Desafío práctio 1 – DSE

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Enlace del proyecto: https://github.com/RicardoM99160/Guias-DSE/tree/master/Desafio%201/MvcPelicula

Script Base de Datos

Modelos

```
Pelicula.cs
```

```
using System;
using System.Collections.Generic;
using System.Data.Entity;
using System.ComponentModel.DataAnnotations;
using System.Linq;
using System.Web;
namespace MvcPelicula.Models
{
    public class Pelicula
        public int ID { get; set; }
        [StringLength(60, MinimumLength = 3)]
        public string Titulo { get; set; }
        [Display(Name = "Fecha de Lanzamiento")]
        [DataType(DataType.Date)]
        [DisplayFormat(DataFormatString = "{0:yyyy-MM-dd}", ApplyFormatInEditMode = true)]
        public DateTime FechaLanzamiento { get; set; }
        [RegularExpression(@"^[A-Z]+[a-zA-Z'\s]*$")]
        [Required]
        [StringLength(30)]
        public string Genero { get; set; }
        [Range(1, 100)]
        [DataType(DataType.Currency)]
        public decimal Precio { get; set; }
        [RegularExpression(@"^[A-Z]+[a-zA-Z'\s]*$")]
        [StringLength(5)]
        public string Calificacion { get; set; }
        [StringLength(60, MinimumLength = 3)]
        public string Productor { get; set; }
        public int? DirectorID { get; set; }
        public virtual Director Director { get; set; }
    }
    public class PeliculaDBContext: DbContext
        public DbSet<Pelicula> Peliculas { get; set; }
        public DbSet<Director> Directores { get; set; }
}
```

```
Director.cs
```

```
using System;
 using System.Collections.Generic;
 using System.Linq;
 using System.Web;
 using System.Data.Entity;
 using System.ComponentModel.DataAnnotations;
 namespace MvcPelicula.Models
 {
     public class Director
         public int DirectorID { get; set; }
         [RegularExpression(@"^[A-Z]+[a-zA-Z'\s]*$")]
         [Required]
         [StringLength(60, MinimumLength = 3)]
         public string Nombre { get; set; }
         public virtual ICollection<Pelicula> Peliculas { get; set; }
     }
 }
Script tablas
Directors
 CREATE TABLE [dbo].[Directors] (
     [DirectorID] INT
                                  IDENTITY (1, 1) NOT NULL,
     [Nombre]
                   NVARCHAR (60) NOT NULL,
     CONSTRAINT [PK_dbo.Directors] PRIMARY KEY CLUSTERED ([DirectorID] ASC)
 );
Peliculas
 CREATE TABLE [dbo].[Peliculas] (
                                          IDENTITY (1, 1) NOT NULL,
     [ID]
                         INT
     [Titulo]
                         NVARCHAR (60)
                                          NULL,
                                          NOT NULL,
     [FechaLanzamiento] DATETIME
                         NVARCHAR (30)
                                          NOT NULL,
     [Genero]
                         DECIMAL (18, 2) NOT NULL,
     [Precio]
     [Calificacion]
                         NVARCHAR (5)
                                          NULL,
     [Productor]
                         NVARCHAR (60)
                                          NULL,
     [DirectorID]
                         INT
                                          NULL,
     CONSTRAINT [PK_dbo.Peliculas] PRIMARY KEY CLUSTERED ([ID] ASC),
     CONSTRAINT [FK_dbo.Peliculas_dbo.Directors_DirectorID] FOREIGN KEY ([DirectorID]) REFERENCES
 [dbo].[Directors] ([DirectorID])
 );
```

Migraciones

Configuration.cs

```
namespace MvcPelicula.Migrations
   using System;
   using System.Collections.Generic;
   using System.Data.Entity;
   using System.Data.Entity.Migrations;
   using System.Linq;
   using MvcPelicula.Models;
   internal sealed class Configuration : DbMigrationsConfiguration<MvcPelicula.Models.PeliculaDBContext>
   {
        public Configuration()
        {
           AutomaticMigrationsEnabled = false;
        }
        protected override void Seed(MvcPelicula.Models.PeliculaDBContext context)
            var directores = new List<Director>
            {
                new Director
                {
                    Nombre = "Chad Stahelski"
                },
                new Director
                {
                    Nombre = "Michael Sucsy"
                },
                new Director
                {
                    Nombre = "Brad Silberling"
                }
            };
            directores.ForEach(p => context.Directores.AddOrUpdate(d => d.Nombre, p));
            context.SaveChanges();
            context.Peliculas.AddOrUpdate(i => i.Titulo,
                new Pelicula
                    Titulo = "John Wick", FechaLanzamiento = DateTime.Parse("2014-10-24"), Genero = "Accion", Precio = 6.99M,
Calificacion = "D", Productor = "David Leicht",
                    DirectorID = directores.Single(s => s.Nombre == "Chad Stahelski").DirectorID, Director = directores.Single(s
=> s.Nombre == "Chad Stahelski")
                },
                new Pelicula
                    Titulo = "John Wick II", FechaLanzamiento = DateTime.Parse("2015-10-26"), Genero = "Accion", Precio = 6.99M,
Calificacion = "D", Productor = "David Leicht",
                    DirectorID = directores.Single(s => s.Nombre == "Chad Stahelski").DirectorID, Director = directores.Single(s
=> s.Nombre == "Chad Stahelski")
                },
                new Pelicula
                {
                    Titulo = "John Wick III", FechaLanzamiento = DateTime.Parse("2019-05-17"), Genero = "Accion", Precio = 6.99M,
Calificacion = "D", Productor = "Basil Iwanyk",
                    DirectorID = directores.Single(s => s.Nombre == "Chad Stahelski").DirectorID, Director = directores.Single(s
=> s.Nombre == "Chad Stahelski")
                },
                new Pelicula
                {
                    Titulo = "Votos de Amor", FechaLanzamiento = DateTime.Parse("2012-02-06"), Genero = "Romance", Precio =
6.99M, Calificacion = "A", Productor = "Jonathan Glickman",
                    DirectorID = directores.Single(s => s.Nombre == "Michael Sucsy").DirectorID, Director = directores.Single(s
=> s.Nombre == "Michael Sucsy")
                }
            );
       }
   }
}
```

Lógica de negocios

Controladores

```
DirectoresController.cs
using System;
using System.Collections.Generic;
using System.Data;
using System.Data.Entity;
using System.Linq;
using System.Net;
using System.Web;
using System.Web.Mvc;
using MvcPelicula.Models;
namespace MvcPelicula.Controllers
{
    public class DirectoresController : Controller
        private PeliculaDBContext db = new PeliculaDBContext();
        // GET: Directores
        public ActionResult Index()
            return View(db.Directores.ToList());
        }
        // GET: Directores/Details/5
        public ActionResult Details(int? id)
            if (id == null)
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            Director director = db.Directores.Find(id);
            if (director == null)
                return HttpNotFound();
            return View(director);
        }
        // GET: Directores/Create
        public ActionResult Create()
            return View();
        }
        // POST: Directores/Create
        // Para protegerse de ataques de publicación excesiva, habilite las propiedades específicas a las que
desea enlazarse. Para obtener
        // más información vea https://go.microsoft.com/fwlink/?LinkId=317598.
        [HttpPost]
        [ValidateAntiForgeryToken]
        public ActionResult Create([Bind(Include = "DirectorID, Nombre")] Director director)
            if (ModelState.IsValid)
                db.Directores.Add(director);
                db.SaveChanges();
                return RedirectToAction("Index");
            return View(director);
        }
        // GET: Directores/Edit/5
```

```
public ActionResult Edit(int? id)
            if (id == null)
            {
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            Director director = db.Directores.Find(id);
            if (director == null)
                return HttpNotFound();
            return View(director);
        }
        // POST: Directores/Edit/5
        // Para protegerse de ataques de publicación excesiva, habilite las propiedades específicas a las que
desea enlazarse. Para obtener
        // más información vea https://go.microsoft.com/fwlink/?LinkId=317598.
        [HttpPost]
        [ValidateAntiForgeryToken]
        public ActionResult Edit([Bind(Include = "DirectorID, Nombre")] Director director)
            if (ModelState.IsValid)
            {
                db.Entry(director).State = EntityState.Modified;
                db.SaveChanges();
                return RedirectToAction("Index");
            return View(director);
        }
        // GET: Directores/Delete/5
        public ActionResult Delete(int? id)
            if (id == null)
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            Director director = db.Directores.Find(id);
            if (director == null)
                return HttpNotFound();
            return View(director);
        }
        // POST: Directores/Delete/5
        [HttpPost, ActionName("Delete")]
        [ValidateAntiForgeryToken]
        public ActionResult DeleteConfirmed(int id)
            Director director = db.Directores.Find(id);
            db.Directores.Remove(director);
            db.SaveChanges();
            return RedirectToAction("Index");
        }
        protected override void Dispose(bool disposing)
            if (disposing)
                db.Dispose();
            base.Dispose(disposing);
        }
    }
}
```

PeliculasController.cs

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Data.Entity;
using System.Linq;
using System.Net;
using System.Web;
using System.Web.Mvc;
using MvcPelicula.Models;
namespace MvcPelicula.Controllers
    public class PeliculasController : Controller
        private PeliculaDBContext db = new PeliculaDBContext();
        // GET: Peliculas
        public ActionResult Index(string buscarString, string generoPelicula, string precioPelicula,
string directorPelicula)
        {
            var directores = from d in db.Directores select d;
            var directoresLst = new List<Director>();
            directoresLst.AddRange(directores.Distinct());
            var peliculas = from p in db.Peliculas select p;
            foreach (var pelicula in peliculas)
                pelicula.Director = directoresLst.Single(s => s.DirectorID == pelicula.DirectorID);
            }
            var GeneroLst = new List<string>();
            var GeneroQry = from d in db.Peliculas orderby d.Genero select d.Genero;
            GeneroLst.AddRange(GeneroQry.Distinct());
            ViewBag.generoPelicula = new SelectList(GeneroLst, "Acción");
            var fromDatabaseEF = new SelectList(db.Directores.ToList(), "DirectorID", "Nombre");
            ViewBag.directorPelicula = fromDatabaseEF;
            if (!String.IsNullOrEmpty(buscarString))
            {
                peliculas = peliculas.Where(s => s.Titulo.Contains(buscarString));
            }
            if (!String.IsNullOrEmpty(generoPelicula))
                peliculas = peliculas.Where(x => x.Genero == generoPelicula);
            }
            if(!String.IsNullOrEmpty(precioPelicula))
                decimal precio = Decimal.Parse(precioPelicula);
                peliculas = peliculas.Where(y => y.Precio == precio);
            if (!String.IsNullOrEmpty(directorPelicula))
                int directorID = int.Parse(directorPelicula);
                peliculas = peliculas.Where(x => x.DirectorID == directorID);
            }
```

```
return View(peliculas);
        }
        // GET: Peliculas/Details/5
        public ActionResult Details(int? id)
            if (id == null)
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            Pelicula pelicula = db.Peliculas.Find(id);
            Director director = db.Directores.Find(pelicula.DirectorID);
            ViewData["director"] = director.Nombre;
            if (pelicula == null)
                return HttpNotFound();
            return View(pelicula);
        }
        // GET: Peliculas/Create
        public ActionResult Create()
            var directores = from d in db.Directores select d.Nombre;
            var fromDatabaseEF = new SelectList(db.Directores.ToList(), "DirectorID", "Nombre");
            ViewData["directores"] = fromDatabaseEF;
            return View();
        }
        // POST: Peliculas/Create
        // Para protegerse de ataques de publicación excesiva, habilite las propiedades específicas a
las que desea enlazarse. Para obtener
        // más información vea https://go.microsoft.com/fwlink/?LinkId=317598.
        [HttpPost]
        [ValidateAntiForgeryToken]
        public ActionResult Create([Bind(Include =
"ID,Titulo,FechaLanzamiento,Genero,Precio,Calificacion,Productor")] Pelicula pelicula, int directorID)
        {
            var directores = from d in db.Directores select d;
            var directoresLst = new List<Director>();
            directoresLst.AddRange(directores.Distinct());
            Director directorSelec = directoresLst.Single(s => s.DirectorID == directorID);
            pelicula.Director = directorSelec;
            pelicula.DirectorID = directorSelec.DirectorID;
            if (ModelState.IsValid)
                db.Peliculas.Add(pelicula);
                db.SaveChanges();
                return RedirectToAction("Index");
            }
            return View(pelicula);
        }
        // GET: Peliculas/Edit/5
        public ActionResult Edit(int? id)
            if (id == null)
```

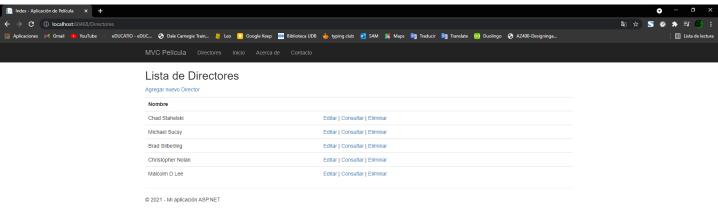
```
{
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            }
            Pelicula pelicula = db.Peliculas.Find(id);
            Director director = db.Directores.Find(pelicula.DirectorID);
            pelicula.Director = director;
            var directores = from d in db.Directores select d.Nombre;
            var fromDatabaseEF = new SelectList(db.Directores.ToList(), "DirectorID", "Nombre",
director.Nombre);
            ViewData["directores"] = fromDatabaseEF;
            if (pelicula == null)
                return HttpNotFound();
            return View(pelicula);
        }
        // POST: Peliculas/Edit/5
        // Para protegerse de ataques de publicación excesiva, habilite las propiedades específicas a
las que desea enlazarse. Para obtener
        // más información vea https://go.microsoft.com/fwlink/?LinkId=317598.
        [HttpPost]
        [ValidateAntiForgeryToken]
        public ActionResult Edit([Bind(Include =
"ID,Titulo,FechaLanzamiento,Genero,Precio,Calificacion,Productor")] Pelicula pelicula, int directorID)
            var directores = from d in db.Directores select d;
            var directoresLst = new List<Director>();
            directoresLst.AddRange(directores.Distinct());
            Director directorSelec = directoresLst.Single(s => s.DirectorID == directorID);
            pelicula.Director = directorSelec;
            pelicula.DirectorID = directorSelec.DirectorID;
            if (ModelState.IsValid)
                db.Entry(pelicula).State = EntityState.Modified;
                db.SaveChanges();
                return RedirectToAction("Index");
            return View(pelicula);
        // GET: Peliculas/Delete/5
        public ActionResult Delete(int? id)
        {
            if (id == null)
                return new HttpStatusCodeResult(HttpStatusCode.BadRequest);
            Pelicula pelicula = db.Peliculas.Find(id);
            Director director = db.Directores.Find(pelicula.DirectorID);
            ViewData["director"] = director.Nombre;
            if (pelicula == null)
                return HttpNotFound();
```

```
return View(pelicula);
        }
        // POST: Peliculas/Delete/5
        [HttpPost, ActionName("Delete")]
        [ValidateAntiForgeryToken]
        public ActionResult DeleteConfirmed(int id)
            Pelicula pelicula = db.Peliculas.Find(id);
            db.Peliculas.Remove(pelicula);
            db.SaveChanges();
            return RedirectToAction("Index");
        }
        protected override void Dispose(bool disposing)
            if (disposing)
            {
                db.Dispose();
            base.Dispose(disposing);
        }
    }
}
```

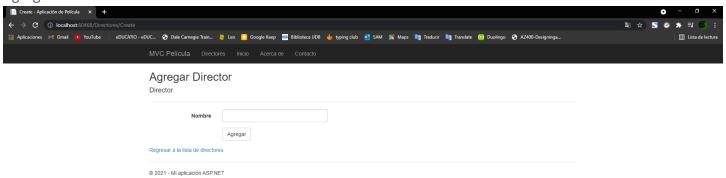
Capturas de pantalla

CRUD Directores

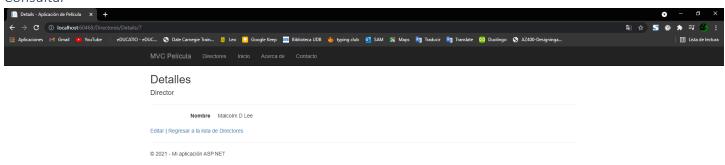
Index



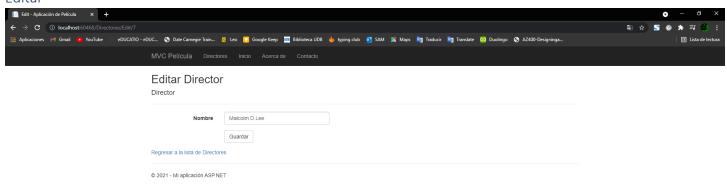
Agregar



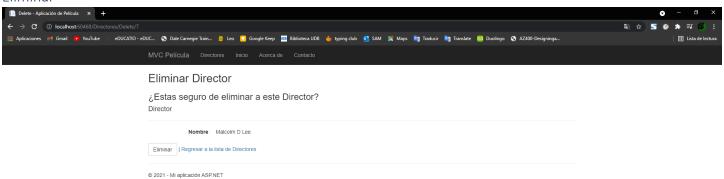
Consultar



Editar

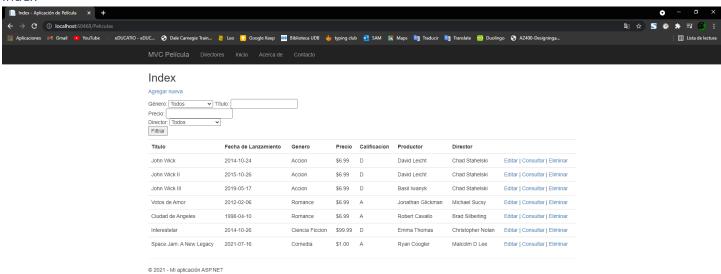


Eliminar

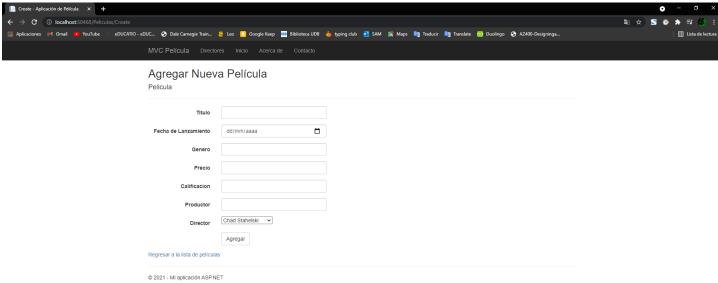


CRUD películas

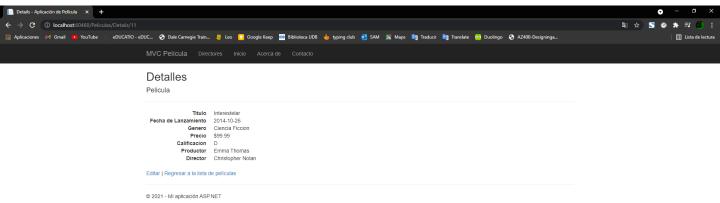
Index



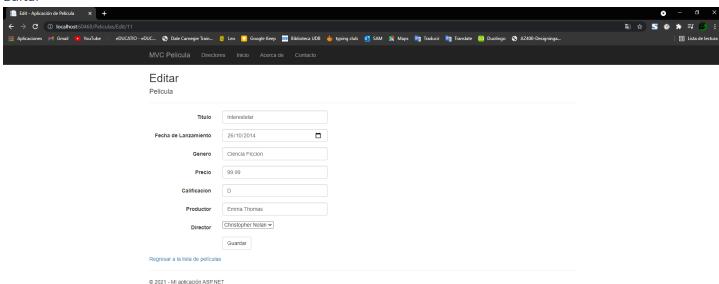
Agregar



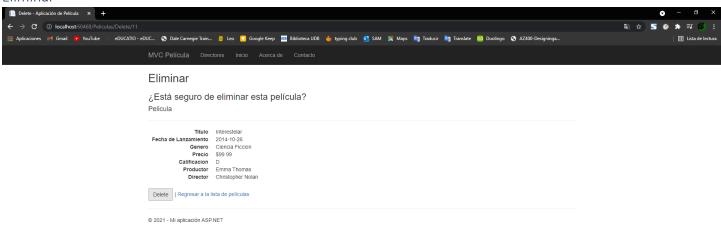
Consultar



Editar

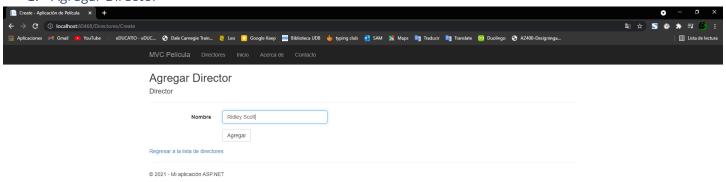


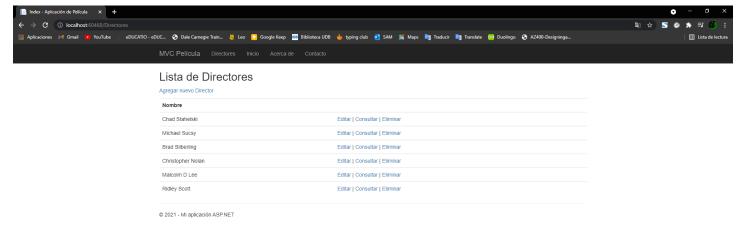
Eliminar



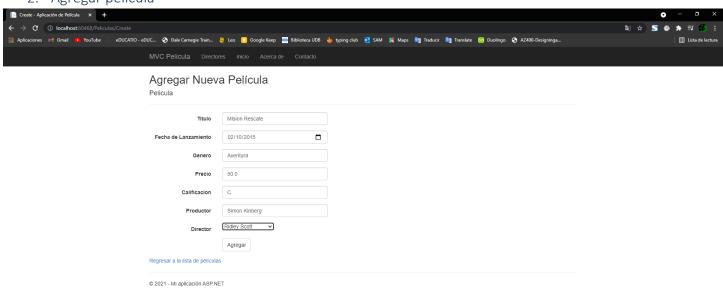
Funcionamiento del sistema

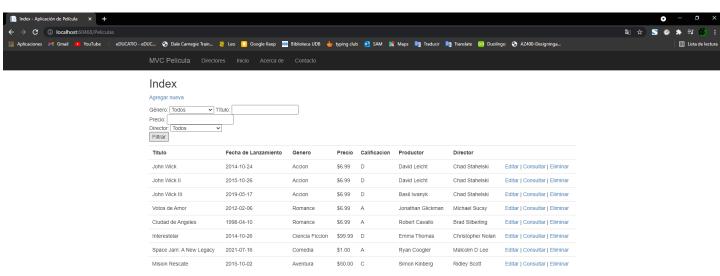
1. Agregar Director





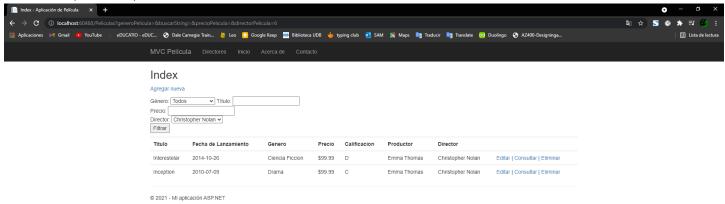
2. Agregar película





Funcionamiento de Filtros

Listado de películas por Director



Listado de películas por Director y por Género

