

C# Web - MVC

PRO - C# Web 1

DE HOGESCHOOL MET HET NETWERK

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Doel

- ASP.Net Core toepassing
 - MVC Web Application
 - Entity framework Sql server
 - Table reference keys
 - Configuration
 - Appsettings.json
 - Entity framework Tools
 - Migrations



MVC Web Application Appsettings.json

Startup.cs

Appsettings.json

```
"ConnectionStrings": {
    "ApplicationDbContext": "Server=(localdb)\\mssqllocaldb;
    Database=fifa2021; Trusted_Connection=True;
    MultipleActiveResultSets=true"
}
```

MVC Web Application Foreign key reference

```
public class TeamPlayer
        public int Id { get; set; }
        [Required]
        public int TeamId { get; set; }
        [Required]
        public int PlayerId { get; set; }
        [Required]
        public DateTime StartDate { get; set; }
        [Required]
        public DateTime EndDate { get; set; }
        public Team Team { get; set; }
        public Player Player { get; set; }
```



```
public class Player
{
    public int PlayerId { get; set; }
    [Required]
    public string FirstName { get; set; }
    [Required]
    public string LastName { get; set; }
    public string ImageLink { get; set; }
}
public ICollection<TeamPlayer> TeamPlayers { get; set; }
```

```
public class Team
{
    public int TeamId { get; set; }
    [Required]
    public string TeamName { get; set; }
    public ICollection<TeamPlayer> TeamPlayers { get; set; }
}
```

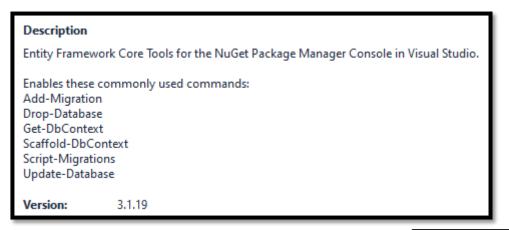


MVC Web Application EntityFramework - Tools Migrations

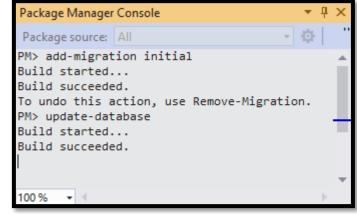
Microsoft.EntityFrameworkCore.Tools

Nuget Package Manager



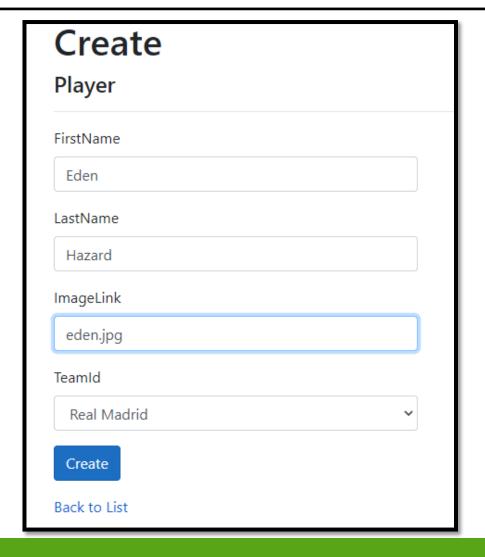


- Delete database fifa2021
 - Remove Database.EnsureCreated() in app (TeamController & PlayerController)
- Nuget Package Manager console
 - Add-migration initial
 - Update-database



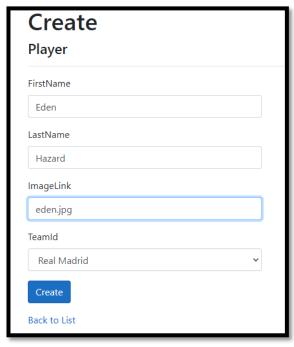
```
migrationBuilder.CreateTable(
    name: "TeamPlayers",
    columns: table => new
        Id = table.Column<int>(nullable: false)
            .Annotation("SqlServer:Identity", "1, 1"),
        TeamId = table.Column<int>(nullable: false),
        PlayerId = table.Column<int>(nullable: false),
        StartDate = table.Column<DateTime>(nullable: false),
        EndDate = table.Column<DateTime>(nullable: false)
    },
    constraints: table =>
        table. PrimaryKey("PK TeamPlayers", x => x.Id);
        table. ForeignKey(
            name: "FK TeamPlayers Players PlayerId",
            column: x => x.PlayerId,
            principalTable: "Players",
            principalColumn: "PlayerId",
            onDelete: ReferentialAction.Cascade);
        table. ForeignKey(
            name: "FK TeamPlayers Teams TeamId",
            column: x \Rightarrow x.TeamId,
            principalTable: "Teams",
            principalColumn: "TeamId",
            onDelete: ReferentialAction.Cascade);
    });
```

- Player creation
 - Update form
 - Add Combobox Teams
 - Create Model
 - Update Create Action



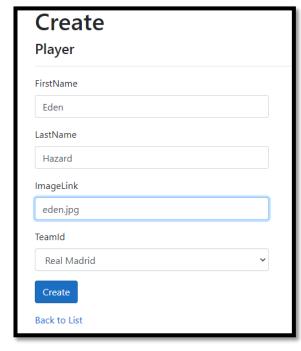
- Player creation
 - Update form
 - Add Combobox Teams
 - Create Model
 - Update Create Action
- New Model
 - NewPlayer.cs

```
public class NewPlayer : Player
{
    public int TeamId { get; set; }
}
```

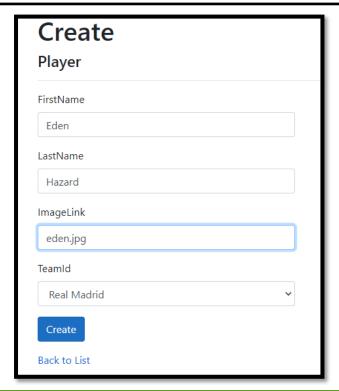


PlayerController

```
[HttpGet]
public IActionResult Create()
   var player = new NewPlayer();
   ViewData["TeamId"] = new SelectList( context.Teams,
"TeamId", "TeamName");
   return View(player);
[HttpPost]
public IActionResult Create(NewPlayer player)
    if (ModelState.IsValid)
       AddPlayer((Player)player);
        return RedirectToAction("Index");
   return View(player);
```

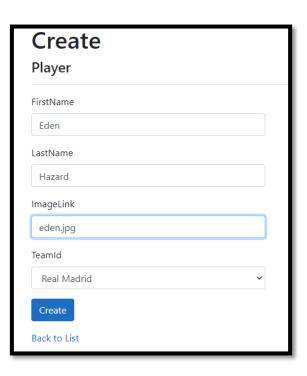


Views/Player/Create.cshtml



PlayerController

```
private void AddPlayer(NewPlayer player)
{
    Player p = (Player)player;
    _context.Players.Add(p);
    _context.SaveChanges();
    var tp = new TeamPlayer();
    tp.PlayerId = p.PlayerId;
    tp.TeamId = player.TeamId;
    tp.StartDate = DateTime.Now;
    _context.TeamPlayers.Add(tp);
    _context.SaveChanges();
}
```



MVC Web Application – Oefening 08 Afdelingen