



# **„System zarządzania konferencjami”**

Projekt i Implementacja systemu bazodanowego.

**Wykonawcy:**

Anna Baran

Karolina Biela

Projekt realizowany w  
ramach przedmiotu „Podstawy Baz Danych”

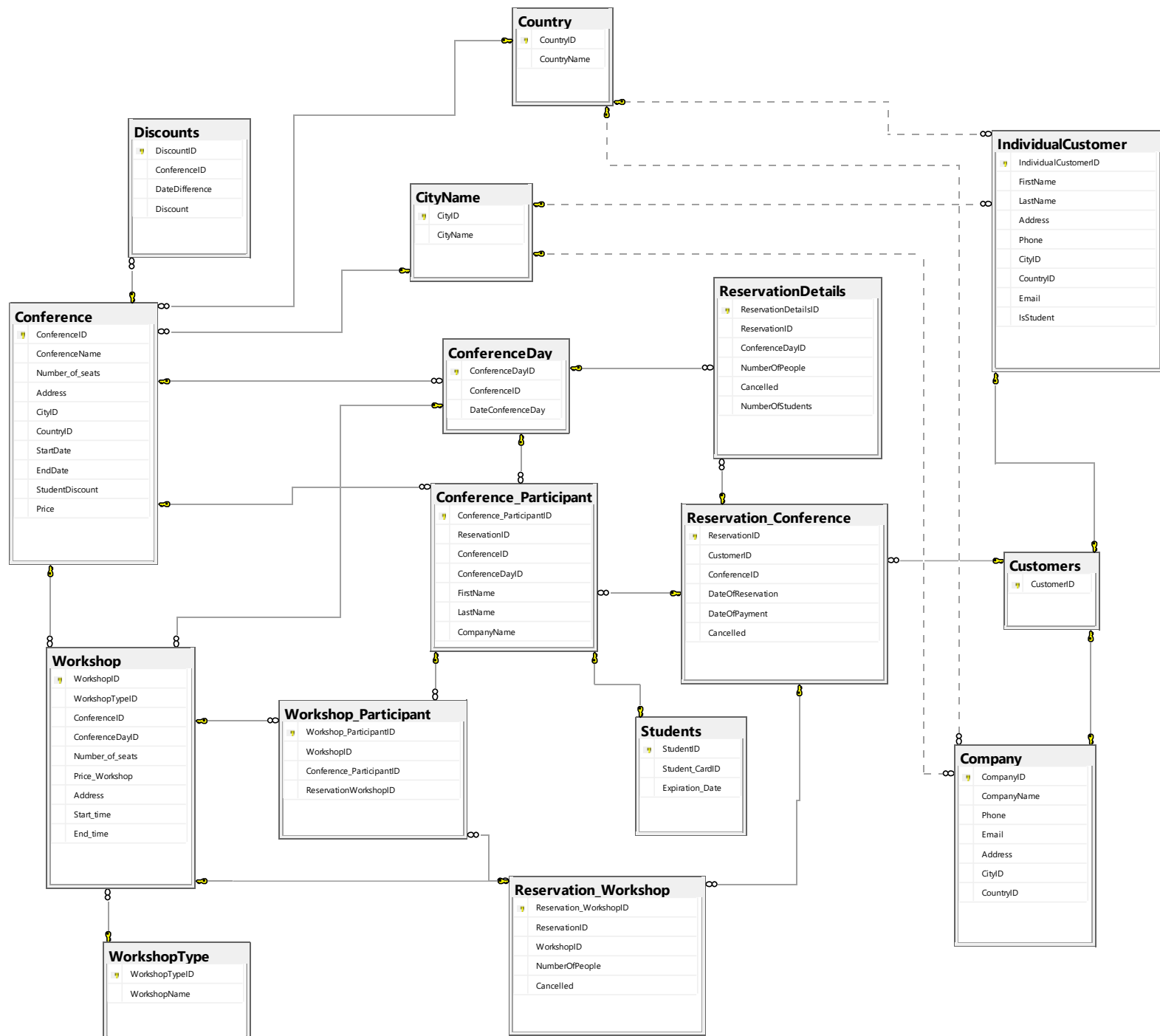
## Opis:

Projekt dotyczy firmy organizującej konferencje i warsztaty zarówno dla osób prywatnych jak i firm. Każda konferencja trwa jeden lub kilka dni, podczas których każdy z uczestników może wziąć udział w warsztatach. Ze względu na wcześniejszą rezerwacją oraz prawu skorzystania z ulg przysługującym studentom, funkcjonuje system zniżek.

Opis funkcji systemu wraz z informacją, co jaki użytkownik może wykonywać w systemie

- Administrator
  - Zarządzanie bazą z wszystkimi uprawnieniami
- Właściciel firmy
  - Pełny dostęp do danych oraz widoków
- Pracownik
  - Tworzenie i dostęp do konferencji i warsztatów
  - Obsługa klientów
  - Wprowadzanie danych dotyczących opłat oraz zniżek
- Klient
  - rejestracja na konferencję (wybór dni i warsztatów, podanie danych)
  - Indywidualny
  - Firma
    - podanie listy uczestników;
    - rezerwacja określonej liczby miejsc na dane dni i warsztaty
  - uiszczenie opłaty

## Schemat bazy:



## Tabele

Name
<b>dbo.CityName</b>
<b>dbo.Company</b>
<b>dbo.Conference</b>
<b>dbo.Conference_Participant</b>
<b>dbo.ConferenceDay</b>
<b>dbo.Country</b>
<b>dbo.Customers</b>
<b>dbo.Discounts</b>
<b>dbo.IndividualCustomer</b>
<b>dbo.Reservation_Conference</b>
<b>dbo.Reservation_Workshop</b>
<b>dbo.ReservationDetails</b>
<b>dbo.Students</b>
<b>dbo.Workshop</b>
<b>dbo.Workshop_Participant</b>
<b>dbo.WorkshopType</b>

## **[dbo].[CityName]**

Tabela reprezentująca nazwy miast w bazie danych. Używana jako słownik w pozostałych tabelach. Ilość rekordów:1001

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
PK	CityID	int	4	False
	CityName	nvarchar(50)	100	False

### Indexes

Key	Name	Key Columns	Unique
PK	PK_CityName	CityID	True

### SQL Script

```
CREATE TABLE [dbo].[CityName]
(
    [CityID] [int] NOT NULL,
    [CityName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[CityName] ADD CONSTRAINT [PK_CityName] PRIMARY KEY CLUSTERED
([CityID]) ON [PRIMARY]
GO
```

### Używane przez

[dbo].[Company]

[dbo].[Conference]

[dbo].[IndividualCustomer]

[dbo].[AddConference]

[dbo].[AddCustomerCompany]

[dbo].[AddCustomerIndividual]

[dbo].[ChangeCompanyData]

[dbo].[ChangeIndividualCustomerData]

## **[dbo].[Company]**

Tabela reprezentująca Klienta Firmowego w bazie danych. Ilość rekordów:3001

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	CompanyID	int	4	False
	CompanyName	nvarchar(50)	100	False
	Phone	nvarchar(50)	100	False
	Email	nvarchar(50)	100	False
	Address	nvarchar(50)	100	False
<b>FK</b>	CityID	int	4	False
<b>FK</b>	CountryID	int	4	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Company_1	CompanyID	True
	IX_Company	CompanyID	True
	CompanyName	CompanyName	

### Foreign Keys

Name	No Check	Columns
<b>FK_Company_CityName</b>	True	CityID->[dbo].[CityName].[CityID]
<b>FK_Company_Country</b>	True	CountryID->[dbo].[Country].[CountryID]
<b>FK_Company_Customers</b>		CompanyID->[dbo].[Customers].[CustomerID]

## SQL Script

---

```
CREATE TABLE [dbo].[Company]

([CompanyID] [int] NOT NULL,

[CompanyName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[Phone] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[Email] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[Address] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[CityID] [int] NOT NULL,

[CountryID] [int] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Company] ADD CONSTRAINT [PK_Company_1] PRIMARY KEY CLUSTERED
([CompanyID]) ON [PRIMARY]

GO

CREATE UNIQUE NONCLUSTERED INDEX [IX_Company] ON [dbo].[Company] ([CompanyID]) ON
[PRIMARY]

GO

CREATE NONCLUSTERED INDEX [CompanyName] ON [dbo].[Company] ([CompanyName]) ON
[PRIMARY]

GO

ALTER TABLE [dbo].[Company] WITH NOCHECK ADD CONSTRAINT [FK_Company_CityName]
FOREIGN KEY ([CityID]) REFERENCES [dbo].[CityName] ([CityID])

GO

ALTER TABLE [dbo].[Company] WITH NOCHECK ADD CONSTRAINT [FK_Company_Country]
FOREIGN KEY ([CountryID]) REFERENCES [dbo].[Country] ([CountryID])

GO

ALTER TABLE [dbo].[Company] ADD CONSTRAINT [FK_Company_Customers] FOREIGN KEY
([CompanyID]) REFERENCES [dbo].[Customers] ([CustomerID])

GO

ALTER TABLE [dbo].[Company] NOCHECK CONSTRAINT [FK_Company_CityName]

GO

ALTER TABLE [dbo].[Company] NOCHECK CONSTRAINT [FK_Company_Country]

GO
```



## Korzysta z

---

[dbo].[CityName]

[dbo].[Country]

[dbo].[Customers]

## Używane przez

---

[dbo].[CancelledReservations]

[dbo].[GeneratorCompany]

[dbo].[GeneratorConference\_participantCompany]

[dbo].[GeneratorReservationDetailsCompany]

[dbo].[GeneratorReservationsIDCompany]

[dbo].[GeneratorWorkshopKompania]

[dbo].[AddConferenceParticipant]

[dbo].[AddCustomerCompany]

[dbo].[ChangeCompanyData]

[dbo].[Conference\_Participants]

## **[dbo].[Conference]**

Tabela reprezentująca Konferencje w bazie danych. Ilość rekordów:102

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	ConferenceID	int	4	False
	ConferenceName	nvarchar(50)	100	False
	Number_of_seats	int	4	True
	Address	varchar(50)	50	True
<b>FK</b>	CityID	int	4	False
<b>FK</b>	CountryID	int	4	False
	StartDate	date	3	True
	EndDate	date	3	True
	StudentDiscount	real	4	True
	Price	money	8	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Conference	ConferenceID	True
	IX_Conference	ConferenceName	
	IX_Conference_1	CountryID	
	IX_Conference_2	CityID	

### Foreign Keys

Name	Columns
<b>FK_Conference_CityName</b>	CityID->[dbo].[CityName].[CityID]
<b>FK_Conference_Country</b>	CountryID->[dbo].[Country].[CountryID]

## SQL Script

---

```
CREATE TABLE [dbo].[Conference]
(
    [ConferenceID] [int] NOT NULL,
    [ConferenceName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,
    [Number_of_seats] [int] NULL,
    [Address] [varchar] (50) COLLATE Polish_CI_AS NULL,
    [CityID] [int] NOT NULL,
    [CountryID] [int] NOT NULL,
    [StartDate] [date] NULL,
    [EndDate] [date] NULL,
    [StudentDiscount] [real] NULL,
    [Price] [money] NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Conference] ADD CONSTRAINT [PK_Conference] PRIMARY KEY CLUSTERED
([ConferenceID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [IX_Conference_2] ON [dbo].[Conference] ([CityID]) ON
[PRIMARY]
GO

CREATE NONCLUSTERED INDEX [IX_Conference] ON [dbo].[Conference] ([ConferenceName])
ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [IX_Conference_1] ON [dbo].[Conference] ([CountryID]) ON
[PRIMARY]
GO

ALTER TABLE [dbo].[Conference] ADD CONSTRAINT [FK_Conference_CityName] FOREIGN KEY
([CityID]) REFERENCES [dbo].[CityName] ([CityID])
GO

ALTER TABLE [dbo].[Conference] ADD CONSTRAINT [FK_Conference_Country] FOREIGN KEY
([CountryID]) REFERENCES [dbo].[Country] ([CountryID])
GO
```

## Korzysta z

---

[dbo].[CityName]

[dbo].[Country]

## Używane przez

---

[dbo].[Conference\_Participant]

[dbo].[ConferenceDay]

[dbo].[Discounts]

[dbo].[Workshop]

[dbo].[ConferenceDayParticipants]

[dbo].[ConferenceParticipants]

[dbo].[PopularConferences]

[dbo].[PriceOfReservation]

[dbo].[WorkshopsInConferenceList]

[dbo].[WorkshopsInDayList]

[dbo].[AddConference]

[dbo].[AddConferenceDay]

[dbo].[AddDiscount]

[dbo].[AddReservation\_Conference]

[dbo].[AddReservationDetails]

[dbo].[AddWorkshop]

[dbo].[ConferenceDayAvailablePlaces]

[dbo].[ConferenceDayFreePlaces]

[dbo].[DateDifferenceDiscount]

[dbo].[GetDiscount]

[dbo].[Reservation\_ConferenceValue]

[dbo].[StudentDiscount]

## **[dbo].[Conference\_Participant]**

Tabela reprezentująca uczestnika konferencji w danym dniu. Ilość rekordów: 106327

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	Conference_ParticipantID	int	4	False
<b>FK</b>	ReservationID	int	4	False
<b>FK</b>	ConferenceID	int	4	False
<b>FK</b>	ConferenceDayID	int	4	False
	FirstName	nvarchar(50)	100	False
	LastName	nvarchar(50)	100	False
	CompanyName	nvarchar(50)	100	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Conference_Participant	Conference_ParticipantID	True
	ConferenceID	ConferenceID	
	LastName	LastName	

### Foreign Keys

Name	Columns
<b>FK_Conference_Participant_-Conference</b>	ConferenceID->[dbo].[Conference].[ConferenceID]
<b>FK_Conference_Participant_-ConferenceDay</b>	ConferenceDayID->[dbo].[ConferenceDay].[ConferenceDayID]
<b>FK_Conference_Participant_-Reservation_Conference</b>	ReservationID->[dbo].[Reservation_Conference].[ReservationID]

## SQL Script

---

```
CREATE TABLE [dbo].[Conference_Participant]

(

[Conference_ParticipantID] [int] NOT NULL,

[ReservationID] [int] NOT NULL,

[ConferenceID] [int] NOT NULL,

[ConferenceDayID] [int] NOT NULL,

[FirstName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[LastName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL,

[CompanyName] [nvarchar] (50) COLLATE Polish_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Conference_Participant] ADD CONSTRAINT [PK_Conference_
Participant] PRIMARY KEY CLUSTERED ([Conference_ParticipantID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [ConferenceID] ON [dbo].[Conference_Participant]
([ConferenceID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [LastName] ON [dbo].[Conference_Participant] ([LastName])
ON [PRIMARY]

GO

ALTER TABLE [dbo].[Conference_Participant] ADD CONSTRAINT [FK_Conference_
Participant_Conference] FOREIGN KEY ([ConferenceID]) REFERENCES [dbo].[Conference]
([ConferenceID])

GO

ALTER TABLE [dbo].[Conference_Participant] ADD CONSTRAINT [FK_Conference_
Participant_ConferenceDay] FOREIGN KEY ([ConferenceDayID]) REFERENCES
[dbo].[ConferenceDay] ([ConferenceDayID])

GO

ALTER TABLE [dbo].[Conference_Participant] ADD CONSTRAINT [FK_Conference_
Participant_Reservation_Conference] FOREIGN KEY ([ReservationID]) REFERENCES
[dbo].[Reservation_Conference] ([ReservationID])

GO
```

## Korzysta z

---

[dbo].[Conference]

[dbo].[ConferenceDay]

[dbo].[Reservation\_Conference]

## Używane przez

---

[dbo].[Students]

[dbo].[Workshop\_Participant]

[dbo].[ConferenceDayParticipants]

[dbo].[ConferenceParticipants]

[dbo].[GeneratorParticipants\_IndividualStudent]

[dbo].[GeneratorWorkshopParticipantsAdding]

[dbo].[WorkshopParticipants]

[dbo].[AddConferenceParticipant]

[dbo].[AddReservationDetails]

[dbo].[DayParticipantsList]

[dbo].[ListOfWorkshopParticipants]

## **[dbo].[ConferenceDay]**

Tabela reprezentująca określony Dzień Konferencji w bazie danych. Ilość rekordów: 379

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	ConferenceDayID	int	4	False
<b>FK</b>	ConferenceID	int	4	True
	DateConferenceDay	date	3	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_ConferenceDay	ConferenceDayID	True
	ConferenceID	ConferenceID	

### Foreign Keys

Name	Columns
<b>FK_ConferenceDay_Conference</b>	ConferenceID->[dbo].[Conference].[ConferenceID]



## SQL Script

---

```
CREATE TABLE [dbo].[ConferenceDay]
(
[ConferenceDayID] [int] NOT NULL,
[ConferenceID] [int] NULL,
[DateConferenceDay] [date] NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[ConferenceDay] ADD CONSTRAINT [PK_ConferenceDay] PRIMARY KEY
CLUSTERED ([ConferenceDayID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [ConferenceID] ON [dbo].[ConferenceDay] ([ConferenceID])
ON [PRIMARY]
GO

ALTER TABLE [dbo].[ConferenceDay] ADD CONSTRAINT [FK_ConferenceDay_Conference]
FOREIGN KEY ([ConferenceID]) REFERENCES [dbo].[Conference] ([ConferenceID])
GO
```

## Korzysta z

---

[dbo].[Conference]

## Używane przez

---

[dbo].[Conference\_Participant]

[dbo].[ReservationDetails]

[dbo].[Workshop]

[dbo].[ConferenceDayParticipants]

[dbo].[GeneratorConference\_participantCompany]

[dbo].[GeneratorParticipants\_Individual]

[dbo].[GeneratorReservationDetailsCompany]

[dbo].[GeneratorReservationDetailsIndividual]

[dbo].[GeneratorReservationsIDCompany]

[dbo].[GeneratorReservationsIDIndywidual]

[dbo].[WorkshopParticipants]

[dbo].[WorkshopsInDayList]

[dbo].[AddConferenceDay]

[dbo].[AddReservationDetails]

[dbo].[CollisionsInWorkshops]

[dbo].[ConferenceDayAvailablePlaces]

[dbo].[ConferenceDayFreePlaces]

[dbo].[StudentDiscount]

## **[dbo].[Country]**

Tabela reprezentująca kraje, w których odbywają się konferencje oraz z których pochodzą klienci. Ilość rekordów: 207

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	CountryID	int	4	False
	CountryName	nvarchar(50)	100	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Country	CountryID	True
	IX_Country	CountryID	True
	IX_Country_1	CountryName	True

### SQL Script

```
CREATE TABLE [dbo].[Country]
(
    [CountryID] [int] NOT NULL,
    [CountryName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Country] ADD CONSTRAINT [PK_Country] PRIMARY KEY CLUSTERED
([CountryID]) ON [PRIMARY]
GO

CREATE UNIQUE NONCLUSTERED INDEX [IX_Country] ON [dbo].[Country] ([CountryID]) ON
[PRIMARY]
GO

CREATE UNIQUE NONCLUSTERED INDEX [IX_Country_1] ON [dbo].[Country] ([CountryName])
ON [PRIMARY]
GO
```

## Używane przez

---

[dbo].[Company]

[dbo].[Conference]

[dbo].[IndividualCustomer]

[dbo].[AddConference]

[dbo].[AddCustomerCompany]

[dbo].[AddCustomerIndividual]

[dbo].[ChangeCompanyData]

[dbo].[ChangeIndividualCustomerData]

## **[dbo].[Customers]**

Tabela reprezentująca numery ID Klienta Indywidualnego oraz firmowego. Ilość rekordów: 8003

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
PK	CustomerID	int	4	False

### Indexes

Key	Name	Key Columns	Unique
PK	PK_Customers	CustomerID	True

### SQL Script

```
CREATE TABLE [dbo].[Customers]
(
    [CustomerID] [int] NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Customers] ADD CONSTRAINT [PK_Customers] PRIMARY KEY CLUSTERED
([CustomerID]) ON [PRIMARY]
GO
```

## Używane przez

---

[dbo].[Company]

[dbo].[IndividualCustomer]

[dbo].[Reservation\_Conference]

[dbo].[GeneratorCompany]

[dbo].[AddCustomerCompany]

[dbo].[AddCustomerIndividual]

[dbo].[AddReservation\_Conference]

[dbo].[AddReservationWorkshop]

[dbo].[AddStudent]

[dbo].[Conference\_Participants]

[dbo].[StudentDiscount]

### **[dbo].[Discounts]**

Tabela zawierająca progi zniżkowe dla każdej konferencji. Wysokość zniżki zależy od tego, o ile przed rozpoczęciem konferencji klient dokonał rezerwacji. Ilość rekordów: 303

#### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	DiscountID	int	4	False
<b>FK</b>	ConferenceID	int	4	False
	DateDifference	int	4	False
	Discount	real	4	False

#### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Discounts	DiscountID	True
	IX_Discounts	ConferenceID	

#### Foreign Keys

Name	Columns
<b>FK_Discounts_Conference</b>	ConferenceID->[dbo].[Conference].[ConferenceID]

## SQL Script

---

```
CREATE TABLE [dbo].[Discounts]
(
    [DiscountID] [int] NOT NULL,
    [ConferenceID] [int] NULL,
    [DateDifference] [int] NULL,
    [Discount] [real] NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Discounts] ADD CONSTRAINT [PK_Discounts] PRIMARY KEY CLUSTERED
([DiscountID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [IX_Discounts] ON [dbo].[Discounts] ([ConferenceID]) ON
[PRIMARY]
GO

ALTER TABLE [dbo].[Discounts] ADD CONSTRAINT [FK_Discounts_Conference] FOREIGN KEY
([ConferenceID]) REFERENCES [dbo].[Conference] ([ConferenceID])
GO
```

## Korzysta z

---

[dbo].[Conference]

## Używane przez

---

[dbo].[PriceOfReservation]

[dbo].[AddDiscount]

[dbo].[GetDiscount]



## **[dbo].[IndividualCustomer]**

Tabela reprezentująca Klienta Indywidualnego. Ilość rekordów: 4001

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	IndividualCustomerID	int	4	False
	FirstName	nvarchar(50)	100	False
	LastName	nvarchar(50)	100	False
	Address	varchar(50)	50	False
	Phone	nvarchar(50)	100	False
<b>FK</b>	CityID	int	4	False
<b>FK</b>	CountryID	int	4	False
	Email	nvarchar(50)	100	False
	IsStudent	bit	1	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_IndividualCustomer	IndividualCustomerID	True

### Foreign Keys

Name	No Check	Columns
<b>FK_IndividualCustomer_CityName</b>	True	CityID->[dbo].[CityName].[CityID]
<b>FK_IndividualCustomer_Country</b>	True	CountryID->[dbo].[Country].[CountryID]
<b>FK_IndividualCustomer_Customers</b>		IndividualCustomerID->[dbo].[Customers].[CustomerID]

## SQL Script

---

```
CREATE TABLE [dbo].[IndividualCustomer]
(
[IndividualCustomerID] [int] NOT NULL,
[FirstName] [nvarchar] (50) NOT NULL,
[LastName] [nvarchar] (50) NOT NULL,
[Address] [varchar] (50) NOT NULL,
[Phone] [nvarchar] (50) NOT NULL,
[CityID] [int] NOT NULL,
[CountryID] [int] NOT NULL,
[Email] [nvarchar] (50) NOT NULL,
[IsStudent] [bit] NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[IndividualCustomer] ADD CONSTRAINT [PK_IndividualCustomer]
PRIMARY KEY CLUSTERED ([IndividualCustomerID]) ON [PRIMARY]
GO

ALTER TABLE [dbo].[IndividualCustomer] WITH NOCHECK ADD CONSTRAINT [FK_Individual-
Customer_CityName] FOREIGN KEY ([CityID]) REFERENCES [dbo].[CityName] ([CityID])
GO

ALTER TABLE [dbo].[IndividualCustomer] WITH NOCHECK ADD CONSTRAINT [FK_Individual-
Customer_Country] FOREIGN KEY ([CountryID]) REFERENCES [dbo].[Country] ([Country-
ID])
GO

ALTER TABLE [dbo].[IndividualCustomer] ADD CONSTRAINT [FK_IndividualCustomer_-
Customers] FOREIGN KEY ([IndividualCustomerID]) REFERENCES [dbo].[Customers]
([CustomerID])
GO

ALTER TABLE [dbo].[IndividualCustomer] NOCHECK CONSTRAINT [FK_IndividualCustomer_-
CityName]
GO

ALTER TABLE [dbo].[IndividualCustomer] NOCHECK CONSTRAINT [FK_IndividualCustomer_-
Country]
GO
```

## Korzysta z

---

[dbo].[CityName]

[dbo].[Country]

[dbo].[Customers]

## Używane przez

---

[dbo].[CancelledReservations]

[dbo].[GeneratorCompany]

[dbo].[GeneratorParticipants\_Individual]

[dbo].[GeneratorParticipants\_IndividualStudent]

[dbo].[GeneratorReservationDetailsIndividual]

[dbo].[GeneratorReservationsIDIndywidual]

[dbo].[GeneratorWorkshopIndywidualny]

[dbo].[AddConferenceParticipant]

[dbo].[AddCustomerIndividual]

[dbo].[AddReservationDetails]

[dbo].[ChangeIndividualCustomerData]

## **[dbo].[Reservation\_Conference]**

Tabela zawierająca rezerwacje poszczególnych klientów na daną konferencję. Ilość rekordów: 6004

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	ReservationID	int	4	False
<b>FK</b>	CustomerID	int	4	False
	ConferenceID	int	4	False
	DateOfReservation	datetime	8	False
	DateOfPayment	datetime	8	True
	Cancelled	bit	1	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Reservation_Conference	ReservationID	True
	CustomerID	CustomerID	
	IX_Reservation_Conference	ConferenceID	

### Foreign Keys

Name	Columns
<b>FK_Reservation_Conference_Customers</b>	CustomerID->[dbo].[Customers].[CustomerID]

## SQL Script

---

```
CREATE TABLE [dbo].[Reservation_Conference]

(

[ReservationID] [int] NOT NULL,

[CustomerID] [int] NOT NULL,

[ConferenceID] [int] NOT NULL,

[DateOfReservation] [datetime] NOT NULL,

[DateOfPayment] [datetime] NULL,

[Cancelled] [bit] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Reservation_Conference] ADD CONSTRAINT [PK_Reservation_Conference] PRIMARY KEY CLUSTERED ([ReservationID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [IX_Reservation_Conference] ON [dbo].[Reservation_Conference] ([ConferenceID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [CustomerID] ON [dbo].[Reservation_Conference] ([CustomerID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Reservation_Conference] ADD CONSTRAINT [FK_Reservation_Conference_Customers] FOREIGN KEY ([CustomerID]) REFERENCES [dbo].[Customers] ([CustomerID])

GO
```

## Korzysta z

---

[dbo].[Customers]

## Używane przez

---

[dbo].[Conference\_Participant]

[dbo].[Reservation\_Workshop]

[dbo].[ReservationDetails]

[dbo].[CancelledReservations]

[dbo].[ConferenceDayParticipants]

[dbo].[ConferenceParticipants]

[dbo].[ConferenceToCancelled]

[dbo].[GeneratorConference\_participantCompany]

[dbo].[GeneratorParticipants\_Individual]

[dbo].[GeneratorParticipants\_IndividualStudent]

[dbo].[GeneratorReservationDetailsCompany]

[dbo].[GeneratorReservationDetailsIndividual]

[dbo].[GeneratorReservationsIDCompany]

[dbo].[GeneratorReservationsIDIndywidual]

[dbo].[GeneratorWorkshopIndywidualny]

[dbo].[GeneratorWorkshopKompania]

[dbo].[NumberOfCustomerReservations]

[dbo].[PopularConferences]

[dbo].[PriceOfReservation]

[dbo].[RegularCustomers]

[dbo].[AddConferenceParticipant]

[dbo].[AddReservation\_Conference]

[dbo].[AddReservationDetails]

[dbo].[CancelReservation\_Conference]

[dbo].[UpdatePaymentDate]

[dbo].[Conference\_Participants]

[dbo].[DateDifferenceDiscount]

[dbo].[DayParticipantsList]

[dbo].[ListOfWorkshopParticipants]

[dbo].[Reservation\_ConferenceValue]

[dbo].[Reservation\_WorkshopValue]

[dbo].[StudentDiscount]

## **[dbo].[Reservation\_Workshop]**

Tabela zawierająca rezerwacje poszczególnych warsztatów dla danej rezerwacji konferencji.

Ilość rekordów: 4952

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	Reservation_WorkshopID	int	4	False
<b>FK</b>	ReservationID	int	4	False
<b>FK</b>	WorkshopID	int	4	False
	NumberOfPeople	int	4	False
	Cancelled	bit	1	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Reservation_Workshop	Reservation_WorkshopID	True
	ReservationID	ReservationID	
	WorkshopID	WorkshopID	

### Foreign Keys

Name	Columns
<b>FK_Reservation_Workshop_Reservation_Conference</b>	ReservationID->[dbo].[Reservation_Conference].[ReservationID]
<b>FK_Reservation_Workshop_Workshop</b>	WorkshopID->[dbo].[Workshop].[WorkshopID]



## SQL Script

---

```
CREATE TABLE [dbo].[Reservation_Workshop]
(
[Reservation_WorkshopID] [int] NOT NULL,
[ReservationID] [int] NOT NULL,
[WorkshopID] [int] NOT NULL,
[NumberOfPeople] [int] NOT NULL,
[Cancelled] [bit] NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Reservation_Workshop] ADD CONSTRAINT [PK_Reservation_Workshop]
PRIMARY KEY CLUSTERED ([Reservation_WorkshopID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [ReservationID] ON [dbo].[Reservation_Workshop]
([ReservationID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [WorkshopID] ON [dbo].[Reservation_Workshop] ([Workshop-
ID]) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Reservation_Workshop] ADD CONSTRAINT [FK_Reservation_Workshop_-
Reservation_Conference] FOREIGN KEY ([ReservationID]) REFERENCES
[dbo].[Reservation_Conference] ([ReservationID])
GO

ALTER TABLE [dbo].[Reservation_Workshop] ADD CONSTRAINT [FK_Reservation_Workshop_-
Workshop] FOREIGN KEY ([WorkshopID]) REFERENCES [dbo].[Workshop] ([WorkshopID])
GO
```

## Korzysta z

---

[dbo].[Reservation\_Conference]

[dbo].[Workshop]

## Używane przez

---

[dbo].[Workshop\_Participant]

[dbo].[GeneratorWorkshopParticipantsAdding]

[dbo].[PopularWorkshops]

[dbo].[AddReservationWorkshop]

[dbo].[FreePlacesForWorkshop]

[dbo].[ListOfWorkshopParticipants]

[dbo].[Reservation\_WorkshopValue]

## **[dbo].[ReservationDetails]**

Tabela zawierająca szczegóły rezerwacji konferencji danego klienta. Na każdy dzień konferencji stworzony zostaje osobny rekord. Ilość rekordów: 21644

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	ReservationDetailsID	int	4	False
<b>FK</b>	ReservationID	int	4	False
<b>FK</b>	ConferenceDayID	int	4	False
	NumberOfPeople	int	4	True
	Cancelled	bit	1	True
	NumberOfStudents	int	4	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_ReservationDetails	ReservationDetailsID	True
	IX_ReservationDetails	ReservationID	
	IX_ReservationDetails_1	ConferenceDayID	

### Triggers

Name	ANSI Nulls On	Quoted Identifier On	On
<b>MoreSeatsThanPeople</b>	True	True	After Insert

### Foreign Keys

Name	Columns
<b>FK_ReservationDetails_ConferenceDay</b>	ConferenceDayID->[dbo].[ConferenceDay].[ConferenceDayID]
<b>FK_ReservationDetails_Reservation_Conference</b>	ReservationID->[dbo].[Reservation_Conference].[ReservationID]

## SQL Script

---

```
CREATE TABLE [dbo].[ReservationDetails]

(

[ReservationDetailsID] [int] NOT NULL,

[ReservationID] [int] NOT NULL,

[ConferenceDayID] [int] NOT NULL,

[NumberOfPeople] [int] NULL,

[Cancelled] [bit] NULL,

[NumberOfStudents] [int] NULL

) ON [PRIMARY]

GO

--sprawdza, czy ilość miejsc dostępnych danego dnia konferencji nie jest mniejsza
od ilości miejsc zarezerwowanych w tworzonej rezerwacji.

CREATE TRIGGER [dbo].[MoreSeatsThanPeople] on [dbo].[ReservationDetails]

AFTER INSERT

AS

BEGIN

SET NOCOUNT ON

DECLARE @reserved int;

DECLARE @free int;

SET @reserved = (SELECT NumberOfPeople FROM INSERTED);

SET @free = dbo.ConferenceDayFreePlaces((SELECT ConferenceDayID FROM INSERTED)) +
@reserved;

IF(@free < @reserved)

BEGIN

RAISERROR('Only %d places are available', 16, 1, @reserved, @free)

ROLLBACK TRANSACTION

END

END

GO

ALTER TABLE [dbo].[ReservationDetails] ADD CONSTRAINT [PK_ReservationDetails]
PRIMARY KEY CLUSTERED ([ReservationDetailsID]) ON [PRIMARY]
```

```

GO

CREATE NONCLUSTERED INDEX [IX_ReservationDetails_1] ON [dbo].[ReservationDetails]
([ConferenceDayID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [IX_ReservationDetails] ON [dbo].[ReservationDetails]
([ReservationID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[ReservationDetails] ADD CONSTRAINT [FK_ReservationDetails_-
ConferenceDay] FOREIGN KEY ([ConferenceDayID]) REFERENCES [dbo].[ConferenceDay]
([ConferenceDayID])

GO

ALTER TABLE [dbo].[ReservationDetails] ADD CONSTRAINT [FK_ReservationDetails_-
Reservation_Conference] FOREIGN KEY ([ReservationID]) REFERENCES
[dbo].[Reservation_Conference] ([ReservationID])

GO

```

## Korzysta z

---

[dbo].[ConferenceDay]

[dbo].[Reservation\_Conference]

## Używane przez

---

[dbo].[GeneratorConference\_participantCompany]

[dbo].[GeneratorWorkshopIndywidualny]

[dbo].[GeneratorWorkshopKompania]

[dbo].[PopularConferences]

[dbo].[PriceOfReservation]

[dbo].[AddReservationDetails]

[dbo].[ConferenceDayAvailablePlaces]

[dbo].[ConferenceDayFreePlaces]

[dbo].[DayParticipantsList]

[dbo].[StudentDiscount]

## **[dbo].[Students]**

Tabela zawierająca dane studenta - uczestnika konferencji. Ilość rekordów: 5495

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK,FK</b>	StudentID	int	4	False
	Student_CardID	int	4	True
	Expiration_Date	date	3	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Students	StudentID	True
	Student_CardID	Student_CardID	True

### Foreign Keys

Name	Columns
<b>FK_Students_Conference_Participant</b>	StudentID->[dbo].[Conference_Participant].[Conference_ParticipantID]

## SQL Script

---

```
CREATE TABLE [dbo].[Students]
(
    [StudentID] [int] NOT NULL,
    [Student_CardID] [int] NULL,
    [Expiration_Date] [date] NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Students] ADD CONSTRAINT [PK_Students] PRIMARY KEY CLUSTERED
([StudentID]) ON [PRIMARY]

GO

CREATE UNIQUE NONCLUSTERED INDEX [Student_CardID] ON [dbo].[Students] ([Student_
CardID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Students] ADD CONSTRAINT [FK_Students_Conference_Participant]
FOREIGN KEY ([StudentID]) REFERENCES [dbo].[Conference_Participant] ([Conference_
ParticipantID])

GO
```

## Korzysta z

---

[dbo].[Conference\_Participant]

## Używane przez

---

[dbo].[AddConferenceParticipant]

[dbo].[AddStudent]

[dbo].[StudentDiscount]

## **[dbo].[Workshop]**

Tabela zawierająca informacje dotyczące konkretnego warsztatu. Ilość rekordów: 1134

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	WorkshopID	int	4	False
<b>FK</b>	WorkshopTypeID	int	4	False
<b>FK</b>	ConferenceID	int	4	False
<b>FK</b>	ConferenceDayID	int	4	False
	Number_of_seats	int	4	True
	Price_Workshop	money	8	True
	Address	nvarchar(50)	100	True
	Start_time	datetime	8	True
	End_time	datetime	8	True

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Workshop	WorkshopID	True
	ConferenceDayID	ConferenceDayID	
	ConferenceID	ConferenceID	
	IX_Workshop	WorkshopTypeID	

### Foreign Keys

Name	Columns
<b>FK_Workshop_Conference</b>	ConferenceID->[dbo].[Conference].[ConferenceID]
<b>FK_Workshop_ConferenceDay</b>	ConferenceDayID->[dbo].[ConferenceDay].[ConferenceDayID]
<b>FK_Workshop_WorkshopType</b>	WorkshopTypeID->[dbo].[WorkshopType].[WorkshopTypeID]



## SQL Script

---

```
CREATE TABLE [dbo].[Workshop]

([WorkshopID] [int] NOT NULL,

[WorkshopTypeID] [int] NOT NULL,

[ConferenceID] [int] NOT NULL,

[ConferenceDayID] [int] NOT NULL,

[Number_of_seats] [int] NULL,

[Price_Workshop] [money] NULL,

[Address] [nvarchar] (50) COLLATE Polish_CI_AS NULL,

[Start_time] [datetime] NULL,

[End_time] [datetime] NULL ) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Workshop] ADD CONSTRAINT [PK_Workshop] PRIMARY KEY CLUSTERED

([WorkshopID]) ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [ConferenceDayID] ON [dbo].[Workshop] ([ConferenceDayID])

ON [PRIMARY]

GO

CREATE NONCLUSTERED INDEX [ConferenceID] ON [dbo].[Workshop] ([ConferenceID]) ON

[PRIMARY]

GO

CREATE NONCLUSTERED INDEX [IX_Workshop] ON [dbo].[Workshop] ([WorkshopTypeID]) ON

[PRIMARY]

GO

ALTER TABLE [dbo].[Workshop] ADD CONSTRAINT [FK_Workshop_Conference] FOREIGN KEY

([ConferenceID]) REFERENCES [dbo].[Conference] ([ConferenceID])

GO

ALTER TABLE [dbo].[Workshop] ADD CONSTRAINT [FK_Workshop_ConferenceDay] FOREIGN KEY

([ConferenceDayID]) REFERENCES [dbo].[ConferenceDay] ([ConferenceDayID])

GO

ALTER TABLE [dbo].[Workshop] ADD CONSTRAINT [FK_Workshop_WorkshopType] FOREIGN KEY

([WorkshopTypeID]) REFERENCES [dbo].[WorkshopType] ([WorkshopTypeID])

GO
```

## **Korzysta z**

---

[dbo].[Conference]

[dbo].[ConferenceDay]

[dbo].[WorkshopType]

## **Używane przez**

---

[dbo].[Reservation\_Workshop]

[dbo].[Workshop\_Participant]

[dbo].[GeneratorWorkshopIndywidualny]

[dbo].[GeneratorWorkshopKompania]

[dbo].[GeneratorWorkshopParticipantsAdding]

[dbo].[PopularWorkshops]

[dbo].[WorkshopParticipants]

[dbo].[WorkshopsInConferenceList]

[dbo].[WorkshopsInDayList]

[dbo].[AddWorkshop]

[dbo].[CollisionsInWorkshops]

[dbo].[FreePlacesForWorkshop]

[dbo].[ListOfWorkshopParticipants]

[dbo].[Reservation\_WorkshopValue]

## **[dbo].[Workshop\_Participant]**

Tabela zawierająca dane dotyczące uczestników warsztatów. Ilość rekordów: 15189

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	Workshop_ParticipantID	int	4	False
<b>FK</b>	WorkshopID	int	4	False
<b>FK</b>	Conference_ParticipantID	int	4	False
<b>FK</b>	ReservationWorkshopID	int	4	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_Workshop_Participant	Workshop_ParticipantID	True
	WorkshopID	WorkshopID	

### Foreign Keys

Name	Columns
<b>FK_Workshop_Participant_Conference_Participant</b>	Conference_ParticipantID->[dbo].[Conference_Participant].[Conference_ParticipantID]
<b>FK_Workshop_Participant_Reservation_Workshop</b>	ReservationWorkshopID->[dbo].[Reservation_Workshop].[Reservation_WorkshopID]
<b>FK_Workshop_Participant_Workshop</b>	WorkshopID->[dbo].[Workshop].[WorkshopID]

## SQL Script

---

```
CREATE TABLE [dbo].[Workshop_Participant]
(
[Workshop_ParticipantID] [int] NOT NULL,
[WorkshopID] [int] NOT NULL,
[Conference_ParticipantID] [int] NOT NULL,
[ReservationWorkshopID] [int] NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Workshop_Participant] ADD CONSTRAINT [PK_Workshop_Participant]
PRIMARY KEY CLUSTERED ([Workshop_ParticipantID]) ON [PRIMARY]
GO

CREATE NONCLUSTERED INDEX [WorkshopID] ON [dbo].[Workshop_Participant] ([Workshop-
ID]) ON [PRIMARY]
GO

ALTER TABLE [dbo].[Workshop_Participant] ADD CONSTRAINT [FK_Workshop_Participant_-
Conference_Participant] FOREIGN KEY ([Conference_ParticipantID]) REFERENCES
[dbo].[Conference_Participant] ([Conference_ParticipantID])
GO

ALTER TABLE [dbo].[Workshop_Participant] ADD CONSTRAINT [FK_Workshop_Participant_-
Reservation_Workshop] FOREIGN KEY ([ReservationWorkshopID]) REFERENCES
[dbo].[Reservation_Workshop] ([Reservation_WorkshopID])
GO

ALTER TABLE [dbo].[Workshop_Participant] ADD CONSTRAINT [FK_Workshop_Participant_-
Workshop] FOREIGN KEY ([WorkshopID]) REFERENCES [dbo].[Workshop] ([WorkshopID])
GO
```

## Korzysta z

---

[dbo].[Conference\_Participant]

[dbo].[Reservation\_Workshop]

[dbo].[Workshop]

## Używane przez

---

[dbo].[WorkshopParticipants]

## **[dbo].[WorkshopType]**

Tabela zawierająca nazwy warsztatów. Ilość rekordów: 33

### Columns

Key	Name	Data Type	Max Length (Bytes)	Allow Nulls
<b>PK</b>	WorkshopTypeID	int	4	False
	WorkshopName	nvarchar(50)	100	False

### Indexes

Key	Name	Key Columns	Unique
<b>PK</b>	PK_WorkshopType	WorkshopTypeID	True

### SQL Script

```
CREATE TABLE [dbo].[WorkshopType]
(
    [WorkshopTypeID] [int] NOT NULL,
    [WorkshopName] [nvarchar] (50) COLLATE Polish_CI_AS NOT NULL
) ON [PRIMARY]
GO

ALTER TABLE [dbo].[WorkshopType] ADD CONSTRAINT [PK_WorkshopType] PRIMARY KEY
CLUSTERED ([WorkshopTypeID]) ON [PRIMARY]
GO
```

### Używane przez

[dbo].[Workshop]

[dbo].[PopularWorkshops]

[dbo].[WorkshopParticipants]

[dbo].[WorkshopsInConferenceList]

[dbo].[WorkshopsInDayList]

[dbo].[AddWorkshop]

## Procedurey

Name
<b>dbo.AddConference</b>
<b>dbo.AddConferenceDay</b>
<b>dbo.AddConferenceParticipant</b>
<b>dbo.AddCustomerCompany</b>
<b>dbo.AddCustomerIndividual</b>
<b>dbo.AddDiscount</b>
<b>dbo.AddReservation_Conference</b>
<b>dbo.AddReservationDetails</b>
<b>dbo.AddReservationWorkshop</b>
<b>dbo.AddStudent</b>
<b>dbo.AddWorkshop</b>
<b>dbo.AddWorkshopParticipant</b>
<b>dbo.CancelReservation_Conference</b>
<b>dbo.ChangeCompanyData</b>
<b>dbo.ChangeIndividualCustomerData</b>
<b>dbo.UpdatePaymentDate</b>

## **[dbo].[AddConference]**

Procedura dodająca nową konferencję wraz z jej specyfikacjami.

### Parameters

Name	Data Type	Max Length (Bytes)
<b>@Name</b>	nvarchar(50)	100
<b>@StartDate</b>	date	3
<b>@EndDate</b>	date	3
<b>@NumberOfSeats</b>	int	4
<b>@StudentDiscount</b>	real	4
<b>@Address</b>	varchar(50)	50
<b>@CountryName</b>	varchar(50)	50
<b>@CityName</b>	varchar(50)	50
<b>@Price</b>	money	8

### SQL Script

```
CREATE PROCEDURE [dbo].[AddConference]

    @Name NVARCHAR(50),

    @StartDate DATE,

    @EndDate DATE,

    @NumberOfSeats INT,

    @StudentDiscount REAL,

    @Address VARCHAR(50),

    @CountryName VARCHAR(50),

    @CityName VARCHAR(50),

    @Price MONEY

AS

BEGIN

    SET NOCOUNT ON;

    IF ( @StartDate > @EndDate)

        BEGIN;

            THROW 51000, 'EndDate should not be earlier than StartDate.', 1

        END
```

```

IF ( @StudentDiscount < 0 OR @StudentDiscount > 1)

BEGIN ;

    THROW 51000, 'The discount must be between 0 and 1.',1

END


IF ( @StartDate < GETDATE())

BEGIN;

    THROW 51000, 'Conference cannot start in the past.', 1

END


IF @CountryName NOT IN (SELECT CountryName FROM Country)

BEGIN

DECLARE @CountryNewID INT

SET @CountryNewID = (SELECT TOP 1 CountryID

                    FROM Country

                    ORDER BY CountryID DESC)+1

INSERT INTO Country(CountryID,CountryName)

VALUES( @CountryNewID,@CountryName)

END


IF @CityName NOT IN (SELECT CityName FROM CityName)

BEGIN

DECLARE @CityNewID INT

SET @CityNewID = (SELECT TOP 1 CityID

                 FROM CityName

                 ORDER BY CityID DESC)+1

INSERT INTO CityName(CityID,CityName)

VALUES( @CityNewID,@CityName)

END

```



```

DECLARE @CountryID INT

SET @CountryID = (

    SELECT CountryID

    FROM Country

    WHERE CountryName = @CountryName

)

DECLARE @CityID INT

SET @CityID = (

    SELECT CityID

    FROM CityName

    WHERE CityName = @CityName

)

DECLARE @ConferenceID INT

SET @ConferenceID = (SELECT TOP 1 ConferenceID

                     FROM Conference

                     ORDER BY conferenceid DESC) + 1

INSERT INTO Conference (ConferenceID, ConferenceName, Number_of_seats,
Address, CityID, CountryID, StartDate, EndDate, StudentDiscount, Price)

VALUES (@ConferenceID, @Name, @NumberOfSeats, @Address, @CityID, @CountryID,
@StartDate, @EndDate, @StudentDiscount, @Price)

END

GO

```

## Używa

[dbo].[CityName]

[dbo].[Conference]

[dbo].[Country]

## ***[dbo].[AddConferenceDay]***

Procedura dodająca dzień konferencji dla konkretnej konferencji.

### Parameters

Name	Data Type	Max Length (Bytes)
@ConferenceID	int	4

### SQL Script

```
CREATE PROCEDURE [dbo].[AddConferenceDay]

    @ConferenceID int

AS

BEGIN

    SET NOCOUNT ON;

    DECLARE @StartDate date

    DECLARE @EndDate date

    SET @EndDate = (

        SELECT EndDate from

        Conference

        WHERE ConferenceID=@ConferenceID)

    SET @StartDate = (

        SELECT StartDate from

        Conference

        WHERE ConferenceID=@ConferenceID)

    DECLARE @Day int

    DECLARE @Date date
```

```
SET @Date = @StartDate

DECLARE @ConferenceDayID int

WHILE (@Date<=@EndDate)

BEGIN

SET @Day = day(@Date)

SET @ConferenceDayID =concat (@Day,0,@ConferenceID)

INSERT INTO ConferenceDay (ConferenceDayID,ConferenceID,DateConferenceDay)

VALUES (@ConferenceDayID,@ConferenceID,@Date)

SET @Date = DATEADD(day,1,@Date)

END

END

GO
```

## Używa

---

[dbo].[Conference]

[dbo].[ConferenceDay]



```

IF (@CustomerID IN (SELECT IndividualCustomerID FROM IndividualCustomer))

    BEGIN;

        SET @CompanyName = NULL

        SET @IsStudent = (SELECT IndividualCustomerID FROM IndividualCustomer
                            WHERE IndividualCustomerID = @CustomerID)

    END

ELSE

    BEGIN;

        SET @CompanyName = (SELECT CompanyName FROM Company
                              WHERE CompanyID = @CustomerID)

    END

DECLARE @ConferenceParticipantID INT

SET @ConferenceParticipantID = (SELECT TOP 1 Conference_ParticipantID FROM
Conference_Participant
                                ORDER BY Conference_ParticipantID DESC) + 1

DECLARE @ConferenceID INT

SET @ConferenceID = (SELECT ConferenceID FROM Reservation_Conference
                     WHERE ReservationID = @ReservationID)

DECLARE @AlreadyRegistered INT

SET @AlreadyRegistered = (SELECT COUNT(@ConferenceParticipantID) FROM
dbo.Conference_Participant
                            WHERE ReservationID = @ReservationID
                                AND ConferenceDayID = @ConferenceDayID)

DECLARE @ReservationDetailsID INT

SET @ReservationDetailsID = (SELECT @ReservationDetailsID FROM dbo.Reservation-
Details
                              WHERE ConferenceDayID = ConferenceDayID

```

```

        AND ReservationID = @ReservationID)

IF ((SELECT NumberOfPeople FROM dbo.ReservationDetails
     WHERE ReservationDetailsID = @ReservationDetailsID) <= @AlreadyRegistered )

    BEGIN;

        THROW 51000, 'You cannot add another participant because you have already registered
all of reserved places', 0

    END

INSERT INTO Conference_Participant(Conference_ParticipantID, ReservationID, ConferenceID,
FirstName, LastName, Companyname)

VALUES (@ConferenceParticipantID, @ReservationID, @ConferenceID, @FirstName, @LastName,
@CompanyName)

IF (@IsStudent =1 AND @Expiration IS NULL)

    BEGIN;

        THROW 51000, 'If participant is a student you need to add the expiration date of
Student ID.', 0

    END

    IF (@IsStudent =1 AND @StudentCardID IS NULL)

        BEGIN;

            THROW 51000, 'If participant is a student you need to add Student ID number.', 0

        END

IF(@IsStudent =1 AND @StudentCardID IS NOT NULL AND @Expiration IS NOT NULL)

BEGIN;

    INSERT INTO Students(StudentID, Student_CardID, Expiration_Date)
VALUES (@ConferenceParticipantID, @StudentCardID, @Expiration)

END

END

GO

```

## Używa

---

[dbo].[Company]

[dbo].[Conference\_Participant]

[dbo].[IndividualCustomer]

[dbo].[Reservation\_Conference]

[dbo].[ReservationDetails]

[dbo].[Students]

## **[dbo].[AddCustomerCompany]**

Procedura dodająca klienta, który jest firmą.

### Parameters

Name	Data Type	Max Length (Bytes)
@CompanyName	nvarchar(50)	100
@Phone	nvarchar(50)	100
@Email	nvarchar(50)	100
@Address	nvarchar(50)	100
@CityName	nvarchar(50)	100
@CountryName	nvarchar(50)	100

### SQL Script

```
CREATE PROCEDURE [dbo].[AddCustomerCompany]

@CompanyName NVARCHAR(50),@Phone NVARCHAR(50) ,@Email NVARCHAR(50), @Address
NVARCHAR(50),@CityName NVARCHAR(50),@CountryName NVARCHAR(50)

AS

BEGIN

SET NOCOUNT ON;

DECLARE @CustomerID int

        set @CustomerID = (Select top 1 CustomerID

                            from dbo.Customers

                            order by CustomerID desc) + 1

IF @CompanyName IN (SELECT Companyname FROM dbo.Company)

BEGIN;

        THROW 52000, 'This Company already exists in our database.', 1

END

IF @CountryName NOT IN (SELECT CountryName FROM Country)

BEGIN

DECLARE @CountryNewID INT

SET @CountryNewID = (SELECT TOP 1 CountryID

                    FROM Country
```



```

ORDER BY CountryID DESC)+1

INSERT INTO Country(CountryID,CountryName)

VALUES( @CountryNewID,@CountryName)

END

IF @CityName NOT IN (SELECT CityName FROM CityName)

BEGIN

DECLARE @CityNewID INT

SET @CityNewID = (SELECT TOP 1 CityID

FROM CityName

ORDER BY CityID DESC)+1

INSERT INTO CityName(CityID,CityName)

VALUES( @CityNewID,@CityName)

END

DECLARE @CountryID INT

SET @CountryID = (

SELECT CountryID

FROM Country

WHERE CountryName = @CountryName

)

DECLARE @CityID INT

SET @CityID = (

SELECT CityID

FROM CityName

WHERE CityName = @CityName

)

INSERT INTO Customers(CustomerID)

VALUES(@CustomerID)


INSERT INTO Company(CompanyID,CompanyName,Phone,Email,Address,CityID,CountryID)

VALUES(@CustomerID,@CompanyName ,@Phone,@Email,@Address,@CityID,@CountryID)


END

GO

```

## Używa

---

[dbo].[CityName]

[dbo].[Company]

[dbo].[Country]

[dbo].[Customers]

## ***[dbo].[AddCustomerIndividual]***

Procedura dodająca klienta indywidualnego.

### Parameters

Name	Data Type	Max Length (Bytes)
<b>@IsStudent</b>	bit	1
<b>@FirstName</b>	nvarchar(50)	100
<b>@LastName</b>	nvarchar(50)	100
<b>@Address</b>	nvarchar(50)	100
<b>@Phone</b>	nvarchar(50)	100
<b>@CityName</b>	nvarchar(50)	100
<b>@CountryName</b>	nvarchar(50)	100
<b>@Email</b>	nvarchar(50)	100

### SQL Script

```
CREATE PROCEDURE [dbo].[AddCustomerIndividual]

@IsStudent BIT, @FirstName NVARCHAR(50),@LastName NVARCHAR(50), @Address
NVARCHAR(50),@Phone NVARCHAR(50) ,@CityName NVARCHAR(50),@CountryName
NVARCHAR(50),@Email NVARCHAR(50)

AS

BEGIN

SET NOCOUNT ON;

DECLARE @CustomerID int

        set  @CustomerID = (Select top 1 CustomerID

                                from Customers

                                order by CustomerID desc) + 1

IF @CountryName NOT IN (SELECT CountryName FROM Country)

BEGIN

DECLARE @CountryNewID INT

SET  @CountryNewID = (SELECT TOP 1 CountryID

                        FROM Country

                        ORDER BY CountryID DESC)+1

INSERT INTO Country (CountryID, CountryName)

VALUES ( @CountryNewID, @CountryName)
```

```

END

IF @CityName NOT IN (SELECT CityName FROM CityName)

BEGIN

DECLARE @CityNewID INT

SET @CityNewID = (SELECT TOP 1 CityID

                  FROM CityName

                  ORDER BY CityID DESC)+1

INSERT INTO CityName (CityID, CityName)

VALUES ( @CityNewID, @CityName)

END

DECLARE @CountryID INT

    SET @CountryID = (

        SELECT CountryID

        FROM Country

        WHERE CountryName = @CountryName

    )

    DECLARE @CityID INT

    SET @CityID = (

        SELECT CityID

        FROM CityName

        WHERE CityName = @CityName

    )

    DECLARE @IndividualCustomerID INT

        SET @IndividualCustomerID = (

            SELECT TOP 1 CustomerID

            FROM Customers

            ORDER BY CustomerID DESC )+1

INSERT INTO Customers (CustomerID)

```

```
VALUES (@CustomerID)

INSERT INTO IndividualCustomer (IndividualCustomerID, FirstName, Last-
Name, Address, Phone, CityID, CountryID, Email)

VALUES ( @IndividualCustomerID, @FirstName , @LastName, @Address, @Phone, @City-
ID, @CountryID, @Email)

END

GO
```

## Używa

---

[dbo].[CityName]

[dbo].[Country]

[dbo].[Customers]

[dbo].[IndividualCustomer]

## **[dbo].[AddDiscount]**

Procedura dodająca zniżki do tabeli Discounts dla konkretnej konferencji.

### Parameters

Name	Data Type	Max Length (Bytes)
@ConferenceID	int	4
@DateDifference1	int	4
@Discount1	real	4
@DateDifference2	int	4
@Discount2	real	4
@DateDifference3	int	4
@Discount3	real	4

### SQL Script

```
CREATE PROCEDURE [dbo].[AddDiscount]

@ConferenceID INT,

@DateDifference1 INT,

@Discount1 REAL,

@DateDifference2 INT,

@Discount2 REAL,

@DateDifference3 INT,

@Discount3 REAL

AS

BEGIN

SET NOCOUNT ON;

    IF @DateDifference1<0 OR @DateDifference2<0 OR @DateDifference3<0

    BEGIN;

        THROW 52000, 'Date difference need to be positive .', 1

    END

    IF @Discount1>1 OR @Discount2>1 OR @Discount3>1
```

```

BEGIN;

    THROW 52000, 'Discount need to be smaller than 1 .', 1

END

IF @ConferenceID NOT IN (SELECT ConferenceID FROM dbo.Conference)

BEGIN;

    THROW 52000, 'There is not such ConferenceID in Conference Table.', 1

END

DECLARE @DiscountID1 INT

SET @DiscountID1=(select top 1 DiscountID

                    from dbo.Discounts

                    order by DiscountID desc) + 1

INSERT INTO dbo.Discounts( DiscountID ,ConferenceID ,DateDifference ,Discount)

VALUES      ( @DiscountID1,@ConferenceID,@DateDifference1,@Discount1)

INSERT INTO dbo.Discounts( DiscountID ,ConferenceID ,DateDifference ,Discount)

VALUES      ( @DiscountID1+1,@ConferenceID,@DateDifference2,@Discount2)

INSERT INTO dbo.Discounts( DiscountID ,ConferenceID ,DateDifference ,Discount)

VALUES      ( @DiscountID1+2,@ConferenceID,@DateDifference3,@Discount3)

END

GO

```

## Używa

---

[dbo].[Conference]

[dbo].[Discounts]





```

IF ( @CustomerIDCheck is NULL)

    BEGIN;

        THROW 52000, 'This Customer does not exist', 1

    END

-----

DECLARE @ReservationID int

set @ReservationID = (select top 1 ReservationID

                    from Reservation_Conference

                    order by ReservationID desc) + 1

INSERT INTO Reservation_Conference(ReservationID, CustomerID,ConferenceID,DateOf-
Reservation,DateOfPayment, Cancelled)

VALUES (@ReservationID, @CustomerID,@ConferenceID, GETDATE(), NULL, 0)

END

GO

```

## Używa

---

[dbo].[Conference]

[dbo].[Customers]

[dbo].[Reservation\_Conference]

## ***[dbo].[AddReservationDetails]***

Procedura dodająca dane dotyczące konkretnej rezerwacji takie jak: liczba miejsc na dany dzień konferencji oraz liczba studentów.

### Parameters

Name	Data Type	Max Length (Bytes)
@ReservationID	int	4
@NumberOfDay	int	4
@NumberOfPeople	int	4
@NumberOfStudents	int	4

### SQL Script

```
CREATE procedure [dbo].[AddReservationDetails]

@ReservationID int,

@NumberOfDay int,

@NumberOfPeople int,

@NumberOfStudents int

AS

BEGIN

SET NOCOUNT ON;

--Conference id wyciągam z rezerwacji. przyda mi się 2 razy

Declare @ConferenceID int

SET @ConferenceID =(select ConferenceID

                    from Reservation_Conference

                    where ReservationID = @ReservationID)

--
```

```

DECLARE @ConferenceDayID int

SET @ConferenceDayID = (select ConferenceDayID

    from ConferenceDay

    where ConferenceID = @ConferenceID

    and DateConferenceDay = (select DateAdd(DD, @NumberOfDay -1, startDate)

        from Conference

        where ConferenceID = @ConferenceID))

--dodawanie indywidualnego klienta jako participanta conf

DECLARE @CustomerID int

SET @CustomerID = (select CustomerID from Reservation_Conference

    where ConferenceID = @ConferenceID)

if (@CustomerID in (select IndividualCustomerID from IndividualCustomer

    where @ConferenceID = IndividualCustomerID) AND @NumberOfPeople>1)

BEGIN;

    THROW 52000, 'Individual Customer can not be multiplied, unless he or she is a Holy Trinity

then

    Individual Customer can be three people at once.', 1

END

--SPRAWDZANIE DANYCH

Declare @PeopleInConference int

SET @PeopleInConference = (dbo.ConferenceDayFreePlaces(@ConferenceDayID))

Declare @EndDate date

Set @EndDate = (select EndDate from Conference

    where ConferenceID = @ConferenceID)

IF @NumberOfPeople < @NumberOfStudents

Begin;

    THROW 52000, 'Students are people too! Number of students must be smaller than number of

people.', 1

END

IF @NumberOfPeople > (select Number_Of_Seats from Conference

    where conferenceID = @ConferenceID)

Begin;

```

```

        THROW 52000, 'Number of people must be smaller than number of seats in conference.', 1

    END

IF ( @EndDate < (select DateAdd(DD, @NumberOfDay -1, startDate)

                from Conference

                where ConferenceID = @ConferenceID))

    BEGIN;

        THROW 51000, 'There is less days in a conference!', 1

    END

IF ( @NumberOfPeople > @PeopleInConference)

    BEGIN;

        THROW 51000, 'Number of seats you want to reserve is bigger than number of places left for
this conference.', 1

    END

Declare @ReservationIDCheck int

set @ReservationIDCheck = (select ReservationID from Reservation_Conference

                            where ReservationID = @ReservationID)

IF ( @ReservationIDCheck is NULL)

    BEGIN;

        THROW 51000, 'There is no such conference.', 1

    END

-----

DECLARE @ReservationDetailsID int

SET @ReservationDetailsID = (select top 1 ReservationDetailsID

                             from ReservationDetails

                             order by ReservationDetailsID desc) + 1

INSERT INTO ReservationDetails (ReservationDetailsID,ReservationID,ConferenceDayID,NumberOf-
People,Cancelled)

VALUES ( @ReservationDetailsID, @ReservationID, @ConferenceDayID,@NumberOfPeople, 0)

END

GO

```

## Używa

---

[dbo].[Conference]

[dbo].[ConferenceDay]

[dbo].[IndividualCustomer]

[dbo].[Reservation\_Conference]

[dbo].[ReservationDetails]

[dbo].[ConferenceDayFreePlaces]

**[dbo].[AddReservationWorkshop]**

Procedura dodająca rezerwacje na konkretny warsztat odbywający się w zarezerwowanej już konferencji.

## Parameters

Name	Data Type	Max Length (Bytes)
@NumberOfPeople	int	4
@ReservationID	int	4
@WorkshopID	int	4

## SQL Script

[illegible]

```

        AND @ReservationID = ReservationID)

IF @ReservationDetailsID IS NULL
    BEGIN;
        THROW 52000, 'There is no reservation on this day.', 1
    END

DECLARE @CustomerID INT
SET @CustomerID = (SELECT CustomerID FROM dbo.Reservation_Conference)

IF (@CustomerID IN (SELECT IndividualCustomerID FROM dbo.IndividualCustomer) AND
@NumberOfPeople > 1)
    BEGIN;
        THROW 52000, 'Individual customer can reserve only one place in workshop.',
1
    END

DECLARE @NumberOfPeopleForDay int
SET @NumberOfPeopleForDay=(SELECT NumberOfPeople FROM dbo.ReservationDetails
        WHERE ReservationDetailsID=@ReservationDetailsID)

IF @NumberOfPeople>@NumberOfPeopleForDay
    BEGIN;
        THROW 52000, 'You do not booked enough seats for that day.', 1
    END

DECLARE @TakenPlaces INT
SET @TakenPlaces = (SELECT SUM(NumberOfPeople) FROM Reservation_Workshop AS rw
        WHERE rw.workshopID = @workshopID)

```

```

DECLARE @AllPlaces INT

SET @AllPlaces = (SELECT W.number_of_seats FROM Workshop w
                  WHERE @WorkshopID = w.WorkshopID)

DECLARE @FreePlaces INT

SET @FreePlaces = @AllPlaces - @TakenPlaces

IF (@FreePlaces < @NumberOfPeople)
    BEGIN;
        THROW 52000, 'Number of free places is smaller than number of people you
        want to register for this workshop.', 1
    END

-----

DECLARE @ReservationWorkshopID INT

SET @ReservationWorkshopID = (SELECT TOP 1 Reservation_WorkshopID
                              FROM Reservation_Workshop
                              ORDER BY Reservation_WorkshopID DESC) + 1

INSERT INTO Reservation_Workshop(Reservation_WorkshopID, ReservationID, Workshop-
ID, NumberOfPeople, Cancelled)

VALUES (@ReservationWorkshopID, @ReservationID, @WorkshopID, @NumberOfPeople, 0)

END

GO

```

## Używa

[dbo].[IndividualCustomer]

[dbo].[Reservation\_Conference]

[dbo].[Reservation\_Workshop]

[dbo].[ReservationDetails]

[dbo].[Workshop]



## **[dbo].[AddWorkshop]**

Procedura dodająca warsztat wraz z jego dokładnymi specyfikacjami

### Parameters

Name	Data Type	Max Length (Bytes)
@ConferenceID	int	4
@WorkshopName	nvarchar(50)	100
@ConferenceDayID	int	4
@Number_of_seats	int	4
@Price_Workshop	money	8
@Address	nvarchar(50)	100
@Start_time	datetime	8
@End_time	datetime	8

### SQL Script

```
CREATE PROCEDURE [dbo].[AddWorkshop]

    @ConferenceID int,

    @WorkshopName nvarchar(50),

    @ConferenceDayID int,

    @Number_of_seats int,

    @Price_Workshop money,

    @Address nvarchar(50),

    @Start_time datetime,

    @End_time datetime

AS

BEGIN

    SET NOCOUNT ON;

    IF ( @Start_time > @End_time)

        BEGIN;

            THROW 51000, 'EndDate should not be earlier than StartDate.', 1

        END
```

```

Declare @StartDate date

set @StartDate = (select StartDate from Conference
                  where ConferenceID = @ConferenceID)

Declare @EndDate Date

set @endDate = (select EndDate from Conference
                where ConferenceID = @ConferenceID)

IF ( @Start_time < @StartDate)

Declare @NumberOfPeopleInConference int

set @NumberOfPeopleInConference = (select Number_of_seats from Conference
                                    where ConferenceID = @ConferenceID)

IF ( @Start_time < @StartDate)

BEGIN;

    THROW 51000, 'Start_time should be contained in Conference time.', 1

END

IF ( @EndDate < @End_time)

BEGIN;

    THROW 51000, 'End_time should be contained in Conference time.', 1

END

IF ( @NumberOfPeopleInConference < @Number_of_seats)

BEGIN;

    THROW 51000, 'Number of people on workshop has to be smaller than
number of people on conference', 1

END

IF @WorkshopName not in (select WorkshopName from WorkshopType)

BEGIN

DECLARE @WorkshopNewTypeID int

SET @WorkshopNewTypeID = (Select top 1 WorkshopTypeID

```

```

        from WorkshopType

        order by WorkshopTypeID desc) + 1

INSERT INTO WorkshopType (WorkshopTypeID ,WorkshopName)

VALUES (@WorkshopNewTypeID,@WorkshopName)

END

DECLARE @WorkshopTypeID int

SET @WorkshopTypeID = (SELECT WorkshopTypeID

                        FROM WorkshopType

                        WHERE @WorkshopName = WorkshopName)

DECLARE @WorkshopID int

set @WorkshopID = (Select top 1 WorkshopID

                   from Workshop

                   order by WorkshopID desc) + 1

INSERT INTO Workshop (WorkshopID, WorkshopTypeID,ConferenceID,ConferenceDayID,
Number_of_seats,Price_Workshop, Address,Start_time,End_time)

VALUES (@WorkshopID, @WorkshopTypeID, @ConferenceID,@ConferenceDay-
ID,@Number_of_seats,@Price_Workshop, @Address,@Start_time, @End_time )

END

GO

```

## Używa

---

[dbo].[Conference]

[dbo].[Workshop]

[dbo].[WorkshopType]

## **[dbo].[AddWorkshopParticipant]**

Procedura dodająca uczestnika konkretnego warsztatu.

### Parameters

Name	Data Type	Max Length (Bytes)
<b>@ReservationWorkshopID</b>	int	4
<b>@ConferenceParticipantID</b>	int	4

### SQL Script

```
CREATE PROCEDURE [dbo].[AddWorkshopParticipant]

    @ReservationWorkshopID INT,

    @ConferenceParticipantID INT
AS
BEGIN
    SET NOCOUNT ON;

    DECLARE @Conference_ParticipantID int

    DECLARE @Start_Time DATETIME

    DECLARE @End_Time DATETIME

    DECLARE @Work_shopID INT


    IF @ReservationWorkshopID NOT IN (SELECT Reservation_WorkshopID FROM
dbo.Reservation_Workshop)

        BEGIN;

            THROW 51000, 'This reservation of workshop does not exist', 1

        END


    IF @ConferenceParticipantID NOT IN (SELECT Conference_ParticipantID FROM
dbo.Conference_Participant)
```

```

BEGIN;

    THROW 52000, 'This conference participant does not exists', 1

END

DECLARE @WorkshopID INT

SET @WorkshopID = (SELECT WorkshopID FROM dbo.Reservation_Workshop
                    WHERE Reservation_WorkshopID = @ReservationWorkshopID)

DECLARE @WorkshopParticipantID INT

SET @WorkshopParticipantID = (SELECT TOP 1 Workshop_ParticipantID FROM
dbo.Workshop_Participant
                                ORDER BY Workshop_ParticipantID DESC) + 1

-- sprawdzanie czy ktoś nie próbuje dodać więcej uczestników niz zareklamował w
rezerwacji warsztatu

DECLARE @AlreadyRegistered INT

SET @AlreadyRegistered = (SELECT SUM(Workshop_ParticipantID) FROM
dbo.Workshop_Participant WP
                                INNER JOIN dbo.Reservation_Workshop Rw
                                ON rw.Reservation_WorkshopID = wp.ReservationWorkshopID
                                WHERE rw.Reservation_WorkshopID = @ReservationWorkshop-
ID)

IF @AlreadyRegistered >= (SELECT NumberOfPeople FROM dbo.Reservation_Workshop
                            WHERE Reservation_WorkshopID= @ReservationWorkshopID)

BEGIN;

    THROW 52000, 'You have already registered all participans from this
reservation.', 1

END

-- sprawdzanie czy warsztaty nie kolidują danemu uczestnikowi

DECLARE @StartTime DATETIME

```

```

SET @StartTime = (SELECT Start_time FROM dbo.Workshop
                    WHERE WorkshopID = @WorkshopID)

DECLARE @EndTime DATETIME

SET @EndTime = (SELECT End_time FROM dbo.Workshop
                 WHERE WorkshopID = @WorkshopID)

DECLARE @Collision BIT

SET @Collision = 0

/*deklarujemy kursor*/
DECLARE moj_kursor CURSOR LOCAL FOR
/*deklarujemy zrodlo kursora*/
SELECT Conference_ParticipantID, wp.WorkshopID, w.Start_Time, w.End_Time FROM
dbo.Workshop w
INNER JOIN dbo.Workshop_Participant wp
ON wp.WorkshopID = w.WorkshopID
WHERE Conference_ParticipantID = 3698
AND wp.WorkshopID = w.WorkshopID
/*otwieramy kursor*/
OPEN moj_kursor
/*przypisujemy pierwszy wiersz do zmiennych o typach zgodnych z kolumnami w
zrodle*/
FETCH NEXT FROM moj_kursor INTO @Conference_ParticipantID, @Work_shopID, @Start_
Time, @End_Time
/*jezeli przypisanie sie powiodlo wchodzimy w petle*/
WHILE @@FETCH_STATUS = 0
BEGIN
/*przykładowa czynnosc na danych*/
IF (@StartTime < @End_Time OR @EndTime > @Start_Time)
    BEGIN;
        THROW 51000, 'This workshop collides with the one you have already
registered for.', 1
    
```

```

END

/*przypisanie kolejnego wiersza*/

    FETCH NEXT FROM moj_kursor INTO @Conference_ParticipantID, @WorkshopID, @Start_
Time,@End_Time

END

/*zamkniecie kursora*/

CLOSE moj_kursor

/*zwolnienie kursora*/

DEALLOCATE moj_kursor


INSERT INTO dbo.Workshop_Participant

    ( Workshop_ParticipantID ,

      WorkshopID ,

      Conference_ParticipantID ,

      ReservationWorkshopID

    )

VALUES ( @WorkshopParticipantID , -- Workshop_ParticipantID - int

        @WorkshopID , -- WorkshopID - int

        @ConferenceParticipantID , -- Conference_ParticipantID - int

        @ReservationWorkshopID -- ReservationWorkshopID - int

    )

END

GO

```

## Używa

---

[dbo].[Conference\_Participant]

[dbo].[Reservation\_Workshop]

[dbo].[Workshop]

[dbo].[Workshop\_Participant]

## **[dbo].[CancelReservation\_Conference]**

Procedura anulowania rezerwacji.

### Parameters

Name	Data Type	Max Length (Bytes)
@Reservation_ConferenceID	int	4

### SQL Script

```
Create PROCEDURE [dbo].[CancelReservation_Conference]
@Reservation_ConferenceID int
AS
BEGIN
SET NOCOUNT ON;
--SPRAWDZANIE DANYCH
Declare @ConfIDCheck int
set @ConfIDCheck = (select ReservationID from Reservation_Conference
                    where ReservationID = @Reservation_ConferenceID)
IF ( @ConfIDCheck is NULL)
    BEGIN;
        THROW 51000, 'There is no such conference',1
    END
-----
UPDATE Reservation_Conference
SET Cancelled = 1
WHERE ReservationID = @Reservation_ConferenceID
END
GO
```

### Używa

[dbo].[Reservation\_Conference]





```
        UPDATE dbo.Company

        SET CountryID = @CountryID

        WHERE CompanyID = @ComanyID

    END

IF @NewCountry IS NOT NULL

    BEGIN;

        DECLARE @CityID INT

        SET @CityID = (SELECT @CityID FROM dbo.CityName

                        WHERE CityName LIKE @NewCity)

        UPDATE dbo.Company

        SET CityID = @CityID

        WHERE CompanyID = @ComanyID

    END

IF @NewCompanyName IS NOT NULL

    BEGIN;

        UPDATE dbo.Company

        SET CompanyName= @NewCompanyName

        WHERE CompanyID = @ComanyID

    END

IF @NewPhone IS NOT NULL

    BEGIN;

        UPDATE dbo.Company

        SET Phone= @NewPhone

        WHERE CompanyID = @ComanyID

    END
```

```
IF @NewEmail IS NOT NULL

    BEGIN;

        UPDATE dbo.Company

        SET Email= @NewEmail

        WHERE CompanyID = @ComanyID

    END

IF @NewAddress IS NOT NULL

    BEGIN;

        UPDATE dbo.Company

        SET Address= @NewAddress

        WHERE CompanyID = @ComanyID

    END

END

GO
```

## Używa

---

[dbo].[CityName]

[dbo].[Company]

[dbo].[Country]

## ***[dbo].[ChangeIndividualCustomerData]***

Procedura zmieniająca dane dotyczące klienta indywidualnego.

### Parameters

Name	Data Type	Max Length (Bytes)
@IndividualCustomerID	int	4
@NewFirstName	varchar(50)	50
@NewLastName	varchar(50)	50
@NewPhone	nvarchar(50)	100
@NewEmail	nvarchar(50)	100
@NewAddress	nvarchar(50)	100
@NewCity	nvarchar(50)	100
@NewCountry	nvarchar(50)	100
@NewIsStudent	bit	1

### SQL Script

```
CREATE PROCEDURE [dbo].[ChangeIndividualCustomerData]

@IndividualCustomerID INT,

@NewFirstName VARCHAR(50),

@NewLastName VARCHAR(50),

@NewPhone NVARCHAR(50),

@NewEmail NVARCHAR(50),

@NewAddress NVARCHAR(50),

@NewCity NVARCHAR(50),

@NewCountry NVARCHAR(50),

@NewIsStudent BIT

AS

BEGIN

SET NOCOUNT ON;
```

```
IF @NewCity IS NOT NULL

    BEGIN;

        DECLARE @CountryID INT

        SET @CountryID = (SELECT CountryID FROM dbo.Country

                           WHERE CountryName LIKE @NewCountry)

        UPDATE IndividualCustomer

        SET CountryID = @CountryID

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

IF @NewCountry IS NOT NULL

    BEGIN;

        DECLARE @CityID INT

        SET @CityID = (SELECT @CityID FROM dbo.CityName

                        WHERE CityName LIKE @NewCity)

        UPDATE IndividualCustomer

        SET CityID = @CityID

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

IF @NewFirstName IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET FirstName = @NewFirstName

        WHERE IndividualCustomerID = @IndividualCustomerID

    END
```

```
IF @NewLastName IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET LastName = @NewLastName

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

IF @NewPhone IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET Phone= @NewPhone

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

IF @NewEmail IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET Email= @NewEmail

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

IF @NewAddress IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET Address= @NewAddress

        WHERE IndividualCustomerID = @IndividualCustomerID

    END
```

```
IF @NewIsStudent IS NOT NULL

    BEGIN;

        UPDATE IndividualCustomer

        SET Address= IsStudent

        WHERE IndividualCustomerID = @IndividualCustomerID

    END

END

GO
```

## Używa

---

[dbo].[CityName]

[dbo].[Country]

[dbo].[IndividualCustomer]

## ***[dbo].[UpdateConferenceNumberOfSeats]***

Procedura aktualizująca liczbę miejsc na konferencji

### Parameters

Name	Data Type	Max Length (Bytes)
<b>@NumberOfSeats</b>	int	4
<b>@ConferenceID</b>	int	4

### SQL Script

```
CREATE PROCEDURE [dbo].[UpdateConferenceNumberOfSeats]
@NumberOfSeats INT,
@ConferenceID INT
AS
BEGIN
SET NOCOUNT ON;

UPDATE dbo.Conference
SET Number_of_seats = @NumberOfSeats
WHERE ConferenceID = @ConferenceID

END

GO
```

### Uses

[dbo].[Conference]



## **[dbo].[UpdatePaymentDate]**

Procedura uaktualnia date dokonania wpłaty.

### Parameters

Name	Data Type	Max Length (Bytes)
@DateOfPayment	datetime	8
@Reservation_ConferenceID	int	4

### SQL Script

```
CREATE PROCEDURE [dbo].[UpdatePaymentDate]
@DateOfPayment DATETIME,
@Reservation_ConferenceID INT

AS

BEGIN

SET NOCOUNT ON;

UPDATE dbo.Reservation_Conference
SET DateOfPayment = @DateOfPayment
WHERE ReservationID = @Reservation_ConferenceID

END

GO
```

### Używa

[dbo].[Reservation\_Conference]

**[dbo].[UpdateWorkshopNumberOfSeats]**

Parameters

Name	Data Type	Max Length (Bytes)
@NumberOfSeats	int	4
@WorkshopID	int	4

SQL Script

```
CREATE PROCEDURE [dbo].[UpdateWorkshopNumberOfSeats]
@NumberOfSeats INT,
@WorkshopID INT
AS
BEGIN
SET NOCOUNT ON;

UPDATE dbo.Workshop
SET Number_of_seats = @NumberOfSeats
WHERE WorkshopID = @WorkshopID

END

GO
```

Uses

[dbo].[Workshop]

## Views

Name
<b>dbo.CancelledReservations</b>
<b>dbo.ConferenceDayParticipants</b>
<b>dbo.ConferenceParticipants</b>
<b>dbo.ConferenceToCancelled</b>
<b>dbo.CustomersToCall</b>
<b>dbo.GeneratorCompany</b>
<b>dbo.GeneratorConference_participantCompany</b>
<b>dbo.GeneratorParticipants_Individual</b>
<b>dbo.GeneratorParticipants_IndividualStudent</b>
<b>dbo.GeneratorReservationDetailsCompany</b>
<b>dbo.GeneratorReservationDetailsIndividual</b>
<b>dbo.GeneratorReservationsIDCompany</b>
<b>dbo.GeneratorReservationsIDIndywidual</b>
<b>dbo.GeneratorWorkshop</b>
<b>dbo.GeneratorWorkshopIndywidualny</b>
<b>dbo.GeneratorWorkshopKompania</b>
<b>dbo.GeneratorWorkshopParticipantsAdding</b>
<b>dbo.NumberOfCustomerReservations</b>
<b>dbo.PopularConferences</b>
<b>dbo.PopularWorkshops</b>
<b>dbo.PriceOfReservation</b>
<b>dbo.RegularCustomers</b>
<b>dbo.ValueOfReservation</b>
<b>dbo.WorkshopParticipants</b>
<b>dbo.WorkshopsInConferenceList</b>
<b>dbo.WorkshopsInDayList</b>

## **[dbo].[CancelledReservations]**

Widok pokazujący odwołane rezerwacje.

### Columns

Name	Data Type	Max Length (Bytes)
ReservationID	int	4
Customer Name	nvarchar(101)	202

### SQL Script

```
CREATE VIEW [dbo].[CancelledReservations] AS

SELECT RC.ReservationID, IC.FirstName + ' ' + IC.LastName AS [Customer Name]

FROM Reservation_Conference as RC

JOIN IndividualCustomer as IC

ON IC.IndividualCustomerID = RC.CustomerID

WHERE RC.Cancelled = 1

UNION

SELECT RC.ReservationID, C.CompanyName AS [Customer Name]

FROM Reservation_Conference as RC

JOIN Company as C

ON C.CompanyID = RC.CustomerID

WHERE RC.Cancelled = 1

GO
```

### Używa

[dbo].[Company]

[dbo].[IndividualCustomer]

[dbo].[Reservation\_Conference]

## **[dbo].[ConferenceDayParticipants]**

Widok pokazujący liste uczestników danego dnia konferencji.

### Columns

Name	Data Type	Max Length (Bytes)
<b>ConferenceID</b>	int	4
<b>ConferenceDayID</b>	int	4
<b>Number of Conference Day</b>	int	4
<b>ConferenceName</b>	nvarchar(50)	100
<b>FirstName</b>	nvarchar(50)	100
<b>LastName</b>	nvarchar(50)	100
<b>Companyname</b>	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[ConferenceDayParticipants]
AS
SELECT c.ConferenceID, cp.ConferenceDayID, DATEDIFF(dd, c.StartDate, CD.Date-
ConferenceDay)+1 AS [Number of Conference Day], c.ConferenceName, cp.FirstName,
cp.LastName, cp.Companyname
FROM Conference_Participant AS cp
INNER JOIN dbo.ConferenceDay CD
ON CP.ConferenceDayID = CD.ConferenceDayID
INNER JOIN Conference AS c
ON c.ConferenceID = cp.ConferenceID
INNER JOIN dbo.Reservation_Conference RC
ON Cp.ReservationID = RC.ReservationID
WHERE RC.Cancelled = 0
AND c.ConferenceID=cp.ConferenceID
AND cd.ConferenceDayID = cp.conferenceDayID
GO
```

## Używa

---

[dbo].[Conference]

[dbo].[Conference\_Participant]

[dbo].[ConferenceDay]

[dbo].[Reservation\_Conference]

## ***[dbo].[ConferenceParticipants]***

Widok pokazujący listę uczestników danej konferencji.

### Columns

Name	Data Type	Max Length (Bytes)
conferenceID	int	4
ConferenceName	nvarchar(50)	100
FirstName	nvarchar(50)	100
Lastname	nvarchar(50)	100
Companyname	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[ConferenceParticipants]
AS
SELECT c.conferenceID, c.ConferenceName, cp.FirstName, cp.Lastname, cp.Companyname
FROM Conference_Participant AS cp
INNER JOIN Conference AS c
ON c.ConferenceID = cp.ConferenceID
INNER JOIN dbo.Reservation_Conference RC
ON Cp.ReservationID = RC.ReservationID
WHERE RC.Cancelled = 0
AND c.ConferenceID=cp.ConferenceID
GO
```

### Używa

[dbo].[Conference]

[dbo].[Conference\_Participant]

[dbo].[Reservation\_Conference]



## ***[dbo].[ReservationConferenceToCancelled]***

Widok pokazujący rezerwacje, które powinny być anulowane ze względu na brak dokonania wpłaty do 7 dni po dokonaniu rezerwacji.

### Columns

Name	Data Type	Max Length (Bytes)
<b>ReservationID</b>	int	4
<b>CustomerID</b>	int	4
<b>DateDifference</b>	int	4

### SQL Script

```
CREATE VIEW [dbo].[ReservationConferenceToCancelled] as

SELECT rc.ReservationID, rc.CustomerID, DATEDIFF(day, rc.DateOfReservation,
GETDATE()) as DateDifference

FROM Reservation_Conference as rc

WHERE DATEDIFF(day, rc.DateOfReservation, GETDATE()) > 7 and rc.DateOfPayment is
null

GO
```

### Używa

[dbo].[Reservation\_Conference]

## ***[dbo].[CustomersToCall]***

Widok pokazujący listę klientów, którzy 14 dni przed konferencją na którą złożyli rezerwację nie podali list imiennych uczestników biorących w niej udział.

### Columns

Name	Data Type	Max Length (Bytes)
<b>reservationID</b>	int	4
<b>CustomerID</b>	int	4
<b>Number of Missing Participants</b>	int	4
<b>Phone</b>	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[CustomersToCall] AS

SELECT rc.reservationID, CustomerID, dbo.NumberOfPeopleIn-
Reservation(rc.ReservationID) - dbo.NumberOfParticipantsBy-
Reservation(rc.ReservationID) AS [Number of Missing Participants], Phone

FROM dbo.Reservation_Conference AS rc

INNER JOIN Conference AS c

on c.ConferenceID = rc.ConferenceID

INNER JOIN Company AS Comp

ON comp.CompanyID = RC.CustomerID

WHERE DATEADD(dd, 14, GETDATE()) > c.StartDate

AND Startdate > GETDATE()

AND dbo.NumberOfPeopleInReservation(rc.ReservationID) - dbo.NumberOfParticipantsBy-
Reservation(rc.ReservationID) <> 0

GO
```

## Używa

---

[dbo].[NumberOfParticipantsByReservation]

[dbo].[NumberOfPeopleInReservation]

[dbo].[Company]

[dbo].[Conference]

[dbo].[Reservation\_Conference]

## **[dbo].[NumberOfCustomerReservations]**

Widok pokazujący liczbę rezerwacji dokonanych przez klientów.

### Columns

Name	Data Type	Max Length (Bytes)
<b>CustomerID</b>	int	4
<b>NumberOfReservations</b>	int	4

### SQL Script

```
CREATE VIEW [dbo].[NumberOfCustomerReservations] AS
select CustomerID, count(customerid) as NumberOfReservations from Reservation_
Conference
group by customerid
GO
```

### Używa

[dbo].[Reservation\_Conference]

## **[dbo].[PopularConferences]**

Widok pokazujący listę najpopularniejszych konferencji.

### Columns

Name	Data Type	Max Length (Bytes)
ConferenceName	nvarchar(50)	100
Number of people	int	4

### SQL Script

```
CREATE VIEW [dbo].[PopularConferences]
AS
SELECT TOP 100 C.ConferenceName, SUM(NumberOfPeople) AS [Number of people]
FROM Conference AS C
JOIN Reservation_Conference AS RC ON C.ConferenceID = RC.ConferenceID
JOIN ReservationDetails AS RD ON RC.ReservationID = RD.ReservationID

WHERE RC.Cancelled LIKE 0

GROUP BY C.ConferenceName

ORDER BY [Number of people] DESC

GO
```

### Używa

[dbo].[Conference]

[dbo].[Reservation\_Conference]

[dbo].[ReservationDetails]

## ***[dbo].[PopularWorkshops]***

Widok pokazujący listę najpopularniejszych warsztatów.

### Columns

Name	Data Type	Max Length (Bytes)
<b>WorkshopName</b>	nvarchar(50)	100
<b>Number of WS participants</b>	int	4

### SQL Script

```
CREATE VIEW [dbo].[PopularWorkshops] AS

SELECT TOP 100 WT.WorkshopName, SUM(RW.NumberOfPeople) AS [Number of WS
participants]

FROM Reservation_Workshop AS RW

INNER JOIN Workshop AS W

ON RW.WorkshopID = W.WorkshopID

INNER JOIN WorkshopType AS WT

ON WT.WorkshopTypeID = W.WorkshopID

GROUP BY WT.WorkshopName

ORDER BY [Number of WS participants] DESC

GO
```

### Używa

[dbo].[Reservation\_Workshop]

[dbo].[Workshop]

[dbo].[WorkshopType]

## ***[dbo].[RegularCustomers]***

Widok zwracający listę stałych klientów.

### Columns

Name	Data Type	Max Length (Bytes)
<b>CustomerID</b>	int	4
<b>Number of Conferences</b>	int	4

### SQL Script

```
CREATE VIEW [dbo].[RegularCustomers] AS

SELECT TOP 100 CustomerID, COUNT(CustomerID) AS [Number of Conferences] FROM
dbo.Reservation_Conference

GROUP BY CustomerID

ORDER BY COUNT(CustomerID) DESC

GO
```

### Używa

[dbo].[Reservation\_Conference]

## ***[dbo].[ValueOfReservation]***

Widok pokazujący należność do zapłacenia za daną rezerwację uwzględniając wszystkie zniżki.

### Columns

Name	Data Type	Max Length (Bytes)
<b>ReservationID</b>	int	4
<b>Value</b>	money	8

### SQL Script

```
CREATE VIEW [dbo].[ValueOfReservation]
AS
SELECT ReservationID, dbo.ReservationValue (ReservationID) AS Value
FROM dbo.Reservation_Conference
GO
```

### Używa

[dbo].[ReservationValue]

[dbo].[Reservation\_Conference]



## **[dbo].[WorkshopParticipants]**

Widok pokazujący liste uczestników wraz z danymi danego warsztatu.

### Columns

Name	Data Type	Max Length (Bytes)
ConferenceDayID	int	4
WorkshopID	int	4
WorkshopName	nvarchar(50)	100
Workshop_ParticipantID	int	4
Firstname	nvarchar(50)	100
Lastname	nvarchar(50)	100
Companyname	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[WorkshopParticipants] AS

(

    SELECT CD.ConferenceDayID, W.WorkshopID, WT.WorkshopName, WP.Workshop_
ParticipantID, CP.Firstname, CP.Lastname, CP.Companyname

    FROM Workshop_Participant AS WP

    JOIN Conference_Participant AS CP

    ON CP.Conference_ParticipantID = WP.Conference_ParticipantID

    JOIN Workshop AS W

    ON W.WorkshopID = WP.WorkshopID

    JOIN ConferenceDay AS CD

    ON CD.ConferenceDayID = W.ConferenceDayID

    JOIN WorkshopType AS WT

    ON WT.WorkshopTypeID = W.WorkshopID

    WHERE CP.Conference_ParticipantID = WP.Conference_ParticipantID

    AND WP.WorkshopID = W.WorkshopID

)

GO
```

## Używa

---

[dbo].[Conference\_Participant]

[dbo].[ConferenceDay]

[dbo].[Workshop]

[dbo].[Workshop\_Participant]

[dbo].[WorkshopType]

## ***[dbo].[WorkshopsInConferenceList]***

Widok zwracający listę dostępnych warsztatów na daną konferencję.

### Columns

Name	Data Type	Max Length (Bytes)
Conference Name	nvarchar(50)	100
Workshop Name	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[WorkshopsInConferenceList] AS
(
    SELECT C.ConferenceName AS [Conference Name] , WT.WorkshopName AS [Workshop
Name]
    FROM Workshop as W
    JOIN WorkshopType AS WT
    ON W.WorkshopID = WT.WorkshopTypeID
    JOIN Conference AS C
    ON W.ConferenceID = C.ConferenceID
    WHERE C.ConferenceID = W.ConferenceID
)
GO
```

### Używa

[dbo].[Conference]

[dbo].[Workshop]

[dbo].[WorkshopType]

## **[dbo].[WorkshopsInDayList]**

Widok zwracający listę warsztatów na dany dzień konferencji.

### Columns

Name	Data Type	Max Length (Bytes)
<b>ConferenceDayID</b>	int	4
<b>ConferenceName</b>	nvarchar(50)	100
<b>Number of Conference Day</b>	int	4
<b>Workshop Name</b>	nvarchar(50)	100

### SQL Script

```
CREATE VIEW [dbo].[WorkshopsInDayList]
AS
    SELECT CD.ConferenceDayID, C.ConferenceName, abs(DATEDIFF(DD, StartDate, Date-
ConferenceDay))+1 as [Number of Conference Day], WT.WorkshopName AS [Workshop
Name]

    FROM Workshop as W

    JOIN WorkshopType AS WT

    ON W.WorkshopID = WT.WorkshopTypeID

    JOIN Conference AS C

    ON W.ConferenceID = C.ConferenceID

    JOIN ConferenceDay AS CD

    ON CD.ConferenceDayID = W.ConferenceDayID

    WHERE W.ConferenceDayID = CD.ConferenceDayID

GO
```

### Używa

[dbo].[Conference]

[dbo].[ConferenceDay]

[dbo].[Workshop]

## Funkcje

Name
dbo.CollisionsInWorkshops
dbo.ConferenceDayAvailablePlaces
dbo.ConferenceDayFreePlaces
dbo.FreePlacesForWorkshop
dbo.GetDiscount
dbo.NumberOfParticipantsByReservation
dbo.NumberOfPeopleInReservation
dbo.Reservation_ConferenceValue
dbo.Reservation_WorkshopValue
dbo.ReservationValue
dbo.StudentDiscount

## **[dbo].[CollisionsInWorkshops]**

Funkcja zwraca 1 w przypadku, gdy dane warsztaty odbywają się w tym samym czasie i 0 w przeciwnym przypadku.

### SQL Script

```
--Funkcja workshopsCollision - zwraca 1 w przypadku, gdy dane warsztaty odbywają się w tym samym czasie i 0 w przeciwnym przypadku.

CREATE FUNCTION [dbo].[CollisionsInWorkshops] (@workshopID1 int, @workshopID2 int)
RETURNS bit
AS
BEGIN
    DECLARE @start_time1 time(7);
    DECLARE @end_time1 time(7);
    DECLARE @date1 date;
    DECLARE @start_time2 time(7);
    DECLARE @end_time2 time(7);
    DECLARE @date2 date;
    DECLARE @collision bit;

    SET @start_time1 = (SELECT Start_time FROM Workshop WHERE workshopID = @workshopID1)
    SET @end_time1 = (SELECT end_time FROM Workshop WHERE workshopID = @workshopID1)
    SET @date1 = (SELECT DateConferenceDay FROM ConferenceDay AS cd
        INNER JOIN Workshop AS w
        ON w.ConferenceDayID = cd.ConferenceDayID
        where w.WorkshopID = @workshopID1)

    SET @start_time2 = (SELECT start_time FROM Workshop WHERE workshopID = @workshopID2)
    SET @end_time2 = (SELECT end_time FROM Workshop WHERE workshopID = @workshopID2)
    SET @date2 = (SELECT DateConferenceDay FROM ConferenceDay AS cd
```

```
INNER JOIN Workshop AS w

ON w.ConferenceDayID = cd.ConferenceDayID

WHERE w.WorkshopID = @workshopID2)

IF((@date1 = @date2) AND (@start_time1 < @end_time2 OR @start_time2 < @end_time1))
SET @collision = 1
ELSE
SET @collision = 0
RETURN @collision
END
GO
```

## Używa

---

[dbo].[ConferenceDay]

[dbo].[Workshop]

## **[dbo].[ConferenceDayFreePlaces]**

Funckja zwraca ilość wolnych miejsc na dany dzień konferencji.

### SQL Script

---

```
CREATE FUNCTION [dbo].[ConferenceDayFreePlaces] (@ConferenceDayID int)

RETURNS int

AS

BEGIN

DECLARE @Number_of_seats int;

SET @Number_of_seats = (SELECT c.Number_of_seats FROM Conference as c

inner join ConferenceDay as cd

on c.ConferenceID = cd.ConferenceID

where cd.ConferenceDayID = @ConferenceDayID)

DECLARE @takenPlaces int;

SET @takenPlaces = (SELECT SUM(rd.NumberOfPeople) FROM ReservationDetails as rd

WHERE rd.ConferenceDayID = @ConferenceDayID)

RETURN (@Number_of_seats - @takenPlaces);

END

GO
```

### Używa

---

[dbo].[Conference]

[dbo].[ConferenceDay]

[dbo].[ReservationDetails]

### Używane przez

---

[dbo].[AddReservationDetails]



## ***[dbo].[FreePlacesForWorkshop]***

Funckja zwracająca ilość wolnych miejsc na dany warsztat.

### SQL Script

---

```
CREATE FUNCTION [dbo].[FreePlacesForWorkshop] (@workshopID int)
RETURNS int
AS
BEGIN
    DECLARE @allPlaces int;

    SET @allPlaces = (SELECT Number_of_seats FROM Workshop WHERE workshopID =
@workshopID)

    DECLARE @takenPlaces int;

    SET @takenPlaces = (SELECT SUM(NumberOfPeople) FROM Reservation_Workshop WHERE
workshopID = @workshopID)

    RETURN (@allPlaces - @takenPlaces);
END
GO
```

### Używa

---

[dbo].[Reservation\_Workshop]

[dbo].[Workshop]

## **[dbo].[GetDiscount]**

Funckja zwracająca wysokość zniżki ze względu na różnice dni pomiędzy datą rezerwacji a data rozpoczęcia konferencji.

### SQL Script

---

```
CREATE FUNCTION [dbo].[GetDiscount] (@ReservationID INT)
RETURNS REAL
AS
BEGIN
    DECLARE @Disc REAL

    SET @Disc = (SELECT TOP 1 Discount FROM Discounts
                INNER JOIN Conference AS c
                ON c.ConferenceId = Discounts.ConferenceID
                INNER JOIN dbo.Reservation_Conference RC
                ON RC.ConferenceID = c.ConferenceID
                WHERE RC.ReservationID = @ReservationID
                And DATEDIFF(dd,RC.DateOfReservation,c.StartDate ) >
Discounts.DateDifference)

    RETURN @Disc
END

GO
```

### Używa

---

[dbo].[Conference]

[dbo].[Discounts]

[dbo].[Reservation\_Conference]

### Używane przez

---

[dbo].[Reservation\_ConferenceValue]

## ***[dbo].[NumberOfParticipantsByReservation]***

Funckja zwraca ilość osób zadeklarowanych poprzez dane osobowe na dany dzień konferencji.

### **SQL Script**

---

```
CREATE FUNCTION [dbo].[NumberOfParticipantsByReservation] (@ReservationId INT)
RETURNS INT
AS
BEGIN
    DECLARE @NumberOfParticipants int

    SET @NumberOfParticipants = (SELECT COUNT(Conference_participantID) FROM
    dbo.Conference_Participant
                                WHERE ReservationID = @ReservationId)

    RETURN @NumberOfParticipants
END

GO
```

### **Używa**

---

[dbo].[Conference\_Participant]

### **Używane przez**

---

[dbo].[CustomersToCall]

## ***[dbo].[NumberOfPeopleInReservation]***

Funkcja zwracająca ilość zarezerwowanych miejsc dla danej rezerwacji.

### SQL Script

---

```
CREATE FUNCTION [dbo].[NumberOfPeopleInReservation] (@ReservationId INT)
RETURNS INT
AS
BEGIN
    DECLARE @NumberOfPeople INT
    SET @NumberOfPeople = (SELECT SUM(NumberOfPeople) FROM dbo.ReservationDetails
                           WHERE ReservationID = @ReservationId)
    RETURN @NumberOfPeople
END

GO
```

### Używa

---

[dbo].[ReservationDetails]

### Używane przez

---

[dbo].[CustomersToCall]

## **[dbo].[Reservation\_ConferenceValue]**

Funkcja zwracająca należność dla rezerwacji .

### SQL Script

```
CREATE FUNCTION [dbo].[Reservation_ConferenceValue] (@ReservationID int)

RETURNS MONEY --wynikiem funkcji jest cena tylko za rezerwacje konferencji (bez warsztatów)

AS

BEGIN

--ustalamy liczbę ludzi którzy nie są studentami i z tego tytułu nie przysługuje im zniżka

DECLARE @NumberOfRegularPeople int

SET @NumberOfRegularPeople = (SELECT SUM(rd.NumberOfPeople-rd.NumberOfStudents) AS NOT_Students

                                FROM dbo.ReservationDetails rd

                                WHERE rd.ReservationID=@ReservationID

                                GROUP BY rd.ReservationID )

--ustalamy liczbę studentów

DECLARE @NumberOfStudents INT

SET @NumberOfStudents=(SELECT SUM(NumberOfStudents) FROM dbo.ReservationDetails

                        WHERE ReservationID=@ReservationID)

--cena za dzień konferencji

DECLARE @Price money

SET @Price=(SELECT c.Price FROM dbo.Conference c

              WHERE ConferenceID=(SELECT ConferenceID FROM dbo.Reservation_Conference

                                   WHERE ReservationID=@ReservationID))

--wartosc rezerwacji bez uwzględniania zniżki dniowej

DECLARE @Value MONEY

SET @Value=@Price* (@NumberOfRegularPeople+(1-dbo.StudentDiscount (@Reservation-ID))*@NumberOfStudents)
```

```
--finalna wartość zamówienia konferencji po uwzględnieniu zniżki dniowej  
  
DECLARE @ValueAfterDiscount MONEY  
  
SET @ValueAfterDiscount=(1-dbo.GetDiscount(@ReservationID))*@Value  
  
RETURN(@ValueAfterDiscount);  
  
END  
  
GO
```

### Używa

---

[dbo].[GetDiscount]

[dbo].[StudentDiscount]

[dbo].[Conference]

[dbo].[Reservation\_Conference]

[dbo].[ReservationDetails]

### Używane przez

---

[dbo].[ReservationValue]

## ***[dbo].[Reservation\_WorkshopValue]***

Funkcja zwracająca należność za rezerwację warsztatu.

### SQL Script

```
CREATE FUNCTION [dbo].[Reservation_WorkshopValue] (@ReservationID int)

RETURNS money

AS

BEGIN

    DECLARE @Licznik INT

    SET @Licznik= (SELECT count(ReservationID) FROM reservation_workshop WHERE Reservation-
ID=@ReservationID)

    DECLARE @Reservation_WorkshopID INT

    DECLARE @Value1 INT

    SET @Reservation_WorkshopID=0

    SET @Value1=0

    DECLARE @Value INT

    SET @Value=0

    WHILE @Licznik>0

    BEGIN

        DECLARE @WorkshopID INT

        SET @WorkshopID=(SELECT TOP 1 WorkshopID FROM dbo.Reservation_Workshop

            WHERE ReservationID=@ReservationID AND Reservation_WorkshopID>@Reservation_-
WorkshopID)

        DECLARE @Price int

        SET @Price=(SELECT Price_Workshop FROM Workshop WHERE WorkshopID=@WorkshopID)

        DECLARE @NumberOfPeople INT

        SET @NumberOfPeople=(SELECT TOP 1 NumberOfPeople FROM dbo.Reservation_Workshop

            WHERE ReservationID=@ReservationID AND WorkshopID=@WorkshopID

            AND Reservation_WorkshopID>@Reservation_WorkshopID)

        SET @Reservation_WorkshopID=(SELECT TOP 1 Reservation_WorkshopID FROM dbo.Reservation_Workshop

            WHERE ReservationID=@ReservationID AND Reservation_Workshop-
ID>@Reservation_WorkshopID)
```

```
SET @Value1=@Price*@NumberOfPeople

SET @Value=@Value+@Value1

SET @Licznik=@Licznik-1


END


RETURN (@Value);

END

GO
```

#### Używa

---

[dbo].[Reservation\_Workshop]

[dbo].[Workshop]

#### Używane przez

---

[dbo].[ReservationValue]



## ***[dbo].[ReservationValue]***

Funkcja zwracająca finalną należność za całość dokonanej rezerwacji.

### SQL Script

---

```
--ReservationValue

CREATE FUNCTION [dbo].[ReservationValue] (@ReservationID int)

RETURNS money

AS

BEGIN

RETURN (dbo.Reservation_ConferenceValue (@ReservationID) + dbo.Reservation_Workshop-
Value (@ReservationID) ) ;

END

GO
```

### Używa

---

[dbo].[Reservation\_ConferenceValue]

[dbo].[Reservation\_WorkshopValue]

### Używane przez

---

[dbo].[PriceOfReservation]

[dbo].[ValueOfReservation]

## **[dbo].[StudentDiscount]**

Funckja zwracająca wysokość zniżki studenckiej zależnie od ID konferencji.

### SQL Script

---

```
CREATE FUNCTION [dbo].[StudentDiscount] (@ReservationID INT)
RETURNS REAL
AS
BEGIN

DECLARE @SDiscount REAL;
DECLARE @CustomerID INT;

SET @SDiscount = (SELECT studentDiscount FROM Conference c
                  INNER JOIN dbo.Reservation_Conference AS rc
                  ON Rc.ConferenceID = c.ConferenceID
                  WHERE rc.ReservationID = @ReservationID)

RETURN @SDiscount

END

GO
```

### Używa

---

[dbo].[Conference]

[dbo].[Reservation\_Conference]

### Używane przez

---

[dbo].[Reservation\_ConferenceValue]

## Role w systemie

Zalecamy stworzenie następujących ról:

**administrator** - osoba zaznajomiona z językiem SQL, która może rozwijać i udoskonalać bazę danych. Jest także odpowiedzialna za obsługę zdarzeń losowych.

o dostęp do wszystkich procedur oraz widoków.

**pracownik firmy** - osoba obsługująca zamówienia, która będzie się kontaktowała z klientem i pomagała mu w przypadku problemów z rejestracją.

o procedury:

- `dbo.AddReservationDetails`
- `dbo.UpdatePaymentDate`
- `dbo.AddDiscount`
- `dbo.CancelReservation_Conference`
- `dbo.AddConference`
- `dbo.AddConferenceDay`
- `dbo.AddConferenceParticipant`
- `dbo.AddWorkshop`
- `dbo.AddStudent`

o widoki:

- `dbo.NumberOfCustomerReservations`
- `dbo.CancelledReservations`
- `dbo.ConferenceDayParticipants`
- `dbo.ConferenceParticipants`
- `dbo.ConferenceToCancelled`
- `dbo.CustomersToCall`
- `dbo.PopularConferences`
- `dbo.PopularWorkshops`
- `dbo.RegularCustomers`
- `dbo.ValueOfReservation`
- `dbo.WorkshopParticipants`
- `dbo.WorkshopsInConferenceList`

**klient** - osoba składająca zamówienia oraz dodająca uczestników

o procedury:

- `dbo.AddReservation_Conference`
- `dbo.AddReservationWorkshop`
- `dbo.AddReservationDetails`
- `dbo.ChangeIndividualCustomerData`
- `dbo.ChangeCompanyData`
- `dbo.CancelReservation_Conference`
- `dbo.AddCustomerIndividual`

- dbo.AddCustomerCompany
- dbo.CancelReservation\_Conference
- dbo.AddConferenceParticipant
- dbo.AddWorkshopParticipant
- dbo.AddStudent

o widoki:

- dbo.ConferenceParticipants
- dbo.WorkshopsInDayList
- dbo.WorkshopsInConferenceList
- dbo.ValueOfReservation

## Generator

Do generowania danych wykorzystaliśmy program RedGate, napisane przez nas widoki oraz wykorzystaliśmy wbudowane funkcje Microsoft SQL Management Studio.

### ***Widoki wykorzystywane do generowania danych:***

[dbo].[GeneratorCompany]

#### SQL Script

```
CREATE VIEW [dbo].[GeneratorCompany]
as
SELECT CustomerID FROM dbo.Customers
WHERE CustomerID IN (SELECT companyid FROM dbo.Company)
GO
```

[dbo].[GeneratorConference\_participantCompany]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorConference_participantCompany]
AS
SELECT rc.reservationID,rc.ConferenceID,cd.ConferenceDayID,(SELECT c.companyname FROM
dbo.Company c WHERE rc.CustomerID=c.CompanyID) AS CompanyName,(SELECT SUM(numberofpeople) FROM
dbo.ReservationDetails rd1 WHERE rd1.ReservationID=rc.ReservationID) AS number
FROM dbo.Reservation_Conference rc
INNER JOIN dbo.ConferenceDay cd
ON cd.ConferenceID = RC.ConferenceID
WHERE rc.CustomerID IN (SELECT companyid FROM dbo.Company) AND rc.ReservationID IN (SELECT
ReservationID FROM dbo.ReservationDetails) GO
```

[dbo].[GeneratorParticipants\_Individual]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorParticipants_Individual] AS
SELECT ROW_NUMBER() OVER( ORDER BY rc.ReservationID )AS Conference_ParticipantID
,rc.ReservationID ,rc.ConferenceID,cd.ConferenceDayID,ic.FirstName,ic.LastName,NULL AS
CompanyName
FROM Reservation_Conference AS RC
INNER JOIN dbo.IndividualCustomer ic
ON rc.CustomerID=ic.IndividualCustomerID
INNER JOIN dbo.ConferenceDay cd
ON cd.ConferenceID = RC.ConferenceID
WHERE rc.CustomerID IN (SELECT ic.IndividualCustomerID FROM dbo.IndividualCustomer)
GO
```

[dbo].[GeneratorParticipants\_IndividualStudent]

### SQL Script

```
CREATE VIEW [dbo].[GeneratorParticipants_IndividualStudent] AS

SELECT cp.Conference_ParticipantID AS StudentID, cp.Conference_ParticipantID+15000 AS Student_
CardID, GETDATE() AS Expiration_Date

FROM dbo.Conference_Participant cp

INNER JOIN dbo.Reservation_Conference rc

ON rc.ReservationID = cp.ReservationID

WHERE rc.CustomerID IN (SELECT IndividualCustomerID FROM dbo.IndividualCustomer WHERE Is-
Student=1)

GO
```

[dbo].[GeneratorReservationDetailsCompany]

### SQL Script

```
CREATE VIEW [dbo].[GeneratorReservationDetailsCompany] AS

SELECT ROW_NUMBER() OVER( ORDER BY rc.ReservationID ) AS ReservationDetailsID,

rc.ReservationID, cd.ConferenceDayID, 2 AS NumberOfPeople, 0 AS Cancelled, 0 AS NumberOfStudents

FROM dbo.Reservation_Conference rc

JOIN dbo.ConferenceDay cd

ON cd.ConferenceID = rc.ConferenceID

WHERE CustomerID IN (SELECT companyId FROM dbo.Company)

GO
```

[dbo].[GeneratorReservationDetailsIndividual]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorReservationDetailsIndividual] AS

SELECT ROW_NUMBER() OVER( ORDER BY rc.ReservationID ) AS ReservationDetailsID,

rc.ReservationID,cd.ConferenceDayID, 2 AS NumberOfPeople,0 AS Cancelled,0 AS NumberOfStudents

FROM dbo.Reservation_Conference rc

JOIN dbo.ConferenceDay cd

ON cd.ConferenceID = rc.ConferenceID

WHERE CustomerID IN (SELECT IndividualCustomerID FROM dbo.IndividualCustomer)

GO
```

[dbo].[GeneratorReservationsIDCompany]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorReservationsIDCompany] AS

SELECT ROW_NUMBER() OVER( ORDER BY rc.ReservationID )+13222 AS ReservationDetailsID,

RC.ReservationID,cd.ConferenceDayID,5 AS NumberOfPeople, 0 AS Cancelled,2 AS NumberOfStudents

FROM Reservation_Conference AS RC

INNER JOIN dbo.ConferenceDay cd

ON cd.ConferenceID = RC.ConferenceID

WHERE RC.CustomerID IN (SELECT CompanyID FROM dbo.Company)

GO
```

[dbo].[GeneratorReservationsIDIndywidual]

### SQL Script

```
CREATE VIEW [dbo].[GeneratorReservationsIDIndywidual] AS

SELECT ROW_NUMBER() OVER( ORDER BY rc.ReservationID ) AS ReservationDetailsID, RC.Reservation-
ID,cd.ConferenceDayID,'1' AS NumberOfPeople,'0' AS Cancelled, ic.IsStudent AS NumberofStudents


FROM Reservation_Conference AS RC

INNER JOIN dbo.ConferenceDay cd

ON cd.ConferenceID = RC.ConferenceID

INNER JOIN dbo.IndividualCustomer ic

ON ic.IndividualCustomerID=rc.CustomerID

WHERE RC.CustomerID IN (SELECT IndividualCustomerID FROM dbo.IndividualCustomer ic WHERE
rc.CustomerID=ic.IndividualCustomerID) AND

rc.ConferenceID IN (SELECT cd.ConferenceDayID FROM dbo.ConferenceDay cd WHERE cd.Conference-
ID=rc.ConferenceID)

GO
```

[dbo].[GeneratorWorkshop]

### SQL Script

```
CREATE VIEW [dbo].[GeneratorWorkshop]

AS

SELECT ConferenceID,ConferenceDayID,DateConferenceDay FROM dbo.ConferenceDay

GO
```



 [dbo].[GeneratorWorkshopIndywidualny]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorWorkshopIndywidualny] AS

SELECT DISTINCT RC.ReservationID,W.WorkshopID, '1' AS NumberOfPeople,'0' AS Cancelled

FROM Reservation_Conference AS RC

INNER JOIN Workshop AS w

ON W.ConferenceID = RC.ConferenceID

INNER JOIN dbo.IndividualCustomer ic

ON ic.IndividualCustomerID = rc.CustomerID

WHERE RC.CustomerID IN (SELECT IndividualCustomerID FROM dbo.IndividualCustomer) AND

rc.ConferenceID IN (SELECT ConferenceDayID FROM dbo.ReservationDetails WHERE Reservation-

ID=rc.ReservationID)

and RC.reservationID BETWEEN 2000 AND 4000

GO
```

[dbo].[GeneratorWorkshopFirma]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorWorkshopKompania] AS

SELECT DISTINCT RC.ReservationID, W.WorkshopID

FROM Reservation_Conference AS RC

INNER JOIN dbo.ReservationDetails RD

ON RD.ReservationID = RC.ReservationID
```

```
INNER JOIN Workshop AS w

ON W.ConferenceID = RC.ConferenceID

INNER JOIN dbo.Company ic

ON ic.CompanyID = rc.CustomerID

WHERE RC.CustomerID IN (SELECT CompanyID FROM dbo.Company) AND

rc.ConferenceID IN (SELECT ConferenceDayID FROM dbo.ReservationDetails WHERE Reservation-
ID=rc.ReservationID)

AND RC.ReservationID > 5000

GO
```

[dbo].[GeneratorWorkshopParticipantsAdding]

## SQL Script

---

```
CREATE VIEW [dbo].[GeneratorWorkshopParticipantsAdding] AS

SELECT rw.workshopid,rw.ReservationID,rw.Reservation_WorkshopID,cp.Conference_ParticipantID

FROM dbo.Reservation_Workshop rw

INNER JOIN dbo.Conference_Participant cp

ON cp.ReservationID=rw.ReservationID

WHERE rw.WorkshopID IN ( SELECT WorkshopID FROM dbo.Workshop WHERE ConferenceDay-
ID=cp.ConferenceDayID)

GO
```