День 1

Мной была создана БД "Медицинской лаборатории №20"

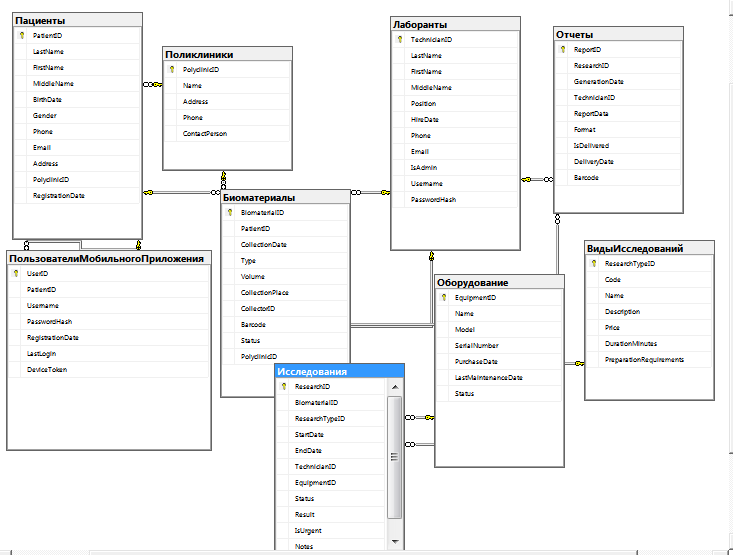


Диаграмма БД

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Биоматериалы] Script Date: 06.05.2025 10:02:07 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Биоматериалы](

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

[PatientID] [int] NOT NULL,

[CollectionDate] [datetime] NOT NULL,

[Type] [nvarchar](50) NOT NULL,

[Volume] [nvarchar](20) NULL,

[CollectionPlace] [nvarchar](100) NULL,

[CollectorID] [int] NULL,

[Barcode] [nvarchar](50) NULL,

[Status] [nvarchar](20) NULL,

[PolyclinicID] [int] NULL,

PRIMARY KEY CLUSTERED

(

[BiomaterialID] ASC

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

UNIQUE NONCLUSTERED

(

[Barcode] 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

ALTER TABLE [dbo].[Биоматериалы] ADD DEFAULT ('Received') FOR [Status]

GO

ALTER TABLE [dbo].[Биоматериалы] WITH CHECK ADD FOREIGN KEY([CollectorID])

REFERENCES [dbo].[Лаборанты] ([TechnicianID])

GO

ALTER TABLE [dbo].[Биоматериалы] WITH CHECK ADD FOREIGN KEY([PatientID])

REFERENCES [dbo].[Пациенты] ([PatientID])

GO

ALTER TABLE [dbo].[Биоматериалы] WITH CHECK ADD FOREIGN KEY([PolyclinicID])

REFERENCES [dbo].[Поликлиники] ([PolyclinicID])

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[ВидыИсследований] Script Date: 06.05.2025 10:02:32 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[ВидыИсследований](

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

[Code] [nvarchar](20) NOT NULL,

[Name] [nvarchar](100) NOT NULL,

[Description] [nvarchar](500) NULL,

[Price] [decimal](10, 2) NOT NULL,

[DurationMinutes] [int] NOT NULL,

[PreparationRequirements] [nvarchar](500) NULL,

PRIMARY KEY CLUSTERED

(

[ResearchTypeID] ASC

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

UNIQUE NONCLUSTERED

(

[Code] 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

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Исследования] Script Date: 06.05.2025 10:02:56 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Исследования](

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

[BiomaterialID] [int] NOT NULL,

[ResearchTypeID] [int] NOT NULL,

[StartDate] [datetime] NULL,

[EndDate] [datetime] NULL,

[TechnicianID] [int] NULL,

[EquipmentID] [int] NULL,

[Status] [nvarchar](20) NULL,

[Result] [nvarchar](max) NULL,

[IsUrgent] [bit] NULL,

[Notes] [nvarchar](500) NULL,

PRIMARY KEY CLUSTERED

(

[ResearchID] 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

ALTER TABLE [dbo].[Исследования] ADD DEFAULT ('Scheduled') FOR [Status]

GO

ALTER TABLE [dbo].[Исследования] ADD DEFAULT ((0)) FOR [IsUrgent]

GO

ALTER TABLE [dbo].[Исследования] WITH CHECK ADD FOREIGN KEY([BiomaterialID])

REFERENCES [dbo].[Биоматериалы] ([BiomaterialID])

GO

ALTER TABLE [dbo].[Исследования] WITH CHECK ADD FOREIGN KEY([EquipmentID])

REFERENCES [dbo].[Оборудование] ([EquipmentID])

GO

ALTER TABLE [dbo].[Исследования] WITH CHECK ADD FOREIGN KEY([ResearchTypeID])

REFERENCES [dbo].[ВидыИсследований] ([ResearchTypeID])

GO

ALTER TABLE [dbo].[Исследования] WITH CHECK ADD FOREIGN KEY([TechnicianID])

REFERENCES [dbo].[Лаборанты] ([TechnicianID])

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Лаборанты] Script Date: 06.05.2025 10:03:12 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Лаборанты](

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

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

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

[MiddleName] [nvarchar](50) NULL,

[Position] [nvarchar](50) NOT NULL,

[HireDate] [date] NOT NULL,

[Phone] [nvarchar](20) NULL,

[Email] [nvarchar](100) NULL,

[IsAdmin] [bit] NULL,

[Username] [nvarchar](50) NULL,

[PasswordHash] [nvarchar](255) NULL,

PRIMARY KEY CLUSTERED

(

[TechnicianID] ASC

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

UNIQUE NONCLUSTERED

(

[Username] 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

ALTER TABLE [dbo].[Лаборанты] ADD DEFAULT ((0)) FOR [IsAdmin]

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Оборудование] Script Date: 06.05.2025 10:03:21 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Оборудование](

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

[Name] [nvarchar](100) NOT NULL,

[Model] [nvarchar](100) NOT NULL,

[SerialNumber] [nvarchar](50) NULL,

[PurchaseDate] [date] NULL,

[LastMaintenanceDate] [date] NULL,

[Status] [nvarchar](20) NULL,

PRIMARY KEY CLUSTERED

(

[EquipmentID] ASC

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

UNIQUE NONCLUSTERED

(

[SerialNumber] 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

ALTER TABLE [dbo].[Оборудование] ADD DEFAULT ('Active') FOR [Status]

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Отчеты] Script Date: 06.05.2025 10:03:31 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Отчеты](

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

[ResearchID] [int] NOT NULL,

[GenerationDate] [datetime] NULL,

[TechnicianID] [int] NULL,

[ReportData] [nvarchar](max) NOT NULL,

[Format] [nvarchar](20) NULL,

[IsDelivered] [bit] NULL,

[DeliveryDate] [datetime] NULL,

[Barcode] [nvarchar](50) NULL,

PRIMARY KEY CLUSTERED

(

[ReportID] ASC

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

UNIQUE NONCLUSTERED

(

[Barcode] 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

ALTER TABLE [dbo].[Отчеты] ADD DEFAULT (getdate()) FOR [GenerationDate]

GO

ALTER TABLE [dbo].[Отчеты] ADD DEFAULT ('PDF') FOR [Format]

GO

ALTER TABLE [dbo].[Отчеты] ADD DEFAULT ((0)) FOR [IsDelivered]

GO

ALTER TABLE [dbo].[Отчеты] WITH CHECK ADD FOREIGN KEY([ResearchID])

REFERENCES [dbo].[Исследования] ([ResearchID])

GO

ALTER TABLE [dbo].[Отчеты] WITH CHECK ADD FOREIGN KEY([TechnicianID])

REFERENCES [dbo].[Лаборанты] ([TechnicianID])

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Пациенты] Script Date: 06.05.2025 10:03:40 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Пациенты](

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

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

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

[MiddleName] [nvarchar](50) NULL,

[BirthDate] [date] NOT NULL,

[Gender] [char](1) NULL,

[Phone] [nvarchar](20) NULL,

[Email] [nvarchar](100) NULL,

[Address] [nvarchar](200) NULL,

[PolyclinicID] [int] NULL,

[RegistrationDate] [datetime] NULL,

PRIMARY KEY CLUSTERED

(

[PatientID] 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

ALTER TABLE [dbo].[Пациенты] ADD DEFAULT (getdate()) FOR [RegistrationDate]

GO

ALTER TABLE [dbo].[Пациенты] WITH CHECK ADD FOREIGN KEY([PolyclinicID])

REFERENCES [dbo].[Поликлиники] ([PolyclinicID])

GO

ALTER TABLE [dbo].[Пациенты] WITH CHECK ADD CHECK (([Gender]='F' OR [Gender]='M'))

GO

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[Поликлиники] Script Date: 06.05.2025 10:03:49 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[Поликлиники](

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

[Name] [nvarchar](100) NOT NULL,

[Address] [nvarchar](200) NOT NULL,

[Phone] [nvarchar](20) NULL,

[ContactPerson] [nvarchar](100) NULL,

PRIMARY KEY CLUSTERED

(

[PolyclinicID] 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

USE [MedLab\_Kislicyn]

GO

/\*\*\*\*\*\* Object: Table [dbo].[ПользователиМобильногоПриложения] Script Date: 06.05.2025 10:03:57 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

CREATE TABLE [dbo].[ПользователиМобильногоПриложения](

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

[PatientID] [int] NULL,

[Username] [nvarchar](50) NOT NULL,

[PasswordHash] [nvarchar](255) NOT NULL,

[RegistrationDate] [datetime] NULL,

[LastLogin] [datetime] NULL,

[DeviceToken] [nvarchar](255) NULL,

PRIMARY KEY CLUSTERED

(

[UserID] ASC

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

UNIQUE NONCLUSTERED

(

[Username] 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

ALTER TABLE [dbo].[ПользователиМобильногоПриложения] ADD DEFAULT (getdate()) FOR [RegistrationDate]

GO

ALTER TABLE [dbo].[ПользователиМобильногоПриложения] WITH CHECK ADD FOREIGN KEY([PatientID])

REFERENCES [dbo].[Пациенты] ([PatientID])

GO

Скрипт БД