"UNIVERSIDAD DE LAS FUERZAS ARMADAS"

Departamento de Ciencias de la Computación

Ingeniería en Software

Desarrollo Web Avanzado

14949

Integrantes:

David Cantuña

Matías Padrón

Sebastián Torres

DOCENTE:

Saavedra Diego

FECHA:

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DOCUMENTACION BANK-API

PREPARATIVOS

Para poder probar el proyecto sin problemas primero deberemos hacer algunos preparativos en:

SQL Server

Debemos crear una base de datos con el siguiente script:

El script también se encuentra en la carpeta "ScriptAPI" del proyecto.

```sql
USE [master]
GO

/****** Object: Database [Bank] Script Date: 30/11/2023 1:45:04 ******/
CREATE DATABASE [Bank]
 CONTAINMENT = NONE
 ON  PRIMARY
( NAME = N'Banco', FILENAME = N'C:\Program Files\Microsoft SQL
Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\Banco.mdf' , SIZE = 8192KB ,
MAXSIZE = UNLIMITED, FILEGROWTH = 65536KB )
 LOG ON
( NAME = N'Banco_log', FILENAME = N'C:\Program Files\Microsoft SQL
Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\Banco_log.ldf' , SIZE = 8192KB ,
MAXSIZE = 2048GB , FILEGROWTH = 65536KB )
 WITH CATALOG_COLLATION = DATABASE_DEFAULT, LEDGER = OFF
GO
ALTER DATABASE [Bank] SET COMPATIBILITY_LEVEL = 160
GO
IF (1 = FULLTEXTSERVICEPROPERTY('IsFullTextInstalled'))
begin
EXEC [Bank].[dbo].[sp_fulltext_database] @action = 'enable'
end
GO
ALTER DATABASE [Bank] SET ANSI_NULL_DEFAULT OFF
GO
ALTER DATABASE [Bank] SET ANSI_NULLS OFF
GO
ALTER DATABASE [Bank] SET ANSI_PADDING OFF
GO
ALTER DATABASE [Bank] SET ANSI_WARNINGS OFF
GO
ALTER DATABASE [Bank] SET ARITHABORT OFF
GO
ALTER DATABASE [Bank] SET AUTO_CLOSE OFF
GO
ALTER DATABASE [Bank] SET AUTO_SHRINK OFF
GO
```

```sql
ALTER DATABASE [Bank] SET AUTO_UPDATE_STATISTICS ON
GO
ALTER DATABASE [Bank] SET CURSOR_CLOSE_ON_COMMIT OFF
GO
ALTER DATABASE [Bank] SET CURSOR_DEFAULT  GLOBAL
GO
ALTER DATABASE [Bank] SET CONCAT_NULL_YIELDS_NULL OFF
GO
ALTER DATABASE [Bank] SET NUMERIC_ROUNDABORT OFF
GO
ALTER DATABASE [Bank] SET QUOTED_IDENTIFIER OFF
GO
ALTER DATABASE [Bank] SET RECURSIVE_TRIGGERS OFF
GO
ALTER DATABASE [Bank] SET  DISABLE_BROKER
GO
ALTER DATABASE [Bank] SET AUTO_UPDATE_STATISTICS_ASYNC OFF
GO
ALTER DATABASE [Bank] SET DATE_CORRELATION_OPTIMIZATION OFF
GO
ALTER DATABASE [Bank] SET TRUSTWORTHY OFF
GO
ALTER DATABASE [Bank] SET ALLOW_SNAPSHOT_ISOLATION OFF
GO
ALTER DATABASE [Bank] SET PARAMETERIZATION SIMPLE
GO
ALTER DATABASE [Bank] SET READ_COMMITTED_SNAPSHOT OFF
GO
ALTER DATABASE [Bank] SET HONOR_BROKER_PRIORITY OFF
GO
ALTER DATABASE [Bank] SET RECOVERY SIMPLE
GO
ALTER DATABASE [Bank] SET  MULTI_USER
GO
ALTER DATABASE [Bank] SET PAGE_VERIFY CHECKSUM
GO
ALTER DATABASE [Bank] SET DB_CHAINING OFF
GO
ALTER DATABASE [Bank] SET FILESTREAM( NON_TRANSACTED_ACCESS = OFF )
GO
ALTER DATABASE [Bank] SET TARGET_RECOVERY_TIME = 60 SECONDS
GO
ALTER DATABASE [Bank] SET DELAYED_DURABILITY = DISABLED
GO
ALTER DATABASE [Bank] SET ACCELERATED_DATABASE_RECOVERY = OFF
GO
ALTER DATABASE [Bank] SET QUERY_STORE = ON
GO
```

```sql
ALTER DATABASE [Bank] SET QUERY_STORE (OPERATION_MODE = READ_WRITE,
CLEANUP_POLICY = (STALE_QUERY_THRESHOLD_DAYS = 30),
DATA_FLUSH_INTERVAL_SECONDS = 900, INTERVAL_LENGTH_MINUTES = 60,
MAX_STORAGE_SIZE_MB = 1000, QUERY_CAPTURE_MODE = AUTO,
SIZE_BASED_CLEANUP_MODE = AUTO, MAX_PLANS_PER_QUERY = 200,
WAIT_STATS_CAPTURE_MODE = ON)
GO
USE [Bank]
GO

/****** Object:  Table [dbo].[Account]    Script Date: 30/11/2023
1:45:04 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[Account](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [AccountType] [int] NOT NULL,
    [ClientID] [int] NULL,
    [Balance] [decimal](10, 2) NOT NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO

/****** Object:  Table [dbo].[AccountType]    Script Date: 30/11/2023
1:45:04 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[AccountType](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [Name] [varchar](100) NOT NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO
```

```
/****** Object:  Table [dbo].[Administrator]    Script Date: 30/11/2023
1:45:04 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[Administrator](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [Name] [varchar](200) NOT NULL,
    [PhoneNumber] [varchar](40) NOT NULL,
    [Email] [varchar](50) NOT NULL,
    [Pwd] [varchar](50) NOT NULL,
    [AdminType] [varchar](30) NOT NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO

/****** Object:  Table [dbo].[BankTransaction]    Script Date:
30/11/2023 1:45:04 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[BankTransaction](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [AccountID] [int] NOT NULL,
    [TransactionType] [int] NOT NULL,
    [Amount] [decimal](10, 2) NOT NULL,
    [ExternalAccount] [int] NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO

/****** Object:  Table [dbo].[Client]    Script Date: 30/11/2023
1:45:04 ******/
SET ANSI_NULLS ON
```

```sql
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[Client](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [Name] [varchar](200) NOT NULL,
    [PhoneNumber] [varchar](40) NOT NULL,
    [Email] [varchar](50) NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO

/****** Object:  Table [dbo].[TransactionType]    Script Date:
30/11/2023 1:45:04 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
CREATE TABLE [dbo].[TransactionType](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [Name] [varchar](100) NOT NULL,
    [RegDate] [datetime] NOT NULL,
PRIMARY KEY CLUSTERED
(
    [ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY =
OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON,
OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
GO

SET IDENTITY_INSERT [dbo].[Account] ON
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (1, 1, 1, CAST(5000.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (2, 2, 2, CAST(800.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (3, 3, 3, CAST(10000.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
```

```sql
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (4, 1, 4, CAST(250.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (5, 2, 5, CAST(1200.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (6, 3, 6, CAST(15000.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (7, 1, 7, CAST(300.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (8, 2, 8, CAST(5000.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (9, 3, 9, CAST(7500.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (10, 1, 10, CAST(1000.00 AS Decimal(10, 2)),
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (11, 1, 1, CAST(300.00 AS Decimal(10, 2)),
CAST(N'2023-11-29T22:44:02.730' AS DateTime))
INSERT [dbo].[Account] ([ID], [AccountType], [ClientID], [Balance],
[RegDate]) VALUES (12, 1, 1, CAST(1000.00 AS Decimal(10, 2)),
CAST(N'2023-11-29T23:18:04.533' AS DateTime))
SET IDENTITY_INSERT [dbo].[Account] OFF
GO

SET IDENTITY_INSERT [dbo].[AccountType] ON
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (1,
N'Savings Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (2,
N'Checking Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (3, N'Fixed
Deposit Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (4, N'Money
Market Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (5,
N'Certificate of Deposit', CAST(N'2023-11-28T18:12:44.650' AS
DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (6,
N'Retirement Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (7,
N'Business Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (8, N'Joint
Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
```

```sql
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (9,
N'Student Account', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
INSERT [dbo].[AccountType] ([ID], [Name], [RegDate]) VALUES (10,
N'Money Market Savings', CAST(N'2023-11-28T18:12:44.650' AS DateTime))
SET IDENTITY_INSERT [dbo].[AccountType] OFF
GO

SET IDENTITY_INSERT [dbo].[Administrator] ON
INSERT [dbo].[Administrator] ([ID], [Name], [PhoneNumber], [Email],
[Pwd], [AdminType], [RegDate]) VALUES (3, N'James', N'123-456-7890',
N'james@gmail.com', N'1234', N'SuperAdmin', CAST(N'2023-11-
30T01:13:20.973' AS DateTime))
INSERT [dbo].[Administrator] ([ID], [Name], [PhoneNumber], [Email],
[Pwd], [AdminType], [RegDate]) VALUES (4, N'Carlos', N'987-654-3210',
N'carlos@gmail.com', N'1234', N'Viewer', CAST(N'2023-11-
30T01:13:20.973' AS DateTime))
SET IDENTITY_INSERT [dbo].[Administrator] OFF
GO

SET IDENTITY_INSERT [dbo].[BankTransaction] ON
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (1, 1, 1, CAST(1000.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (2, 2, 2, CAST(200.00 AS
Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (3, 3, 1, CAST(5000.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (4, 4, 2, CAST(50.00 AS
Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (5, 5, 1, CAST(800.00 AS
Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (6, 6, 2, CAST(1000.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (7, 7, 1, CAST(200.00 AS
Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (8, 8, 2, CAST(1500.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (9, 9, 1, CAST(3000.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
```

```sql
INSERT [dbo].[BankTransaction] ([ID], [AccountID], [TransactionType],
[Amount], [ExternalAccount], [RegDate]) VALUES (10, 10, 2, CAST(500.00
AS Decimal(10, 2)), NULL, CAST(N'2023-11-28T18:12:44.653' AS DateTime))
SET IDENTITY_INSERT [dbo].[BankTransaction] OFF
GO

SET IDENTITY_INSERT [dbo].[Client] ON
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (1, N'John Doe', N'555-1234', N'john.doe@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (2, N'Jane Smith', N'555-5678', N'jane.smith@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (3, N'Robert Johnson', N'555-9012', N'robert.j@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (4, N'Mary White', N'555-3456', N'mary.white@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (5, N'Michael Brown', N'555-7890', N'michael.b@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (6, N'Emily Davis', N'555-2345', N'emily.d@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (7, N'David Wilson', N'555-6789', N'david.w@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (8, N'Olivia Moore', N'555-0123', N'olivia.m@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (9, N'William Lee', N'555-4567', N'william.l@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (10, N'Sophia Anderson', N'555-8901', N'sophia.a@email.com',
CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[Client] ([ID], [Name], [PhoneNumber], [Email], [RegDate])
VALUES (11, N'Clara', N'099005214', N'clara@gmail.com', CAST(N'2023-11-
29T00:30:54.963' AS DateTime))
SET IDENTITY_INSERT [dbo].[Client] OFF
GO

SET IDENTITY_INSERT [dbo].[TransactionType] ON
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (1,
N'Deposit', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (2,
N'Withdrawal', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
```

```sql
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (3,
N'Transfer', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (4,
N'Payment', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (5,
N'Purchase', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (6,
N'Interest', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (7,
N'Fee', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (8,
N'Adjustment', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (9,
N'Conversion', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
INSERT [dbo].[TransactionType] ([ID], [Name], [RegDate]) VALUES (10,
N'Other', CAST(N'2023-11-28T18:12:44.653' AS DateTime))
SET IDENTITY_INSERT [dbo].[TransactionType] OFF
GO

ALTER TABLE [dbo].[Account] ADD  DEFAULT (getdate()) FOR [RegDate]
GO

ALTER TABLE [dbo].[AccountType] ADD  DEFAULT (getdate()) FOR [RegDate]
GO

ALTER TABLE [dbo].[Administrator] ADD  DEFAULT (getdate()) FOR
[RegDate]
GO

ALTER TABLE [dbo].[BankTransaction] ADD  DEFAULT (getdate()) FOR
[RegDate]
GO

ALTER TABLE [dbo].[Client] ADD  DEFAULT (getdate()) FOR [RegDate]
GO

ALTER TABLE [dbo].[TransactionType] ADD  DEFAULT (getdate()) FOR
[RegDate]
GO

ALTER TABLE [dbo].[Account]  WITH CHECK ADD FOREIGN KEY([AccountType])
REFERENCES [dbo].[AccountType] ([ID])
GO

ALTER TABLE [dbo].[Account]  WITH CHECK ADD FOREIGN KEY([AccountType])
REFERENCES [dbo].[AccountType] ([ID])
GO

ALTER TABLE [dbo].[Account]  WITH CHECK ADD FOREIGN KEY([ClientID])
```

```
REFERENCES [dbo].[Client] ([ID])
GO

ALTER TABLE [dbo].[Account]  WITH CHECK ADD FOREIGN KEY([ClientID])
REFERENCES [dbo].[Client] ([ID])
GO

ALTER TABLE [dbo].[BankTransaction]  WITH CHECK ADD FOREIGN
KEY([AccountID])
REFERENCES [dbo].[Account] ([ID])
GO

ALTER TABLE [dbo].[BankTransaction]  WITH CHECK ADD FOREIGN
KEY([AccountID])
REFERENCES [dbo].[Account] ([ID])
GO

ALTER TABLE [dbo].[BankTransaction]  WITH CHECK ADD FOREIGN
KEY([TransactionType])
REFERENCES [dbo].[TransactionType] ([ID])
GO

ALTER TABLE [dbo].[BankTransaction]  WITH CHECK ADD FOREIGN
KEY([TransactionType])
REFERENCES [dbo].[TransactionType] ([ID])
GO

USE [master]
GO

ALTER DATABASE [Bank] SET  READ_WRITE
GO
```

Una vez creada la base de datos con sus respectivos datos debemos hacer lo siguiente en el proyecto.

PROYECTO

En el proyecto, en el archivo "appsettings.json" debemos modificar la cadena de conexión a la base de datos según sea necesario. La cadena es la siguiente:
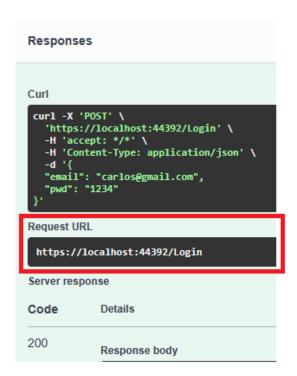
```
"ConexionSqlServer": "Server=DESKTOP-
9E12MUD\\SQLEXPRESS;Database=Bank;Trusted_Connection=True;MultipleActiveRe
sultSets=true;TrustServerCertificate=true;"
```

Realizando los cambios mencionados ya podemos empezar a probar el proyecto.

IMPORTANTE

El puerto mostrado en las URLS de este documento puede cambiar, se recomienda realizar el LOGIN en la página "Swagger" que se abre al correr el proyecto y revisar el puerto que se muestra en la información para ocuparlo con el resto de las peticiones.

AUTENTICACION

Para poder realizar cualquier petición en la API necesitamos primero generar un token mediante un login de la siguiente manera:

Ingresamos la siguiente URL, con método **POST**:

https://localhost:44392/Login

En el Body de la petición ingresamos las credenciales registradas en la base de datos en formato .json de la siguiente manera:
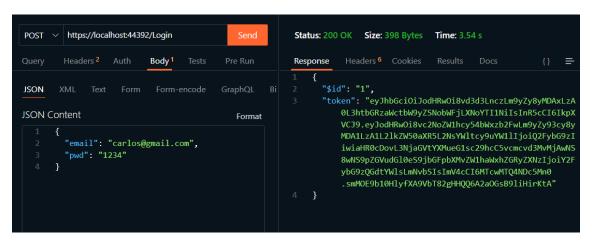
```json
{
  "email": "carlos@gmail.com",
  "pwd": "1234"
}
```

La respuesta de dicha petición será el token que necesitamos para realizar el resto de las acciones de la API:
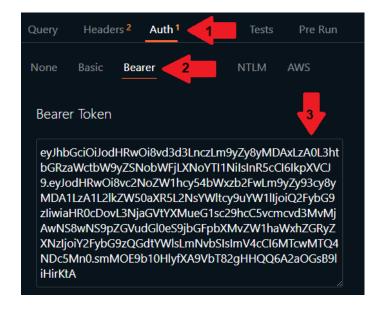
```json
{
  "$id": "1",
  "token": "eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yMDAxLzA0L3htbGRzaWctbW9yZSNobWFjLXNoYTI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy54bWxzb2FwLm9yZy93cy8yMDA1LzA1L2lkZW50aXR5L2NsYWltcy9uYW1lIjoiQ2FybG9zIiwiaHR0cDovL3NjaGVtYXMueG1sc29hcC5vcmcvd3MvMjAwNS8wNS9pZGVudGl0eS9jbGFpbXMvZW1haWxhZGRyZXNzIjoiY2FybG9zQGdtYWlsLmNvbSIsImV4cCI6MTcwMTQ4NDc5Mn0.smMOE9b10HlyfXA9VbT82gHHQQ6A2aOGsB9liHirKtA"
}
```

EJEMPLO:

Para poder realizar el resto de las peticiones es necesario que usemos el token que generamos, para ello:

1. Vamos al apartado de **Authorization**
2. Luego a **Bearer**
3. Finalmente ingresamos el token

ENDPOINTS

ENDPOINTS CLIENT(CLIENTE)

1.
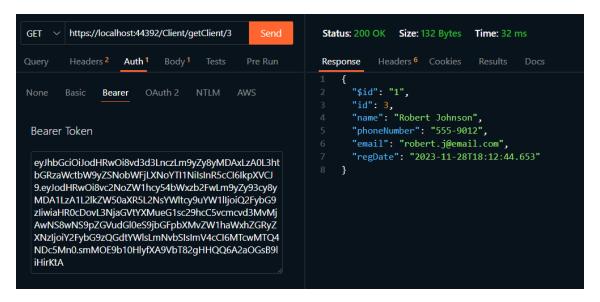
MÉTODO	GET
URL	https://localhost:44392/Client
BODY (JSON)	No necesario
DESCRIPCIÓN	Listar todos los clientes registrados actualmente.

EJEMPLO:

2.

MÉTODO	GET
URL	https://localhost:44392/Client/getClient/{id}
BODY (JSON)	No necesario
DESCRIPCIÓN	Obtiene un cliente específico

EJEMPLO:

3.
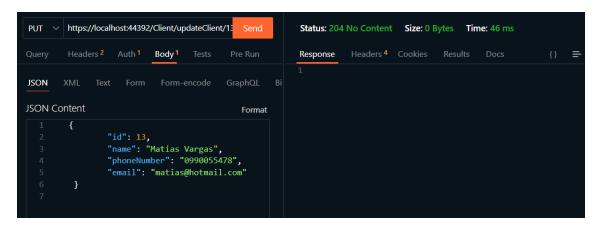
MÉTODO	POST
URL	https://localhost:44392/Client/addClient

BODY (JSON)	{
	    "name": "Matias Padron",
	    "phoneNumber": "0990055478",
	    "email": "matias@gmail.com"
	}

DESCRIPCIÓN	Agrega un cliente

EJEMPLO:

4.

MÉTODO	PUT
URL	https://localhost:44392/Client/updateClient/{id}

BODY (JSON)	{
	    "id": 15,
	    "name": "Matias Padron",
	    "phoneNumber": "0990055478",
	    "email": "matias@hotmail.com"
	}

DESCRIPCIÓN	Modifica un cliente específico

EJEMPLO:

5.

MÉTODO	DELETE
URL	https://localhost:44392/Client/deleteClient/{id}
BODY (JSON)	No necesario
DESCRIPCIÓN	Elimina un cliente específico
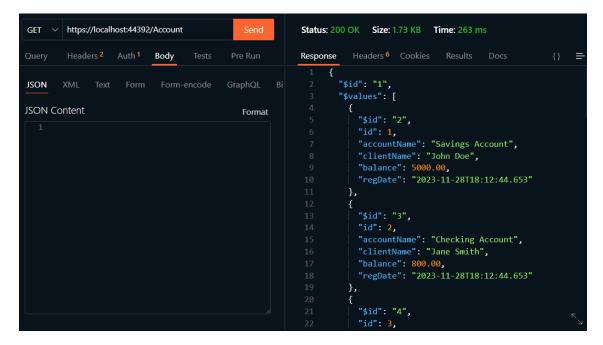
EJEMPLO:

ENDPOINTS ACCOUNT (CUENTA)

1.

MÉTODO	GET
URL	https://localhost:44392/Account
BODY (JSON)	No necesario
DESCRIPCIÓN	Listar todas las cuentas registradas

EJEMPLO:

2.

MÉTODO	GET
URL	https://localhost:44392/Account/getAccount/{id}
BODY (JSON)	No necesario
DESCRIPCIÓN	Obtener una cuenta específica

EJEMPLO:

3.

MÉTODO	POST
URL	https://localhost:44392/Account/addAccount

BODY (JSON)	{
	  "accountType": 10,
	  "clientId": 10,
	  "balance": 3
	}

DESCRIPCIÓN	Agregar una cuenta

EJEMPLO:

4.
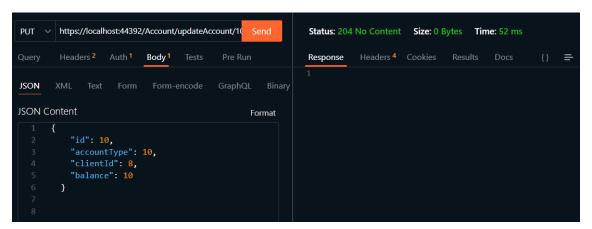
MÉTODO	PUT
URL	https://localhost:44392/Account/updateAccount/{id}

BODY (JSON)	{
	  "id": 14,
	  "accountType": 10,
	  "clientId": 14,
	  "balance": 10
	}

DESCRIPCIÓN	Modificar una cuenta específica

EJEMPLO:

5.

MÉTODO	DELETE
URL	https://localhost:44392/Account/deleteAccount/{id}
BODY (JSON)	No necesario
DESCRIPCIÓN	Eliminar una cuenta específica

EJEMPLO:

DELETE ∨	https://localhost:44392/Account/deleteAccou	Send		Status: 200 OK Size: 0 Bytes Time: 36 ms

Query   Headers 2   Auth 1   **Body**   Tests   Pre Run | **Response**   Headers 5   Cookies   Results   Docs   { }   ≡

1