Національний технічний університет України

«Київський політехнічний інститут імені Ігоря Сікорського»

Факультет інформатики та обчислювальної техніки

Кафедра автоматики та управління в технічних системах

**Лабораторна робота № 8**

з дисципліни «Компоненти програмної інженерії – 2.

Моделювання та аналіз програмного забезпечення»

**Виконав:**

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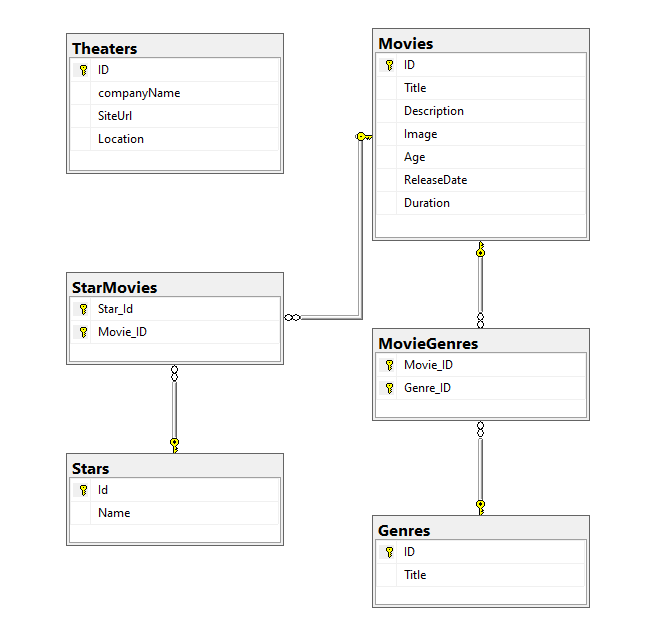
**Перевірив:**

ас. Галушко Дмитро Олександрович

Київ 2020

**Тема:** розробка і проектування бази даних.

Даталогічна модель:



Скрипти:

USE [cinemasdbstore]

GO

/\*\*\*\*\*\* Object: Table [dbo].[\_\_MigrationHistory] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[\_\_MigrationHistory](

[MigrationId] [nvarchar](150) NOT NULL,

[ContextKey] [nvarchar](300) NOT NULL,

[Model] [varbinary](max) NOT NULL,

[ProductVersion] [nvarchar](32) NOT NULL,

CONSTRAINT [PK\_dbo.\_\_MigrationHistory] PRIMARY KEY CLUSTERED

(

[MigrationId] ASC,

[ContextKey] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Genres] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Genres](

[ID] [int] IDENTITY(1,1) NOT NULL,

[Title] [nvarchar](max) NULL,

CONSTRAINT [PK\_dbo.Genres] PRIMARY KEY CLUSTERED

(

[ID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[MovieGenres] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[MovieGenres](

[Movie\_ID] [int] NOT NULL,

[Genre\_ID] [int] NOT NULL,

CONSTRAINT [PK\_dbo.MovieGenres] PRIMARY KEY CLUSTERED

(

[Movie\_ID] ASC,

[Genre\_ID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Movies] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Movies](

[ID] [int] IDENTITY(1,1) NOT NULL,

[Title] [nvarchar](max) NULL,

[Description] [nvarchar](max) NULL,

[Image] [nvarchar](max) NULL,

[Age] [int] NOT NULL,

[ReleaseDate] [date] NOT NULL,

[Duration] [int] NOT NULL,

CONSTRAINT [PK\_dbo.Movies] PRIMARY KEY CLUSTERED

(

[ID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[StarMovies] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[StarMovies](

[Star\_Id] [int] NOT NULL,

[Movie\_ID] [int] NOT NULL,

CONSTRAINT [PK\_dbo.StarMovies] PRIMARY KEY CLUSTERED

(

[Star\_Id] ASC,

[Movie\_ID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Stars] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Stars](

[Id] [int] IDENTITY(1,1) NOT NULL,

[Name] [nvarchar](max) NULL,

CONSTRAINT [PK\_dbo.Stars] PRIMARY KEY CLUSTERED

(

[Id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Theaters] Script Date: 05.06.2020 17:28:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Theaters](

[ID] [int] IDENTITY(1,1) NOT NULL,

[companyName] [nvarchar](max) NULL,

[SiteUrl] [nvarchar](max) NULL,

[Location] [geography] NULL,

CONSTRAINT [PK\_dbo.Theaters] PRIMARY KEY CLUSTERED

(

[ID] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON) ON [PRIMARY]

) ON [PRIMARY] TEXTIMAGE\_ON [PRIMARY]

GO

INSERT [dbo].[\_\_MigrationHistory] ([MigrationId], [ContextKey], [Model], [ProductVersion]) VALUES (N'202006041400005\_InitialCreate', N'CinemaWeb.DAL.Entities.DatabaseContext', 

GO

SET IDENTITY\_INSERT [dbo].[Genres] ON

INSERT [dbo].[Genres] ([ID], [Title]) VALUES (1, N'Треш')

INSERT [dbo].[Genres] ([ID], [Title]) VALUES (2, N'Бодя')

SET IDENTITY\_INSERT [dbo].[Genres] OFF

GO

INSERT [dbo].[MovieGenres] ([Movie\_ID], [Genre\_ID]) VALUES (1, 1)

INSERT [dbo].[MovieGenres] ([Movie\_ID], [Genre\_ID]) VALUES (2, 1)

INSERT [dbo].[MovieGenres] ([Movie\_ID], [Genre\_ID]) VALUES (1, 2)

INSERT [dbo].[MovieGenres] ([Movie\_ID], [Genre\_ID]) VALUES (2, 2)

GO

SET IDENTITY\_INSERT [dbo].[Movies] ON

INSERT [dbo].[Movies] ([ID], [Title], [Description], [Image], [Age], [ReleaseDate], [Duration]) VALUES (1, N'Тестовое название', N'Тестовое описание', N'AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA==', 18, CAST(N'2020-05-01' AS Date), 60)

INSERT [dbo].[Movies] ([ID], [Title], [Description], [Image], [Age], [ReleaseDate], [Duration]) VALUES (2, N'Тестовое название2', N'Тестовое описание2', N'AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA', 18, CAST(N'2020-06-06' AS Date), 60)

SET IDENTITY\_INSERT [dbo].[Movies] OFF

GO

INSERT [dbo].[StarMovies] ([Star\_Id], [Movie\_ID]) VALUES (1, 1)

INSERT [dbo].[StarMovies] ([Star\_Id], [Movie\_ID]) VALUES (2, 1)

INSERT [dbo].[StarMovies] ([Star\_Id], [Movie\_ID]) VALUES (1, 2)

INSERT [dbo].[StarMovies] ([Star\_Id], [Movie\_ID]) VALUES (2, 2)

GO

SET IDENTITY\_INSERT [dbo].[Stars] ON

INSERT [dbo].[Stars] ([Id], [Name]) VALUES (1, N'Шмонько')

INSERT [dbo].[Stars] ([Id], [Name]) VALUES (2, N'Лукашенко')

SET IDENTITY\_INSERT [dbo].[Stars] OFF

GO

SET IDENTITY\_INSERT [dbo].[Theaters] ON

INSERT [dbo].[Theaters] ([ID], [companyName], [SiteUrl], [Location]) VALUES (1, N'Multiplex', N'https://multiplex.ua/', 0xE6100000010C87A6ECF483A23E40757632384A3A4940)

INSERT [dbo].[Theaters] ([ID], [companyName], [SiteUrl], [Location]) VALUES (2, N'Оскар', N'https://oskar.kyiv.ua/', 0xE6100000010C72C0AE264F993E40CBDB114E0B3A4940)

SET IDENTITY\_INSERT [dbo].[Theaters] OFF

GO

ALTER TABLE [dbo].[MovieGenres] WITH CHECK ADD CONSTRAINT [FK\_dbo.MovieGenres\_dbo.Genres\_Genre\_ID] FOREIGN KEY([Genre\_ID])

REFERENCES [dbo].[Genres] ([ID])

ON DELETE CASCADE

GO

ALTER TABLE [dbo].[MovieGenres] CHECK CONSTRAINT [FK\_dbo.MovieGenres\_dbo.Genres\_Genre\_ID]

GO

ALTER TABLE [dbo].[MovieGenres] WITH CHECK ADD CONSTRAINT [FK\_dbo.MovieGenres\_dbo.Movies\_Movie\_ID] FOREIGN KEY([Movie\_ID])

REFERENCES [dbo].[Movies] ([ID])

ON DELETE CASCADE

GO

ALTER TABLE [dbo].[MovieGenres] CHECK CONSTRAINT [FK\_dbo.MovieGenres\_dbo.Movies\_Movie\_ID]

GO

ALTER TABLE [dbo].[StarMovies] WITH CHECK ADD CONSTRAINT [FK\_dbo.StarMovies\_dbo.Movies\_Movie\_ID] FOREIGN KEY([Movie\_ID])

REFERENCES [dbo].[Movies] ([ID])

ON DELETE CASCADE

GO

ALTER TABLE [dbo].[StarMovies] CHECK CONSTRAINT [FK\_dbo.StarMovies\_dbo.Movies\_Movie\_ID]

GO

ALTER TABLE [dbo].[StarMovies] WITH CHECK ADD CONSTRAINT [FK\_dbo.StarMovies\_dbo.Stars\_Star\_Id] FOREIGN KEY([Star\_Id])

REFERENCES [dbo].[Stars] ([Id])

ON DELETE CASCADE

GO

ALTER TABLE [dbo].[StarMovies] CHECK CONSTRAINT [FK\_dbo.StarMovies\_dbo.Stars\_Star\_Id]

GO

**Висновок:** в даній лабораторній роботі ми навчилися розробляти і проектувати базу даних MS SQL.