



Don't fly alone

KI-unterstützte Softwareentwicklung mit GitHub Copilot

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Microsoft



AGENDA

CLICK TO EDIT

01 What it does

02 How it works

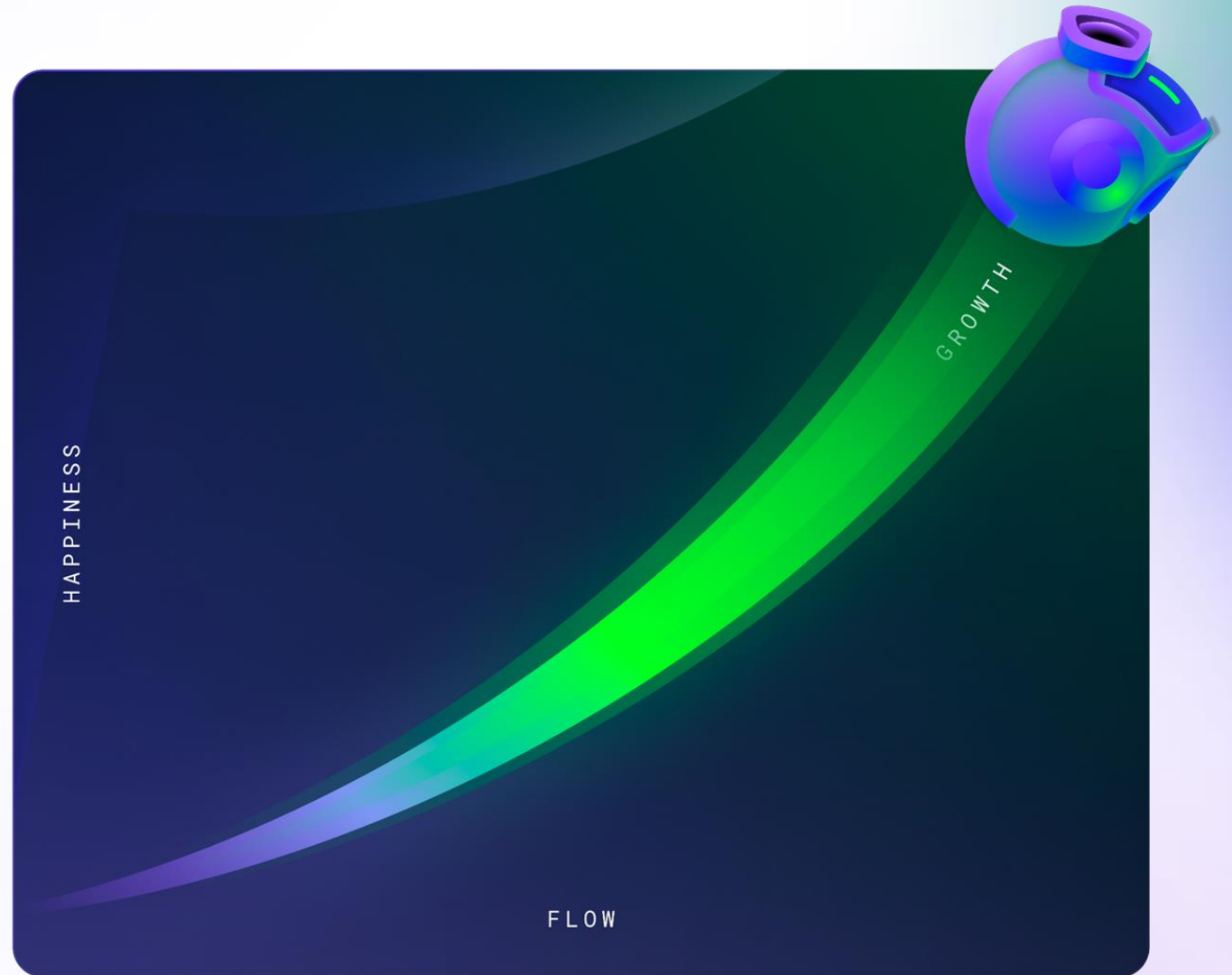
03 What's next

04 How to get started
(in an enterprise)



AI is the next frontier in DevEx.

A McKinsey study found that equipping developers to be their most productive also significantly improves the developer experience, and developers using generative AI-based tools were more than twice as likely to report overall happiness, fulfillment, and a state of flow.





Offers code suggestions,
contextualized to your project

```
TS sentiment.ts  -GO write_sql.go  parse_expenses

1 #!/usr/bin/env ts-node
2
3 import { fetch } from "fetch-h2";
4
5 // Determine whether the sentiment of
6 // Use a web service
7 async function isPositive(text: string)
8   const response = await fetch(`http://
9     method: "POST",
10    body: `text=${text}`,
11    headers: {
12      "Content-Type": "application/x-www
13    },
14  });
15  const json = await response.json();
16  return json.label === "pos";
17 }
```

Copilot



Let's demo!





How it works

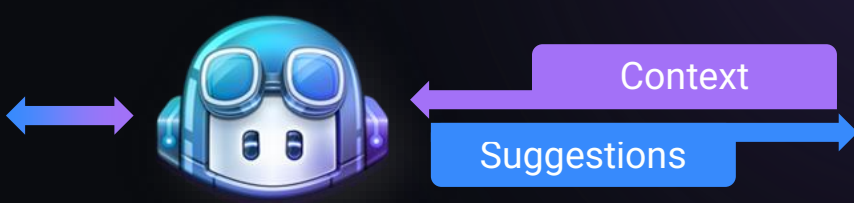


GitHub Copilot

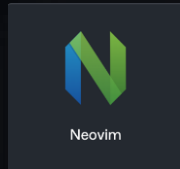
Once enabled...



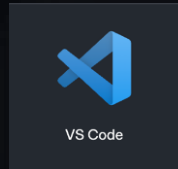
OpenAI
Codex



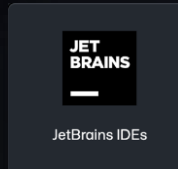
Visual Studio



Neovim



VS Code



JetBrains IDEs

```
runtime.go course.rb time.js IsPrimeTest.java
1 package main
2
3 type Run struct {
4     Time int // in milliseconds
5     Results string
6     Failed bool
7 }
8
9
10
11
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20
21
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23
```



GitHub Copilot

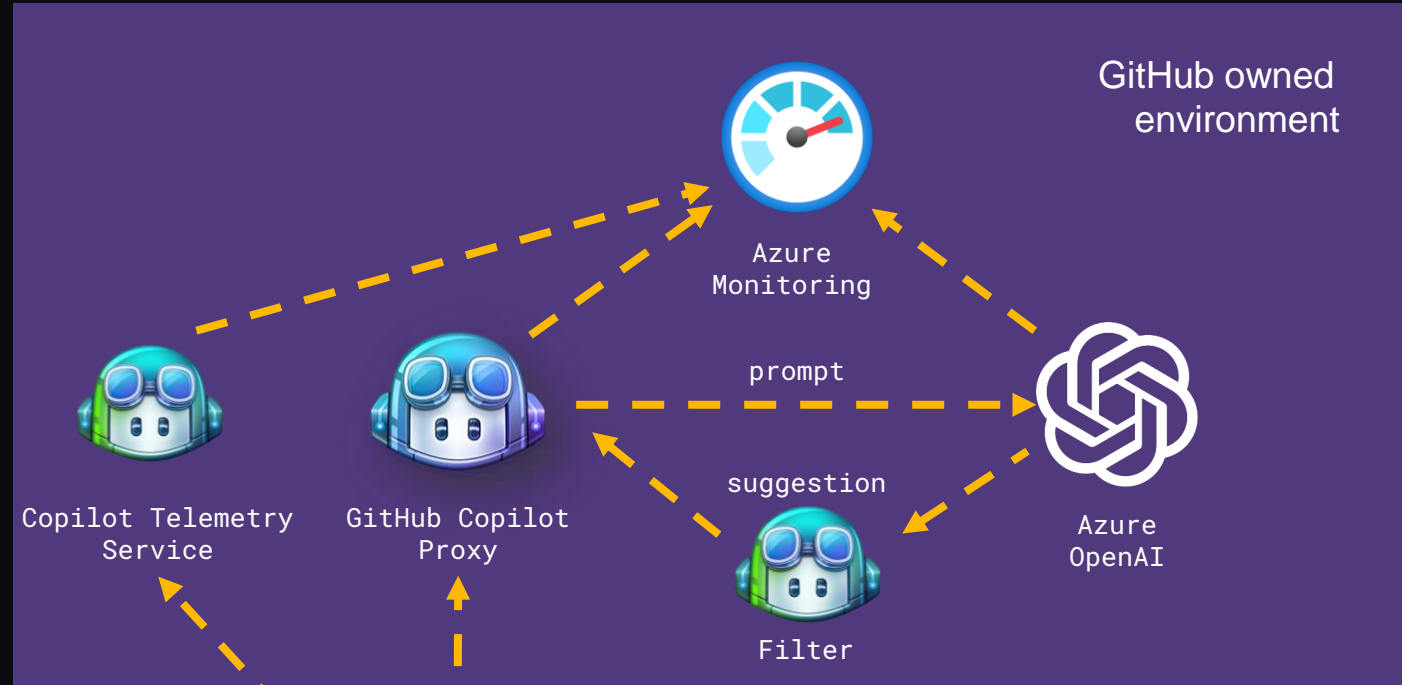


GitHub Enterprise Cloud

Auth, Settings, Signup

GitHub Cloud

Developer Client



https / tls / port 443

```
runtimego course.rb timejs hPrimeTest.java
1 package main
2
3 type Run struct {
4     Time int // in milliseconds
5     Results string
6     Failed bool
7 }
8
9 // Get average runtime of successful runs in seconds
10 func averageRuntimeInSeconds(runs []Run) float64 {
11     var totalTime int
12     var failedRuns int
13     for _, run := range runs {
14         if run.Failed {
15             failedRuns++
16         } else {
17             totalTime += run.Time
18         }
19     }
20
21     averageRuntime := float64(totalTime) / float64(len(runs) - failedRuns) / 1000
22     return averageRuntime
23 }
```

VS Code Extension



What's next?



Save time and energy on writing code.

Convert comments to code

Autosuggest tests

Show alternatives



Improve code quality with contextual conversations.

- ✓ Context specific coding support
- ✓ Explains concepts and specific code blocks
- ✓ Debugging and vulnerability remediation assistance



Enable developers to take command of the CLI.

✓ Git command assistance in the terminal

✓ Command and script explanations



Simplify collaboration by adding clarity to pull requests.

✓ Pull request summaries

✓ Automated code reviews

✓ Explanations on changes and comments

Fine tune responses with custom models.

✓ Draws context from your code and knowledge

✓ Fine tuning and custom private models

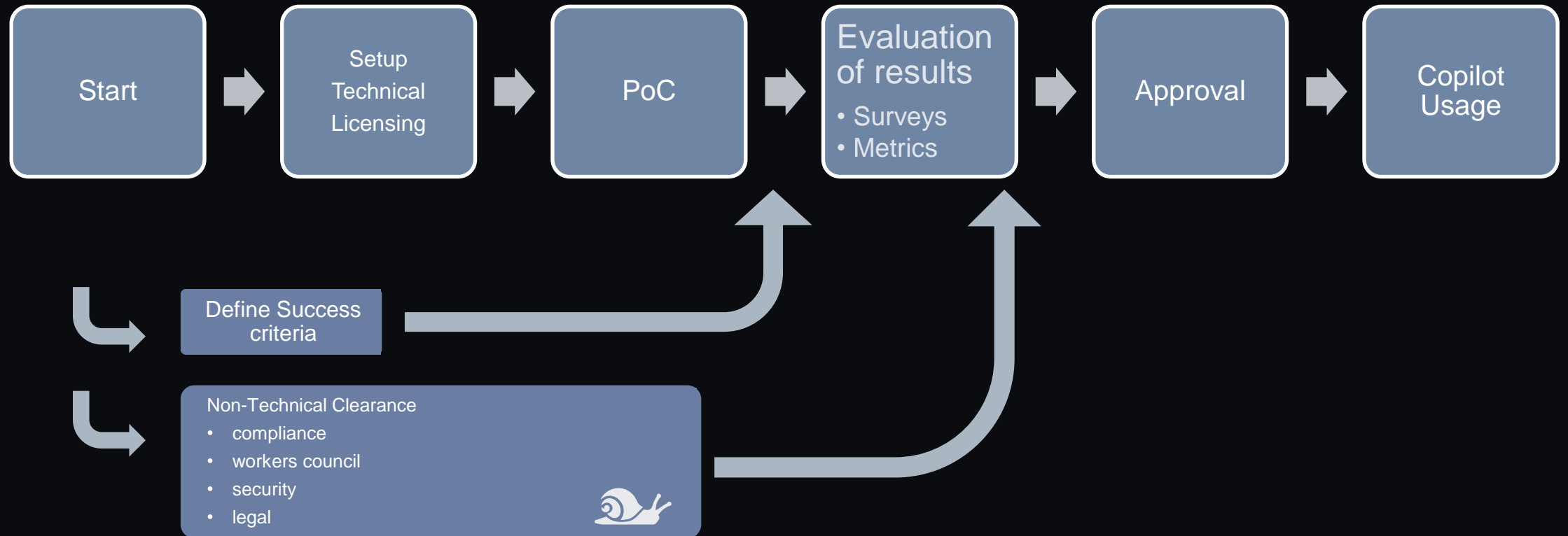


How to get started (in an enterprise)





Enterprise Introduction of GitHub Copilot





Thank you!

Microsoft Mission:
Empower every person
and every organization on the planet
to achieve more.

Our mission
Empower every person
and every organization
on the planet to
achieve more.

SESSION FEEDBACK

Session Title: Don't fly alone: KI-unterstützte
Softwareentwicklung mit GitHub Copilot



<https://aka.ms/AzSum-S007>

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