Warunki integralnościowe

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1 Roles

```
CREATE TABLE Roles (
   RoleID int NOT NULL,
   RoleName nvarchar(200) NOT NULL,
   CONSTRAINT RoleName UNIQUE (RoleName),
   CONSTRAINT employeeType PRIMARY KEY (RoleID)
)
```

2 EmployeeRoles

```
CREATE TABLE EmployeeRoles (
EmployeeID int NOT NULL,
RoleID int NOT NULL,
CONSTRAINT EmployeeRoles_pk PRIMARY KEY (EmployeeID, RoleID)
)
```

3 Webinars

```
CREATE TABLE Webinars (
WebinarID int NOT NULL,
ReleaseDate datetime NOT NULL,
RecordingLink nvarchar(max) NULL,
WebinarLink nvarchar(max) NOT NULL,
LecturerID int NOT NULL,
TranslatorID int NULL,
LanguageID int NOT NULL,
RecordingReleaseDate date NULL,
CONSTRAINT Webinars_pk PRIMARY KEY (WebinarID)
```

Warunki integralnościowe:

• Webinars_RecodingReleaseDateValid

RecodingReleaseData musi być po ReleaseDate

```
CONSTRAINT Webinars_RecodingReleaseDateValid CHECK
(RecordingReleaseDate >= ReleaseDate)
```

• Webinars_RecodingLinkRelationWithRecordingReleaseDate

Jeżeli jest nagranie to Recording Release
Date nie może być nullem, jeżeli nie ma to Recording Release Date musi być nullem

```
CONSTRAINT Webinars_RecodingLinkRelationWithRecordingReleaseDate CHECK
((RecordingReleaseDate IS NULL AND RecordingLink IS NULL)

OR
(RecordingReleaseDate IS NOT NULL AND RecordingLink IS NOT NULL))
```

4 Languages

```
CREATE TABLE Languages (
   LanguageID int NOT NULL,
   LanguageName nvarchar(200) NOT NULL,
   CONSTRAINT LanguageName UNIQUE (LanguageName),
   CONSTRAINT Languages_pk PRIMARY KEY (LanguageID)
)
```

5 Courses

```
CREATE TABLE Courses (
    CourseID int NOT NULL,
    CourseName nvarchar(max) NOT NULL,
    Description nvarchar(max) NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NOT NULL,
    CoordinatorID int NOT NULL,
    MaxStudents int NULL,
    CONSTRAINT Courses_pk PRIMARY KEY (CourseID)
)
```

Warunki integralnościowe:

• Course_MaxStudents

MaxStudents może być NULL, jeżeli np. jest to kurs wyłącznie online, w przeciwnym wypadku musi być >0

```
CONSTRAINT Course_MaxStudents CHECK
(MaxStudents is NULL OR
(MaxStudents > 0) )
```

• Course_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT Course_DateIntervalIsValid CHECK
(StartDate < EndDate)
```

6 Modules

```
CREATE TABLE Modules (
    ModuleID int NOT NULL,
    CourseID int NOT NULL,
    ModuleName nvarchar(max) NOT NULL,
    ModuleDescription nvarchar(max) NOT NULL,
    CONSTRAINT Modules_pk PRIMARY KEY (ModuleID)
)
```

7 Studies

```
CREATE TABLE Studies (
    StudiesID int NOT NULL,
    Name int NOT NULL,
    Description nvarchar(max) NOT NULL,
    CoordinatorID int NOT NULL,
    StartDate Date NOT NULL,
    EndDate Date NOT NULL,
    MaxStudents int NOT NULL,
    LanguageID int NOT NULL,
    Semester int NOT NULL,
    FieldOfStudiesID int NOT NULL,
    SemesterNumber int NOT NULL,
    CONSTRAINT Studies_pk PRIMARY KEY (StudiesID)
)
```

Warunki integralnościowe:

• Studies_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT Studies_DateIntervalIsValid CHECK
(StartDate < EndDate)
```

• Studies_MaxStudentsIsValid

Maksymalna liczba studentów musi być większa od 0

```
CONSTRAINT Studies_MaxStudentsIsValid CHECK
(MaxStudents > 0)
```

• Studies_SemesterIsValid

Numery semestrów zaczynają się od 1

```
CONSTRAINT Studies_SemesterIsValid CHECK
(SemesterNumber >= 1)
```

8 ExamsGrades

```
CREATE TABLE ExamsGrades (
StudentID int NOT NULL,
ExamID int NOT NULL,
FinalGrade decimal(2,1) NOT NULL,
CONSTRAINT ExamsGrades_pk PRIMARY KEY (StudentID,ExamID)
)
```

Warunki integralnościowe:

• FinalExams_FinalGradeIsValid

Przyjmujemy skalę ocen jak na publicznej uczelni wyższej

```
CONSTRAINT FinalExams_FinalGradeIsValid CHECK (FinalGrade IN (2.0, 3.0, 3.5, 4.0, 4.5, 5.0))
```

9 Internships

```
CREATE TABLE Internships (
    InternshipID int NOT NULL,
    StudiesID int NOT NULL,
    Description nvarchar(max) NOT NULL,
    StartDate date NOT NULL,
    EndDate date NOT NULL,
    CONSTRAINT Internships_pk PRIMARY KEY (InternshipID)
)
```

Warunki integralnościowe:

• Internships_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT Internships_DateIntervalIsValid CHECK
(StartDate < EndDate)
```

10 InternshipDetails

```
CREATE TABLE InternshipDetails (
   StudentID int NOT NULL,
   IntershipID int NOT NULL,
   CompletedAt date NULL,
   Completed bit NOT NULL,
   CompanyName nvarchar(500) NOT NULL,
   City nvarchar(500) NOT NULL,
   Country nvarchar(500) NOT NULL,
   PostalCode nvarchar(500) NOT NULL,
   Address nvarchar(500) NOT NULL,
   CONSTRAINT InternshipDetails_pk PRIMARY KEY (IntershipID,StudentID)
)
```

Warunki integralnościowe:

• InternshipDetails_CompletedAtIsValid

CompletedAt nie może być w przyszłości

```
CONSTRAINT InternshipDetails_CompletedAtIsValid CHECK
(CompletedAt <= GetDate())</pre>
```

• InternshipDetails_PostalCodeIsValid

Kod pocztowy ma być w prawidłowym formacie

```
CONSTRAINT InternshipDetails_PostalCodeIsValid CHECK

(PostalCode LIKE '[0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]')
```

11 Products

```
CREATE TABLE Products (
    ProductID int NOT NULL,
    Price money NOT NULL,
    AdvancePayment money NULL,
    ProductType nvarchar(max) NOT NULL,
    AddedAt datetime NOT NULL,
    Closed bit NOT NULL,
    ClosedAt datetime NOT NULL,
    CONSTRAINT Products_pk PRIMARY KEY (ProductID)
)
```

Warunki integralnościowe:

• Products_PriceIsValid

Cena musi być większa lub równa 0

```
CONSTRAINT Products_PriceIsValid CHECK
(Price >= 0)
```

• Products_AdvancePaymentIsValid

Zaliczka musi być większa od 0 i nie może być większa od ceny całkowitej, lub być NULL

```
CONSTRAINT Products_AdvancePaymentIsValid CHECK
((AdvancePayment > 0 AND AdvancePayment < Price)
OR (AdvancePayment IS NULL))
```

• Products_ProductTypeIsValid

Produkt może być webinarem, kursem, studia mi, albo pojedyńczym postkaniem studyjnym

```
CONSTRAINT Products_ProductTypeIsValid CHECK
(ProductType IN ('studies', 'course', 'webinar', 'public study session'))
```

• Products_AddedAtIsValid

AddedAt nie może być w przyszłości

```
CONSTRAINT Products_AddedAtIsValid CHECK
(AddedAt <= GetDate())</pre>
```

• Products_ClosedAtIsValid

ClosedAt musi być po AddedAt

```
CONSTRAINT Products_ClosedAtIsValid CHECK
(ClosedAt <= GetDate() AND ClosedAt >= AddedAt)
```

12 Payments

```
CREATE TABLE Payments (
PaymentID int NOT NULL,
UserID int NOT NULL,
ProductID int NOT NULL,
Price money NOT NULL,
```

```
Date date NOT NULL,
Status nvarchar(300) NOT NULL,
CONSTRAINT Payments_pk PRIMARY KEY (PaymentID)
)
```

Warunki integralnościowe:

• Payments_Price

Kwota musi być >= 0

```
CONSTRAINT Payments_Price CHECK
(Price >= 0)
```

• Payments_Status

Możliwe wartości dla statusu płatności: "Successful", "Failed"

```
CONSTRAINT Payments_Status CHECK
(Status in ('Successful', 'Failed'))
```

• Payments_Date

Data płatności nie może być z przyszłości

```
CONSTRAINT Payments_Date CHECK
(Date <= GetDate())</pre>
```

13 Carts

```
CREATE TABLE Carts (
    UserID int NOT NULL,
    ProductID int NOT NULL,
    AddedAt datetime NOT NULL,
    CONSTRAINT Carts_pk PRIMARY KEY (UserID, ProductID)
)
```

Warunki integralnościowe:

• Carts_AddedAtIsValid

AddedAt nie może być w przyszłości

```
CONSTRAINT Carts_AddedAtIsValid CHECK
(AddedAt <= GetDate())</pre>
```

14 WebinarsAttendence

```
CREATE TABLE WebinarsAttendence (
WebinarID int NOT NULL,
UserID int NOT NULL,
CONSTRAINT WebinarsAttendence_pk PRIMARY KEY (WebinarID, UserID)
)
```

15 StationaryStudiesSessions

```
CREATE TABLE StationaryStudiesSessions (
    StationaryStudiesSessionID int NOT NULL,
    Address nvarchar(500) NOT NULL,
    City nvarchar(500) NOT NULL,
    Country nvarchar(500) NOT NULL,
    PostalCode nvarchar(20) NOT NULL,
    ClassroomNumber nvarchar(30) NOT NULL,
    CONSTRAINT StationaryStudiesSessions_pk PRIMARY KEY (StationaryStudiesSessionID)
)
```

Warunki integralnościowe:

• StationaryStudiesSessions_PostalCodeIsValid

Kod pocztowy jest w poprawny formacie

```
CONSTRAINT StationaryStudiesSessions_PostalCodeIsValid CHECK
(PostalCode LIKE '[0-9][0-9]-[0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]')
```

16 OnlineStudiesSessions

```
CREATE TABLE OnlineStudiesSessions (
    OnlineStudiesSessionID int NOT NULL,
    WebinarLink nvarchar(max) NOT NULL,
    RecordingLink int NULL,
    TranslatorID int NULL,
    CONSTRAINT OnlineStudiesSessions_pk PRIMARY KEY (OnlineStudiesSessionID)
)
```

17 StudiesSessions

```
CREATE TABLE StudiesSessions (
    StudiesSessionID int NOT NULL,
    SubjectID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NOT NULL,
    LecturerID int NOT NULL,
    MaxStudents int NOT NULL,
    TranslatorID int NULL,
    LanguageID int NOT NULL,
    CONSTRAINT StudiesSessions_pk PRIMARY KEY (StudiesSessionID)
)
```

Warunki integralnościowe:

• StudiesSessions_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT StudiesSessions_DateIntervalIsValid CHECK (StartDate < EndDate)
```

• MaxStudentsVerification

```
CONSTRAINT MaxStudentsVerification CHECK
(MaxStudents > 0)
```

18 StudiesSessionsAttendence

```
CREATE TABLE StudiesSessionsAttendence (
    SessionID int NOT NULL,
    StudentID int NOT NULL,
    Completed bit NOT NULL,
    CONSTRAINT StudiesSessionsAttendence_pk PRIMARY KEY (SessionID,StudentID)
)
```

19 CourseOfflineSessions

```
CREATE TABLE CourseOfflineSessions (
    CourseOfflineSessionID int NOT NULL,
    Link nvarchar(max) NOT NULL,
    Description nvarchar(max) NOT NULL,
    UploadedAt datetime NOT NULL,
    CONSTRAINT CourseOfflineSessions_pk PRIMARY KEY (CourseOfflineSessionID)
)
```

Warunki integralnościowe:

• CourseOfflineSessions_UploadedAtIsValid

UploadedAt nie może być w przyszłości

```
CONSTRAINT CourseOfflineSessions_UploadedAtIsValid CHECK
(UploadedAt <= GETDATE() )</pre>
```

20 CourseStationarySessions

```
CREATE TABLE CourseStationarySessions (
    CourseStationarySessionID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NOT NULL,
    Address nvarchar(500) NOT NULL,
    City nvarchar(500) NOT NULL,
    Country nvarchar(500) NOT NULL,
    PostalCode nvarchar(20) NOT NULL,
    ClassroomNumber nvarchar(30) NOT NULL,
    MaxStudents int NOT NULL,
    CONSTRAINT CourseStationarySessions_pk PRIMARY KEY (CourseStationarySessionID)
```

Warunki integralnościowe:

• CourseStationarySessions_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT CourseStationarySessions_DateIntervalIsValid CHECK (StartDate < EndDate)
```

• CourseStationarySessions_PostalCodeIsValid

Kod pocztowy ma być w poprawnym formacie

```
CONSTRAINT CourseStationarySessions_PostalCodeIsValid CHECK
(PostalCode LIKE '[0-9][0-9] [0-9] [0-9] '
OR PostalCode LIKE '[0-9][0-9][0-9][0-9] [0-9] '
OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9] ')
```

• CourseStationarySessions_MaxStudentsIValid

MaxStudents musi być większy od zera

```
CONSTRAINT CourseStationarySessions_MaxStudentsIValid CHECK
(MaxStudents > 0)
```

21 CourseOnlineSessions

```
CREATE TABLE CourseOnlineSessions (
    CourseOnlineSessionID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NOT NULL,
    WebinarLink text NOT NULL,
    RecordingLink text NULL,
    CONSTRAINT CourseOnlineSessions_pk PRIMARY KEY (CourseOnlineSessionID)
)
```

Warunki integralnościowe:

• CourseOnlineSessions_DateIntervalCheck

EndDate musi być po StartDate

```
CONSTRAINT CourseOnlineSessions_DateIntervalCheck CHECK (StartDate < EndDate)
```

22 CoursesSessions

```
CREATE TABLE CoursesSessions (
    CourseSessionID int NOT NULL,
    LanguageID int NOT NULL,
    ModuleID int NOT NULL,
    LecturerID int NOT NULL,
    TranslatorID int NULL,
    CONSTRAINT CoursesSessions_pk PRIMARY KEY (CourseSessionID)
)
```

23 CourseSessionsAttendance

```
CREATE TABLE CourseSessionsAttendance (
    CourseParticipantID int NOT NULL,
    CourseSessionID int NOT NULL,
    Completed bit NOT NULL,
    CONSTRAINT CourseSessionsAttendance_pk PRIMARY KEY (CourseSessionID,CourseParticipantID)
)
```

24 PublicStudySessions

```
CREATE TABLE PublicStudySessions (
    StudiesSessionID int NOT NULL,
    ProductID int NOT NULL,
    CONSTRAINT PublicStudySessions_pk PRIMARY KEY (ProductID, StudiesSessionID)
)
```

25 Students

```
CREATE TABLE Students (
   StudentID int NOT NULL,
   UserID int NOT NULL,
   StudiesID int NOT NULL,
   StudiesPrice money NOT NULL,
   EntryFee money NOT NULL,
   DuePostponedPayment datetime NULL,
   EntryFeePaymentID int NULL,
   RemainingPaymentID int NULL,
   CONSTRAINT Students_pk PRIMARY KEY (StudentID)
)
```

Warunki integralnościowe:

• Students_PriceIsValid

Cena za studia musi być większa od zera

```
CONSTRAINT Students_PriceIsValid CHECK
(StudiesPrice > 0)
```

• Students_EntryFeeIsValid

Zaliczka musi być większa od zera i mniejsza od całkowitej ceny studiów.

```
CONSTRAINT Students_EntryFeeIsValid CHECK
(EntryFee > 0 AND EntryFee < StudiesPrice)
```

26 CourseParticipants

```
CREATE TABLE CourseParticipants (
CourseParticipantID int NOT NULL,
UserID int NOT NULL,
CourseID int NOT NULL,
CoursePrice money NOT NULL,
```

```
EntryFee money NOT NULL,
EntryFeePaymentID int NULL,
RemainingPaymentID int NULL,
FullPricePaymentID int NULL,
DuePostponedPayment datetime NULL,
CONSTRAINT CourseParticipants_pk PRIMARY KEY (CourseParticipantID)
)
```

Warunki integralnościowe:

• CourseParticipants_PriceCheck

```
Cena musi być >=0
```

```
CONSTRAINT CourseParticipants_PriceCheck CHECK
(CoursePrice >= 0)
```

• CourseParticpants_EntryFeeCheck

Zaliczka nie może być ujemna oraz nie może być większa od całkowitej ceny

```
CONSTRAINT CourseParticpants_EntryFeeCheck CHECK
(EntryFee >= 0 and EntryFee <= CoursePrice)
```

27 RecordingAccessTime

```
CREATE TABLE RecordingAccessTime (
    RecordingAccessTimeID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NULL,
    NumberOfDays int NOT NULL,
    WebinarID int NULL,
    CONSTRAINT RecordingAccessTime_pk PRIMARY KEY (RecordingAcessTimeID)
)
```

Warunki integralnościowe:

• RecordingAccessTime_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT RecordingAccessTime_DateIntervalIsValid CHECK (StartDate < EndDate)
```

• RecordingAccessTime_NumberOfDaysIsValid

Liczba dni na którą udostępniamy nagrani musi być większa lub równa 0

```
CONSTRAINT RecordingAccessTime_NumberOfDaysIsValid CHECK
(NumberOfDays >= 0)
```

28 MinAttendancePercentageToPassInternship

Warunki integralnościowe:

• MinAttendancePercentageToPassInternship_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT MinAttendancePercentageToPassInternship_DateIntervalIsValid CHECK (StartDate < EndDate)
```

 $\bullet \ \texttt{MinAttendancePercentageToPassInternship_PercentageIsValid}$

Procent obecności musi być w przedziale od 0 do 1 włącznie

```
CONSTRAINT MinAttendancePercentageToPassInternship_PercentageIsValid CHECK (AttendancePercentage BETWEEN 0 AND 1.0)
```

29 MaxDaysForPaymentBeforeStudiesStart

Warunki integralnościowe:

• MaxDaysForPaymentBeforeStudiesStart_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT MaxDaysForPaymentBeforeStudiesStart_DateIntervalIsValid CHECK
(EndDate > StartDate)
```

• MaxDaysForPaymentBeforeStudiesStart_NumberOfDaysIsValid Liczba dni przed rozpoczęciem musi być większa od 0

```
CONSTRAINT MaxDaysForPaymentBeforeStudiesStart_NumberOfDaysIsValid CHECK (NumberOfDays > 0)
```

30 MinAttendancePercentageToPassCourse

Warunki integralnościowe:

• MinAttendancePercentageToPassCourse_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT MinAttendancePercentageToPassCourse_DateIntervalIsValid CHECK ((StartDate < EndDate))
```

 $\bullet \ \texttt{MinAttendancePercentageToPassCourse_AttendencePercentageIsValid}$

Procent obecności musi być w przedziale od 0 do 1 włącznie

```
CONSTRAINT MinAttendancePercentageToPassCourse_AttendencePercentageIsValid CHECK ((AttendencePercentage >= 0) and (AttendencePercentage <= 1))
```

31 DaysInInternship

```
CREATE TABLE DaysInInternship (
    MinAttendancePercentageToPassStudiesID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NULL,
    NumberOfDays int NOT NULL,
    InternshipID int NULL,
    CONSTRAINT DaysInInternship_pk PRIMARY KEY (MinAttendancePercentageToPassStudiesID)
)
```

Warunki integralnościowe:

• DaysInInternship_DateIntervalIsValid

EndDate musi być po StartDate

```
CONSTRAINT DaysInInternship_DateIntervalIsValid CHECK
(StartDate < EndDate)</pre>
```

• DaysInInternship_NumberOfDaysIsValid

Liczba dni stażu musi być większa od zera

```
CONSTRAINT DaysInInternship_NumberOfDaysIsValid CHECK
(NumberOfDays > 0)
```

32 MaxDaysForPaymentBeforeCourseStart

Warunki integralnościowe:

• MaxDaysForPaymentBeforeCourseStart_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT MaxDaysForPaymentBeforeCourseStart_DateIntervalIsValid CHECK (StartDate < EndDate)
```

• MaxDaysForPaymentBeforeCourseStart_NumberOfDaysIValid Liczba dni przed rozpoczęciem musi być większa od 0

```
CONSTRAINT MaxDaysForPaymentBeforeCourseStart_NumberOfDaysIValid CHECK (NumberOfDays > 0)
```

${\bf 33} \quad {\bf Min Attendance Percentage To Pass Studies}$

Warunki integralnościowe:

• MinAttendancePercentageToPassStudies_DateIntervalIsValid EndDate musi być po StartDate

```
CONSTRAINT MinAttendancePercentageToPassStudies_DateIntervalIsValid CHECK (StartDate < EndDate)
```

 $\bullet \ {\tt MinAttendancePercentageToPassStudies_PercentageIsValid}$

Procent obecności musi być w przedziale od 0 do 1 włącznie

```
CONSTRAINT MinAttendancePercentageToPassStudies_PercentageIsValid CHECK (AttendancePercentage BETWEEN 0 AND 1)
```

34 People

```
CREATE TABLE People (
PersonID int NOT NULL,
FirstName nvarchar(max) NOT NULL,
LastName nvarchar(500) NOT NULL,
BirthDate date NOT NULL,
Address nvarchar(500) NOT NULL,
City nvarchar(500) NOT NULL,
Region nvarchar(500) NOT NULL,
PostalCode nvarchar(20) NOT NULL,
Country nvarchar(500) NOT NULL,
Phone nvarchar(20) NOT NULL,
Email nvarchar(500) NOT NULL,
CONSTRAINT id PRIMARY KEY (PersonID)
```

Warunki integralnościowe:

• People_EmailValid

Adres email musi zawierać znak '@'

```
CONSTRAINT People_EmailValid CHECK
(Email LIKE '%0%')
```

• People_BirthDateValid

Data urodzenia nie może być z przyszłości

```
CONSTRAINT People_BirthDateValid CHECK
(BirithDate <= GetDate())</pre>
```

• People_PhoneIsValid

Numer telefonu składa się z cyfr

```
CONSTRAINT People_PhoneIsValid CHECK
((ISNUMERIC([Phone])=(1)))
```

• People_PostalCodeIsValid

Kod pocztowy musi być w poprawnym formacie.

```
CONSTRAINT People_PostalCodeIsValid CHECK

(PostalCode LIKE '[0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]')
```

35 PeopleDataChangeHistory

```
CREATE TABLE PeopleDataChangeHistory (
PersonDataChangeHistoryID int NOT NULL,
PersonID int NOT NULL,
ChangedAt datetime NOT NULL,
New_FirstName nvarchar(max) NOT NULL,
Old_FirstName nvarchar(max) NOT NULL,
New_LastName nvarchar(500) NOT NULL,
```

```
Old_LastName nvarchar(500) NOT NULL,
    New_BirthDate date NOT NULL,
    Old_BirthDate date NOT NULL,
   New_Address nvarchar(500) NOT NULL,
   Old_Address nvarchar(500) NOT NULL,
    New_City nvarchar(500) NOT NULL,
    Old_City nvarchar(500) NOT NULL,
    New_Region nvarchar(500) NOT NULL,
    Old_Region nvarchar(500) NOT NULL,
    New_PostalCode nvarchar(20) NOT NULL,
    Old_PostalCode nvarchar(500) NOT NULL,
    New_Country nvarchar(500) NOT NULL,
    Old_Country nvarchar(500) NOT NULL,
    New_Email nvarchar(500) NOT NULL,
    Old_Email nvarchar(500) NOT NULL,
    New_Phone nvarchar(20) NOT NULL,
    Old_Phone nvarchar(500) NOT NULL,
   CONSTRAINT id PRIMARY KEY (PersonDataChangeHistoryID)
)
```

Warunki integralnościowe:

• PeopleDataChangeHistory_ChangedAtIsValid

Data zmiany nie może być w przyszłości

```
CONSTRAINT PeopleDataChangeHistory_ChangedAtIsValid CHECK
(ChangedAt <= GetDate())</pre>
```

• PeopleDataChangeHistory_NewPostalCodeIsValid

Kod pocztowy musi być w poprawnym formacie

```
CONSTRAINT PeopleDataChangeHistory_NewPostalCodeIsValid CHECK

(New_PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]'

OR New_PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]'

OR New_PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]')
```

• PeopleDataChangeHistory_New_EmailValid

Nowy adres email musi zawierać znak '@'

```
CONSTRAINT PeopleDataChangeHistory_New_EmailValid CHECK
(New_Email LIKE '%@%')
```

• PeopleDataChangeHistory_New_BirthDate

Data urodzenia nie może być w przyszłości

```
CONSTRAINT PeopleDataChangeHistory_New_BirthDate CHECK
(New_BirthDate() <= GetDate())</pre>
```

• PeopleDataChangeHistory_New_Phone

Nowy numer telefonu składa się z cyfr

```
CONSTRAINT PeopleDataChangeHistory_New_Phone CHECK
(ISNUMERIC([Phone])=(1))
```

36 WebinarParticipants

```
CREATE TABLE WebinarParticipants (
    CourseParticipant int NOT NULL,
    UserID int NOT NULL,
    WebinarID int NOT NULL,
    WebinarPrice money NOT NULL,
    DuePostponedPayment datetime NULL,
    FullPricePaymentID int NOT NULL,
    CONSTRAINT WebinarParticipants_pk PRIMARY KEY (CourseParticipant)
)
```

Warunki integralnościowe:

• WebinarParticipants_WebinarPrice

Cena za webinar musi być większa lub równa zero

```
CONSTRAINT WebinarParticipants_WebinarPrice CHECK
(WebinarPrice >= 0)
```

37 PublicStudySessionParticipants

```
CREATE TABLE PublicStudySessionParticipants (
    PublicStudySessionParticipantID int NOT NULL,
    UserID int NOT NULL,
    PublicStudySessionID int NOT NULL,
    SessionPrice money NOT NULL,
    DuePostponedPayment datetime NULL,
    FullPricePaymentID int NULL,
    CONSTRAINT PublicStudySessionParticipants_pk PRIMARY KEY (PublicStudySessionParticipantID)
)
```

Warunki integralnościowe:

• PublicStudySessionParticipants_SessionPriceIsValid

```
CONSTRAINT PublicStudySessionParticipants_SessionPriceIsValid CHECK (SessionPrice > 0)
```

38 PublicStudySessionsAttendanceForOutsiders

```
CREATE TABLE PublicStudySessionsAttendanceForOutsiders (
    PublicStudySessionID int NOT NULL,
    PublicStudySessions_ProductID int NOT NULL,
    Completed bit NOT NULL,
    PublicStudySessionParticipantID int NOT NULL,
    CONSTRAINT PublicStudySessionsAttendanceForOutsiders_pk PRIMARY KEY (PublicStudySessionID)
)
```

39 SubjectMakeUpPossibilities

```
CREATE TABLE SubjectMakeUpPossibilities (
    SubjectID int NOT NULL,
    ProductID int NOT NULL,
    CONSTRAINT SubjectMakeUpPossibilities_pk PRIMARY KEY (SubjectID, ProductID)
)
```

40 MadeUpAttendance

```
CREATE TABLE MadeUpAttendance (
    SubjectID int NOT NULL,
    ProductID int NOT NULL,
    StudentID int NOT NULL,
    AttendanceValue int NOT NULL,
    CONSTRAINT MadeUpAttendance_pk PRIMARY KEY (SubjectID, ProductID)
)
```

Warunki integralnościowe:

• MadeUpAttendance_AttendanceValue

Jest to liczba odrobionych zajęć z przedmiotu, zatem musi być większa od zera

```
CONSTRAINT MadeUpAttendance_AttendanceValue CHECK
(AttendanceValue > 0)
```

41 ProductPriceChangeHistory

```
CREATE TABLE ProductPriceChangeHistory (
    ProductPriceChangeHistoryID int NOT NULL,
    ProductID int NOT NULL,
    Old_Price money NOT NULL,
    New_Price money NULL,
    Old_AdvancePayment money NULL,
    New_AdvancePayment money NULL,
    ChangedAt datetime NOT NULL,
    CONSTRAINT ProductPriceChangeHistory_pk PRIMARY KEY (ProductPriceChangeHistoryID)
)
```

Warunki integralnościowe:

• ProductHistory_ChangedAtIsValid

ChangedAt musi być po AddedAt

```
CONSTRAINT ProductHistory_ChangedAtIsValid CHECK
(ChangedAt <= GetDate() AND ChangedAt >= AddedAt)
```

• ProductHIstory_NewPriceIsValid

Nowa cenu musi być nieujemna

```
CONSTRAINT ProductHIstory_NewPriceIsValid CHECK
(New_price >= 0)
```

ProductHistory_NewAdvancePaymentIsValid
 Jeżeli wpisano zaliczkę to musi być ona większa od zera

```
CONSTRAINT ProductHistory_NewAdvancePaymentIsValid CHECK
(New_AdvancePayment > 0)
```

42 CartHistory

```
CREATE TABLE CartHistory (
    CartHistoryID int NOT NULL,
    UserID int NOT NULL,
    ProductID int NOT NULL,
    AddedAt datetime NOT NULL,
    RemovedAt datetime NOT NULL,
    CONSTRAINT CartHistory_pk PRIMARY KEY (CartHistoryID)
)
```

Warunki integralnościowe:

• CartHistory_AddedAt

AddedAt nie może być w przyszłości

```
CONSTRAINT CartHistory_AddedAt CHECK
(AddedAt <= GetDate())</pre>
```

• CartHIstory_RemovedAt

RemovedAt musi być po AddedAt

```
CONSTRAINT CartHIstory_RemovedAt CHECK
(RemovedAt >= AddedAt AND RemovedAt <= GetDate())</pre>
```

43 Exams

```
CREATE TABLE Exams (
    ExamID int NOT NULL,
    SubjectID int NOT NULL,
    StartDate datetime NOT NULL,
    EndDate datetime NOT NULL,
    Country nvarchar(500) NOT NULL,
    City nvarchar(500) NOT NULL,
    PostalCode nvarchar(500) NOT NULL,
    Address nvarchar(500) NOT NULL,
    CONSTRAINT Exams_pk PRIMARY KEY (ExamID)
)
```

Warunki integralnościowe:

• Exams_DateInteralIsValid

EndDate musi być po StartDate

```
CONSTRAINT Exams_DateInteralIsValid CHECK
(StartDate < EndDate)
```

• Exams_PostalCodeIsValid

Kod pocztowy ma być w poprawnym formacie

```
CONSTRAINT Exams_PostalCodeIsValid CHECK

(PostalCode LIKE '[0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9]'

OR PostalCode LIKE '[0-9][0-9][0-9][0-9][0-9]')
```

44 Subjects

```
CREATE TABLE Subjects (
SubjectID int NOT NULL,
StudiesID int NOT NULL,
Description nvarchar(max) NOT NULL,
CoordinatorID int NOT NULL,
CONSTRAINT SubjectID PRIMARY KEY (SubjectID)
)
```

45 FieldsOfStudies

```
CREATE TABLE FieldsOfStudies (
   FieldOfStudiesID int NOT NULL,
   Name nvarchar(max) NOT NULL,
   Description nvarchar(max) NOT NULL,
   CONSTRAINT FieldsOfStudies_pk PRIMARY KEY (FieldOfStudiesID)
)
```

46 Users

```
CREATE TABLE Users (
    UserID int NOT NULL,
    CONSTRAINT Users_pk PRIMARY KEY (UserID)
)
```

47 Employees

```
CREATE TABLE Employees (
EmployeeID int NOT NULL,
CONSTRAINT id PRIMARY KEY (EmployeeID)
)
```