

Systemy Baz Danych

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1. Opis systemu

Z tworzonej bazy danych skorzysta firma oferująca różnego rodzaju kursy i szkolenia:

- webinary - odbywają się na żywo na jednej z platform chmurowych, a ich nagrania są udostępniane klientom firmy. Nagrania nie są przechowywane w bazie - jedynie informacja o nich, którą usunąć może administrator.
- kursy - krótkie formy kształcenia, trwające zazwyczaj kilka dni, istnieją wyłącznie kursy płatne. Zaliczenie kursu wymaga zaliczenia min. 80% modułów.
- studia - kilkuletnie szkolenia odbywające się online i stacjonarnie, wymagają zaliczenia praktyk i zdania egzaminu końcowego

Każda z tych form kształcenia prowadzona jest przez konkretnego wykładowcę w konkretnym języku (najczęściej polskim). Czasami treść jest tłumaczona na żywo przez tłumacza, co też powinno zostać odnotowane w bazie danych.

Możemy wyróżnić następujących aktorów systemu:

- Klient - użytkownik chcący skorzystać z oferty firmy szkoleniowej
 - Właściciel - osoba tworząca materiały video i treść kursów
 - Administrator - zarządzanie bazą danych oraz jej ulepszanie
- Aktorzy mogą skorzystać z następujących funkcjonalności:

1.1 Klient

1.1.1. Webinary

- Korzystanie z nagrań bezpłatnych webinarów przez okres 30 dni od ich umieszczenia na stronie
- Użytkownicy posiadający konto: Po opłaceniu dostępu do webinarów płatnych, korzystanie z nagrań tych webinarów przez kolejne 30 dni od potwierdzenia opłaty
-

1.1.2. Kursy

- Kontrolowanie zaliczenia danego kursu (procent zaliczonych modułów $\geq 80\%$) Sprawdzenie statusu swojej obecności na wybranych modułach
- Dostęp do listy kursów na które użytkownik jest zapisany i dostęp do statusu płatności przy każdym kursie (nieopłacone/ zaliczka/ opłacone w całości)
- Sprawdzenie dostępności wolnych miejsc na kursy hybrydowe i stacjonarne
- Dostęp do dodatkowych informacji o kursach takich jak: język kursu, obecność tłumacza, sposobie organizacji kursu (stacjonarnie/ o-line synchronicznie/ online asynchronicznie/ hybrydowo), dacie rozpoczęcia kursu czy sali zajęciowej (informacja dostępna po uiszczeniu wszelkich opłat) Dostęp do nagranych modułów (moduły online), po opłaceniu dostępu

1.1.3. Studia

- Sprawdzenie swojej obecności na zajęciach
- Możliwość zapisania się na odrabianie zajęć w kursie lub zajęciach innego kursu o podobnej tematyce
- Sprawdzenie wyników z egzaminów
- Sprawdzenie informacji o tym, czy odbyło się praktyki (14 dni - 2 razy w ciągu roku) i frekwencji na nich
- Możliwość zapisania się na pojedyncze zajęcia
- Wyświetlenie sylabusu studiów

1.1.4. Koszyk

- dodawanie produktów do koszyka (kursy, webinary, studia)

1.2. Sekretarz

- Wyświetlanie następujących raportów:
 - lista osób, które skorzystały z oferty firmy, ale za to nie zapłaciły
 - lista osób zapisanych na przyszłe wydarzenia z informacją, czy wydarzenia te odbywają się stacjonarnie, czy online

- raport dotyczący frekwencji na wydarzeniach przeszłych - liczba osób które brały udział w każdym kursie/webinarze/studium i były obecne
- lista osób, które są zapisane na kolidujące ze sobą wydarzenia
- lista wyników egzaminów dla użytkowników
- lista obecności na zajęciach dla danego użytkownika
- lista odbytych praktyk
- Dodanie nowego klienta
- Wyświetlanie spisu wszystkich zajęć i wszystkich spotkań z datami

1.3. Manager

Funkcje jakie ma sekretarz + dodatkowo:

- Wyświetlanie następujących raportów:
 - finansowe - zestawienie przychodów dla każdego kursu/studium/webinaru - przesyłana jest informacja o tym do właściciela
 - lista osób zapisanych na każde szkolenie zawierająca imię, nazwisko, informacja, czy klient był obecny
- Wyświetlanie spisu wszystkich zajęć i wszystkich spotkań z datami oraz możliwość ich zmiany (studia)
- Określenie limitu miejsc na kursy hybrydowe/stacjonarne oraz studia
- Możliwość generowania listy klientów którzy są uprawnieni do otrzymania dyplomów (ukończyli kurs/studia)

1.4. Nauczyciel

- Dodawanie nagrań szkoleń
- Dostęp do prowadzonych przez siebie nagrań i list obecności z prowadzonych przez siebie zajęć

1.5. Właściciel

Funkcje managera i sekretarza + dodatkowo:

- Zezwalanie na odroczenie płatności za szkolenia

1.6. Funkcje systemu

1.6.1. Webinary

- kontrola dostępu klientów do webinarów
 - webinary bezpłatne - dostęp przez 30 dni od umieszczenia nagrania na platformie
 - webinary płatne - dostęp przez 30 dni od uiszczenia opłaty
 - uniemożliwienie korzystania z płatnych webinarów użytkownikom niezalogowanym i tym, którzy nie uiszcili opłaty

1.6.2. Kursy

- weryfikacja zaliczenia danych modułów wchodzących w skład kursu
- kontrola dostępu klientów do kursów:
 - kursy on-line synchronicznie (zasady jak przy webinarach)
 - kursy online asynchronicznie (dostęp po dodaniu materiałów przez właściciela i po uiszczeniu opłat przez klienta)
 - uniemożliwienie dostępu do kursów on-line użytkownikom którzy nie wpłacili całości kwoty 3 dni przed rozpoczęciem kursu

1.6.3. Studia

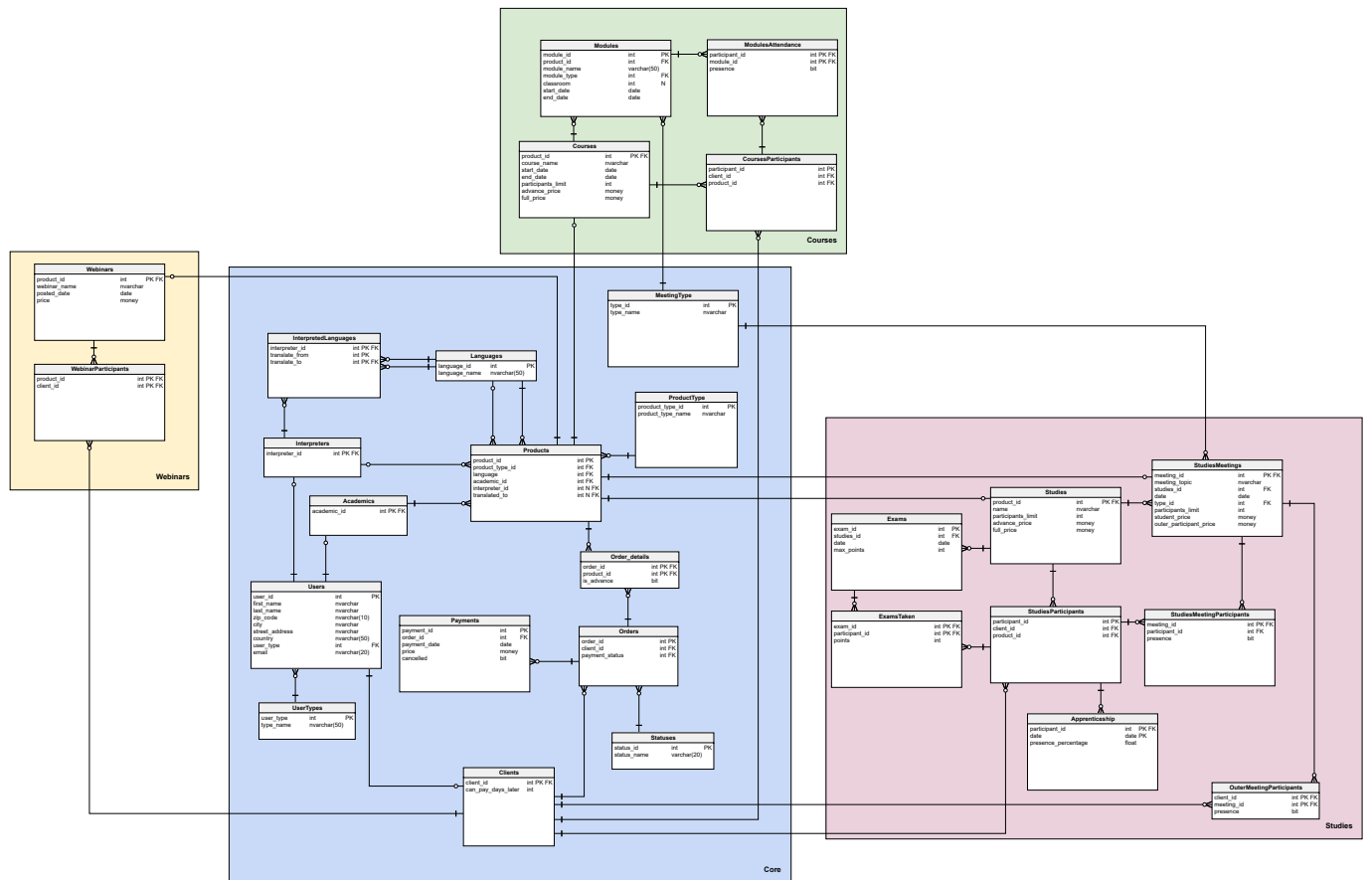
- kontrola dostępu klientów do studiów
 - spotkania on-line
 - spotkania stacjonarnie
 - spotkania hybrydowe
 - możliwość wykupienia dostępu płatnego do jednego spotkania
 - limit miejsc ogólny (nie może być większy niż najmniejszy spośród limitów wszystkich spotkań)
- przechowywanie informacji o sylabusie (przechowywanie listy zajęć na danym studium i listy różnych studiów jeszcze przed danym rokiem)
- przechowywanie informacji o spisie wszystkich zajęć i wszystkich spotkań z datami
 - limit miejsc na spotkanie
- kontrola, czy studenci zaliczyli praktyki trwające 14 dni - 2 razy w ciągu roku
- kontrola obecności klientów na spotkaniach i praktykach
 - aby zaliczyć studium:
 - 80% obecności na spotkaniach
 - 100% obecności na praktykach
- kontrola, czy studenci uiszcili opłatę wpisową oraz za każde spotkanie najpóźniej 3 dni przed zjazdem

- przyznawanie statusu zaliczenia i ew. wysłania dyplomu Pocztą polska na status korespondencyjny (na podstawie zaliczenia praktyk i egzaminu końcowego oraz obecności)

1.6.4. Koszyk

- po kliknięciu przez klienta "Zakończ i zapłać", wygenerowanie linku do płatności.
- po zakończeniu transakcji przesłanie informacji zwrotnej o pomyślnym zakończeniu płatności lub błędzie.

2. Schemat bazy danych



Vertabelo

3. Implementacje tabel

3.1 Core

Główna część systemu

Users

Zawiera wszystkich użytkowników systemu oraz ich dane - imię, nazwisko, dane adresowe oraz typ użytkownika (klucz obcy do tabeli `User_types`), a także informację o tym, ile dni opóźnienia w płatności jest dozwolone danemu użytkownikowi.

```
create table Users
(
    user_id          int identity
        constraint user_id
            primary key,
    first_name       nvarchar(50)    not null,
    last_name        nvarchar(50)    not null,
    zip_code         nvarchar(10)    not null,
    city             nvarchar(50)    not null,
    street_address   nvarchar(50)    not null,
    country          nvarchar(50)    not null,
    user_type        int
        constraint df_user_type default 1 not null
        constraint User_types_Users
            references User_types
)
```

```

        on update cascade on delete cascade,
email      nvarchar(50)          not null
        constraint email_unique
            unique
        constraint ValidEmail
            check ([Email] like '%@%._%')
    )
go

create index Users_first_name_last_name_index
    on Users (first_name, last_name)
go

create index Users_zip_code_city_street_address_country_index
    on Users (zip_code, city, street_address, country)
go

```

Academics

Zawiera id wszystkich użytkowników, którzy są nauczycielami - zdecydowaliśmy się na dodanie tabel Academics, Interpreters i Clients, by rozdzielić logikę wykonywaną dla poszczególnych typów użytkownika.

```

create table Academics
(
    academic_id int not null
        constraint Academics_pk
            primary key
        constraint FK_Academics_Users
            references Users
            on update cascade on delete cascade
)
go

```

Interpreters

Zawiera id wszystkich tłumaczy

```

create table Interpreters
(
    interpreter_id int not null
        constraint Interpreters_pk
            primary key
        constraint Interpreters_Users
            references Users
            on update cascade on delete cascade
)
go

```

Clients

Zawiera id wszystkich klientów

```

create table Clients
(
    client_id      int                not null
        constraint client_id
            primary key
        constraint Clients_Users
            references Users,
    can_pay_days_later int
        constraint df_Can_pay_days_later default 0 not null
)

```

```
)  
go
```

User_types

Zawiera listę wszystkich typów użytkowników występujących w systemie

```
create table User_types  
(  
    user_type int identity  
        constraint User_types_pk  
            primary key,  
    type_name nvarchar(50) not null  
)  
go
```

Interpreted_languages

Każdemu tłumaczowi przyporządkowuje informację o tym, z jakiego języka na jaki tłumaczy (są to FK do tabeli languages)

```
create table Interpreted_languages  
(  
    interpreter_id int not null  
        constraint Interpreted_languages_Interpreters  
            references Interpreters  
            on update cascade on delete cascade,  
    translate_from int not null  
        constraint FK_Interpreted_languages_Languages  
            references Languages  
        constraint FK_Interpreted_languages_Languages2  
            references Languages,  
    translate_to int not null  
        constraint FK_Interpreted_languages_Languages1  
            references Languages,  
    constraint Interpreted_languages_pk  
        primary key (interpreter_id, translate_from, translate_to)  
)  
go
```

Languages

Lista wszystkich języków, w jakich prowadzone są szkolenia, bądź na jakie są one tłumaczone

```
create table Languages  
(  
    language_id int identity  
        constraint PK_Languages  
            primary key,  
    language_name nvarchar(50) not null  
        constraint language_name_unique  
            unique  
)  
go
```

Products

Zawiera wszystkie produkty, informację o ich typie (odwołanie do tabeli ProductType), języku w jakim jest prowadzone dane szkolenie, wykładowcy, który je prowadzi oraz o tłumaczu i języku, na który tłumaczone jest szkolenie

```
create table Products  
(
```

```

product_id      int identity
               constraint Products_pk
               primary key,
product_type_id int not null
               constraint Products_ProductType
               references ProductType
               on update cascade on delete cascade,
language        int not null
               constraint FK_Products_Languages
               references Languages,
academic_id     int not null
               constraint FK_Products_Academics
               references Academics
               on update cascade on delete cascade,
interpreter_id  int
               constraint FK_Products_Interpreters1
               references Interpreters,
translated_to   int
               constraint FK_Products_Languages1
               references Languages
)
go

create index Products_product_type_id_index
on Products (product_type_id)
go

create index Products_language_index
on Products (language)
go

```

ProductType

Zawiera wszystkie typy produktów (webinary, spotkania, kursy, studia)

```

create table ProductType
(
    product_type_id int identity
                  constraint ProductType_pk
                  primary key,
    product_type_name nvarchar(50) not null
)
go

```

Payments

Spis wszystkich płatności (numer zamówienia, data płatności, wpłacona kwota)

```

create table Payments
(
    payment_id int identity
              constraint Payments_pk
              primary key,
    order_id   int not null
              constraint Orders_Payments
              references Orders,
    payment_date date not null
              constraint payment_date_check
              check ([payment_date] >= '1990-01-01' AND [payment_date] <= getdate()),
    price      money not null,
    cancelled  bit
              constraint DF_Payments_cancelled default 0 not null
)
go

create index Payments_order_id_index

```

```
    on Payments (order_id)
go

create index Payments_payment_date_index
    on Payments (payment_date)
go
```

MeetingType

Rodzaje spotkań (online, hybrydowe, stacjonarne)

```
create table MeetingType
(
    type_id int identity
        constraint type_id
            primary key,
    type_name nvarchar(50) not null
)
go
```

Orders

Lista wszystkich zamówień (numer klienta, status płatności)

```
create table Orders
(
    order_id int identity
        constraint Orders_pk
            primary key,
    client_id int not null
        constraint Orders_Clients
            references Clients,
    payment_status int
        constraint df_payment_status default 2 not null
        constraint Statuses_Orders
            references Statuses
)
go
```

OrdersDetails

Lista wszystkich zamówień (numer klienta, status płatności)

```
create table Order_details
(
    order_id int not null
        constraint Order_products_Orders
            references Orders,
    product_id int not null
        constraint Order_products_Products
            references Products,
    is_advance bit
        constraint DF_Order_details_is_advance default 0 not null,
    constraint Order_details_pk
        primary key (order_id, product_id)
)
go
```

Statuses

Rodzaje statusów zamówień (nieopłacone, opłacone, częściowo opłacone (z jakiegos produktu tylko zaliczka), anulowane)

```
create table Statuses
(
    status_id int identity
        constraint Statuses_pk
            primary key,
    status_name varchar(20) not null
)
go
```

3.2. Webinars

Webinars

Lista wszystkich webinarów wraz z ich nazwami, datą publikacji i ceną

```
create table Webinars
(
    product_id int not null
        constraint product_id_webinars
            primary key
        constraint Webinars_Products
            references Products
                on update cascade on delete cascade,
    webinar_name nvarchar(50) not null,
    posted_date date not null
        constraint check_posted_date
            check ([posted_date] >= '1990-01-01' AND [posted_date] <= getdate()),
    price money
        constraint def_price default 0.00 not null
)
go

create index Webinars_webinar_name_index
on Webinars (webinar_name)
go

create index Webinars_posted_date_index
on Webinars (posted_date)
go
```

WebinarParticipants

Lista uczestników poszczególnych webinarów

```
create table WebinarParticipants
(
    product_id int not null
        constraint WebinarParticipants_Webinars
            references Webinars
                on update cascade on delete cascade,
    client_id int not null
        constraint FK_WebinarParticipants_Clients
            references Clients
                on update cascade on delete cascade,
    constraint WebinarParticipants_pk
        primary key (client_id, product_id)
)
go
```

3.3. Courses

Courses

Lista kursów wraz z ich nazwami, datami początku i końca kursu, limitem uczestników, ceną zaliczki oraz pełną ceną


```

create table Courses
(
    product_id          int                not null
    constraint product_id
        primary key
    constraint FK_Courses_Products
        references Products
        on update cascade on delete cascade,
    course_name          nvarchar(50)      not null,
    start_date           date               not null,
    end_date             date               not null,
    participants_limit   int                not null
    constraint participants_limit
        check ([participants_limit] >= 0),
    advance_price        money
    constraint df_advance_price default 50.00 not null,
    full_price           money
    constraint df_full_price default 400.00 not null,
    constraint ch_advance_price
        check ([advance_price] < [full_price] AND [advance_price] >= 0),
    constraint ch_end_date
        check ([end_date] >= [start_date])
)
go

create unique index Courses_course_name_uindex
on Courses (course_name)
go

create unique index Courses_start_date_end_date_uindex
on Courses (start_date, end_date)
go

```

CoursesParticipants

Lista uczestników poszczególnych kursów

```

create table CoursesParticipants
(
    participant_id int identity
    constraint CoursesParticipants_pk
        primary key,
    client_id      int not null
    constraint CursesParticipants_Clients
        references Clients
        on update cascade on delete cascade,
    product_id     int not null
    constraint CoursesParticipants_Courses
        references Courses
)
go

```

Modules

Lista modułów kursów z nazwami, typem modułu (odwołanie do tabeli MeetingType), numerem sali oraz datą rozpoczęcia i zakończenia modułu

```

create table Modules
(
    module_id int identity
    constraint Modules_pk
        primary key,
    product_id int not null
    constraint Courses_Modules
        references Courses
        on update cascade on delete cascade,

```

```

module_name varchar(50) not null,
module_type int          not null
        constraint Modules_MeetingType
        references MeetingType
        on update cascade on delete cascade,
classroom   int,
start_date  date          not null,
end_date    date          not null,
constraint ch_end_date_courses
        check ([end_date] >= [start_date])
)
go

create unique index Uniq_Modules
on Modules (module_name)
go

create index Modules_product_id_index
on Modules (product_id)
go

create index Modules_start_date_end_date_index
on Modules (start_date, end_date)
go

create index Modules_classroom_index
on Modules (classroom)
go

```

ModulesAttendance

Zawiera listę obecności uczestników kursów na poszczególnych modułach

```

create table ModulesAttendance
(
    participant_id int          not null
        constraint FK_ModulesAttendance_CoursesParticipants
        references CoursesParticipants
        on update cascade on delete cascade,
    module_id      int          not null
        constraint ModulesAttendance_Modules
        references Modules
        on update cascade on delete cascade,
    presence       bit
        constraint DF_ModulesAttendance_presence default 0 not null,
    constraint PK_ModulesAttendance
        primary key (participant_id, module_id)
)
go

```

3.4. Studies

Studies

Zawiera listę produktów typu "studia", nazwę studiów, limit uczestników oraz wysokość wpisowego

```

create table Studies
(
    product_id      int          not null
        constraint studies_id
        primary key
        constraint Studies_Products
        references Products
        on update cascade on delete cascade,
    name            nvarchar(50) not null
        constraint check_name

```

```

        check (len([name]) > 0),
participants_limit int default 100                                not null
        constraint check_praticipant_limit
        check ([participants_limit] > 0),
full_price          money
        constraint df_studies_full_price default 7000.00 not null
        constraint check_full_price
        check ([full_price] >= 0),
advance_price       money
        constraint df_studies_advance_price default 100.00,
        constraint check_advance_price
        check ([advance_price] <= [Studies].[full_price] AND [advance_price] >= 0)
)
go

create index Studies_name_index
on Studies (name)
go

```

StudiesParticipants

Zawiera uczestników poszczególnych studiów

```

create table StudiesParticipants
(
    participant_id int identity
        constraint participant_id_studies_participants
        primary key,
    client_id      int not null
        constraint StudiesParticipants_Clients
        references Clients
        on update cascade on delete cascade,
    product_id     int not null
        constraint StudiesParticipants_Studies
        references Studies
)
go

create index StudiesParticipants_client_id_index
on StudiesParticipants (client_id)
go

create index StudiesParticipants_product_id_index
on StudiesParticipants (product_id)
go

```

Exams

Zawiera przypisane studiom egzaminy, datę odbycia się egzaminów oraz maksymalne możliwe do zdobycia punkty

```

create table Exams
(
    exam_id      int identity
        constraint PK_Exams
        primary key,
    studies_id   int                                not null
        constraint Exams_Studies
        references Studies
        on update cascade on delete cascade,
    date         date default getdate() not null,
    max_points   int default 100              not null
        constraint check_max_points
        check ([max_points] > 0)
)
go

```

```
create index Exams_studies_id_index
on Exams (studies_id)
go

create index Exams_date_index
on Exams (date)
go
```

ExamsTaken

Zawiera dane odnośnie wyników egzaminów w których uczestnik studiów wziął udział

```
create table ExamsTaken
(
    exam_id          int          not null
        constraint ExamsTaken_Exams
            references Exams
            on update cascade
        constraint check_date
            check ([dbo].[checkExamDate]([exam_id]) <= getdate()),
    participant_id    int          not null
        constraint ExamsTaken_StudiesParticipants
            references StudiesParticipants,
    points            int default 50 not null,
    constraint ExamsTaken_pk
        primary key (participant_id, exam_id),
    constraint check_points
        check ([points] >= 0 AND [points] <= [dbo].[checkExamMaxPoints]([exam_id]))
)
go
```

Apprenticeship

Zawiera uczestników, którzy odbyli praktyki w określonym terminie

```
create table Apprenticeship
(
    participant_id    int          not null
        constraint Apprenticeship_StudiesParticipants
            references StudiesParticipants
            on update cascade on delete cascade,
    date              date          not null,
    presence_percentage float default 100 not null
        constraint check_presence_percentage
            check ([presence_percentage] >= 0 AND [presence_percentage] <= 100)
)
go

create unique clustered index Apprenticeship_participant_id_date_uindex
on Apprenticeship (participant_id, date)
go
```

StudiesMeetingParticipants

Zawiera listę obecnych studentów na danych spotkaniach

```
create table StudiesMeetingParticipants
(
    meeting_id        int not null
        constraint FK_MeetingParticipants_StudiesMeetings
            references StudiesMeetings
            on update cascade on delete cascade,
    participant_id     int not null
        constraint MeetingParticipants_StudiesParticipants
```

```

        references StudiesParticipants
        on update cascade on delete cascade,
    presence      bit default 0,
    constraint meeting_id
        primary key (meeting_id, participant_id)
)
go

```

StudiesMeetings

Lista spotkań poszczególnych studiów, data spotkania, typ spotkania (FK do MeetingTypes), limit uczestników spotkania, cena dla studentów, cena dla uczestników, którzy nie są studentami

```

create table StudiesMeetings
(
    meeting_id          int                not null
        constraint StudiesMeetings_pk
            primary key
        constraint StudiesMeetings_Products
            references Products
            on update cascade on delete cascade,
    studies_id          int                not null
        constraint StudiesMeetings_Studies
            references Studies,
    date                date              not null,
    type_id             int default 1      not null
        constraint StudiesMeetings_MeetingType
            references MeetingType
            on update cascade on delete cascade,
    participants_limit   int default 300    not null,
    student_price        money
        constraint df_student_price default 60.00 not null
        constraint check_student_price
            check ([student_price] >= 0),
    outer_participant_price money
        constraint df_outer_participant_price default 100.00 not null
        constraint check_outer_participant_price
            check ([outer_participant_price] >= 0),
    meeting_topic        nvarchar(50)      not null
        constraint check_meeting_topic_length
            check (len([meeting_topic]) > 0),
    constraint check_participants_limit
        check ([dbo].[checkParicipantsLimit]([studies_id]) <= [StudiesMeetings].[participants_limit])
)
go

create index StudiesMeetings_studies_id_index
on StudiesMeetings (studies_id)
go

create index StudiesMeetings_date_index
on StudiesMeetings (date)
go

```

OuterMeetingsParticipants

Tabela zawierająca uczestników spotkań na studiach nie będących uczestnikami studiów

```

create table OuterMeetingParticipants
(
    client_id int                not null
        constraint FK_OuterMeetingParticipants_Clients
            references Clients,
    meeting_id int              not null
        constraint FK_OuterMeetingParticipants_StudiesMeetings
            references StudiesMeetings,

```

```

presence bit
    constraint df_outer_meeting_presence default 0 not null,
constraint PK_OuterMeetingParticipants
    primary key (client_id, meeting_id)
)
go

```

Widoki

Dla Sekretarza

BorrowersList

Lista klientów którzy skorzystali z oferty i za nią nie zapłacili (client_id, order_id)

```

CREATE VIEW [dbo].[BorrowersList] AS
Select client_id, order_id
From Orders as o
Where order_id in ( Select order_id
    From Order_details as od
    inner join
    (Select product_id as p_id, posted_date from Webinars where posted_date <= GETDATE()
    UNION Select product_id as p_id, start_date from Courses where start_date <= GETDATE()
    UNION Select studies_id as p_id, min(date)
        from StudiesMeetings group by studies_id having (MIN(date)) <= GETDATE( ))
    as p
    on p.p_id=od.product_id)
and not( payment_status = 1)

```

PastEvents

Raport dotyczący frekwencji na danym wydarzeniu (moduł, spotkanie ze studiów) wraz z podstawowymi informacjami

```

CREATE VIEW PastEventsAttendance
AS
SELECT p.product_id, pt.product_type_name as category, s.name as product_name, sm.meeting_id as id, sm.date as
date, mt.type_name as type, COUNT(mp.client_id) as attendance
FROM StudiesMeetings as sm
    inner join (SELECT participant_id as client_id, meeting_id
        FROM StudiesMeetingParticipants
        WHERE presence=1
        UNION
        SELECT client_id, meeting_id
        FROM OuterMeetingParticipants
        WHERE presence = 1) as mp
    on mp.client_id=sm.meeting_id
inner join Studies as s on s.product_id=sm.studies_id and sm.date <= GETDATE()
inner join Products as p on p.product_id=s.product_id
join MeetingType as mt on mt.type_id=sm.type_id
join ProductType as pt on pt.product_type_id=p.product_type_id
GROUP BY p.product_id, pt.product_type_name, s.name, sm.meeting_id, sm.date, mt.type_name
UNION
SELECT p.product_id, pt.product_type_name as category, c.course_name as product_name, m.module_id as id,
m.start_date as date, mt.type_name as type, COUNT(ma.presence) as attendance
FROM Modules as m
    inner join ModulesAttendance as ma on m.module_id=ma.module_id and ma.presence=1
    inner join Courses as c on c.product_id=m.product_id and m.end_date <= GETDATE()
    inner join Products as p on p.product_id=c.product_id
    join MeetingType as mt on mt.type_id=m.module_type
    join ProductType as pt on pt.product_type_id=p.product_type_id
GROUP BY p.product_id, pt.product_type_name, c.course_name, m.module_id, m.start_date, mt.type_name
GO

```

EventsThisMonth

Spis webinarów, modułów oraz spotkań ze studiów, które odbywają się w aktualnym miesiącu

```
CREATE VIEW EventsThisMonth
AS
SELECT p.product_id, pt.product_type_name as category, s.name as product_name, sm.meeting_id as id, sm.date as
date, mt.type_name as type
FROM StudiesMeetings as sm
    inner join Studies as s on s.product_id=sm.studies_id and YEAR(sm.date) = YEAR(GETDATE()) and MONTH(sm.date)
= MONTH(GETDATE())
    inner join Products as p on p.product_id=s.product_id
    join MeetingType as mt on mt.type_id = sm.type_id
    join ProductType as pt on pt.product_type_id=p.product_type_id
UNION
SELECT p.product_id, pt.product_type_name as category, w.webinar_name as product_name, w.product_id,
w.posted_date as date, 'on-line' as type
FROM Webinars as w
    inner join Products as p on p.product_id=w.product_id and YEAR(w.posted_date) = YEAR(GETDATE()) and
MONTH(w.posted_date) = MONTH(GETDATE())
    join ProductType as pt on pt.product_type_id=p.product_type_id
UNION
SELECT p.product_id, pt.product_type_name as category, c.course_name as product_name, m.module_id as id,
m.start_date as date, mt.type_name as type
FROM Modules as m
    inner join Courses as c on c.product_id=m.product_id and YEAR(m.start_date) = YEAR(GETDATE()) and
MONTH(m.start_date) = MONTH(GETDATE())
    inner join Products as p on p.product_id=c.product_id
    join MeetingType as mt on mt.type_id = m.module_type
    join ProductType as pt on pt.product_type_id=p.product_type_id
GO
```

Exams Stats

Lista egzaminów wraz z srednia ilością punktów uzyskanych przez studentów

```
CREATE VIEW ExamsStats
AS
SELECT e.studies_id as studies, e.exam_id as exam, e.max_points as max_points, AVG(et.points) as average_points
FROM Exams as e
    inner join ExamsTaken as et on et.exam_id=e.exam_id
GROUP BY e.studies_id, e.exam_id, e.max_points
```

StudentsApprenticeships

Lista studentów wraz z ilością odbytych praktyk

```
CREATE VIEW StudentsApprenticeship
AS
SELECT a.participant_id, COUNT(a.date) as apprenticeships_taken
FROM Apprenticeship as a
GROUP BY a.participant_id
```

Bilocations

Lista osób zapisanych na kilka wydarzeń odbywających sie w tym samym czasie (client_id, date, num_of_events

```
CREATE VIEW [dbo].[Bilocations] As
Select c.client_id, p.date, COUNT(p.date) as eventsNumber
From Clients as c
    inner join Orders as o on c.can_pay_days_later=o.client_id
    inner join Order_details as od on od.order_id=o.order_id
    inner join( Select m.module_id as p_id, start_date as date from Modules as m where not m.module_type = 1
UNION
```

```

Select sm.meeting_id as p_id, sm.date as date from StudiesMeetings as sm where not sm.type_id = 1
UNION
Select w.product_id as p_id, w.posted_date as date from Webinars as w
UNION
Select sm.student_price as p_id, sm.date as date from StudiesMeetings as sm where not sm.type_id = 1) as
p
on p.p_id = od.product_id
where p.date >= GETDATE()
group by c.client_id, p.date

```

Dla Managera

Financial Report

Przedstawia podsumowanie finansowe

```

CREATE VIEW FinancialReport AS
SELECT Products.product_id, dbo.getProductname(Products.product_id) AS product_name, product_type_name,
SUM(price) AS total_income
FROM Payments
INNER JOIN Orders ON Payments.order_id = Orders.order_id
INNER JOIN Order_details ON Orders.order_id = Order_details.order_id
INNER JOIN Products ON Order_details.product_id = Products.product_id
INNER JOIN ProductType ON Products.product_type_id = ProductType.product_type_id
GROUP BY Products.product_id, Products.product_id, product_type_name
GO

```

GraduationCandidates

Przedstawia listę osób które zaliczyły studia lub kurs - są kandydatami do otrzymania certyfikatu

```

CREATE VIEW GraduationCandidates AS
SELECT Clients.client_id, first_name, last_name, dbo.getProductname(product_id) AS product_name
FROM StudiesParticipants
INNER JOIN Clients ON StudiesParticipants.client_id = Clients.client_id
INNER JOIN Users ON Clients.client_id = Users.user_id
WHERE dbo.studiesPass(participant_id) = 1
UNION
SELECT Clients.client_id, first_name, last_name, dbo.getProductname(product_id) AS product_name
FROM CoursesParticipants
INNER JOIN Clients ON CoursesParticipants.client_id = Clients.client_id
INNER JOIN Users ON Clients.client_id = Users.user_id
WHERE dbo.coursePass(participant_id) = 1
GO

```

All Meetings

Wyświetla daty wszystkich spotkań

```

CREATE VIEW AllMeetings AS
SELECT product_id, 'Module' AS type, module_name AS title, start_date AS date
FROM Modules
UNION
SELECT studies_id, 'Studies Meeting' AS type, meeting_topic AS title, date AS date
FROM StudiesMeetings
UNION
SELECT product_id, 'Webinar' AS type, webinar_name, posted_date AS date
FROM Webinars
GO

```

Procedury

AddUser

Dodaje użytkownika o podanych danych (imię, nazwisko, adres,email, typ użytkownika)

```
CREATE PROCEDURE [dbo].[uspAddUser]
    @first_name nvarchar(50),
    @last_name nvarchar(50),
    @zip_code nvarchar(10),
    @city nvarchar(50),
    @street_address nvarchar(50),
    @country nvarchar(50),
    @email nvarchar(50),
    @type_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM User_types
            where @type_id=user_type
        )
        BEGIN
            ;
            THROW 52000, N'Taki rodzaj użytkownika nie istnieje',1
        END

        DECLARE @user_type_name nvarchar(50)
        SELECT @user_type_name = type_name
        FROM User_types
        WHERE @type_id=user_type

        BEGIN TRANSACTION
            INSERT INTO Users (first_name,last_name,zip_code,city,street_address,country,user_type,email)

                values(@first_name,@last_name,@zip_code,@city,@street_address,@country,@type_id,@email)

        DECLARE @user_id INT;
        SET @user_id= SCOPE_IDENTITY();

        IF @user_type_name='client'
        Begin
            insert into clients (client_id)
            values(@user_id)
        end
        else IF @user_type_name='academic'
        Begin
            insert into academics (academic_id)
            values(@user_id)
        end
        else IF @user_type_name='interpreter'
        Begin
            insert into interpreters (interpreter_id)
            values(@user_id)
        end
        COMMIT TRANSACTION

    END TRY
    BEGIN CATCH
        IF @@TRANCOUNT > 0
            ROLLBACK TRAN
        DECLARE @msg nvarchar(2048)=N'Błąd dodawania uzytkownika: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

AddWebinar

Dodaje webinar o podanej nazwie, id nauczyciela, nazwie języka oraz opcjonalnie danych o tłumaczu i języku, na który jest tłumaczone dane szkolenie do tabeli webinars oraz products

```
CREATE PROCEDURE [dbo].[uspAddWebinar]
    @language_id int,
    @academic_id int,
    @interpreter_id int=null,
    @translate_to_id int=null,
    @webinar_name nvarchar(50)
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Academics
            WHERE academic_id=@academic_id
        )
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego nauczyciela!',1
        END
        IF NOT EXISTS(
            SELECT *
            FROM Languages
            WHERE @language_id=language_id
        )
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego języka!',1
        END
        IF NOT EXISTS(
            SELECT *
            FROM Languages
            WHERE @translate_to_id=language_id
        ) AND @translate_to_id is not null
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego języka!',1
        END
        IF NOT EXISTS(
            SELECT *
            FROM Interpreters
            WHERE interpreter_id=@interpreter_id
        ) AND @interpreter_id is not null
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego tłumacza!',1
        END

        DECLARE @type_id INT
        SELECT @type_id = product_type_id
        FROM ProductType
        WHERE 'webinar' = product_type_name

        BEGIN TRANSACTION
            INSERT INTO Products (product_type_id,language,academic_id,interpreter_id,translated_to)

                values(@type_id,@language_id,@academic_id,@interpreter_id,@translate_to_id)

            DECLARE @product_id INT;
            SET @product_id= SCOPE_IDENTITY();

            INSERT INTO Webinars(product_id,webinar_name, posted_date)
            Values (@product_id,@webinar_name, GETDATE());
        COMMIT TRANSACTION
```

```
END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd dodania webinaru: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END
```

SetWebinarPrice

Zmienia cenę webinaru o podanej nazwie

```
CREATE PROCEDURE [dbo].[uspSetWebinarPrice]
    @webinar_id int,
    @price money
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM webinars
            where @webinar_id=product_id
        )
            BEGIN
                ;
                THROW 52000, N'Webinar o tej nazwie nie istnieje',1
            END

            UPDATE webinars
            SET price=@price
            where product_id=@webinar_id
        END TRY
        BEGIN CATCH
            DECLARE @msg nvarchar(2048)=N'Błąd zmiany ceny webinaru: ' + ERROR_MESSAGE();
            THROW 52000, @msg, 1;
        END CATCH
    END
```

AddCourse

Dodaje kurs o podanej nazwie, id nauczyciela, nazwie języka oraz opcjonalnie danych o tłumaczu i języku, na który jest tłumaczone dane szkolenie oraz dacie rozpoczęcia i zakończenia i limicie uczestników do tabeli courses oraz products

```
CREATE PROCEDURE [dbo].[uspAddCourse]
    @language_id int,
    @academic_id int,
    @interpreter_id int=null,
    @translated_to_id int=null,
    @course_name nvarchar(50),
    @start_date date,
    @end_date date,
    @participants_limit int
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Academics
```

```

        WHERE academic_id=@academic_id
    )
    BEGIN
        ;
        THROW 52000, N'Nie ma takiego nauczyciela!',1
    END
    IF NOT EXISTS(
        SELECT *
        FROM Languages
        WHERE @language_id=language_id
    )
    BEGIN
        ;
        THROW 52000, N'Nie ma takiego języka!',1
    END
    IF NOT EXISTS(
        SELECT *
        FROM Languages
        WHERE @translated_to_id=language_id
    ) AND @translated_to_id is not null
    BEGIN
        ;
        THROW 52000, N'Nie ma takiego języka!',1
    END
    IF NOT EXISTS(
        SELECT *
        FROM Interpreters
        WHERE interpreter_id=@interpreter_id
    ) AND @interpreter_id is not null
    BEGIN
        ;
        THROW 52000, N'Nie ma takiego tłumacza!',1
    END

    DECLARE @type_id INT
    SELECT @type_id = product_type_id
    FROM ProductType
    WHERE 'course' = product_type_name

    BEGIN TRANSACTION
        INSERT INTO Products (product_type_id,language,academic_id,interpreter_id,translated_to)

            values(@type_id,@language_id,@academic_id,@interpreter_id,@translated_to_id)

        DECLARE @product_id INT;
        SET @product_id= SCOPE_IDENTITY();

        INSERT INTO Courses(product_id,course_name, start_date,end_date,participants_limit)
        Values (@product_id,@course_name, @start_date,@end_date,@participants_limit);
    COMMIT

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd dodania kursu: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

setCoursePrice

Ustawia cenę zaliczki i/lub pełną cenę kursu

```

CREATE PROCEDURE [dbo].[uspSetCoursePrice]
    @course_id int,

```

```

        @advance_price money=null,
        @full_price money=null
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM courses
            where @course_id=product_id
        )
        BEGIN
            ;
            THROW 52000, N'Kurs o tej nazwie nie istnieje',1
        END

        IF @advance_price is not null
        Begin
            UPDATE courses
            SET advance_price=@advance_price
            where product_id=@course_id
        end

        IF @full_price is not null
        begin
            UPDATE courses
            SET full_price=@full_price
            where product_id=@course_id
        end

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zmiany ceny kursu: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END

```

AddStudies

Dodaje studia o podanej nazwie, id nauczyciela, nazwie języka oraz opcjonalnie danych o tłumaczu i języku, na który jest tłumaczone dane szkolenie oraz limicie uczestników do tabeli studies oraz products

```

CREATE PROCEDURE [dbo].[uspAddStudies]
    @language_id int,
    @academic_id int,
    @interpreter_id int=null,
    @translate_to_id int=null,
    @name nvarchar(50),
    @participants_limit int
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Academics
            WHERE academic_id=@academic_id
        )
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego nauczyciela!',1
        END
        IF NOT EXISTS(
            SELECT *
            FROM Languages

```

```

        WHERE @language_id=language_id
    )
BEGIN
    ;
    THROW 52000, N'Nie ma takiego języka!',1
END
IF NOT EXISTS(
    SELECT *
    FROM Languages
    WHERE @translate_to_id=language_id
) AND @translate_to_id is not null
BEGIN
    ;
    THROW 52000, N'Nie ma takiego języka!',1
END
IF NOT EXISTS(
    SELECT *
    FROM Interpreters
    WHERE interpreter_id=@interpreter_id
) AND @interpreter_id is not null
BEGIN
    ;
    THROW 52000, N'Nie ma takiego tłumacza!',1
END

DECLARE @type_id INT
SELECT @type_id = product_type_id
FROM ProductType
WHERE 'studies' = product_type_name

BEGIN TRANSACTION
    INSERT INTO Products (product_type_id,language,academic_id,interpreter_id,translated_to)

        values(@type_id,@language_id,@academic_id,@interpreter_id,@translate_to_id)

    DECLARE @product_id INT;
    SET @product_id= SCOPE_IDENTITY();

    INSERT INTO Studies(product_id,name,participants_limit)
    Values (@product_id,@name,@participants_limit);
COMMIT TRANSACTION

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd dodania studiów: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

setStudiesPrice

Ustawia cenę zaliczki i/lub pełną cenę studiów o podanej nazwie

```

CREATE PROCEDURE [dbo].[uspSetStudiesPrice]
    @studies_id int,
    @advance_price money=null,
    @full_price money=null
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM studies
            where @studies_id=product_id

```

```
)
BEGIN
;
    THROW 52000, N'Studia o tej nazwie nie istnieją',1
END

IF @advance_price is not null
Begin
    UPDATE studies
    SET advance_price=@advance_price
    where product_id=@studies_id
end

IF @full_price is not null
begin
    UPDATE studies
    SET full_price=@full_price
    where product_id=@studies_id
end

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd zmiany ceny studiów: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END
```

AddStudiesMeetings

Dodaje spotkanie o podanej nazwie, id nauczyciela, nazwie języka oraz opcjonalnie danych o tłumaczu i języku, na który jest tłumaczone dane szkolenie oraz limicie uczestników, dacie spotkania i przynależności do danych studiów do tabeli StudiesMeetings oraz products

```
CREATE PROCEDURE [dbo].[uspAddStudiesMeetings]
    @language_id int,
    @academic_id int,
    @interpreter_id int=null,
    @translate_to_id int=null,
    @participants_limit int,
    @type_meeting_id INT,
    @date date,
    @studies_id int,
    @meeting_topic nvarchar(50)
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Academics
            WHERE academic_id=@academic_id
        )
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego nauczyciela!',1
        END
        IF NOT EXISTS(
            SELECT *
            FROM Languages
            WHERE @language_id=language_id
        )
        BEGIN
            ;
            THROW 52000, N'Nie ma takiego języka!',1
        END
        IF NOT EXISTS(
            SELECT *
```

```

        FROM Languages
        WHERE @translate_to_id=language_id
    ) AND @translate_to_id is not null
BEGIN
    ;
    THROW 52000, N'Nie ma takiego języka!',1
END
IF NOT EXISTS(
    SELECT *
    FROM Interpreters
    WHERE interpreter_id=@interpreter_id
) AND @interpreter_id is not null
BEGIN
    ;
    THROW 52000, N'Nie ma takiego tłumacza!',1
END
IF NOT EXISTS(
    SELECT *
    FROM MeetingType
    WHERE type_name=@type_meeting_id
)
BEGIN
    ;
    THROW 52000, N'Nie ma takiego typu spotkania!',1
END
IF NOT EXISTS(
    SELECT *
    FROM Studies
    WHERE name=@studies_id
)
BEGIN
    ;
    THROW 52000, N'Nie ma takich studiów',1
END

if @meeting_topic IS NULL
BEGIN
    ;
    THROW 52000, N'Temat spotkania nie może być pusty!',1
END

DECLARE @type_id INT
SELECT @type_id = product_type_id
FROM ProductType
WHERE 'meeting' = product_type_name

BEGIN TRANSACTION
    INSERT INTO Products (product_type_id,language,academic_id,interpreter_id,translated_to)

        values(@type_id,@language_id,@academic_id,@interpreter_id,@translate_to_id)

    DECLARE @product_id INT;
    SET @product_id= SCOPE_IDENTITY();

    INSERT INTO StudiesMeetings(meeting_id,studies_id,date,type_id,participants_limit, meeting_topic)
    Values (@product_id,@studies_id,@date,@type_meeting_id,@participants_limit, @meeting_topic);
COMMIT TRANSACTION

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd dodania spotkania: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```


Ustawia cenę danego spotkania dla studentów i/lub uczestników spoza studiów

```
CREATE PROCEDURE [dbo].[uspSetMeetingPrice]
    @meeting_id int,
    @student_price money=null,
    @outer_participant_price money=null
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM StudiesMeetings
            where @meeting_id=meeting_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki meeting nie istnieje',1
        END

        IF @student_price is not null
        Begin
            UPDATE StudiesMeetings
            SET student_price=@student_price
            where meeting_id=@meeting_id
        end

        IF @outer_participant_price is not null
        begin
            UPDATE StudiesMeetings
            SET outer_participant_price=@outer_participant_price
            where meeting_id=@meeting_id
        end

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zmiany ceny spotkania: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

AddMeetingParticipant

Dodaje uczestnika spotkania o podanym id

```
CREATE PROCEDURE [dbo].[uspAddMeetingParticipant]
    @client_id int,
    @product_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Clients
            where @client_id=client_id
        )
        BEGIN
            ;
            THROW 52000, N'Klient o podanym id nie istnieje',1
        END

        IF NOT EXISTS(
            SELECT *
            FROM StudiesMeetings
```

```

        where @product_id=meeting_id
    )
BEGIN
    ;
    THROW 52000, N'Taki meeting nie istnieje',1
END

DECLARE @participant_id INT;
SELECT @participant_id=participant_id
from StudiesParticipants
where @client_id=client_id

DECLARE @student_studies_id INT;
SELECT @student_studies_id=product_id
from StudiesParticipants
where @client_id=client_id

DECLARE @meeting_studies_id INT;
SELECT @meeting_studies_id=studies_id
from StudiesMeetings
where meeting_id=@product_id

IF @participant_id is null or @student_studies_id!=@meeting_studies_id
BEGIN
    INSERT INTO OuterMeetingParticipants(client_id,meeting_id)
    values(@client_id,@product_id)
END
ELSE
BEGIN
    INSERT INTO StudiesMeetingParticipants(meeting_id,participant_id)
    values(@product_id,@participant_id)
END

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd dodania uczestnika spotkania: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

AddWCSParticipant

Dodaje uczestnika do szkolenia podanego typu (kurs, studia, webinar)

```

CREATE PROCEDURE [dbo].[uspAddWCSParticipant]
    @type_id int,
    @client_id int,
    @product_id int

AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        DECLARE @type_name nvarchar(50)
        SELECT @type_name = product_type_name
        FROM ProductType
        WHERE @type_id = product_type_id

        IF NOT EXISTS(
            SELECT *
            FROM ProductType
            where @type_name=product_type_name
        )
        BEGIN
            ;

```

```
        THROW 52000, N'Taki rodzaj szkolenia nie istnieje',1
    END
    IF NOT EXISTS(
        SELECT *
        FROM Clients
        where @client_id=client_id
    )
    BEGIN
        ;
        THROW 52000, N'Klient o podanym id nie istnieje',1
    END
    IF NOT EXISTS(
        SELECT *
        FROM Products
        where @product_id=product_id and @type_id=product_type_id
    )
    BEGIN
        ;
        THROW 52000, N'Produkt nie istnieje lub jest innego typu niż podany',1
    END

    IF @type_name='webinars'
    begin
        INSERT INTO WebinarParticipants(product_id,client_id)
        values(@product_id,@client_id)
    end
    else IF @type_name='course'
    begin
        INSERT INTO CoursesParticipants(product_id,client_id)
        values(@product_id,@client_id)
    end
    else IF @type_name='studies'
    begin
        INSERT INTO StudiesParticipants(product_id,client_id)
        values(@product_id,@client_id)
    end
    else if @type_name='meeting'
    begin
        exec uspAddMeetingParticipant @client_id,@product_id
    end
    end

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd dodania uczestnika: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END
```

CancelPayment

Dla danego payment_id ustawia pole cancelled w tabeli Payments na true - anuluje płatność

```
CREATE PROCEDURE [dbo].[uspCancelPayment]
    @payment_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Payments
            where @payment_id=payment_id
        )
```

```
BEGIN
;
    THROW 52000, N'Płatność o podanym id nie istnieje',1
END

UPDATE Payments
SET cancelled=1
where payment_id=@payment_id

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd anulowania płatności: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END
```

LetPayDaysLater

Zezwala użytkownikowi o podanym id na płacenie z podanym opóźnieniem (wartość w dniach)

```
CREATE PROCEDURE [dbo].[uspLetPayDaysLater]
    @client_id int,
    @days int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Clients
            where @client_id=client_id
        )
        BEGIN
            ;
            THROW 52000, N'Klient o podanym id nie istnieje',1
        END

        UPDATE Clients
        SET can_pay_days_later=@days
        where client_id=@client_id

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zezwolenia na opóźnienie w płatności: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

SetParticipantsLimit

Ustawia limit uczestników dla produktu podanego typu produktu (spotkania, kursu lub studiów)

```
CREATE PROCEDURE [dbo].[uspSetParticipantsLimit]
    @product_id int,
    @limit int,
    @product_type_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
```

```
IF NOT EXISTS(
    SELECT *
    FROM ProductType
    where @product_type_id=product_type_id
)
BEGIN
    ;
    THROW 52000, N'Taki rodzaj szkolenia nie istnieje',1
END

DECLARE @product_type_name nvarchar(50);
Select @product_type_name=product_type_name
from ProductType
where @product_id=product_type_id

IF @product_type_name='course'
begin
    IF NOT EXISTS(
        SELECT *
        FROM Courses
        where @product_id=product_id
    )
    BEGIN
        ;
        THROW 52000, N'Taki kurs nie istnieje',1
    END

    UPDATE Courses
    SET participants_limit=@limit
    where product_id=@product_id
end
else IF @product_type_name='studies'
begin
    IF NOT EXISTS(
        SELECT *
        FROM Studies
        where @product_id=product_id
    )
    BEGIN
        ;
        THROW 52000, N'Takie studia nie istnieją',1
    END

    UPDATE Studies
    SET participants_limit=@limit
    where product_id=@product_id
end
else IF @product_type_name='meeting'
begin
    IF NOT EXISTS(
        SELECT *
        FROM StudiesMeetings
        where @product_id=meeting_id
    )
    BEGIN
        ;
        THROW 52000, N'Takie spotkanie nie istnieje',1
    END

    UPDATE StudiesMeetings
    SET participants_limit=@limit
    where meeting_id=@product_id
end
else
BEGIN
    ;
    THROW 52000, N'Na podanym rodzaju szkolenia nie obowiązuje limit miejsc',1
END

END TRY
BEGIN CATCH
```

```
DECLARE @msg nvarchar(2048)=N'Błąd zmiany limitu miejsc: ' + ERROR_MESSAGE();
THROW 52000, @msg, 1;
END CATCH
END
```

AddMeetingPresence

Dodaje status obecności na spotkaniu dla podanego użytkownika oraz id spotkania.

```
CREATE PROCEDURE [dbo].[uspAddMeetingPresence]
    @product_id int,
    @participant_id int,
    @presence bit
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM StudiesMeetings
            where @product_id=meeting_id
        )
        BEGIN
            ;
            THROW 52000, N'Takie spotkanie nie istnieje',1
        END

        INSERT INTO StudiesMeetingParticipants(participant_id,meeting_id,presence)
        values(@participant_id,@product_id,@presence)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd wpisywania obecności na spotkaniu: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

SetMeetingPresence

Zmienia status obecności danego użytkownika na spotkaniu.

```
CREATE PROCEDURE [dbo].[uspSetMeetingPresence]
    @product_id int,
    @participant_id int,
    @presence bit
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM StudiesMeetings
            where @product_id=meeting_id
        )
        BEGIN
            ;
            THROW 52000, N'Takie spotkanie nie istnieje',1
        END

        UPDATE StudiesMeetingParticipants
        SET presence=@presence
        where @participant_id=participant_id and @product_id=meeting_id

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zmiany statusu obecności na spotkaniu: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

```
END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd zmiany obecności na spotkaniu: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END
```

AddModulePresence

Dodaje status obecności na module dla podanego użytkownika oraz id modułu.

```
CREATE PROCEDURE [dbo].[uspAddModulePresence]
    @module_id int,
    @participant_id int,
    @presence bit
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Modules
            where @module_id=module_id
        )
            BEGIN
                ;
                THROW 52000, N'Taki moduł nie istnieje',1
            END

        INSERT INTO ModulesAttendance(participant_id,module_id,presence)
        values(@participant_id,@module_id,@presence)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd wpisywania obecności na module: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

SetModulePresence

Zmienia status obecności danego użytkownika na module.

```
CREATE PROCEDURE [dbo].[uspSetModulePresence]
    @module_id int,
    @participant_id int,
    @presence bit
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Modules
            where @module_id=module_id
        )
            BEGIN
                ;
                THROW 52000, N'Taki moduł nie istnieje',1
            END

    END TRY
```

```
        UPDATE ModulesAttendance
        SET presence=@presence
        where @participant_id=participant_id and @module_id=module_id

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zmiany obecności na module: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

AddExamResult

Dodaje wynik egzaminu po podaniu przez użytkownika id egzaminu, id uczestnika studiów i punktów przez niego zdobytych

```
CREATE PROCEDURE [dbo].[uspAddExamResult]
    @exam_id int,
    @participant_id int,
    @points int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Exams
            where @exam_id=exam_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki egzamin nie istnieje',1
        END

        IF NOT EXISTS(
            SELECT *
            FROM StudiesParticipants
            where @participant_id=participant_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki uczestnik studiów nie istnieje',1
        END

        DECLARE @max_points INT;
        SELECT @max_points = max_points
        FROM Exams
        WHERE exam_id=@exam_id

        IF @max_points<@points
        Begin
            ;
            THROW 52000, N'Liczba punktów przekracza wartość maksymalną',1
        END

        INSERT INTO ExamsTaken(exam_id,participant_id,points)
        values(@exam_id,@participant_id,@points)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd wpisywania wyniku egzaminu: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```


AddApprenticeship

Dla podanego uczestnika studiów dodaje datę odbycia przez niego praktyk do tabeli Apprenticeship

```
CREATE PROCEDURE [dbo].[uspAddApprenticeship]
    @date date,
    @participant_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM StudiesParticipants
            where @participant_id=participant_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki uczestnik studiów nie istnieje',1
        END

        IF GETDATE()<@date
        Begin
            ;
            THROW 52000, N'Wprowadzenie praktyk o dacie przyszłej niemożliwe',1
        END

        INSERT INTO Apprenticeship(participant_id,date)
        values(@participant_id,@date)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd dodania praktyk: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

ChangeMeetingDate

Zmienia datę spotkania

```
CREATE PROCEDURE [dbo].[uspChangeMeetingDate]
    @meeting_id int,
    @date date
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM StudiesMeetings
            where @meeting_id=meeting_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki meeting nie istnieje',1
        END

        DECLARE @former_date DATE;
        SELECT @former_date=date
```

```

FROM StudiesMeetings
WHERE meeting_id=@meeting_id

IF @former_date<GETDATE()
Begin
    ;
    THROW 52000, N'Spotkanie się już odbyło - nie można zmienić jego daty!',1
END

IF @date<GETDATE()
Begin
    ;
    THROW 52000, N'Data spotkania może być zmieniona tylko na przyszłą',1
END

UPDATE StudiesMeetings
SET date=@date
where meeting_id=@meeting_id

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd zmiany daty spotkania: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

DeleteProduct

Usuwa produkt o podanym id z bazy

```

CREATE PROCEDURE [dbo].[uspDeleteProduct]
    @product_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY
        IF NOT EXISTS(
            SELECT *
            FROM Products
            where @product_id=product_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki produkt nie istnieje',1
        END

        DELETE FROM Products Where @product_id=product_id

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd usuwania produktu: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END

```

Pay

Dla podanego order_id sumuje ceny produktów wyszczególnionych w order_details i dodaje do płatność do tabeli Payments oraz uczestników do tabel odpowiadających opłaconym szkoleniom

```

CREATE PROCEDURE [dbo].[uspPay]
    @order_id int

```

```
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Orders
            where @order_id=order_id
        )
        BEGIN
            ;
            THROW 52000, N'Takie zamówienie nie istnieje',1
        END

        Declare @total_price money;
        SET @total_price=0;

        DECLARE @client_id INT
        SELECT @client_id=client_id
        from orders
        where order_id=@order_id

        DECLARE @status INT;
        SELECT @status=status_id
        from statuses s
        join orders o
        on o.payment_status=s.status_id
        where order_id=@order_id

        DECLARE @initial_status INT;
        SET @initial_status=@status

        IF @initial_status=1
        BEGIN
            ;
            THROW 52000, N'Zamówienie było już opłacone',1
        END

        SELECT @status=status_id
        from statuses
        where status_name='paid'

        print(@status)

        DECLARE curOrder cursor for
        select product_id
        from Order_details
        where order_id=@order_id

        BEGIN TRANSACTION

            DECLARE @product_id INT;

            Open curOrder

            FETCH NEXT FROM curOrder INTO @product_id
            WHILE @@FETCH_STATUS = 0
            BEGIN
                DECLARE @is_advance bit
                SELECT @is_advance=is_advance
                from Order_details
                where @product_id=product_id and @order_id=order_id

                DECLARE @product_type nvarchar(50)
                SELECT @product_type=product_type_name
                from Products p
                join ProductType pt on pt.product_type_id=p.product_type_id
                where product_id=@product_id
```

```
DECLARE @price money

IF @product_type='webinar'
BEGIN
    select @price=price
    from webinars
    where @product_id=product_id
END

else IF @product_type='course'
BEGIN
    IF @is_advance=1
    begin
        SELECT @status=status_id
        from statuses
        where status_name='partially_paid'

        select @price=advance_price
        from courses
        where @product_id=product_id
    end
    ELSE
    begin
        select @price=full_price
        from courses
        where @product_id=product_id
    end
END

else IF @product_type='studies'
BEGIN
    IF @is_advance=1
    begin
        SELECT @status=status_id
        from statuses
        where status_name='partially_paid'

        select @price=advance_price
        from Studies
        where @product_id=product_id
    end
    ELSE
    begin
        select @price=full_price
        from studies
        where @product_id=product_id
    end
END

else if @product_type='meeting'
begin

    DECLARE @meeting_studies_id1 INT;
    SELECT @meeting_studies_id1=studies_id
    from StudiesMeetings
    where meeting_id=@product_id
    if exists(
        Select *
        from StudiesParticipants
        where @client_id=client_id and product_id=@meeting_studies_id1
    )
    begin
        select @price=student_price
        from StudiesMeetings
        where @product_id=meeting_id
    end
else
```

```
begin
    select @price=outer_participant_price
    from StudiesMeetings
    where @product_id=meeting_id

end

end

SET @total_price = @total_price +@price;

FETCH NEXT FROM curOrder INTO @product_id;

END

close curOrder
DEALLOCATE curOrder;

IF @initial_status=(
select status_id
from Statuses
where status_name='partially_paid'
)
Begin
    declare @former_price money;
    set @former_price=(select sum(price)
    from payments
    where order_id=@order_id
    group by order_id)
    print(@total_price)

    set @total_price=@total_price-@former_price
end

IF @total_price<0
BEGIN
    ROLLBACK;
    THROW 52000, N'Cena ujemna!',1
END

INSERT INTO Payments(order_id,payment_date, price)
Values (@order_id,GETDATE(),@total_price);

UPDATE Orders
SET payment_status=@status
where order_id=@order_id

--insert to relevant tables

DECLARE curOrder1 cursor for
select product_id
from Order_details
where order_id=@order_id

Open curOrder1

FETCH NEXT FROM curOrder1 INTO @product_id
WHILE @@FETCH_STATUS = 0
BEGIN

    DECLARE @product_type1 nvarchar(50)
    SELECT @product_type1=product_type_name
    from Products p
    join ProductType pt on pt.product_type_id=p.product_type_id
    where product_id=@product_id
    PRINT(@product_type1)

    IF @product_type1='webinar'
```

```
BEGIN
    if not exists(
        select *
        from WebinarParticipants
        where @client_id=client_id
    )
    begin
        Insert into WebinarParticipants(product_id,client_id)
        values (@product_id,@client_id)
    end
END

else IF @product_type1='course'
BEGIN
    if not exists(
        select *
        from CoursesParticipants
        where @client_id=client_id
    )
    begin
        Insert into CoursesParticipants(product_id,client_id)
        values (@product_id,@client_id)
    end
END

else IF @product_type1='studies'
BEGIN
    if not exists(
        select *
        from StudiesParticipants
        where @client_id=client_id and @product_id=product_id
    )
    begin
        Insert into StudiesParticipants(product_id,client_id)
        values (@product_id,@client_id)
    end
END

else if @product_type1='meeting'
begin
    DECLARE @meeting_studies_id INT;
    SELECT @meeting_studies_id=studies_id
    from StudiesMeetings
    where meeting_id=@product_id
    if exists(
        Select *
        from StudiesParticipants
        where @client_id=client_id and product_id=@meeting_studies_id
    )
    begin
        DECLARE @participant_id int
        select @participant_id=participant_id
        from StudiesParticipants
        where client_id=@client_id
        if not exists(
            select *
            from StudiesMeetingParticipants
            where @participant_id=participant_id
        )
        begin
            Insert into StudiesMeetingParticipants(meeting_id,participant_id,presence)
            values (@product_id,@participant_id,0)
        end
    end
end
else
begin
    if not exists(
        select *
        from OuterMeetingParticipants
        where @client_id=client_id
```

```

        )
        begin
            Insert into OuterMeetingParticipants(meeting_id,client_id,presence)
            values (@product_id,@client_id,0)
        end
    end
end

    FETCH NEXT FROM curOrder1 INTO @product_id;

END

    close curOrder1
    DEALLOCATE curOrder1;
COMMIT TRANSACTION

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd płatności: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

AddOrder

Tworzy zamówienie dla klienta o podanym id

```

CREATE PROCEDURE [dbo].[uspAddOrder]
    @client_id int
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM Clients
            where @client_id=client_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki klient nie istnieje',1
        END

        INSERT INTO Orders(client_id)
        values(@client_id)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd tworzenia nowego zamówienia: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END

```

AddProductToOrder

Dodaje produkt do podanego zamówienia oraz informację, czy jest to zaliczka czy nie

```
CREATE PROCEDURE [dbo].[uspAddProductToOrder]
    @order_id int,
    @product_id int,
    @is_advance bit
AS
BEGIN

    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM orders
            where @order_id=order_id
        )
        BEGIN
            ;
            THROW 52000, N'Takie zamówienie nie istnieje',1
        END

        IF NOT EXISTS(
            SELECT *
            FROM products
            where @product_id=product_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki produkt nie istnieje',1
        END

        IF @is_advance=1
        begin
            DECLARE @product_type nvarchar(50)
            select @product_type=product_type_name
            from Products p
            join ProductType pt
            on pt.product_type_id=p.product_type_id
            where @product_id=product_id

            if @product_type!='studies' and @product_type!='course'
            begin
                ;
                THROW 52000, N'Ten produkt nie posiada opcji "zaliczka"',1
            end
        end

        declare @status nvarchar(50)
        select @status=status_name
        from Statuses s
        join orders o
        on o.payment_status=s.status_id
        where order_id=@order_id

        IF @status!='not_paid'
        BEGIN
            ;
            THROW 52000, N'Nie można dodać produktu do zamówienia, którego płatność zaczęła być realizowana',1
        END

        INSERT INTO Order_details(order_id,product_id,is_advance)
        values(@order_id,@product_id,@is_advance)

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd dodawania produktu zamówienia: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```



```
END CATCH
END
```

ChangeToFullPrice

Zmienia pole is_advance tabeli Order_details na false - oznacza to, że klient chce zapłacić pełną cenę po uprzednim zapłaceniu zaliczki

```
CREATE PROCEDURE [dbo].[uspChangeToFullPrice]
    @order_id int,
    @product_id int
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
            SELECT *
            FROM orders
            where @order_id=order_id
        )
        BEGIN
            ;
            THROW 52000, N'Takie zamówienie nie istnieje',1
        END

        IF NOT EXISTS(
            SELECT *
            FROM products
            where @product_id=product_id
        )
        BEGIN
            ;
            THROW 52000, N'Taki produkt nie istnieje',1
        END

        Update Order_details
        set is_advance=0
        where order_id=@order_id and product_id=@product_id

    END TRY
    BEGIN CATCH
        DECLARE @msg nvarchar(2048)=N'Błąd zmiany zaliczki na pełną cenę: ' + ERROR_MESSAGE();
        THROW 52000, @msg, 1;
    END CATCH
END
```

DeleteProductFromOrder

Usuwa produkt z zamówienia

```
CREATE PROCEDURE [dbo].[uspDeleteProductFromOrder]
    @order_id int,
    @product_id int
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY

        IF NOT EXISTS(
```

```

        SELECT *
        FROM orders
        where @order_id=order_id
    )
    BEGIN
        ;
        THROW 52000, N'Takie zamówienie nie istnieje',1
    END

    IF NOT EXISTS(
        SELECT *
        FROM Order_details
        where @product_id=product_id and @order_id=order_id
    )
    BEGIN
        ;
        THROW 52000, N'Taki produkt nie istnieje w podanym zamówieniu',1
    END

    declare @status nvarchar(50)
    select @status=status_name
    from Statuses s
    join orders o
    on o.payment_status=s.status_id
    where order_id=@order_id

    IF @status!='not_paid'
    BEGIN
        ;
        THROW 52000, N'Nie można usunąć produktu z zamówienia, którego płatność zaczęła być realizowana',1
    END

    DELETE FROM Order_details
    where product_id=@product_id and order_id=@order_id

END TRY
BEGIN CATCH
    DECLARE @msg nvarchar(2048)=N'Błąd usunięcia produktu z zamówienia: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

AddParticipantAboveLimit

Dodaje uczestnika pomimo wyczerpania limitu uczestników

```

CREATE PROCEDURE [dbo].[uspAddParticipantAboveLimit]
    @type_id INT,
    @client_id int,
    @product_id int
AS
BEGIN
    SET NOCOUNT ON;
    BEGIN TRY
        DISABLE TRIGGER checkStudiesParticipantsLimit_trg on StudiesParticipants;
        DISABLE TRIGGER checkStudiesMeetingLimit_studiesParticipants_trg on StudiesMeetingParticipants;
        DISABLE TRIGGER checkStudiesMeetingLimit_outerParticipants_trg on OuterMeetingParticipants;
        DISABLE TRIGGER checkCourseParticipantsLimit_trg on CoursesParticipants;
        DISABLE TRIGGER checkIfClientPaidForStudies_outerParticipant_trg on OuterMeetingParticipants;
        DISABLE TRIGGER checkIfClientPaidForStudiesMeeting_outerParticipant_trg on OuterMeetingParticipants;
        DISABLE TRIGGER checkIfClientPaidForCourse_trg on CoursesParticipants;

        begin transaction
            exec uspAddWCSParticipant @type_id,@client_id,@product_id;
    END TRY
    BEGIN CATCH
        -- Error handling logic
    END CATCH
END

```

```

INSERT INTO Orders(client_id)
values(@client_id)

DECLARE @order_id INT;
SET @order_id= SCOPE_IDENTITY();
PRINT(@order_id)

DECLARE @is_advance BIT;
IF @type_id=2 or @type_id=3
BEGIN
    SET @is_advance=1
END
ELSE
BEGIN
    SET @is_advance=0
END

exec uspAddProductToOrder @order_id,@product_id,@is_advance;
commit transaction;

ENABLE TRIGGER checkStudiesParticipantsLimit_trg on StudiesParticipants;
ENABLE TRIGGER checkStudiesMeetingLimit_studiesParticipants_trg on StudiesMeetingParticipants;
ENABLE TRIGGER checkStudiesMeetingLimit_outerParticipants_trg on OuterMeetingParticipants;
ENABLE TRIGGER checkCourseParticipantsLimit_trg on CoursesParticipants;
ENABLE TRIGGER checkIfClientPaidForStudies_outerParticipant_trg on OuterMeetingParticipants;
ENABLE TRIGGER checkIfClientPaidForStudiesMeeting_outerParticipant_trg on OuterMeetingParticipants;
ENABLE TRIGGER checkIfClientPaidForCourse_trg on CoursesParticipants;

END TRY
BEGIN CATCH
    IF @@TRANCOUNT > 0
        ROLLBACK TRAN
    DECLARE @msg nvarchar(2048)=N'Błąd dodania uczestnika ponad limit: ' + ERROR_MESSAGE();
    THROW 52000, @msg, 1;
END CATCH
END

```

Funkcje

Ogólne

GetProductName

Umożliwia konwersję id produktu na nazwę, wykorzystywaną w innych funkcjach i widokach

```

CREATE FUNCTION getProductName(@product_id int)
RETURNS nvarchar(50)
AS
BEGIN
    DECLARE @product_type nvarchar(50)
    SET @product_type = ISNULL((SELECT product_type_name
                                FROM Products INNER JOIN ProductType ON Products.product_type_id =
ProductType.product_type_id
                                WHERE product_id = @product_id), 'Nan')

    RETURN CASE @product_type
        WHEN 'Nan' THEN ''
        WHEN 'webinar' THEN (SELECT webinar_name FROM Webinars WHERE product_id = @product_id)
        WHEN 'studies' THEN (SELECT name FROM Studies WHERE product_id = @product_id)
        WHEN 'meeting' THEN (SELECT meeting_topic FROM StudiesMeetings WHERE meeting_id = @product_id)
        WHEN 'course' THEN (SELECT course_name FROM Courses WHERE product_id = @product_id)
    END
END

```

GetUserIdFromUserEmail

```

CREATE FUNCTION getUserIdFromUserEmail(@user_email nvarchar(50))
RETURNS int
AS
BEGIN
    DECLARE @user_id int
    SET @user_id = (SELECT user_id FROM Users WHERE email = @user_email)

    RETURN @user_id
END

```

GetParticipantIdFromUserAndProduct

```

CREATE FUNCTION getParticipantIdFromUserAndProduct(@user_id int, @product_id int)
RETURNS int
AS
BEGIN
    DECLARE @product_type nvarchar(50)
    SET @product_type = (SELECT product_type_name
                        FROM Products
                        INNER JOIN ProductType ON Products.product_type_id = ProductType.product_type_id
                        WHERE product_id = @product_id)

    RETURN CASE @product_type
        WHEN 'webinar' THEN (SELECT client_id
                            FROM WebinarParticipants
                            WHERE product_id = @product_id AND client_id = @user_id )
        WHEN 'course' THEN (SELECT participant_id
                            FROM CoursesParticipants
                            WHERE product_id = @product_id AND client_id = @user_id)
        WHEN 'studies' THEN (SELECT participant_id
                            FROM StudiesParticipants
                            WHERE product_id = @product_id AND client_id = @user_id)
        WHEN 'meeting' THEN (SELECT client_id
                            FROM OuterMeetingParticipants
                            WHERE meeting_id = @product_id AND client_id = @user_id)

    END
END

```

CheckIfClientPaid

Sprawdza czy dany klient zapłacił za dany produkt

```

CREATE FUNCTION checkIfClientPaid(@client_id int, @product_id int)
RETURNS bit
BEGIN
    DECLARE @payment_status nvarchar(50)
    SET @payment_status = ISNULL((SELECT status_name
                                FROM Orders
                                INNER JOIN Order_details ON Orders.order_id = Order_details.order_id
                                INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
                                WHERE
                                    Order_details.product_id = @product_id AND
                                    Orders.client_id = @client_id), 'none')

    IF @payment_status = 'paid' OR @payment_status = 'partially_paid' BEGIN
        RETURN 1
    END
    RETURN 0
END

```

Sekretarz

ClientsExams

Lista wyników egzaminów dla danego klienta

```
CREATE FUNCTION clientsExam(@participant_id int)
RETURNS table
AS
RETURN Select e.studies_id, et.exam_id, et.points
FROM Exams as e
inner join ExamsTaken as et on et.exam_id=e.exam_id and et.participant_id = @participant_id
```

ClientsApprenticeships

Liczba odbytych praktyk przez danego klienta

```
CREATE FUNCTION clientsApprenticeships(@participant_id int)
RETURNS int
AS
BEGIN
RETURN ( SELECT COUNT(date) FROM Apprenticeship
Where participant_id = @participant_id
Group By participant_id)
END
```

Kursy

CoursePass

Wypisanie wartości 1 gdy uczestnik zaliczył kurs i 0 gdy nie zaliczył

```
CREATE FUNCTION coursePass(@participant_id int)
RETURNS bit
AS
BEGIN
DECLARE @course_id int
SET @course_id = (Select product_id
FROM CoursesParticipants
WHERE @participant_id=participant_id)
DECLARE @presence float
SET @presence = [dbo].[coursesPresence](@participant_id, @course_id)
DECLARE @pass bit
SET @pass = IIF(@presence >= 80, 1, 0)
RETURN @pass
END
```

CourseInfo

Wypisanie podstawowych informacji o kursie takich jak: nazwa, cena, zaliczka, data rozpoczęcia, data zakończenia oraz język główny i język na który kurs jest tłumaczony.

```
CREATE FUNCTION courseInfo(@product_id int)
RETURNS table
AS
RETURN Select c.course_name as course_name,
c.full_price as price,
c.advance_price as advance_price,
c.start_date as start_date,
c.end_date as end_date,
p.language as original_language,
l.language_name as translated_to
FROM Products as p
join Courses as c on c.product_id=p.product_id
left outer join Languages as l on l.language_id=p.translated_to
WHERE p.product_id=@product_id
```

ModulesPresence

Sprawdzenie statusu swojej obecności na wybranych modułach

```
CREATE FUNCTION modulesPresence(@participant_id int, @module_id int)
    RETURNS bit
AS
BEGIN
    DECLARE @presence BIT
    SET @presence = ISNULL((SELECT presence
        FROM ModulesAttendance
        WHERE participant_id=@participant_id AND
            module_id=@module_id),0)
    RETURN @presence
END
```

CoursesPresence

Sprawdzenie procentowej obecności na modułach w danym kursie

```
CREATE FUNCTION [dbo].[coursesPresence](@participant_id int, @product_id int)
    RETURNS FLOAT
AS
BEGIN
    DECLARE @presence float
    SET @presence = ISNULL((SELECT COUNT(ma.presence)
        FROM ModulesAttendance as ma
        inner join Modules as m
            on m.module_id=ma.module_id and m.product_id = @product_id
        WHERE ma.participant_id=@participant_id and ma.presence=1),0)

    DECLARE @modules_num int
    SET @modules_num = ISNULL((SELECT COUNT(module_id)
        FROM Modules
        WHERE product_id = @product_id),0)

    IF @modules_num = 0
        RETURN 100
    RETURN (@presence/@modules_num) *100
END
go
```

CoursesFreeSlots

Sprawdzenie ilości wolnych miejsc na kursach hybrydowych i stacjonarnych

```
CREATE FUNCTION coursesFreeSlots(@product_id int)
    RETURNS INT
AS
BEGIN
    DECLARE @slots INT
    SET @slots = ISNULL((SELECT c.participants_limit
        From Courses as c
        Where c.product_id = @product_id), 0)

    DECLARE @occupied INT
    SET @occupied = ISNULL((SELECT COUNT(cp.participant_id)
        From CoursesParticipants as cp
        WHERE cp.product_id = @product_id
        GROUP BY cp.product_id),0)

    RETURN @slots - @occupied
END
```

ClientsCourses

Sprawdzenie na jakie kursy jest zapisany dany klient oraz status płatności tego kursu

```
CREATE FUNCTION clientCourses(@client_id int)
RETURNS table
AS
RETURN Select c.course_name, s.status_name
FROM Orders as o inner join Order_details as od on od.order_id=o.order_id
inner join Courses as c on c.product_id=od.product_id
inner join Statuses as s on s.status_id=o.payment_status
WHERE o.client_id=@client_id
```

CheckIfCourseParticipantsAllowed

Sprawdza czy do kursu można dopisać więcej osób - czy limit miejsc nie został jeszcze przekroczony

```
CREATE FUNCTION checkIfCourseParticipantsAllowed(@product_id int)
RETURNS bit
AS
BEGIN
    DECLARE @participant_limit int
    DECLARE @participants_count int

    SET @participants_count = ISNULL((SELECT COUNT(*)
                                      FROM CoursesParticipants
                                      WHERE product_id = @product_id
                                      GROUP BY product_id), 0)

    SET @participant_limit = ISNULL((SELECT participants_limit
                                      FROM Courses
                                      WHERE product_id = @product_id), 0)

    IF @participants_count > @participant_limit BEGIN
        RETURN 0
    END
    RETURN 1
END
```

Studia

StudiesPass

Umożliwia sprawdzenie czy dany uczestnik studiów zaliczył studia

```
CREATE FUNCTION studiesPass(@participant_id int)
RETURNS bit
AS
BEGIN
    IF dbo.checkApprenticeshipStatus(@participant_id) = 1 AND
       dbo.studiesPresence(@participant_id) >= 80 AND
       dbo.checkExamStatus(@participant_id) = 1
        RETURN 1
    RETURN 0
END
```

StudiesPresence

Sprawdzenie obecności danego uczestnika studiów

```
CREATE FUNCTION studiesPresence(@participant_id int)
RETURNS float
AS
```

```

BEGIN
    DECLARE @meetingsCount int
    SET @meetingsCount = ISNULL((SELECT COUNT(*)
                                FROM StudiesMeetings
                                INNER JOIN StudiesMeetingParticipants ON StudiesMeetings.meeting_id =
StudiesMeetingParticipants.meeting_id
                                WHERE date < GETDATE() AND participant_id = @participant_id), 0)
    IF @meetingsCount = 0 BEGIN
        RETURN 100
    END

    DECLARE @attendedMeetings int
    SET @attendedMeetings = ISNULL((SELECT COUNT(*)
                                    FROM StudiesMeetings
                                    INNER JOIN StudiesMeetingParticipants ON StudiesMeetings.meeting_id =
StudiesMeetingParticipants.meeting_id
                                    WHERE
                                        date < GETDATE() AND
                                        presence = 1 AND
                                        participant_id = @participant_id), 0)

    RETURN CAST(@attendedMeetings AS float)/@meetingsCount * 100.0
END
go

```

GetExamScores

Umożliwia wyświetlenie punktów i wyniku procentowego z egzaminów w których uczestnik studiów brał udział (dla wszystkich studiów na które dany klient został zapisany)

```

CREATE FUNCTION getExamScores(@student_id int)
    RETURNS table
AS
RETURN
    SELECT name, date, points, CAST(points AS float)/max_points*100 AS percentScore
    FROM ExamsTaken
        INNER JOIN Exams ON ExamsTaken.exam_id = Exams.exam_id
        INNER JOIN dbo.Studies S on Exams.studies_id = S.product_id
    WHERE participant_id = @student_id

```

CheckExamStatus

Umożliwia sprawdzenie czy dany uczestnik studiów zaliczył egzaminy

```

CREATE FUNCTION checkExamStatus(@participan_id int)
    RETURNS bit
AS
BEGIN
    DECLARE @passed_exams_count int
    SET @passed_exams_count = ISNULL((SELECT COUNT(*)
                                        FROM dbo.getExamScores(@participan_id)
                                        WHERE percentScore >= 50), 0)

    IF @passed_exams_count >= 1
        RETURN 1
    RETURN 0
END
go

```

CheckExamMaxPoints

Pozwala sprawdzić maksymalną ilość punktów na danym egzaminie


```
CREATE FUNCTION checkExamMaxPoints(@exam_id int)
    RETURNS int
AS
BEGIN
    DECLARE @exam_max_points int
    SET @exam_max_points = ISNULL((SELECT max_points
                                   FROM Exams
                                   WHERE exam_id = @exam_id), 0)

    RETURN @exam_max_points
END
go
```

CheckExamDate

Pozwala sprawdzić datę wybranego egzaminu

```
CREATE FUNCTION checkExamDate(@exam_id int)
    RETURNS date
AS
BEGIN
    DECLARE @exam_date date
    SET @exam_date = ISNULL((SELECT date
                             FROM Exams
                             WHERE exam_id = @exam_id), NULL)

    RETURN @exam_date
END
```

GetStudiesMeetings

Umożliwia wyświetlenie wszystkich zaplanowanych spotkań na studiach

```
CREATE FUNCTION getStudiesMeetings(@studies_id int)
    RETURNS table
AS RETURN
    SELECT meeting_topic, date, participants_limit
    FROM StudiesMeetings
    WHERE studies_id = @studies_id
    ORDER BY date
```

GetRegisteredApprenticeship

Umożliwia wyświetlenie praktyk danego uczestnika studiów

```
CREATE FUNCTION getRegisteredApprenticeship(@participant_id int)
    RETURNS table
AS RETURN
    SELECT name, Apprenticeship.*
    FROM Apprenticeship
        INNER JOIN StudiesParticipants ON Apprenticeship.participant_id = StudiesParticipants.participant_id
        INNER JOIN Studies ON StudiesParticipants.product_id = Studies.product_id
    WHERE Apprenticeship.participant_id = @participant_id
```

CheckApprenticeshipStatus

Umożliwia sprawdzenie czy dany uczestnik studiów ma zaliczone praktyki

```
CREATE FUNCTION checkApprenticeshipStatus(@participant_id int)
    RETURNS bit
AS
BEGIN
```

```

DECLARE @acceptedApprenticeshipStatus int
SET @acceptedApprenticeshipStatus = ISNULL((SELECT COUNT(*)
      FROM Apprenticeship
      WHERE presence_percentage = 100 AND participant_id =
@participant_id), 0)
IF @acceptedApprenticeshipStatus >= 2
    RETURN 1

RETURN 0
END
go

```

CheckParticipantsLimit

Pozwala sprawdzić limit osób zapisanych na studiach

```

CREATE FUNCTION checkParicipantsLimit(@studies_id int)
RETURNS int
AS
BEGIN
    DECLARE @paricipantsLimit int
    SET @paricipantsLimit = ISNULL((SELECT participants_limit
      FROM Studies
      WHERE product_id = @studies_id), 0)

    RETURN @paricipantslimit
END
go

```

CheckIfStudiesMeetingParticipantsAllowed

Pozwala sprawdzić czy do listy uczestników spotkania na studiach można dopisać więcej osób

```

CREATE FUNCTION checkIfStudiesMeetingParticipantsAllowed(@meeting_id int)
RETURNS bit
AS
BEGIN
    DECLARE @outer_participant_count int
    DECLARE @studies_participant_count int
    DECLARE @participant_limit int

    SET @studies_participant_count = ISNULL((SELECT COUNT(*)
      FROM StudiesMeetingParticipants
      WHERE meeting_id = @meeting_id
      GROUP BY meeting_id), 0)

    SET @outer_participant_count = ISNULL((SELECT COUNT(*)
      FROM OuterMeetingParticipants
      WHERE meeting_id = @meeting_id
      GROUP BY meeting_id), 0)

    SET @participant_limit = ISNULL((SELECT participants_limit
      FROM StudiesMeetings
      WHERE meeting_id = @meeting_id), 0)

    IF @studies_participant_count + @outer_participant_count > @participant_limit BEGIN
        RETURN 0
    END
    RETURN 1
END

```

CheckIfStudiesParticipantsAllowed

Pozwala sprawdzić czy limit uczestników zapisanych na dane studia nie został przekroczony

```
CREATE FUNCTION checkIfStudiesParticipantsAllowed(@product_id int)
    RETURNS bit
AS
BEGIN
    DECLARE @participant_limit int
    DECLARE @participants_count int

    SET @participants_count = ISNULL((SELECT COUNT(*)
                                      FROM StudiesParticipants
                                      WHERE product_id = @product_id
                                      GROUP BY product_id), 0)

    SET @participant_limit = dbo.checkParicipantsLimit(@product_id)

    IF @participants_count > @participant_limit BEGIN
        RETURN 0
    END
    RETURN 1
END
```

Nauczyciel

GetTaughtWebinars

Umożliwia wyświetlenie prowadzonych przez nauczyciela webinarów

```
CREATE FUNCTION getTaughtWebinars(@academic_id int)
    RETURNS table
AS RETURN
    SELECT webinar_name, Webinars.product_id
    FROM Products
        INNER JOIN Webinars ON Products.product_id = Webinars.product_id
    WHERE academic_id = @academic_id
```

GetTaughtWebinars

Umożliwia wyświetlenie prowadzonych przez nauczyciela kursów

```
CREATE FUNCTION getTaughtCourses(@academic_id int)
    RETURNS table
AS RETURN
    SELECT course_name, Courses.product_id
    FROM Products
        INNER JOIN Courses ON Products.product_id = Courses.product_id
    WHERE academic_id = @academic_id
```

GetTaughtMeetings

Umożliwia wyświetlenie prowadzonych przez nauczyciela kursów

```
CREATE FUNCTION getTaughtStudiesMeetings(@academic_id int)
    RETURNS table
AS RETURN
    SELECT meeting_topic, meeting_id
    FROM Products
        INNER JOIN StudiesMeetings ON Products.product_id = StudiesMeetings.meeting_id
```

```
WHERE academic_id = @academic_id
```

GetTaughtStudies

Umożliwia wyświetlenie prowadzonych przez nauczyciela kursów

```
CREATE FUNCTION getTaughtStudies(@academic_id int)
RETURNS table
AS RETURN
SELECT name, Studies.product_id
FROM Products
INNER JOIN Studies ON Products.product_id = Studies.product_id
WHERE academic_id = @academic_id
```

GetStudiesMeetingAttendanceList

Umożliwia wyswietlenie listy obecności na danym spotkaniu na studiach

```
CREATE FUNCTION getStudiesMeetingAttendanceList(@meeting_id int)
RETURNS table
AS RETURN
SELECT StudiesMeetingParticipants.participant_id, U.last_name, U.first_name
FROM StudiesMeetingParticipants
INNER JOIN dbo.StudiesMeetings SM on StudiesMeetingParticipants.meeting_id = SM.meeting_id
INNER JOIN StudiesParticipants SP on StudiesMeetingParticipants.participant_id = SP.participant_id
INNER JOIN Clients C on SP.client_id = C.client_id
INNER JOIN Users U on C.client_id = U.user_id
WHERE SM.meeting_id = @meeting_id
UNION
SELECT OuterMeetingParticipants.client_id, U.last_name, U.first_name
FROM OuterMeetingParticipants
INNER JOIN Clients C ON OuterMeetingParticipants.client_id = C.client_id
INNER JOIN Users U ON C.client_id = U.user_id
WHERE meeting_id = @meeting_id
go
```

GetCourseModuleAttendanceList

Wyświetla listę uczestników danego modułu z kursu

```
CREATE FUNCTION getCourseModuleAttendanceList(@module_id int)
RETURNS table
AS RETURN
SELECT ModulesAttendance.participant_id, last_name, first_name
FROM ModulesAttendance
INNER JOIN CoursesParticipants CP ON ModulesAttendance.participant_id = CP.participant_id
INNER JOIN dbo.Clients C on C.client_id = CP.client_id
INNER JOIN Users U on C.client_id = U.user_id
WHERE module_id = @module_id
```

Klient

GetOwnedWebinars

Umożliwia wyświetlenie zakupionych webinarów przez klienta

```
CREATE FUNCTION [dbo].[getOwnedWebinars](@client_id int)
RETURNS table
```

```
AS RETURN
SELECT webinar_name
FROM Webinars
    INNER JOIN Products ON Webinars.product_id = Products.product_id
    INNER JOIN Order_details ON Products.product_id = Order_details.product_id
    INNER JOIN Orders ON Order_details.order_id = Orders.order_id
    INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
    INNER JOIN Payments ON Payments.order_id=Orders.order_id
WHERE status_name = 'paid' AND client_id = @client_id AND DATEDIFF(d,payment_date,GETDATE())<=30
```

GetOwnedStudies

Umożliwia wyświetlenie zakupionych studiów przez klienta

```
CREATE FUNCTION getOwnedStudies(@client_id int)
RETURNS table
AS RETURN
SELECT name
FROM Studies
    INNER JOIN Products ON Studies.product_id = Products.product_id
    INNER JOIN Order_details ON Products.product_id = Order_details.product_id
    INNER JOIN Orders ON Order_details.order_id = Orders.order_id
    INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
WHERE status_name = 'paid' AND client_id = @client_id
```

GetOwnedStudiesMeetings

Umożliwia wyświetlenie zakupionych spotkań ze studiów przez klienta

```
CREATE FUNCTION getOwnedStudiesMeetings(@client_id int)
RETURNS table
AS RETURN
SELECT meeting_topic
FROM StudiesMeetings
    INNER JOIN Products ON StudiesMeetings.meeting_id = Products.product_id
    INNER JOIN Order_details ON Products.product_id = Order_details.product_id
    INNER JOIN Orders ON Order_details.order_id = Orders.order_id
    INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
WHERE status_name = 'paid' AND client_id = @client_id
```

GetOwnedCourses

Umożliwia wyświetlenie zakupionych kursów przez klienta

```
CREATE FUNCTION getOwnedCourses(@client_id int)
RETURNS table
AS RETURN
SELECT course_name
FROM Courses
    INNER JOIN Products ON Courses.product_id = Products.product_id
    INNER JOIN Order_details ON Products.product_id = Order_details.product_id
    INNER JOIN Orders ON Order_details.order_id = Orders.order_id
    INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
WHERE status_name = 'paid' AND client_id = @client_id
```

GetBucket

Pozwala wyświetlić zawartość koszyka klientów

```

CREATE FUNCTION getBucket(@client_id int)
    RETURNS table
AS RETURN
    SELECT dbo.getProductNames(Products.product_id) AS product_name, product_type_name, Payments.price
    FROM Products
        INNER JOIN Order_details ON Products.product_id = Order_details.product_id
        INNER JOIN Orders ON Order_details.order_id = Orders.order_id
        INNER JOIN ProductType ON Products.product_type_id = ProductType.product_type_id
        INNER JOIN Payments ON Orders.order_id = Payments.order_id
        INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
    WHERE status_name = 'not_paid' AND client_id = @client_id
go

```

GetPaymentHistory

Umożliwia wyświetlenie historii płatności danego klienta

```

CREATE FUNCTION getPaymentHistory(@client_id int)
    RETURNS table
AS RETURN
    SELECT payment_date, price, Orders.order_id
    FROM Payments
        INNER JOIN Orders ON Payments.order_id = Orders.order_id
        INNER JOIN Statuses ON Orders.payment_status = Statuses.status_id
    WHERE status_name = 'paid' AND client_id = @client_id
go

```

Triggery

Studia

CheckStudiesMeetingLimit

Przy dodawaniu nowych uczestników spotkań sprawdza czy nie został przekroczony limit miejsc na spotkaniu na studiach podczas wpisywania do tabeli `StudiesMeetingParticipants` lub `OuterMeetingParticipants`

```

CREATE TRIGGER checkStudiesMeetingLimit_studiesParticipants_trg
ON StudiesMeetingParticipants
AFTER INSERT
AS
    BEGIN
        SET NOCOUNT ON
        DECLARE @meeting_id int
        DECLARE curs CURSOR FOR
            (SELECT meeting_id FROM inserted)

        OPEN curs

        FETCH NEXT FROM curs INTO @meeting_id
        WHILE @@FETCH_STATUS = 0 BEGIN
            IF NOT dbo.checkIfStudiesMeetingParticipantsAllowed(@meeting_id) = 1 BEGIN
                RAISERROR(N'Studies Meetings participants limit exceeded', 12, 1)
            END

            FETCH NEXT FROM curs INTO @meeting_id
        END
        CLOSE curs
        DEALLOCATE curs
    END

CREATE TRIGGER checkStudiesMeetingLimit_outerParticipants_trg
ON OuterMeetingParticipants
AFTER INSERT
AS

```

```
BEGIN
    SET NOCOUNT ON
    DECLARE @meeting_id int
    DECLARE curs CURSOR FOR
        (SELECT meeting_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @meeting_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfStudiesMeetingParticipantsAllowed(@meeting_id) = 1 BEGIN
            RAISERROR(N'Studies Meetings participants limit exceeded', 12, 1)
        END

        FETCH NEXT FROM curs INTO @meeting_id
    END
    CLOSE curs
    DEALLOCATE curs
END
```

CheckStudiesParticipantsLimit

Przy dodawaniu nowych uczestników na studia do tabli **StudiesParticipants**, sprawdza czy limit zapisanych uczestników nie został przekroczony

```
CREATE TRIGGER checkStudiesParticipantsLimit_trg
ON StudiesParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @studies_id int

    DECLARE curs CURSOR FOR
        (SELECT product_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @studies_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfStudiesParticipantsAllowed (@studies_id) = 1 BEGIN
            RAISERROR(N'Studies Participants limit exceeded', 12, 1)
        END

        FETCH NEXT FROM curs INTO @studies_id
    END
    CLOSE curs
    DEALLOCATE curs
END
```

CheckIfClientPaidForStudies

Podczas wpisywania do tabeli **StudiesParticipants** sprawdza czy wpisywany klient zapłacił za studia

```
CREATE TRIGGER checkIfClientPaidForStudies_trg
ON StudiesParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @client_id int
    DECLARE @product_id int

    DECLARE curs CURSOR FOR
        (SELECT client_id, product_id FROM inserted)
```

```

OPEN curs

FETCH NEXT FROM curs INTO @client_id, @product_id
WHILE @@FETCH_STATUS = 0 BEGIN
    IF NOT dbo.checkIfClientPaid(@client_id, @product_id) = 1 BEGIN
        RAISERROR(N'Client did not pay for the product', 12, 1)
    END

    FETCH NEXT FROM curs INTO @client_id, @product_id
END
CLOSE curs
DEALLOCATE curs
END

```

CheckIfClientPaidForStudiesMeeting

Podczas wpisywania do tabeli **OuterMeetingParticipants** sprawdza czy wpisywani klienci mają status zamówienia jako zapłacony.

```

CREATE TRIGGER checkIfClientPaidForStudiesMeeting_outerParticipant_trg
ON OuterMeetingParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @client_id int
    DECLARE @meeting_id int

    DECLARE curs CURSOR FOR
        (SELECT client_id, meeting_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @client_id, @meeting_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfClientPaid(@client_id, @meeting_id) = 1 BEGIN
            RAISERROR(N'Client did not pay for the product', 12, 1)
        END

        FETCH NEXT FROM curs INTO @client_id, @meeting_id
    END
    CLOSE curs
    DEALLOCATE curs
END

```

Kursy

CheckCourseParticipantsLimit

Przy wpisywaniu do tabeli **CoursesParticipants** sprawdza czy limit uczestników zapisanych na kurs nie został przekroczony

```

CREATE TRIGGER checkCourseParticipantsLimit_trg
ON CoursesParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @course_id int

    DECLARE curs CURSOR FOR
        (SELECT product_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @course_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfCourseParticipantsAllowed(@course_id) = 1 BEGIN

```



```
        RAISERROR(N'Course Participants limit exceeded', 12, 1)
    END

    FETCH NEXT FROM curs INTO @course_id
END
CLOSE curs
DEALLOCATE curs
END
```

CheckIfClientPaidForCourse

Przy wpisywaniu do tabeli **CoursesParticipants** sprawdza czy klient zapłacił za dany kurs

```
CREATE TRIGGER checkIfClientPaidForCourse_trg
ON CoursesParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @client_id int
    DECLARE @product_id int

    DECLARE curs CURSOR FOR
        (SELECT client_id, product_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @client_id, @product_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfClientPaid(@client_id, @product_id) = 1 BEGIN
            RAISERROR(N'Client did not pay for the product', 12, 1)
        END

        FETCH NEXT FROM curs INTO @client_id, @product_id
    END
    CLOSE curs
    DEALLOCATE curs
END
```

Webinary

Przy wpisywaniu do tabeli **WebinarParticipants** sprawdza czy klient zapłacił za webinar.

```
CREATE TRIGGER checkIfClientPaidForWebinar_trg
ON WebinarParticipants
AFTER INSERT
AS
BEGIN
    SET NOCOUNT ON
    DECLARE @product_id int
    DECLARE @client_id int

    DECLARE curs CURSOR FOR
        (SELECT product_id, client_id FROM inserted)

    OPEN curs

    FETCH NEXT FROM curs INTO @product_id, @client_id
    WHILE @@FETCH_STATUS = 0 BEGIN
        IF NOT dbo.checkIfClientPaid(@client_id, @product_id) = 1 BEGIN
            RAISERROR(N'Client did not pay for the product', 12, 1)
        END

        FETCH NEXT FROM curs INTO @product_id, @client_id
    END
    CLOSE curs
```

```
DEALLOCATE curs
END
```

Role i upoważnienia

Sekretarz

```
Create role secretary

GRANT SELECT ON PastEventsAttendance to secretary
GRANT SELECT ON BorrowersList to secretary
GRANT SELECT ON EventsThisMonth to secretary
GRANT SELECT ON ExamsStats to secretary
GRANT SELECT ON StudentsApprenticeship to secretary
GRANT SELECT ON Bilocations to secretary

GRANT EXECUTE ON GetProductName to secretary
GRANT EXECUTE ON GetUserIdFromUserEmail to secretary
GRANT EXECUTE ON GetParticipantIdFromUserAndProduct to secretary
GRANT SELECT ON ClientsExam to secretary
GRANT EXECUTE ON ClientsApprenticeships to secretary
GRANT EXECUTE ON CoursePass to secretary
GRANT SELECT ON CourseInfo to secretary
GRANT EXECUTE ON ModulesPresence to secretary
GRANT EXECUTE ON CoursesPresence to secretary
GRANT EXECUTE ON CoursesFreeSlots to secretary
GRANT SELECT ON ClientCourses to secretary
GRANT EXECUTE ON StudiesPass to secretary
GRANT EXECUTE ON StudiesPresence to secretary
GRANT EXECUTE ON CheckExamStatus to secretary
GRANT EXECUTE ON CheckExamDate to secretary
GRANT SELECT ON GetStudiesMeetings to secretary
GRANT SELECT ON GetRegisteredApprenticeship to secretary
GRANT EXECUTE ON checkApprenticeshipStatus to secretary
GRANT EXECUTE ON checkParicipantsLimit to secretary
GRANT EXECUTE ON checkIfStudiesMeetingParticipantsAllowed to secretary
GRANT SELECT ON GetStudiesMeetingAttendanceList to secretary
GRANT SELECT ON GetCourseModuleAttendanceList to secretary
GRANT EXECUTE ON checkIfClientPaid to secretary

GRANT SELECT on clientCourses to secretary
GRANT EXECUTE ON CheckIfCourseParticipantsAllowed to secretary
GRANT SELECT on getExamScores to secretary
GRANT EXECUTE on checkExamMaxPoints to secretary
GRANT EXECUTE on CheckApprenticeshipStatus to secretary
GRANT EXECUTE on checkParicipantsLimit to secretary

GRANT EXECUTE ON uspAddApprenticeship to secretary
GRANT EXECUTE ON uspAddUser to secretary
GRANT EXECUTE ON uspChangeMeetingDate to secretary
GRANT EXECUTE ON uspAddCourse to secretary
GRANT EXECUTE ON uspAddStudies to secretary
GRANT EXECUTE ON uspAddStudiesMeetings to secretary
GRANT EXECUTE ON uspAddWebinar to secretary
```

Manager

```
Create role manager

GRANT SELECT ON FinancialReport to manager
GRANT SELECT ON GraduationCandidates to manager
GRANT SELECT ON AllMeetings to manager
```

```
GRANT SELECT ON PastEventsAttendance to manager
GRANT SELECT ON BorrowersList to manager
GRANT SELECT ON EventsThisMonth to manager
GRANT SELECT ON ExamsStats to manager
GRANT SELECT ON StudentsApprenticeship to manager
GRANT SELECT ON Bilocations to manager

GRANT EXECUTE ON GetProductName to manager
GRANT EXECUTE ON GetUserIdFromUserEmail to manager
GRANT EXECUTE ON GetParticipantIdFromUserAndProduct to manager
GRANT SELECT ON ClientsExam to manager
GRANT EXECUTE ON ClientsApprenticeships to manager
GRANT EXECUTE ON CoursePass to manager
GRANT SELECT ON CourseInfo to manager
GRANT EXECUTE ON ModulesPresence to manager
GRANT EXECUTE ON CoursesPresence to manager
GRANT EXECUTE ON CoursesFreeSlots to manager
GRANT SELECT ON ClientCourses to manager
GRANT EXECUTE ON StudiesPass to manager
GRANT EXECUTE ON StudiesPresence to manager
GRANT EXECUTE ON CheckExamStatus to manager
GRANT EXECUTE ON CheckExamDate to manager
GRANT SELECT ON GetStudiesMeetings to manager
GRANT SELECT ON GetRegisteredApprenticeship to manager
GRANT EXECUTE ON checkApprenticeshipStatus to manager
GRANT EXECUTE ON checkParticipantsLimit to manager
GRANT EXECUTE ON checkIfStudiesMeetingParticipantsAllowed to manager
GRANT SELECT ON GetStudiesMeetingAttendanceList to manager
GRANT SELECT ON GetCourseModuleAttendanceList to manager
GRANT EXECUTE ON checkIfClientPaid to manager
GRANT EXECUTE ON CheckIfCourseParticipantsAllowed to manager
GRANT SELECT ON getExamScores to manager

GRANT SELECT ON clientCourses to manager
GRANT EXECUTE ON checkExamMaxPoints to manager
GRANT EXECUTE ON CheckApprenticeshipStatus to manager
GRANT EXECUTE ON checkParticipantsLimit to manager
GRANT SELECT ON getPaymentHistory to manager

GRANT EXECUTE ON uspAddApprenticeship to manager
GRANT EXECUTE ON uspAddUser to manager
GRANT EXECUTE ON uspChangeMeetingDate to manager
GRANT EXECUTE ON uspAddCourse to manager
GRANT EXECUTE ON uspAddStudies to manager
GRANT EXECUTE ON uspAddStudiesMeetings to manager
GRANT EXECUTE ON uspAddWebinar to manager
GRANT EXECUTE ON uspSetCoursePrice to manager
GRANT EXECUTE ON uspSetMeetingPrice to manager
GRANT EXECUTE ON uspSetStudiesPrice to manager
GRANT EXECUTE ON uspSetWebinarPrice to manager
GRANT EXECUTE ON uspSetParticipantsLimit to manager
GRANT EXECUTE ON uspDeleteProduct to manager
```

Nauczyciel

```
Create role teacher

GRANT SELECT ON getTaughtWebinars to teacher
GRANT SELECT ON getTaughtCurses to teacher
GRANT SELECT ON getTaughtStudiesMeetings to teacher
GRANT SELECT ON getTaughtStudies to teacher
GRANT SELECT ON getStudiesMeetingAttendanceList to teacher
GRANT SELECT ON getCourseModuleAttendanceList to teacher
GRANT SELECT ON getTaughtWebinars to teacher

GRANT EXECUTE ON uspAddExamResult to teacher
GRANT EXECUTE ON uspAddMeetingPresence to teacher
```

```
GRANT EXECUTE on uspAddModulePresence to teacher
GRANT EXECUTE on uspSetMeetingPresence to teacher
```

Klient

```
Create role client

GRANT EXECUTE on CoursePass to client
GRANT SELECT on CourseInfo to client
GRANT EXECUTE on ModulesPresence to client
GRANT EXECUTE on CoursesPresence to client
GRANT EXECUTE on coursesFreeSlots to client
GRANT SELECT on ClientCourses to client
GRANT EXECUTE on StudiesPass to client
GRANT EXECUTE on StudiesPresence to client
GRANT SELECT on getExamScores to client
GRANT EXECUTE on checkExamStatus to client
GRANT EXECUTE on checkExamMaxPoints to client
GRANT EXECUTE on checkExamDate to client
GRANT SELECT on getStudiesmeetings to client
GRANT SELECT on getRegisteredApprenticeship to client
GRANT EXECUTE on CheckApprenticeshipStatus to client
GRANT EXECUTE on checkParticipantsLimit to client

GRANT SELECT on getOwnedWebinars to client
GRANT SELECT on getOwnedStudies to client
GRANT SELECT on getOwnedStudiesMeetings to client
GRANT SELECT on getOwnedCourses to client
GRANT SELECT on clientCourses to client
GRANT EXECUTE ON CheckIfCourseParticipantsAllowed to client
GRANT EXECUTE ON StudiesPass to client
GRANT SELECT ON getBucket to client
GRANT SELECT ON getPaymentHistory to client

GRANT EXECUTE on uspAddProductToOrder to client
GRANT EXECUTE on uspCancelPayment to client
GRANT EXECUTE on uspChangeToFullPrice to client
GRANT EXECUTE on uspDeleteProductFromOrder to client
GRANT EXECUTE on uspPay to client
GRANT EXECUTE on uspAddOrder to client
```

Właściciel

```
Create role owner

grant all privileges ON u_stankiew to owner
```

Indeksy

```
-- imię i nazwisko użytkownika
create index Users_first_name_last_name_index
on Users (first_name, last_name)

-- adres użytkownika
create index Users_zip_code_city_street_address_country_index
on Users (zip_code, city, street_address, country)

--typ produktu
create index Products_product_type_id_index
on Products (product_type_id)

--język
create index Products_language_index
```

```
on Products (language)

--numer zamówienia
create index Payments_order_id_index
on Payments (order_id)

--data zamówienia
create index Payments_payment_date_index
on Payments (payment_date)

--nazwa webinaru
create index Webinars_webinar_name_index
on Webinars (webinar_name)

--data publikacji webinaru
create index Webinars_posted_date_index
on Webinars (posted_date)

--nazwa kursu
create unique index Courses_course_name_uindex
on Courses (course_name)

--data rozpoczęcia i zakończenia kursu
create unique index Courses_start_date_end_date_uindex
on Courses (start_date, end_date)

--nazwa modułu
create unique index Uniq_Modules
on Modules (module_name)

--id modułu
create index Modules_product_id_index
on Modules (product_id)

--data rozpoczęcia i zakończenia modułu
create index Modules_start_date_end_date_index
on Modules (start_date, end_date)

--sala, w której odbywa się moduł
create index Modules_classroom_index
on Modules (classroom)

--nazwa studiów
create index Studies_name_index
on Studies (name)

--id klienta, który jest uczestnikiem studiów
create index StudiesParticipants_client_id_index
on StudiesParticipants (client_id)

--id studiów
create index StudiesParticipants_product_id_index
on StudiesParticipants (product_id)

--id studiów
create index Exams_studies_id_index
on Exams (studies_id)

--data egzaminu
create index Exams_date_index
on Exams (date)

--data praktyk i id uczestnika studiów
create unique clustered index Apprenticeship_participant_id_date_uindex
on Apprenticeship (participant_id, date)

--id studiów
create index StudiesMeetings_studies_id_index
on StudiesMeetings (studies_id)

--data studiów
```

```
create index StudiesMeetings_date_index
on StudiesMeetings (date)
```

Dane testowe

Academics

academic_id
2
8
10
12
21
27

Apprenticeship

participant_id	date	presence_percentage
1	2023-11-15	100
4	2023-08-23	100
4	2023-12-17	100

Clients

client_id	can_pay_days_later
1	0
3	0
4	0
5	12
6	0
7	0
9	10
11	0
13	0
15	0
23	0
24	0
26	0
29	2
30	0
31	4
38	0

Courses

product_id	course_name	start_date	end_date	participants_limit	advance_price	full_price
------------	-------------	------------	----------	--------------------	---------------	------------

product_id	course_name	start_date	end_date	participants_limit	advance_price	full_price
2	SQL for beginners	2022-12-12	2023-02-20	15	500.0000	2500.0000
6	SQL for intermediate	2024-03-20	2024-06-30	10	1000.0000	3000.0000
10	Python algoritms and structures	2023-10-10	2024-01-20	25	1500.0000	4000.0000
14	UNIX comends	2024-01-05	2024-01-31	20	200.0000	1000.0000
22	Object oriented Programming in C++	2024-01-01	2024-06-28	23	20.0000	400.0000

CoursesParticipants

participant_id	client_id	product_id
1	1	2
2	1	6
3	4	2
4	4	6
5	7	10
6	7	14
7	1	10
8	1	14
9	11	10
10	15	10
11	5	10
12	13	10
13	9	10
14	3	10
15	24	22
16	24	14

Exams

exam_id	studies_id	date	max_points
1	4	2023-10-12	60
2	8	2024-12-06	100
3	12	2024-08-14	20
4	16	2023-11-23	97
5	19	2024-05-23	150
6	4	2023-12-16	100
7	20	2023-10-04	80
8	20	2023-12-08	60

ExamsTaken

exam_id	participant_id	points
1	1	55
6	1	92
7	4	66

exam_id	participant_id	points
8	4	53
4	5	82
4	6	95
1	9	40
1	10	49

Interpreted_language

interpreter_id	translate_from	translate_to
14	2	1
14	2	3
14	3	1
22	4	1

Interpreters

interpreter_id
14
22

Languages

language_id	language_name
3	English
2	German
4	Italian
1	Polish
5	Spanish

MeetingType

type_id	type_name
1	on-line
2	in-person
3	hybrid

Modules

module_id	product_id	module_name	module_type	classroom	start_date	end_date
1	2	Primary Keys	2	10	2022-12-12	2022-12-14
2	2	Basic commands	1	null	2022-12-19	2022-12-20
3	2	The basics of joins	1	null	2023-01-04	2023-01-10
4	2	Exercises	1	null	2023-01-15	2023-02-20
5	6	Group by your data	2	15	2024-03-20	2024-04-20
6	6	Sort your data	2	15	2024-04-25	2024-04-30
7	6	Exercices	1	null	2024-05-01	2024-06-30

module_id	product_id	module_name	module_type	classroom	start_date	end_date
8	10	Sorting algoritms	2	20	2023-10-10	2023-11-10
9	10	Graph Algoritms	3	15	2023-11-15	2023-12-15
10	10	Dynamic Programming	2	20	2023-12-20	2024-01-20
11	14	Files and folders	1	null	2024-01-05	2024-01-10
12	14	Grep and awk	1	null	2024-01-11	2024-01-20
13	14	Bash and regex	1	null	2024-01-21	2024-01-31

ModulesAttendance

participant_id	module_id	presence
1	1	true
1	2	true
1	3	true
1	4	true
3	1	true
3	2	false
3	3	false
3	4	true
5	8	true
5	9	true
7	8	true
7	9	true
9	8	true
9	9	true
10	8	true
10	9	false
11	8	true
11	9	true
12	8	true
12	9	true
13	8	true
13	9	true
14	8	true
14	9	true
15	1	true
15	13	true

Order_details

order_id	product_id	is_advance
1	5	false
1	9	false
1	21	false

order_id	product_id	is_advance
2	5	false
3	9	false
3	13	false
4	9	false
5	21	false
6	5	false
7	13	false
7	21	false
8	13	false
8	14	false
8	22	false
12	2	false
12	6	false
12	10	false
12	14	true
14	2	false
14	6	false
15	10	false
15	14	true
16	10	false
17	10	false
18	10	false
19	10	false
20	6	false
21	10	false
22	10	false
23	4	false
24	12	false
25	16	false
26	20	false
27	16	false
28	16	false
29	19	false
30	20	false
31	4	false
32	4	false
33	8	false

Orders

order_id	client_id	payment_status
----------	-----------	----------------

order_id	client_id	payment_status
1	1	1
2	7	1
3	9	1
4	15	1
5	23	1
6	30	1
7	24	1
8	24	1
9	4	2
12	1	1
14	4	1
15	7	4
16	11	1
17	5	1
18	13	1
19	3	1
20	3	2
21	15	1
22	9	1
23	30	1
24	23	1
25	4	1
26	23	1
27	23	1
28	24	1
29	3	1
30	4	1
31	5	1
32	29	1
33	5	1

OuterMeetingParticipants

client_id	meeting_id	presence
1	24	false
3	24	false
5	24	false
38	24	false

Payments

payment_id	order_id	payment_date	price	cancelled
4	2	2023-12-10	50.0000	false

payment_id	order_id	payment_date	price	cancelled
5	3	2023-12-14	60.0000	false
6	4	2023-12-17	60.0000	false
7	5	2023-12-15	12.0000	false
8	6	2023-12-16	50.0000	false
9	7	2023-12-16	12.0000	false
14	1	2023-12-17	122.0000	false
15	8	2023-12-17	220.0000	false
22	8	2023-12-17	800.0000	false
23	8	2023-12-17	380.0000	false
24	12	2022-12-01	5250.0000	false
25	12	2023-10-01	4500.0000	false
26	14	2022-12-05	5500.0000	false
27	15	2023-09-10	4250.0000	false
28	16	2023-07-23	4000.0000	false
29	17	2023-02-20	4000.0000	false
30	18	2023-06-01	1500.0000	true
31	18	2023-06-02	1500.0000	false
32	18	2023-08-01	2500.0000	false
33	19	2023-09-12	4000.0000	false
36	21	2023-10-01	4000.0000	false
37	22	2023-10-02	4000.0000	false
38	23	2023-10-03	40.0000	false
39	24	2023-10-04	35.0000	false
40	25	2023-10-11	25.0000	false
41	26	2023-10-11	10.0000	false
42	27	2023-10-20	25.0000	false
43	28	2023-10-04	25.0000	false
44	29	2023-10-03	25.0000	false
45	30	2023-10-01	10.0000	false
46	31	2023-09-22	40.0000	false
47	32	2023-09-23	40.0000	false
48	33	2023-09-29	30.0000	false

Products

product_id	product_type_id	language	academic_id	interpreter_id	translated_to
1	1	3	8	null	null
2	2	2	2	14	1
3	1	4	10	22	1
4	3	1	21	null	null
5	1	3	2	null	null

product_id	product_type_id	language	academic_id	interpreter_id	translated_to
6	2	4	8	22	1
7	4	2	10	14	3
8	3	1	12	null	null
9	1	3	12	null	null
10	2	2	2	null	null
11	4	4	10	null	null
12	3	1	21	null	null
13	1	3	21	null	null
14	2	4	2	null	null
15	4	2	8	14	3
16	3	2	2	null	null
17	1	1	8	14	1
18	2	1	8	22	3
19	3	2	10	null	null
20	3	3	12	null	null
21	1	3	2	null	null
22	2	2	2	null	null
23	3	2	2	null	null
24	4	2	2	null	null
26	4	2	2	null	null
27	4	3	12	null	null
28	4	2	10	null	null
29	4	2	12	14	1
30	4	2	8	null	null
31	4	1	8	22	3
32	4	1	21	null	null
33	4	1	21	null	null
34	4	2	2	22	3
35	4	3	2	null	null

ProductType

product_type_id	product_type_name
1	webinar
2	course
3	studies
4	meeting

Statuses

status_id	status_name
1	paid
2	not_paid

status_id	status_name
4	partially_paid

Studies

product_id	name	participants_limit	full_price	advance_price
4	Computer Science	50	40.0000	20.0000
8	Astrophysics	20	30.0000	12.0000
12	Cybersecurity	30	35.0000	10.0000
16	Biomedic Engineering	15	50.0000	25.0000
19	Economy	100	25.0000	10.0000
20	Marketing	200	10.0000	5.0000
23	Geschichte und Okonomie	23	2000.0000	100.0000

StudiesMeetings

meeting_id	studies_id	date	type_id	participants_limit	student_price	outer_participant_price	meeting_topic
3	4	2023-10-30	1	60	0.0000	15.0000	"Programming Basics"
6	8	2023-10-20	2	30	0.0000	20.0000	"Black holes explained"
7	4	2023-12-25	1	50	0.0000	10.0000	"Operating Systems"
11	4	2023-12-15	2	65	0.0000	5.0000	"Network Architecture"
15	4	2023-11-22	1	100	60.0000	100.0000	"Algorithms Part 1"
24	4	2023-12-23	1	50	60.0000	200.0000	"Object Oriented Programing"
26	4	2023-12-05	1	150	60.0000	15.0000	"Algorithms Part 2"
27	8	2023-10-18	2	35	60.0000	20.0000	"Introduction to Astrophysiscs "
28	8	2023-10-25	3	40	60.0000	100.0000	"Modern cosmology theories"
29	12	2023-12-24	3	50	5.0000	20.0000	"Introduction to cybersecurity"
30	19	2023-11-13	2	100	0.0000	5.0000	"Basics of market analysys"
31	20	2023-12-28	2	200	0.0000	13.0000	"Data-driven marketing introduction"
32	4	2024-01-03	3	100	0.0000	12.0000	"Introduction to AI"
33	4	2024-03-04	2	65	6.0000	20.0000	"Functional Programming"
34	20	2024-03-05	2	200	7.0000	30.0000	"Digital marketing strategies"
35	20	2024-03-12	2	200	2.0000	10.0000	"Introduction to marketing metrics"

StudiesMeetingParticipants

meeting_id	participant_id	presence
3	1	false
3	9	true
6	11	true
7	1	true
7	9	false
7	10	false
27	11	true
28	11	false
29	2	true
30	7	true

StudiesParticipants

participant_id	client_id	product_id
1	30	4
2	23	12
3	4	16
4	23	20
5	23	16
6	24	16
7	3	19
8	4	20
9	5	4
10	29	4
11	5	8

User_type

user_type	type_name
1	client
2	academic
3	interpreter
4	owner
5	manager
6	secretary

Users

user_id	first_name	last_name	zip_code	city	street_address	country	user_type	email
1	Jan	Nowak	00-001	Warsaw	ul. Prosta 5	Poland	1	Jan.Nowak@gmail.com
2	Hans	Müller	10115	Berlin	Unter den Linden 15	Germany	2	Hans.Müller@gmail.com
3	John	Smith	10001	New York	123 Main St	USA	1	John.Smith@gmail.com

user_id	first_name	last_name	zip_code	city	street_address	country	user_type	email
4	Alice	Williams	SW1A 1AA	London	Buckingham Palace Rd	England	1	Alice.Williams@gmail.com
5	Giuseppe	Rossi	00100	Rome	Via del Corso 10	Italy	1	Giuseppe.Rossi@gmail.com
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9	Sophie	Taylor	SW1A 1BA	London	Westminster Bridge Rd	England	1	Sophie.Taylor@gmail.com
10	Luca	Bianchi	00144	Rome	Via Appia Nuova 25	Italy	2	Luca.Bianchi@gmail.com
11	Marek	Wozniak	50-001	Wroclaw	ul. Rynek 1	Poland	1	Marek.Wozniak@gmail.com
12	Elena	Schneider	60311	Frankfurt	Hauptwache 6	Germany	2	Elena.Schneider@gmail.com
13	Michael	Brown	33101	Miami	678 Ocean Dr	USA	1	Michael.Brown@gmail.com
14	Olivia	Smith	SW1A 1AB	London	Buckingham Gate 12	England	3	Olivia.Smith@gmail.com
15	Giovanni	Ferrari	00192	Rome	Via della Conciliazione 50	Italy	1	Giovanni.Ferrari@gmail.com
16	Karolina	Lewandowska	02-020	Warsaw	ul. Kwiatowa 7	Poland	4	Karolina.Lewandowska@gmail.com
17	Mateusz	Kowalczyk	50-500	Wroclaw	ul. Piekna 12	Poland	5	Mateusz.Kowalczyk@gmail.com
18	Adrian	Szymanski	80-080	Gdansk	ul. Morska 3	Poland	6	Adrian.Szymanski@gmail.com
19	Ewa	Jankowska	01-010	Lodz	ul. Ogrodowa 25	Poland	6	Ewa.Jankowska@gmail.com
20	Mikolaj	Wójcik	33-330	Krakow	ul. Slowackiego 10	Poland	5	Mikolaj.Wójcik@gmail.com
21	Aleksandra	Dabrowska	03-030	Warsaw	ul. Lipowa 8	Poland	2	Aleksandra.Dabrowska@gmail.com
22	Andrzej	Kowalczyk	50-501	Wroclaw	ul. Zielona 14	Poland	3	Andrzej.Kowalczyk@gmail.com
23	Welby	Churchouse	22300	Dallas	Hunt St 10	USA	1	Welby.Churchouse@gmail.com
24	Ive	Boyington	10550	Hamburg	Alter Vall 43	Germany	1	Ive.Boyington@gmail.com
25	Eric	Warren	90543	Brema	Neuenstrasse 12	Germany	6	Eric.Warren@gmail.com
26	Vincent	Cunningham	15250	Vancouver	Davie St 12	Canada	1	Vincent.Cunningham@gmail.com
27	Janina	Wiśniowska	43-442	Szczeciń	ul. Długa 15	Poland	2	Janina.Wiśniowska@gmail.com
28	John	Richardson	32455	Florencja	via Palazzulo 95	Italy	6	John.Richardson@gmail.com
29	Alexander	Fowler	43533	Neapol	Via Campania 5	Italy	1	Alexander..Fowler@gmail.com
30	Andrzej	Bogdański	35-234	Gdańsk	ul. Portowa 41	Poland	1	Andrzej.Bogdański@gmail.com
31	Mark	Brown	12-234	London	Downing Street 5	England	1	br@gmail.com
38	Aleksander	Kowalski	20-200	Kraków	Lea 5	Poland	1	alkowalski@gmail.com

WebinarParticipants

product_id	client_id
1	1
5	1
9	1
21	1
1	3
5	3
9	3
13	4
9	7
9	9
5	11
9	13
1	15
13	24

Webinars

product_id	webinar_name	posted_date	price
1	Present Simple for beginners	2023-12-02	0.0000
5	Cooking is fun	2023-01-01	50.0000
9	Robotics for children	2023-10-11	60.0000
13	Advanced constructions in English	2023-12-12	0.0000
21	First Aid Basics	2023-12-14	12.0000