

F# FULL STACK CHEAT SHEET

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USEFUL LINKS

TRY F# IN YOUR BROWSER:

[HTTP://WWW.TRYFSHARP.ORG/](http://www.tryfsharp.org/)

THE F# SOFTWARE FOUNDATION:

[HTTP://FSHARP.ORG/](http://fsharp.org/)

F# SNIPPETS: [HTTP://WWW.FSSNIP.NET/](http://www.fssnip.net/)

F# FOR FUN AND PROFIT:

[HTTP://FSHARPFORFUNANDPROFIT.COM/](http://fsharpforfunandprofit.com/)

DEMO APP:

[HTTPS://GITHUB.COM/ASHTONKJ/JSINSADEMO](https://github.com/ashtonkj/jsinsademo)

NUGET PACKAGES

FSHARP.DATA

FSHARP.DYNAMIC

FSHARP.REACTIVE

FUNSCRIPT

VISUAL STUDIO ADD-INS

F# MVC 5 -

[HTTP://VISUALSTUDIOGALLERY.MSDN.MICROSOFT.CO
M/39AE8DEC-D11A-4AC9-974E-BE0FDADEC71B](http://visualstudiogallery.msdn.microsoft.com/39AE8DEC-D11A-4AC9-974E-BE0FDADEC71B)

VISUAL F# POWER TOOLS:

[HTTP://VISUALSTUDIOGALLERY.MSDN.MICROSOFT.CO
M/136B942E-9F2C-4C0B-8BAC-86D774189CFF](http://visualstudiogallery.msdn.microsoft.com/136B942E-9F2C-4C0B-8BAC-86D774189CFF)

TWITTER ACCOUNTS

@ASHTONKJ

@DSYME

@FSHARPORG

@DMOHL

@ZBRAY

F# SYNTAX PRIMER

```
let x = 5
//val x : int = 5
let add a b = a + b
//val add : a:int -> b:int -> int
let add10 = add 10
//val add10 : (int -> int)
let z = add10 x
//val z : int = 15
let addTupled (a,b) = a + b
// val addTupled : a:int * b:int -> int

// Interface
type IAmAnInterface =
    abstract member NoOp : unit -> unit

// Class
type Vector(x,y) =
    let square m = m * m
    member this.X = x
    member this.Y = y
    member this.Length() =
        sqrt(square x + square y)
```

```
let rec fact n =
    match n with
    | 0 | 1 -> 1
    | x -> x * (fact (x - 1))
// val fact : n:int -> int
fact 5
// val it : int = 120

//IEnumerable<int>
let OneToTen = { 1.. 10 }
// FSharp List of int
let OneToTenList = [1 .. 10]
//val OneToTenList : int list = [1; 2;
3; 4; 5; 6; 7; 8; 9; 10]
// int[]
let OneToTenArray= [| 1 .. 10|]
//val OneToTenArray : int [] = [|1; 2;
3; 4; 5; 6; 7; 8; 9; 10|]
OneToTen |> Seq.map (fun x -> x * x)
// val it : seq<int> = seq [1; 4; 9; 16;
...]
```