Particular Software

Welcome

Async best-practices

webinar

Particular Software

Solution Architect
Enthusiastic Software Engineer
Microsoft MVP for systems integration

@danielmarbach
particular.net/blog
planetgeek.ch

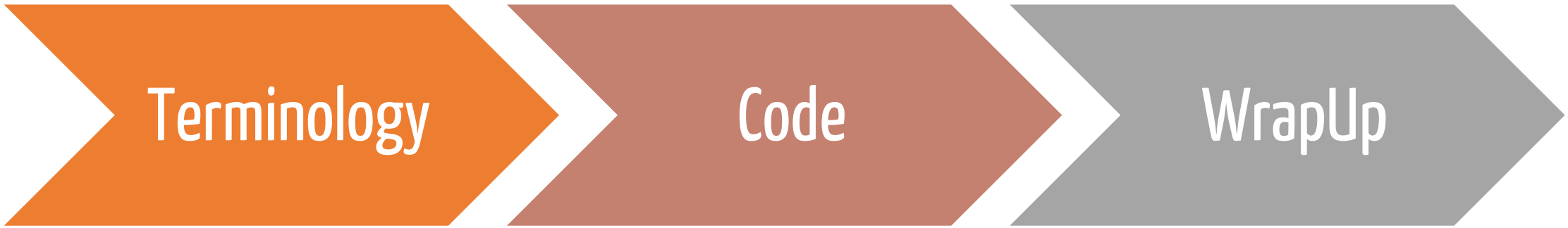
Goals

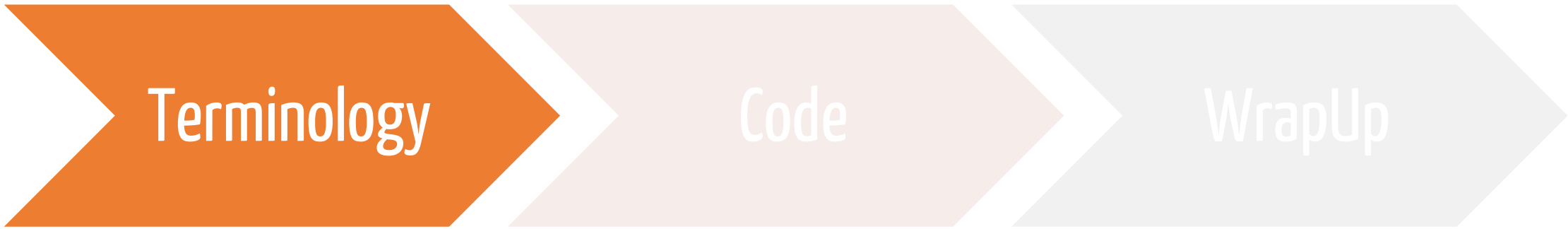
target

CPU-bound vs IO-bound

Threads and Tasks

Async best-practices


Terminology
Code
WrapUp


Terminology
Code
WrapUp

async

event-driven

Task

uniform

Task

IO-bound

Task

CPU-bound

concurrent

concurrent

concurrent

concurrent

concurrent

interleaved

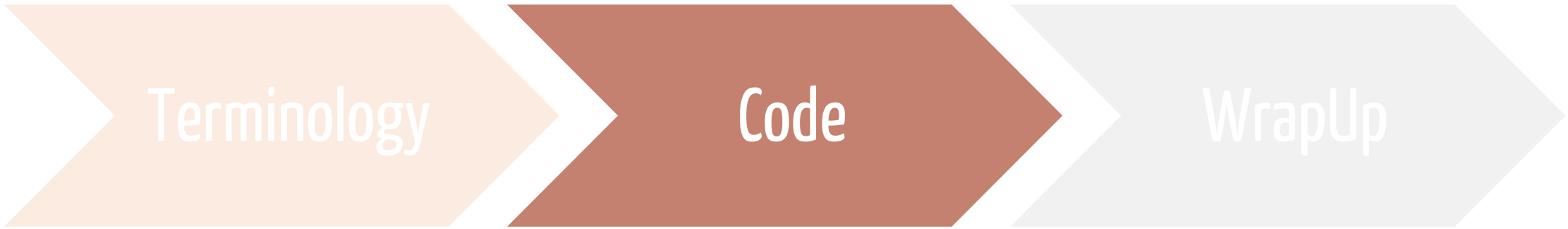
parallel

parallel

simultaneous

Continuation

function


Terminology
Code
WrapUp

async/await

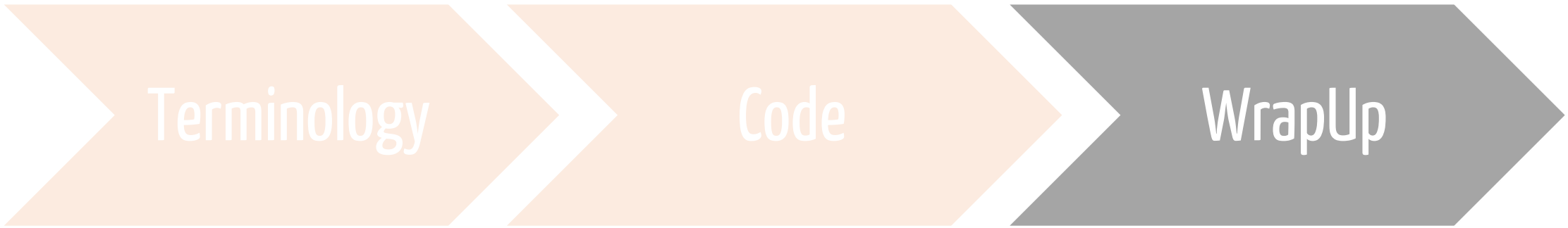
simplicity

```
function1(function(err, res) {
  function2(function(err, res) {
    function3(function(err, res) {
      function4(function(err, res) {
        function5(function(err, res) {
          // do something useful
        })
      })
    })
  })
})
```

```
cleanLaundry.ContinueWith(t => {
  dryLaundry;
})
```

```
await cleanLaundry;
dryLaundry;
```

await Demo


Terminology
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Forget thread!

think Task

NSB v6

Will be Async all the way

Applies the shown best-practies like ConfigureAwait(false) consequently, checked with Roslyn analyzer

particular.net/blog/async-await-its-time

Recap

reminder

Use Task.Run, Factory.StartNew for CPU-bound work

Use Task directly for IO-bound work

Use async Task instead of async void

Recap

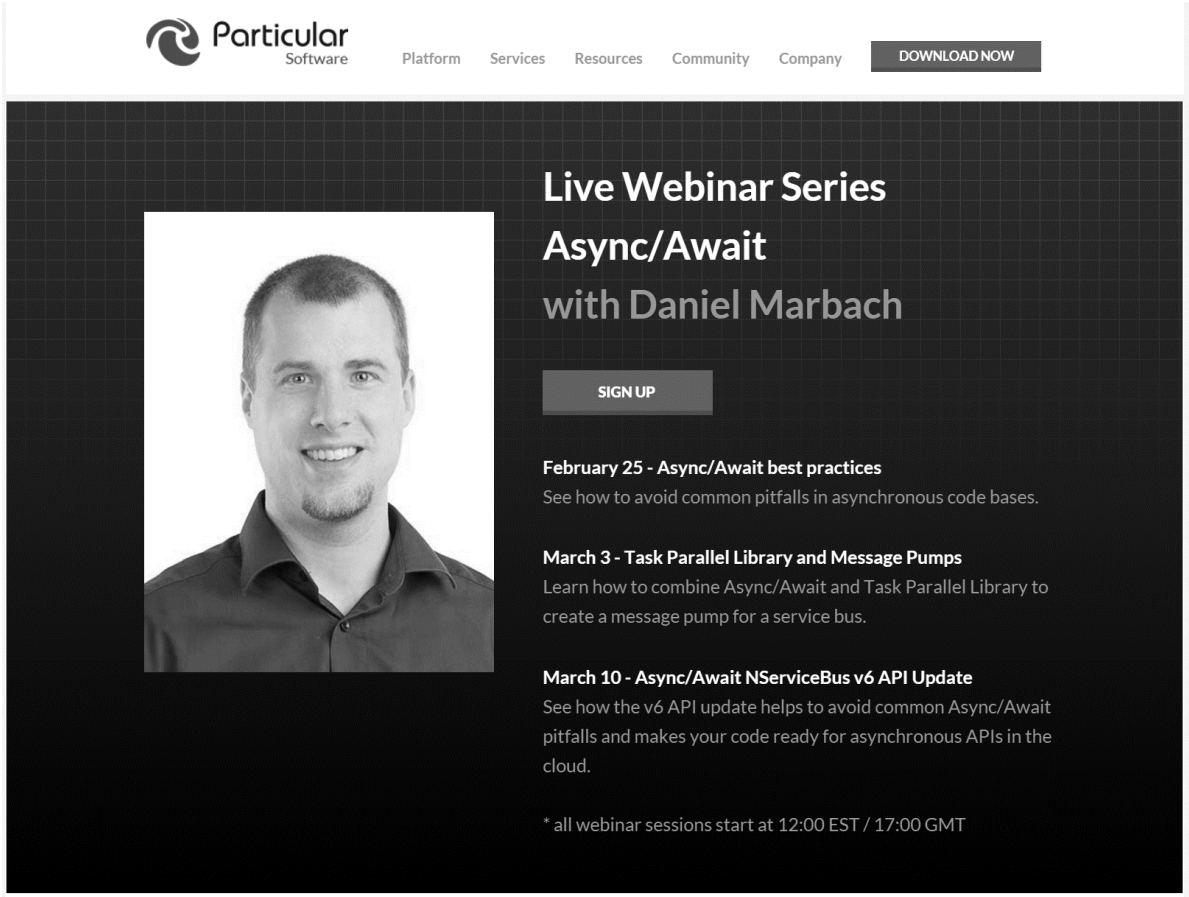
reminder

Libraries and frameworks should use ConfigureAwait(false)

Async all the way, don't mix blocking and asynchronous code

particular.net/async-await-webinar-series

Next



Slides, Links...

github.com/danielmarbach/02-25-2016-AsyncWebinar

await Q&A

Thanks