ΒΆΣΕΙΣ ΔΕΔΟΜΈΝΩΝ

ΕΑΡΙΝΌ ΕΞΆΜΗΝΟ 2023

ΣΥΝΟΠΤΙΚΉ ΑΝΑΦΟΡΆ ΦΆΣΗΣ Α΄

ΟΜΆΔΑ 92

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Για την ευκολότερη διαχείριση των προγραμμάτων σπουδών, δημιουργήθηκε ο εξής τύπος enum:

```
CREATE TYPE public.program_type AS ENUM (
    'typical',
    'foreign_language',
    'seasonal'
);
```

Επίσης, έγινε η σύμβαση ότι τα προγράμματα θα ξεχωρίζονται από το ProgramID τους υπό την έννοια ότι ομαδοποιούνται ανά την χιλιάδα τους σε τυπικό, ξενόγλωσσο και εποχιακό. Συγκεκριμένα έχουμε την χιλιάδα 1000, 2000 και 3000 αντίστοιχα. Αυτό είναι ιδιαίτερα βοηθητικό στη συνάρτηση του trigger για τον έλεγχο όσον αφορά το έτος εισαγωγής προγράμματος. Θα γνωρίζουμε από την εισαγωγή και μόνο στο Program (από το ID) τι τύπου πρόγραμμα θα εισαχθεί.

CREATE OR REPLACE VIEW course_and_prof AS

CREATE OR REPLACE VIEW grade_view AS

CREATE OR REPLACE FUNCTION create_professor(num integer) RETURNS void AS $$

CREATE OR REPLACE FUNCTION create_labTeacher(num integer) RETURNS void AS $$

CREATE OR REPLACE FUNCTION create_student(num integer) RETURNS void AS $$

CREATE OR REPLACE FUNCTION append_random(en_date date) RETURNS character(5) AS $$

CREATE OR REPLACE FUNCTION trim_year(en_date date) RETURNS character(4) AS $$

CREATE OR REPLACE FUNCTION random_date() RETURNS date AS $$

CREATE OR REPLACE FUNCTION public.random_fathernames() RETURNS character varying AS $$

CREATE OR REPLACE FUNCTION random_X() RETURNS character(1) AS $$

CREATE OR REPLACE FUNCTION random_code() RETURNS integer AS

CREATE OR REPLACE FUNCTION generate_am(year1 character(4), X character(1), num character(5)) RETURNS character(10) AS $$

CREATE OR REPLACE FUNCTION random_rank() RETURNS rank_type AS

CREATE OR REPLACE FUNCTION random_level() RETURNS level_type AS

```sql
CREATE OR REPLACE FUNCTION random_between(min INTEGER, max
INTEGER)
RETURNS INTEGER AS $$
```

```sql
CREATE OR REPLACE FUNCTION create_person()
RETURNS character varying
```

```sql
CREATE OR REPLACE FUNCTION random_amka()
RETURNS character varying
AS $$
```

```sql
CREATE OR REPLACE FUNCTION generate_random_11_digit_integer()
RETURNS bigint
AS $$
```

```sql
CREATE OR REPLACE FUNCTION random_surnames(n integer)
RETURNS TABLE(surname character varying(30))
AS $$
```

```sql
CREATE OR REPLACE FUNCTION random_fathernames(n integer)
RETURNS character varying(30)
AS $$
```

```sql
CREATE OR REPLACE FUNCTION public.make_latin(greek_text text)
RETURNS text
AS $$
```

```sql
CREATE OR REPLACE FUNCTION random_names(n integer)
RETURNS TABLE(name character varying(30),sex character(1))
AS $$
```

```sql
CREATE OR REPLACE FUNCTION public.adapt_surname(surname character
varying, sex character)
RETURNS character varying
AS $$
```

```sql
CREATE OR REPLACE FUNCTION create_am(year integer, num integer)
RETURNS character(10) AS
$$
```

CREATE OR REPLACE FUNCTION insert_grade(semester_id integer)
RETURNS void AS
$$

CREATE OR REPLACE FUNCTION calculate_final_grade(exam numeric , lab numeric)
RETURNS numeric AS $$

CREATE OR REPLACE FUNCTION random_grade()
RETURNS numeric AS $$

CREATE OR REPLACE FUNCTION student_data(am character(10))
RETURNS "Person" AS $$

CREATE OR REPLACE FUNCTION fullnames_am(code character(7))
RETURNS TABLE (name character varying(30), surname character varying(30), am character(10)) AS $$

CREATE OR REPLACE FUNCTION get_person_property()
RETURNS TABLE (name character varying(30), surname character varying(30), property text) AS $$

CREATE OR REPLACE FUNCTION func_34(ProgramID integer, amka character varying)
RETURNS TABLE(course_code character(7) , course_title character(100) , units smallint) AS $$

CREATE OR REPLACE FUNCTION check_future_semester() RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION update_present_semester() RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION type_of_program(progr_id INTEGER)
RETURNS program_type AS
$$

CREATE OR REPLACE FUNCTION course_weight(units SMALLINT, OUT weight NUMERIC) AS$$

```
CREATE OR REPLACE FUNCTION insert_cust_units(seasonal_pr_id INTEGER,
unit_code INTEGER,
   VARIADIC course_codes CHARACTER(7)[])
RETURNS VOID AS
$$

CREATE OR REPLACE FUNCTION check_student_grad(st_am CHARACTER(10),
progr_id INTEGER,
   OUT fin_grade NUMERIC)
AS
$$

CREATE OR REPLACE FUNCTION check_student_certificate(st_am
CHARACTER(10), progr_id INTEGER,
   OUT fin_grade NUMERIC)
AS
$$

CREATE OR REPLACE FUNCTION calculate_grade(st_amka VARCHAR,
course_code CHARACTER(7),
   serial_num INTEGER, OUT fin_grade NUMERIC)
AS
$$


CREATE OR REPLACE FUNCTION student_total_semester_units(st_amka
VARCHAR,
   OUT total_units INTEGER)
AS $$

CREATE OR REPLACE FUNCTION check_course_requirements(st_amka
VARCHAR,
   course_to_register CHARACTER(7), OUT meets_requirements BOOLEAN)
AS $$

CREATE OR REPLACE FUNCTION new_program(progr_type program_type,
language VARCHAR, season VARCHAR,
   year CHARACTER(4), duration INTEGER, min_courses INTEGER, min_credits
INTEGER, obligatory BOOLEAN,
```

```sql
    committee_num INTEGER, dipl_type diploma_type) RETURNS VOID AS
$$


CREATE OR REPLACE FUNCTION insert_thesis(st_am CHARACTER(10),
thesis_title VARCHAR,
    progr_id INTEGER)
RETURNS VOID AS
$$


CREATE OR REPLACE FUNCTION find_sector_with_most_projects()
    RETURNS TABLE (d_type diploma_type, sector INTEGER)
AS
$$


CREATE OR REPLACE FUNCTION students_able_to_grad(progr_id INTEGER)
RETURNS SETOF CHARACTER(10) AS
$$



CREATE OR REPLACE FUNCTION workload_of_lab_teachers()
RETURNS TABLE(lab_amka CHARACTER VARYING, lab_surname
CHARACTER VARYING(30), lab_name CHARACTER VARYING(30), work_hours
BIGINT) AS
$$


CREATE OR REPLACE FUNCTION relative_courses(course_code
CHARACTER(7)) RETURNS
TABLE(relative_code CHARACTER(7), relative_title CHARACTER(100)) AS
$$


CREATE OR REPLACE FUNCTION teach_all_progr_types() RETURNS
    TABLE(prof_name CHARACTER VARYING(30), prof_surname CHARACTER
VARYING(30))
AS
$$
```

```
CREATE OR REPLACE FUNCTION semester_future_to_present()
RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION present_status()
RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION semester_present_to_past()
RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION inserting_progr_year()
RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION max_comm_num()
RETURNS TRIGGER AS $$

CREATE OR REPLACE FUNCTION check_course_requirements()
RETURNS TRIGGER AS $$
```