)
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c)
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a)
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) #
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d)
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)
)

a) ViewData   ViewBag
) ModelData
) HtmlData   HtmlCache
) CurrentContent   PermanentContent
)

                                                            Mjesto   Naziv

)

@Model Mjesto
@model.Naziv

b)

```
@model Mjesto
@Model.Naziv
```

)

```
@model Mjesto
@Naziv
```

)

```
@Model Mjesto
@Naziv
```

)

```
@model Mjesto
@Mjesto.Naziv
```

```csharp
try {
        ...
        throw new NullReferenceException(...)
}
catch (Exception exc) {
        Console.WriteLine("EXC");
}
catch (NullReferenceException nre) {
        Console.WriteLine("NRE");
}
finally {
        Console.WriteLine("F");
}
```

)

NRE

b)

EXC

F

)

NRE

F

)

EXC

NRE

F

)

F

)
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d)
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d)
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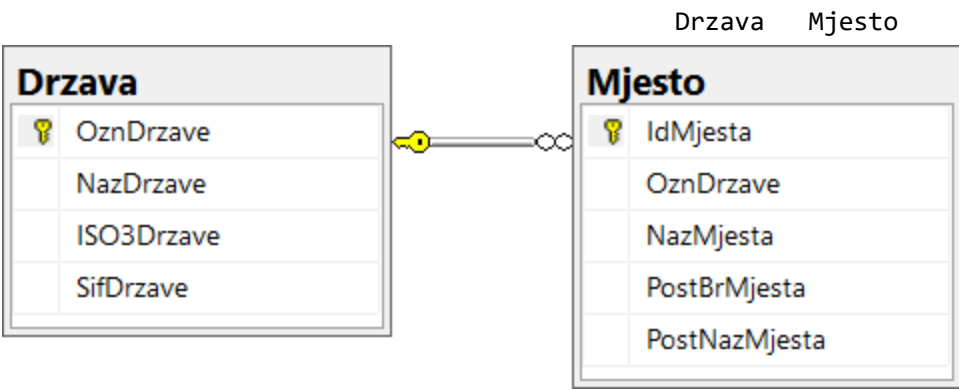

a)
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)

)

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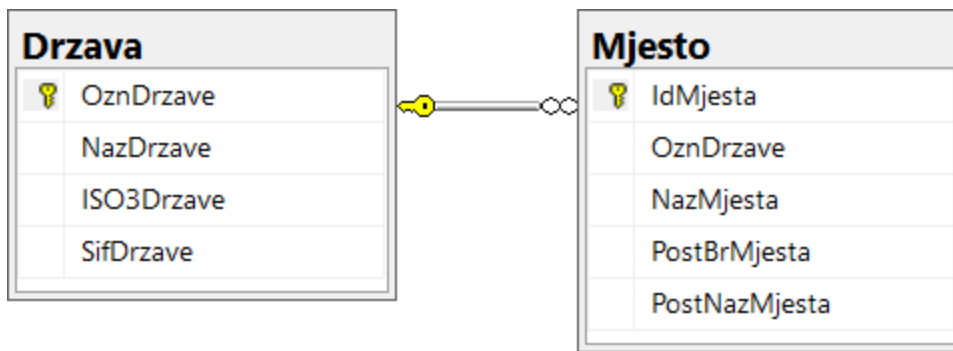   (

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)

d)

)

(   )

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b)

)

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(   )

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)

)

Drzava   Mjesto

Drzava
🔑 OznDrzave
NazDrzave
ISO3Drzave
SifDrzave

Mjesto
🔑 IdMjesta
OznDrzave
NazMjesta
PostBrMjesta
PostNazMjesta

Drzava

)

Drzava

🔑	OznDrzave
	NazDrzave
	ISO3Drzave
	SifDrzave

Mjesto

🔑	IdMjesta
	OznDrzave
	NazMjesta
	PostBrMjesta
	PostNazMjesta

Mjesto

a)

```
public partial class Mjesto
{
        ...
        public string OznDrzave { get; set; }
        ...
        public Drzava OznDrzaveNavigation { get; set; }
}
```

naziv=vrijednost   (

p=1&q=7&user=student   http://apps.zpr.fer.hr/myapp/run?p=1&q=7&user=student)
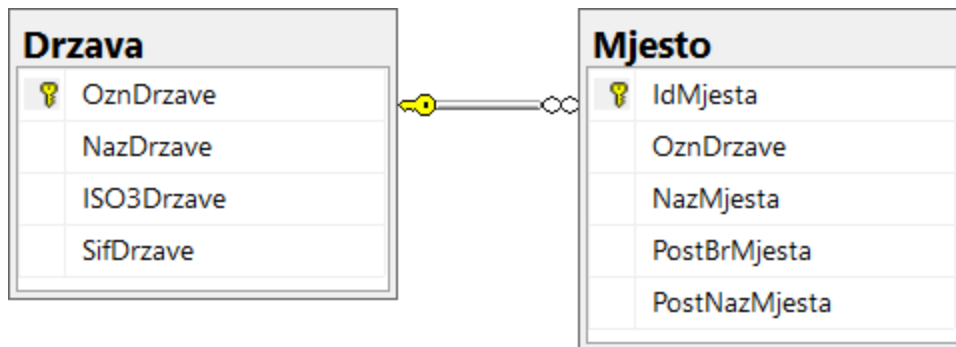

)
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c)
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b)
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a)
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)   (   )
d)   (   )
)   (   )

)   (   )
)   (   )
)   (   )
)   (   )
)   (   )

a)   (   )
)   (   )
)   (   )
)   (   )
)   (   )

Drzava		Mjesto	
🔑 OznDrzave		🔑 IdMjesta	
NazDrzave		OznDrzave	
ISO3Drzave		NazMjesta	
SifDrzave		PostBrMjesta	
		PostNazMjesta	

ctx

a)

```
var list = ctx.Mjesto
  .Select(m => new {
        m.NazivMjesta,
        Drzava = m.OznDrzaveNavigation.NazDrzave
  }).ToList();
```

a)
```
)
)
)
)


class Primjer
{
        private int index;
        public int Index
        {
                get { return index; }
                set {
                        if (value <= 0) { this.index = 0; }
                        else if (value > 100) { this.index = 100; }
                        else { this.index = value; }
                }
        }
}


)
)
)
)
)
"
                                                                "
)
)
)
```
d)
```
)
```


a) http://.../firma/artikl(8)

                                        Partner   Osoba

Partner

🔑	IdPartnera
	TipPartnera
	OIB
	IdMjestaPartnera
	AdrPartnera
	IdMjestaIsporuke
	AdrIsporuke

Osoba

🔑	IdOsobe
	PrezimeOsobe
	ImeOsobe

```
            Osoba

)

public partial class Osoba {
        ...
        public int IdPartnera { get; set; }
        ...
        public ICollection<Partner> IdOsobeNavigation { get; set; }
}
```

b)

```
public partial class Osoba {
```

```
    )

    public partial class Osoba
    {
        ...
        public int IdOsobe { get; set; }
    }
```

(   )

a)

```
            SELECT OznDrzave, NazDrzave FROM Drzava;
        DbCommand    IDataReader
                                            Drzava
)
```

```
string oznaka = (string) reader["OznDrzave"];
string naziv = (string) reader["NazDrzave"];
```

```
)
```

```
string oznaka = reader.GetString(0);
string naziv = reader.GetString(1);
```

```
)
```

```
string oznaka = reader["OznDrzave"].ToString();
string naziv = reader["NazDrzave"].ToString();
```

d)

```
string oznaka = (string) reader.GetName("OznDrzave");
string naziv = (string) reader.GetName("NazDrzave");
```

```
)
)
```

c)

```
)
)
```

```csharp
void IspisiVozila(IEnumerable<MotornoVozilo> vozila) {
    foreach(var vozilo in vozila)
        Console.WriteLine(vozilo.Model);
}
```

Automobil   Motocikl   MotornoVozilo   IspisiVozilo

List<Automobil>   IEnumerable<T>

a)

)

)

)

)

(

)

)

b)

)

)

)

)

)

)

d)

)

a) ApiController

) TypeFilter

) BadRequestFilter

) ControllerBase

) ExceptionFilter

"   "

)"   "

)"   "   "   "

)
)
)   "   "

a)

(
)
)
)
)
)
)

a) `http://.../firma/artikl?$filter=CijArtikla gt 100 and CijArtikla lt 500`   C

x

```
public string this[int a, int b] {
        get {
                ...
        }
        set {
                ...
        }
}
```


) `x["A", 5] = 1 + x["B", 3]`

b) `x[1, 3]` ^{n} `= "Z" + x[2, 3]`

) `x(1, 2) = "Z"`

) `x.`

)

( )

)

a) `Func<int, int, double>`

) `Func<int<,>, double>`

) `Action<int, int, double>`

) `Func<Action<int, int>, double>`

) `Func<double, int, int>`

( )

)

b)

c)

d)

)

"   "

a)

)

)   (   )

c)

)

)

a)

(
)

)

b)

)

)

)

"   "

a)

1. Introduction

    1.1. Project Overview

    1.2. Project Deliverables

    1.3. Evolution of the Software Project Management Plan

    1.4. Reference Materials

    1.5. Definitions and Acronyms

2. Project Organization

    2.1 Process Model

    2.2 Organizational Structure

    2.3 Organizational Boundaries and Interfaces

    2.4 Project Responsibilities

3. Managerial Process

    3.1 Management Objectives and Priorities

    3.2 Assumptions, Dependencies, and Constraints

    3.3 Resource Requirements

    3.4 Budget and Resource Allocation

    3.5 Schedule

6. Additional Components

7. Index

8. Appendices

a)

```
int a = 0, b = 0, c;
try {
    try {
        Console.Write("T1 ");
        c = b / a;
    }
    finally {
        Console.Write("F1 ");
    }
}
catch (Exception exc2) {
    Console.Write("E2 ");
}
finally {
    Console.Write("F2 ");
}
```
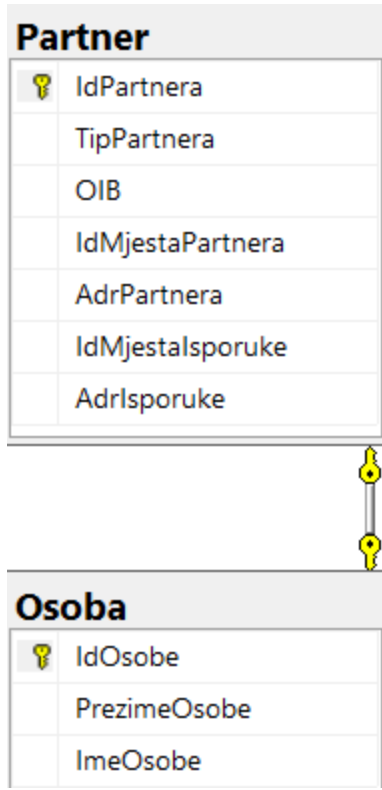
a) T1 F1 E2 F2

```
try {
    try {
        Console.Write("T1 ");
    }
    finally {
        Console.Write("F1 ");
    }
}
catch (Exception exc2) {
    Console.Write("E2 ");
}
finally {
    Console.Write("F2 ");
}
```

a) T1 F1 F2

%

a)

(bower.json   packages.json)

a) `"jQuery": "~3.3.1"`

a)

`private`

a)

Partner   Osoba

Partner
🔑 IdPartnera
TipPartnera
OIB
IdMjestaPartnera
AdrPartnera
IdMjestaIsporuke
AdrIsporuke

Osoba
🔑 IdOsobe
PrezimeOsobe
ImeOsobe

Partner

a)

```
public partial class Partner
{
    ...
    public int IdOsobe { get; set; }
    ...
    public Osoba IdOsobeNavigation { get; set; }
}


)
```

```csharp
public partial class Partner
{
    ...
    public int IdPartnera { get; set; }
    ...
    public Partner IdOsobe { get; set; }
}
```

a)

a)

%

a)

a)

```csharp
class GenRazred<T> where T : class {
    ...
}
```

) GenRazred<List<int>> x;

) GenRazred<Exception> x;

) GenRazred<string> x;

d) GenRazred<System.Int32> x;

) GenRazred<List<string>> x;

(

)

a)

b)

c)

d)

)

#

a) System.Object

a)

)

)

)

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a)

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)

a) @* komentar koji se neće pojaviti u generiranom html-u *@

)

)

c)

)

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a)

a)   (   )

a)

                              (#)

a)   (   )

a)

```csharp
class Razred : IDisposable {
        private string Naziv;

        public Razred(string Naziv) {
                this.Naziv = Naziv;
        }

        public void Dispose() {
                Console.WriteLine(Naziv);
        }
}

class Program {
        static void Main(string[] args) {
                try {
                        Razred r1 = new Razred("A1");
                        using (Razred r2 = new Razred("B2")) {
                                Razred r3 = new Razred("C3");
                                r3 = null;
                                throw new Exception("Poruka");
                        }
                        r1.Dispose();
                }
                catch { }
        }
}
```

| Razred | Dispose |

) C3
) B2 C3
c) B2
) B2 A1
) B2 C3 A1

a)

)
)

```
        )

    )
)

    static void Main(string[] args) {
            Action<Func<int, int, int>> action = (f1) => Console.WriteLine(f1(5, 20));

            action += (f2) => Console.WriteLine(f2(3, 6));
            action((f1, f2) => f1 + f2);
    }
```

a)

  25
  9

a)   *   (*   )

a)

a)
     Automobil   Motocikl   MotornoVozilo   IComparer
  public interface IComparer<in T>

```
  void IspisiBoljiMotor(Motocikl a, Motocikl b, IComparer<Motocikl> comparer) {
          Console.WriteLine(comparer.Compare(a, b) < 0 ? a : b);
  }
```

            (   )
a) IComparer<MotornoVozilo>

a)
)
)

)

)

) FromQuery

b) FromScript

) FromRoute

) FromServices

) FromForm

a)

"   "

a)

a)
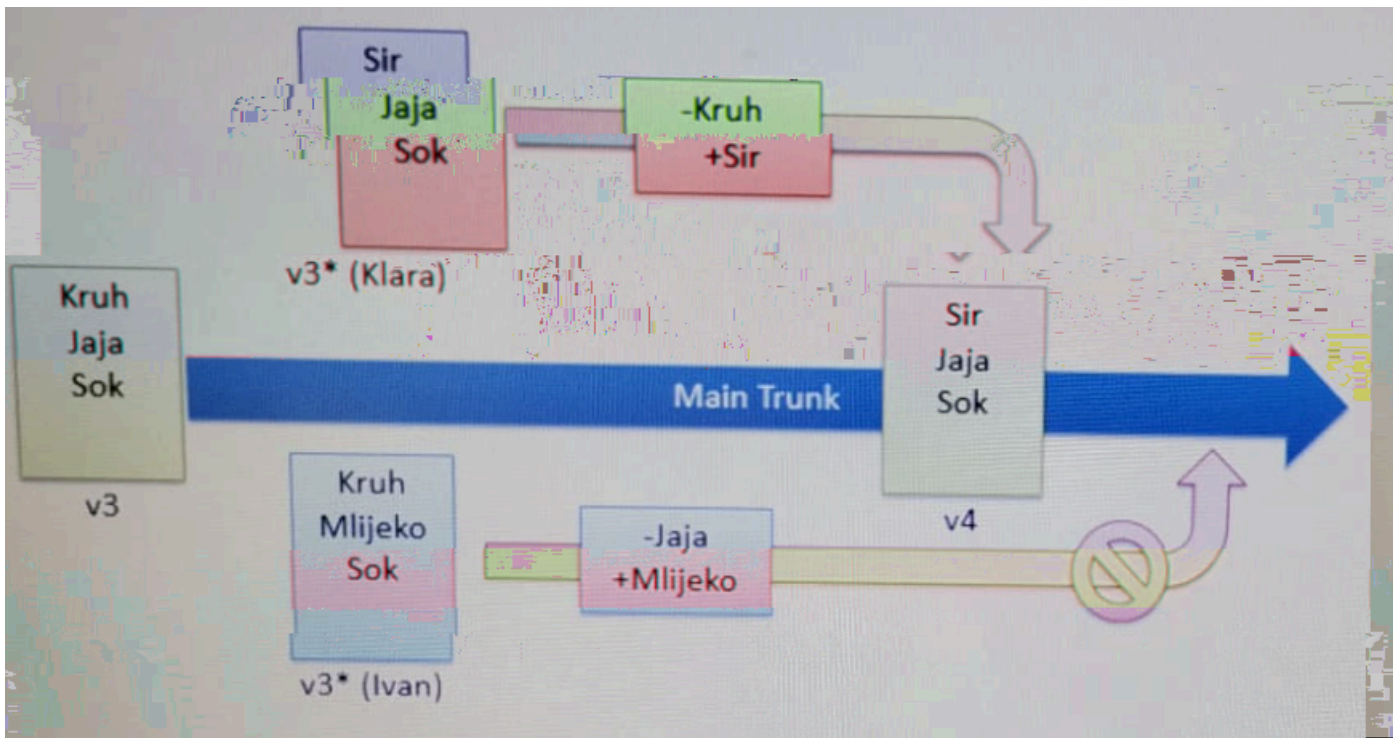

)

)

c)

)

)

                    Car   Vehicle   M

 void M(List<Vehicle> list)   M   ( )

a) List<Vehicle>

) List<Vehicle>   List<Car>

) IEnumerable<Vehicle>   List<Vehicle>

) List<Vehicle>   List<Car>   IEnumerable<Vehicle>   IEnumerable<Car>

) IEnumerable<Vehicle>   IEnumerable<Car>

 internal

a)

a)

a)

```
int a = 1, b = 2;
M(ref a, out b);
...
void M(ref int a, out int b) {
        b = 20;
}
```

ControllerBase

Tools   Categories

)

```
[HttpPost]
public IActionResult
```

```csharp
[HttpPost]
public IActionResult Assign([FromBody] Tools tools, [FromBody] Categories categories)


)

[HttpPost]
public IActionResult Assign([FromBody] Tools tools, [FromQuery] Categories categories)


)

[HttpPost]
public IActionResult Assign(Tools tools, [FromServices] Categories categories)
```

SifArtikla   Artikl
   Artikl

```csharp
using (var context = new FirmaContext())
{
    for (int i = 1; i <= 10; i++)
    {
        Artikl artikl = new Artikl
        {
            SifArtikla = i/2, CijArtikla = 10m,
            JedMjere = "kom", NazArtikla = i.ToString()
        }
        context.Artikl.Add(artikl);
    }
    context.SaveChanges();
}
```

Artikl

a)

)
)
c)
)
)

                                    out   public interface IEnumerable<out T>
a)

a)

a) http://.../firma/artikl?$top=3&$orderby=CijArtikla desc

) http://.../firma/artikl(3)/By/CijArtikla

) http://.../firma/artikl/3?orderBy=CijArtikla&desc=true

) http://.../firma/artikl?$top=3&$filter=CijArtikla desc

) http://.../firma/3/artikl>$$by=CijArtiklaDesc

( )

a)

) FromBody

) FromRoute

c) FromApi

) FromForm

) FromHeader

```
static void Main(string[] args) {
        Action<int, string, Func<char, string, int>> action = (i, s, f) => Console.WriteLin
        action(6, "ispit iz RPPP-a", (x, s) => {
                int sum = 0;
                foreach (var c in s) {
                        if (x == c) {
                                ++sum;
                        }
                }
                return sum;
        });
}
```

a)

)   (   )
)
)
)
)   (   )

b) ( )

Create

a)

```csharp
return RedirectToAction("Create");
```

a)

a)

a)

a)

Automobil   Motocikl   MotornoVozilo   IEnumerable

```csharp
public interface IEnumerable<out T>
```

```csharp
 void IspisiVozila(IEnumerable<MotornoVozilo> vozila) {
     foreach(var vozilo in vozila)
         Console.WriteLine(vozilo.Model);
 }
```

a) List<Automobil>
) List<IEnumerable<Motocikl>>
) Motocikl
)
) Automobil

)
b)   ( )

c)
)

)

a)

a)

)
)
)
d)
)

a)

a)

#

a)
)

```csharp
dynamic s = 7;
```

)

```csharp
dynamic s;
```

)

```csharp
dynamic s;
s = 12;
s = "Pero";
```

)

```csharp
dynamic s; s = "Pero";
s = 12;
```

a)

```
)
)
)
)
```

```csharp
int a = 0, b = 0, c;
try {
        try {
                Console.Write("T1 ");
                c = b / a;
        }
        catch (Exception exc) {
                Console.Write("E1 ");
                c = a / b;
        }
        finally {
                Console.Write("F1 ");
        }
    }
    catch (Exception exc2) {
            Console.Write("E2 ");
    }
    finally {
            Console.Write("F2 ");
    }
```

a) T1 E1 F1 E2 F2

(

)

a) TempData

(   )
a)

```
)
)
)
)
```

)

)
)
)
)
)

a)

a)

```
public class MjestoController : ControllerBase {
        ...
        [HttpPost]
        public IActionResult Create(string s, int i) {
                ...
        }
}
```

a)

a)

                                                              (   )
a)

a)

a)

a)

a)

    R

```csharp
class R {
        public int X { get; set; }
        public int Y { get; set; }
        public R() : this(5, 6) { }
        public R(int x) {
                Y = x;
        }
        public R(int a, int b) {
                X = a;
                Y = b;
        }
}



R r = new R {
        X = 7
};
Console.WriteLine(r.X + " " + r.Y);
```

a) 7 6

)
)
)
)
)

)
)
)
d)
)

a)   (   )

a)

- Vozilo   Automobil   ElektricniAutomobil
- Vozilo   Motocikl
- Osoba   Djelatnik   Direktor

    Djelatnik ZaduzenZa(Automobil a)

a)

```
Func<ElektricniAutomobil, Direktor> func = ZaduzenZa;
```

)

```
Func<ElektricniAutomobil, Osoba> func = ZaduzenZa;
```

c)

```
Func<Vozilo, Direktor> func = ZaduzenZa;
```

d)

```
Func<Vozilo, Osoba> func = ZaduzenZa;
```

)

```
Func<Vozilo, ElektricniAutomobil> func = ZaduzenZa;
```


- Vozilo   Automobil   ElektricniAutomobil
- Vozilo   Motocikl
- Osoba   Djelatnik   Direktor

    void Zaduzi(Automobil a, Djelatnik D)

)

```
Action<Vozilo, Direktor> action = Zaduzi;
```

)

```
Func<ElektricniAutomobil, Osoba> action = Zaduzi;
```

```
)
```

Action\<Vozilo, Osoba\> action = Zaduzi;

d)

Action\<ElektricniAutomobil, Direktor\> action = Zaduzi;

```
)
```

Action\<ElektricniAutomobil, Osoba\> action = Zaduzi;

%

a)

( )

```
)
)
)
```

d)

```
)
)              (              )
)
```

( )

```
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)
)
)              (              )
)
```

Artikl

```
using (var context = new FirmaContext())
{
        List<Artikl> artikli = context.Artikl
                .AsNoTracking()
                .Where(a => a.SifArtikla < 3)
                .ToList();
        artikli[0].CijArtikla += 10m;
        artikli[1].CijArtikla = artikli[0].CijArtikla;
        context.SaveChanges();
}
```

a) SELECT   UPDATE

)
)
)
d)
)

)
b)
)
)
)

a)
)
)
)
)

                    IConnectionStringTool   ConnectionStringTool

  FirmaContext   IConnectionStringTool
                    (   )   FirmaContext

b)

```csharp
private static IServiceProvider serviceProvider;
public static void Main(string[] args) {
        serviceProvider = new ServiceCollection()
                .AddSingleton<IConnectionStringTool, ConnectionStringTool>()
                .AddTransient<FirmaContext, FirmaContext>()
                .BuildServiceProvider();

        ...

        FirmaContext ctx = serviceProvider.GetService<FirmaContext>();

        ...
}




)
)
)
)
)
```

Stavka

- 1
- 2
- 3

```csharp
int sum = 0;
var upit = context.Artikl
        .Include(a => a.Stavka)
        .AsNoTracking()
        .Where(a => a.SifArtikla >=1 && a.SifArtikla <= 3)
        .ToList();
foreach (Artikl artikl in upit) {
        sum += artikl.Stavka.Count();
}
```

d)   SELECT

x

```
using(var context = new FirmaContext()) {
var x = context.Artikl
        .Select(a => new {
            a.SifArtikla, a.NazArtikla, a.CijArtikla,
        })
        .First();
}


) IEnumerable
)                                        SifArtikla   NazArtikla   CijArtikla
d)                                       NazArtikla   CijArtikla   SifArtikla
                                         (           )
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a)                          (           )
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a)
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        )
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)


                    (       )
a)




)
)
```

c)

)

a)

)   #

)

)

d)

)

Postupak()

a) base.Postupak();

)

return NotFound()

a)

a)

a)   (   )   (   )

a)

a)

a)

a)   (   )

a)   (   )

a)   (   )

a)

)
)

                     ("   ")

)
)

                 ("   ")

a)

a)

                                    (   )

)

```
[ProducesResponseType((int) HttpStatusCode.NotFound)]
public async Task<IActionResult> Get(string sifArtikla)
```

)

```
[ProducesResponseType(typeof(IActionResult), (int) HttpStatusCode.OK)]
[ProducesResponseType((int) HttpStatusCode.NotFound)]
public async Task<IActionResult> Get(string sifArtikla)
```

c)

```
[ProducesResponseType(typeof(Artikl), (int) HttpStatusCode.OK)]
[ProducesResponseType((int) HttpStatusCode.NotFound)]
public async Task<IActionResult> Get(string sifArtikla)
```

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)
)
)

a)
)
c)
d)

)
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c)
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)

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)
c)
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d)
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    (   )
   (   )
a)
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)

in   public interface IComparer<in T>

a)

)
)
)
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)
)
)
)
)

```csharp
static void Main(string[] args)
{
        Action<int, string, Func<char, string, int>> action = (i, s, f) => Console.WriteLin
        action(4, "This is not an easy question", (x, s) =>
        {
                int sum = 0;
                foreach (var c in s) {
                        if (x == c)
                                ++sum;
                }
                return sum;
        });
}
```

a) 5
) 4

a)

)
)
)

)

)
b)
)
)
)

)
)
)
)
)

) ExceptionFilter

) BadRequest

) NotFound

d) ProblemDetails

) ActionResult

(   )

)
)
)
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)

)
b)
)
)
)

a)
)
)

```
        )
    )


    [ApiController]
    [Route("[controller]")]
    public class CitiesController : ControllerBase {
            ...
            [HttpDelete("{id}", Name = "DeleteCity")]
            public async Task<IActionResult> DeleteCity(int id)
            ...
    }
```

) .../cities/deletecity/100

b) .../cities/100

) .../cities/delete?id=100

) .../cities/deletecity?id=100

) .../cities/delete/100

```
    public class MjestoController : ControllerBase {
            ...
            [HttpPost]
            public IActionResult Create(MjestoViewModel model)
            ...
    }
```

)

b)

)

)

https://server/app/mjesto   https://server/app/drzava

)

)

c)

)

)