

Going Open!

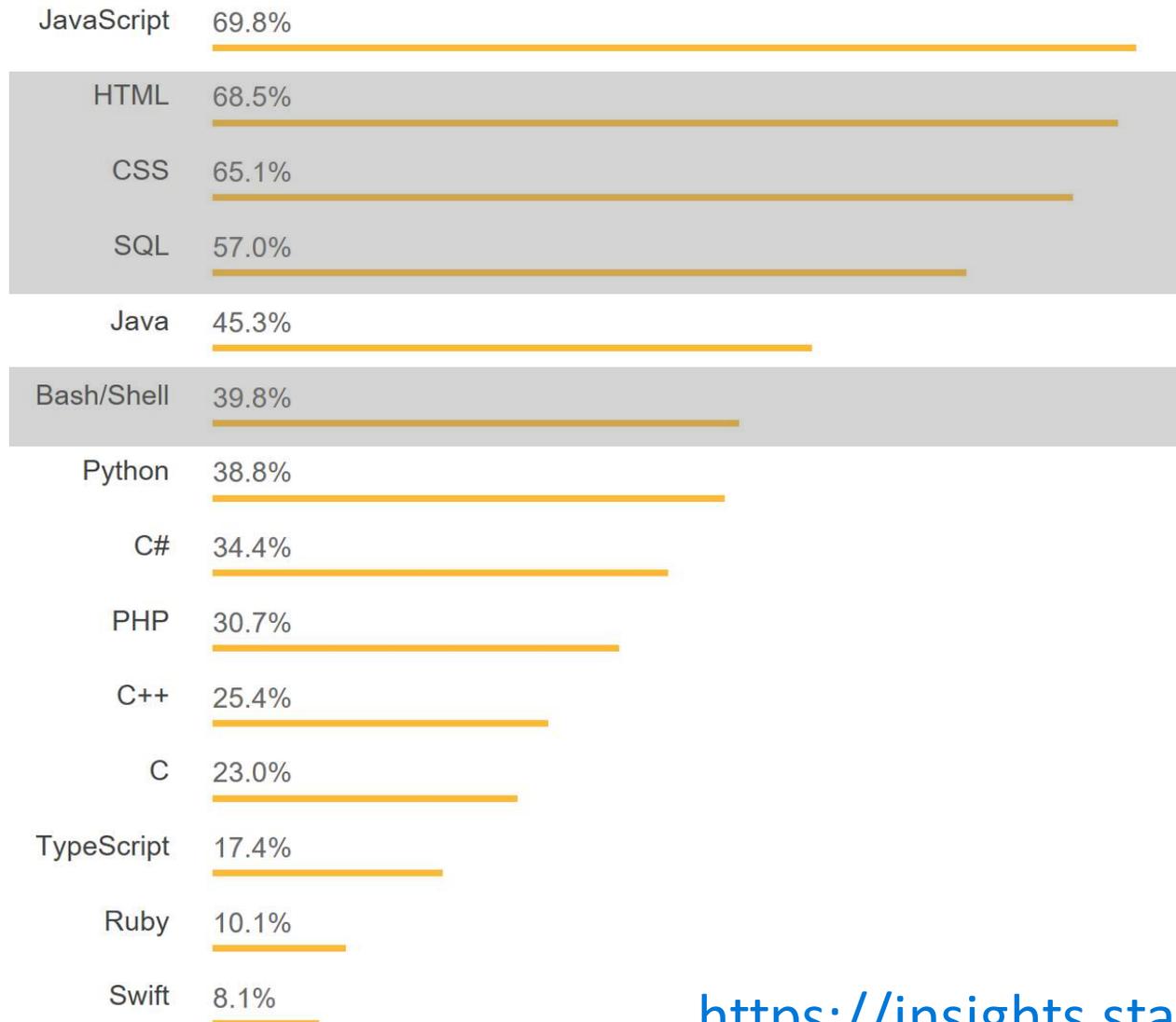
C# for Everyone

Mads Torgersen
Microsoft



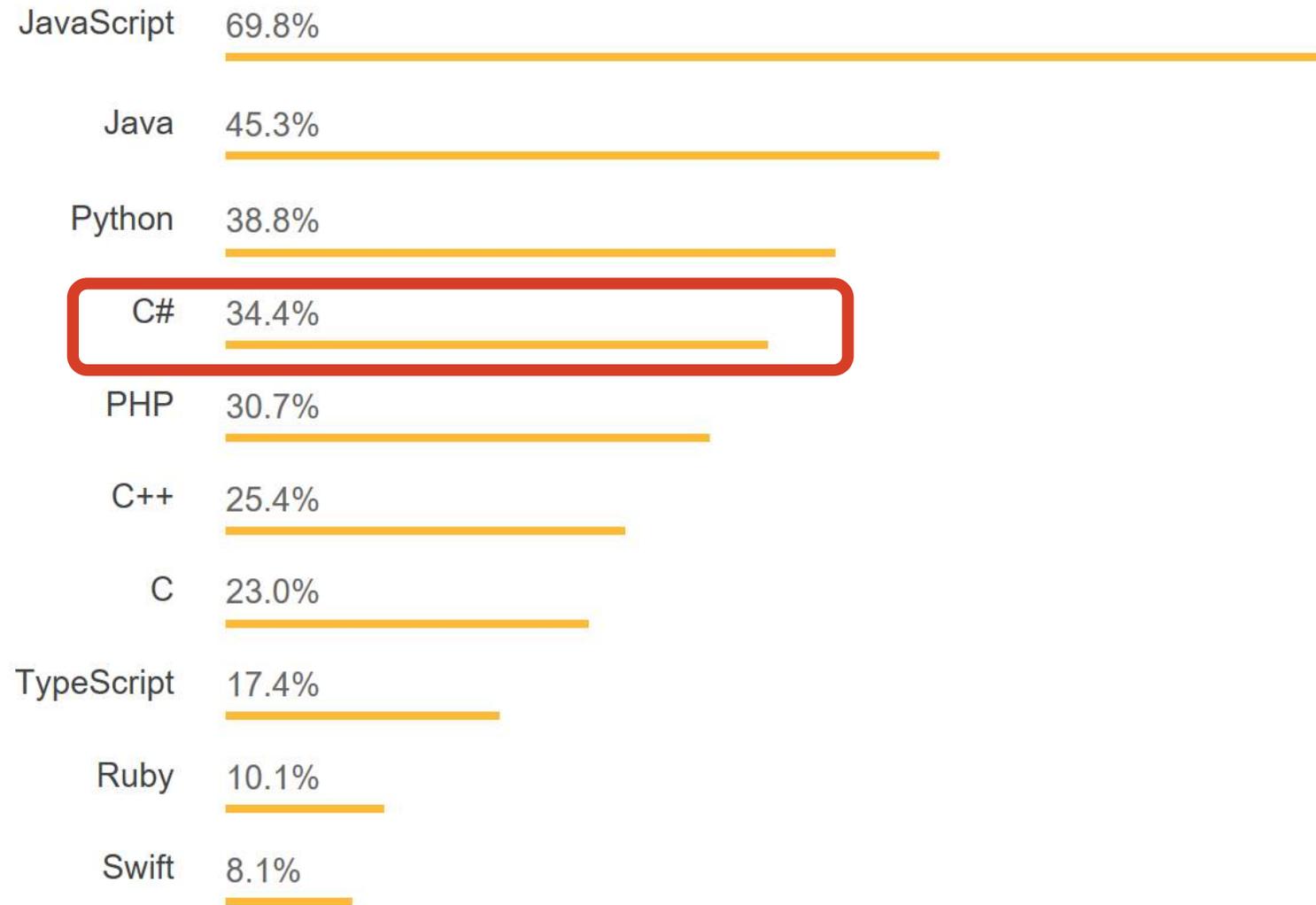
Tiananmen Square

Stack Overflow - most *popular* languages



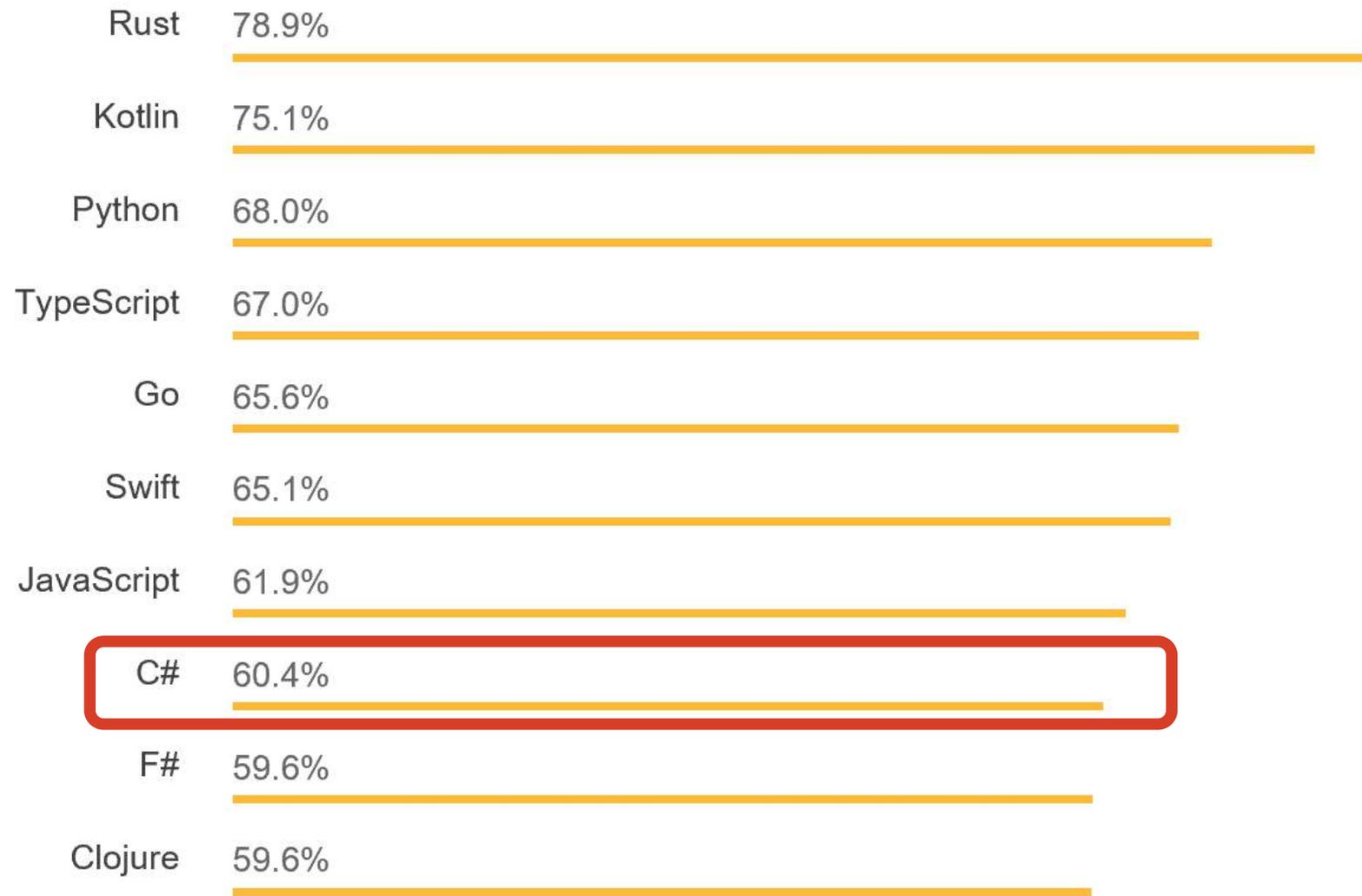
<https://insights.stackoverflow.com/survey/2018>

Stack Overflow - most *popular* languages



<https://insights.stackoverflow.com/survey/2018>

Stack Overflow - most *loved* languages



<https://insights.stackoverflow.com/survey/2018>

Why?

1. Great on Windows

2. Great in Visual Studio

3. Great language for the times

... and elsewhere

... even as they change

Going open

Open source

Runtime, framework, compiler

Cross platform

Runs pretty much anywhere

Open language API “Roslyn”

Syntax trees and more

Cross IDE

OmniSharp

Open design

Language design is a conversation

Open to change

Let's never be afraid to explore new directions



Beihai Park

Going open – open source

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Sign at Dingling

Going open – cross platform

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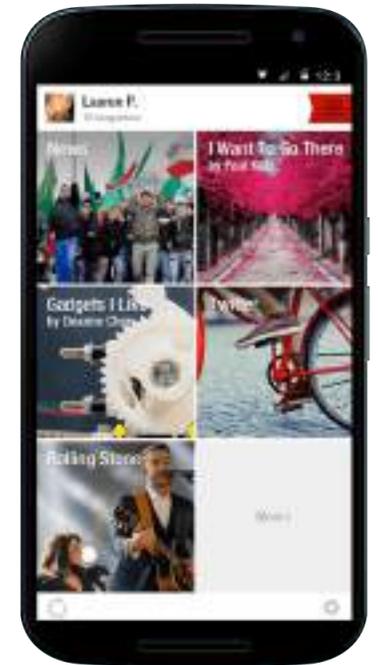
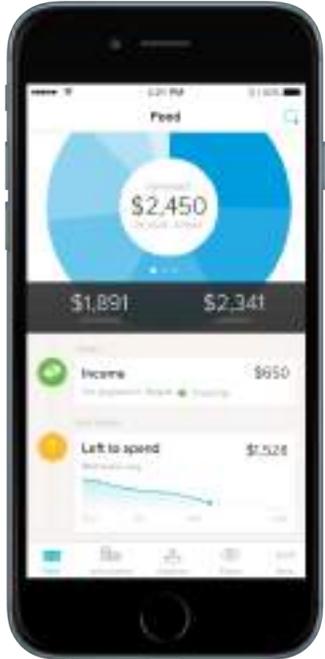


“Microsoft Windows” in restaurant

C# everywhere - Xamarin

iOS, Android, Mac (oh, and Windows)

Native UI, shared code



C# Everywhere - Unity

Industry leading 3d/2d game engine

Massively cross platform



C# Everywhere - .NET Core

Lightweight platform for server/cloud workloads

Linux and Mac (oh, and Windows)



C# Everywhere – One .NET

.NET Standard

Shared “head” for all .NETs



Dragonhead spout in Beihai Park

Going open – Roslyn

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Beihai Park

Roslyn – C# language engine

There should need to be only

one code base

in the world for understanding C#

- IDEs and editors
- Linters and analysis tools
- Fixing and refactoring
- Source generation
- Scripting and REPLs
- ... Oh, and compiling!



Tree growing on wall at Dingling

Going open – other editors

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Bridge in Beihai Park

OmniSharp – edit C# everywhere

Open source community project

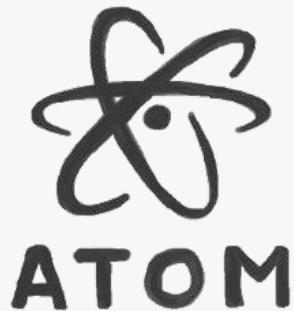
Language server



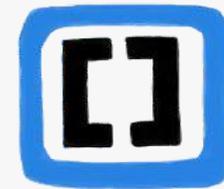
OmniSharp



Sublime Text



Emacs



Brackets

Introduction

Run your first C# program

Declare and use variables

Work with strings

Do more with strings

Search strings

Complete challenge

Next steps

Run your first C# program

28 minutes remaining

Run the following code in the interactive window. To do that, type the following code block in the interactive window and click the **Run** button:

```
C# Copy  
Console.WriteLine("Hello World!");
```

Congratulations! You've run your first C# program. It's a simple program that prints the message "Hello World!". It used the [Console.WriteLine](#) method to print that message. `Console` is a type that represents the console window. `WriteLine` is a method of the `console` type that prints a line of text to that text console.

Let's move on and explore more. The rest of this lesson explores working with the `string` type, which represents text in C#. Like

.NET Editor [Run]

1 Console.

- ★ WriteLine
- ★ Write
- ★ Error
- ★ Out
- ★ ForegroundColor
- BackgroundColor
- Beep
- BufferHeight
- BufferWidth
- CancelKeyPress
- CapsLock
- Clear

Output

