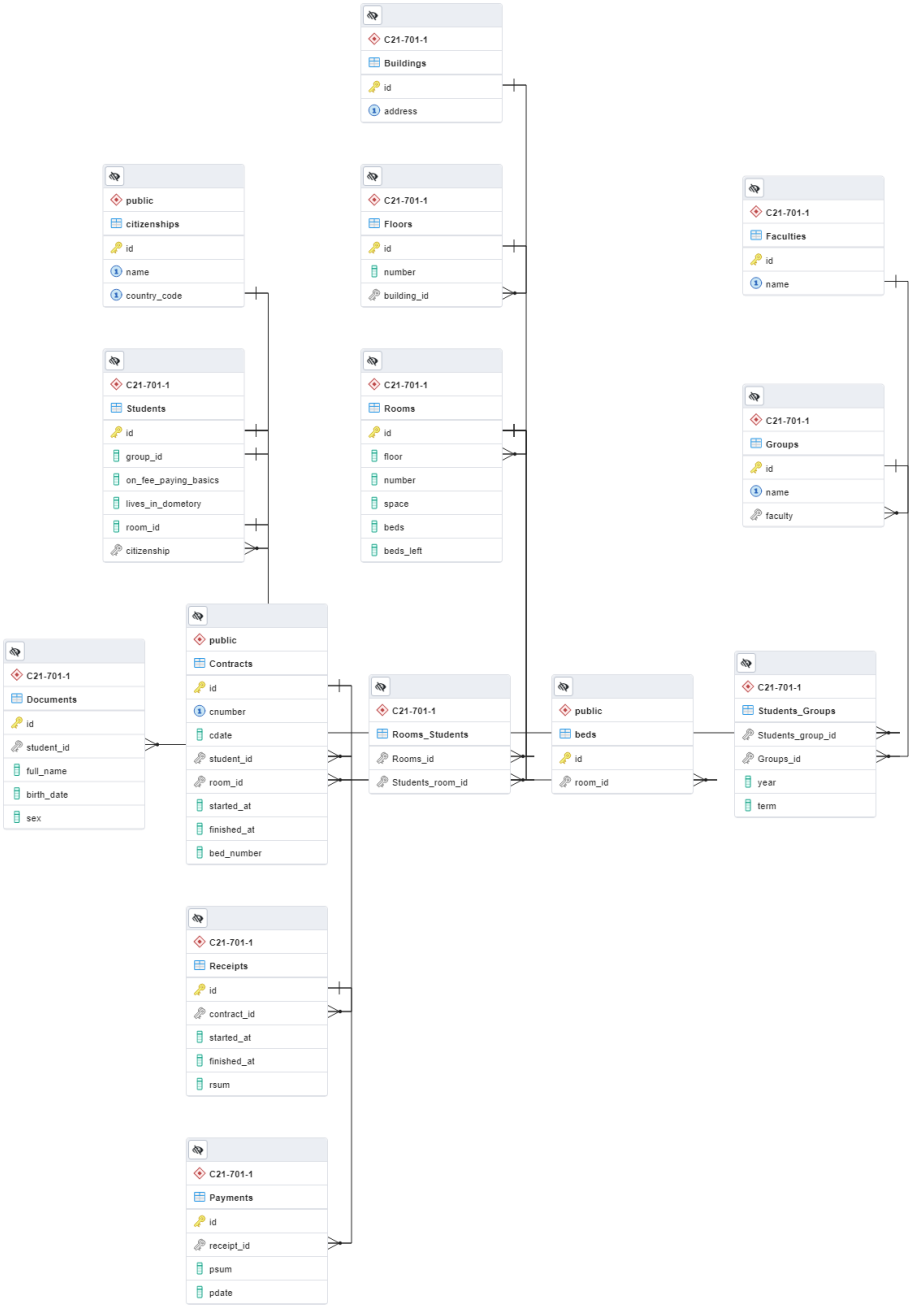
Отчет по Практической работе №1 БДиЭС




```
-- This script was generated by a beta version of the ERD tool in pgAdmin 4.
-- Please log an issue at
https://redmine.postgresql.org/projects/pgadmin4/issues/new if you find any
bugs, including reproduction steps.
BEGIN;


CREATE TABLE IF NOT EXISTS "C21-701-1"."Students"
(
    id integer,
    group_id integer NOT NULL,
    on_fee_paying_basics boolean NOT NULL,
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    lives_in_dometory boolean NOT NULL,
    room_id integer,
    citizenship character varying(3) NOT NULL DEFAULT RU
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Groups"
(
    id integer,
    name character varying NOT NULL,
    faculty character varying NOT NULL,
    PRIMARY KEY (id),
    CONSTRAINT unique_groupname UNIQUE (name)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Faculties"
(
    id integer,
    name character varying,
    PRIMARY KEY (id),
    CONSTRAINT unique_name UNIQUE (name)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Documents"
(
    id integer,
    student_id integer NOT NULL,
    full_name character varying(255) NOT NULL,
    birth_date date NOT NULL,
    sex character NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Buildings"
(
    id integer,
    address character varying(255) NOT NULL,
    PRIMARY KEY (id),
    CONSTRAINT unique_buildings_adreesses UNIQUE (address)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Rooms"
(
    id integer,
    floor integer NOT NULL,
    "number" integer NOT NULL,
    space integer NOT NULL,
    beds integer NOT NULL,
    beds_left integer NOT NULL
);
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CREATE TABLE IF NOT EXISTS "C21-701-1"."Floors"
(
    id integer NOT NULL,
    "number" integer NOT NULL,
    building_id integer NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE IF NOT EXISTS public."Contracts"
(
    id integer,
    cnumber character varying(32) NOT NULL,
    cdate date NOT NULL,
    student_id integer NOT NULL,
    room_id integer NOT NULL,
    started_at date NOT NULL,
    finished_at date,
    bed_number integer NOT NULL,
    PRIMARY KEY (id),
    CONSTRAINT uni_cnumber UNIQUE (cnumber)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Receipts"
(
    id integer,
    contract_id integer NOT NULL,
    started_at date NOT NULL,
    finished_at date NOT NULL,
    rsum numeric,
    PRIMARY KEY (id)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Payments"
(
    id integer,
    receipt_id integer NOT NULL,
    psum numeric NOT NULL,
    pdate date NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Rooms_Students"
(
    "Rooms_id" integer,
    "Students_room_id" integer
);

CREATE TABLE IF NOT EXISTS public.beds
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(
    id integer,
    room_id integer NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE IF NOT EXISTS "C21-701-1"."Students_Groups"
(
    "Students_group_id" integer NOT NULL,
    "Groups_id" integer,
    year integer NOT NULL,
    term integer NOT NULL
);

CREATE TABLE IF NOT EXISTS public.citizenships
(
    id integer,
    name character varying(255) NOT NULL,
    country_code character varying(3) NOT NULL,
    PRIMARY KEY (id),
    CONSTRAINT uni_country UNIQUE (name, country_code)
);

ALTER TABLE IF EXISTS "C21-701-1"."Students"
    ADD FOREIGN KEY (citizenship)
    REFERENCES public.citizenships (country_code) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Groups"
    ADD FOREIGN KEY (faculty)
    REFERENCES "C21-701-1"."Faculties" (name) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Documents"
    ADD FOREIGN KEY (student_id)
    REFERENCES "C21-701-1"."Students" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Floors"
    ADD FOREIGN KEY (building_id)
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```
    REFERENCES "C21-701-1"."Buildings" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS public."Contracts"
    ADD FOREIGN KEY (student_id)
    REFERENCES "C21-701-1"."Students" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS public."Contracts"
    ADD FOREIGN KEY (room_id)
    REFERENCES "C21-701-1"."Rooms" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Receipts"
    ADD FOREIGN KEY (contract_id)
    REFERENCES public."Contracts" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Payments"
    ADD FOREIGN KEY (receipt_id)
    REFERENCES "C21-701-1"."Receipts" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Rooms_Students"
    ADD FOREIGN KEY ("Rooms_id")
    REFERENCES "C21-701-1"."Rooms" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Rooms_Students"
    ADD FOREIGN KEY ("Students_room_id")
    REFERENCES "C21-701-1"."Students" (room_id) MATCH SIMPLE
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    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS public.beds
    ADD FOREIGN KEY (room_id)
    REFERENCES "C21-701-1"."Rooms" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Students_Groups"
    ADD FOREIGN KEY ("Students_group_id")
    REFERENCES "C21-701-1"."Students" (group_id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;


ALTER TABLE IF EXISTS "C21-701-1"."Students_Groups"
    ADD FOREIGN KEY ("Groups_id")
    REFERENCES "C21-701-1"."Groups" (id) MATCH SIMPLE
    ON UPDATE NO ACTION
    ON DELETE NO ACTION
    NOT VALID;

END;
```