

Writing VS Code extensions for fun and profit

NIKOLAJ FOGH

About me

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Background

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- Electronics engineering / process control

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- Often done by automation tools

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Tooling is important

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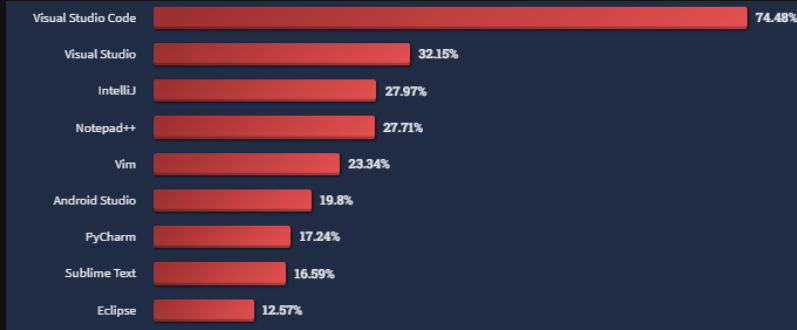
Tooling is important

- Anastasia Kazakova: C++ Painkillers for C++ developers
- This talk is very much about C++ painkillers
- Allows your developers to focus on their main task

Why VS Code

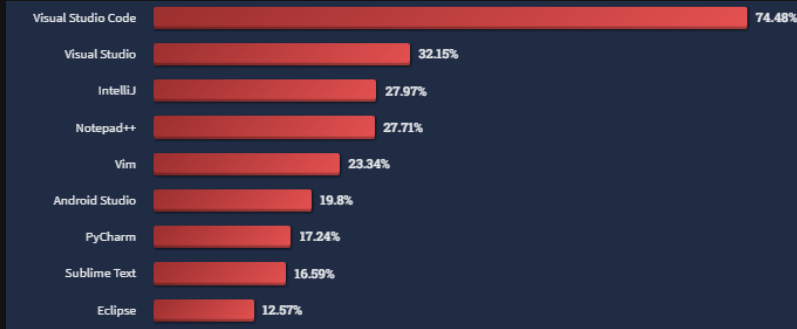
Why VS Code

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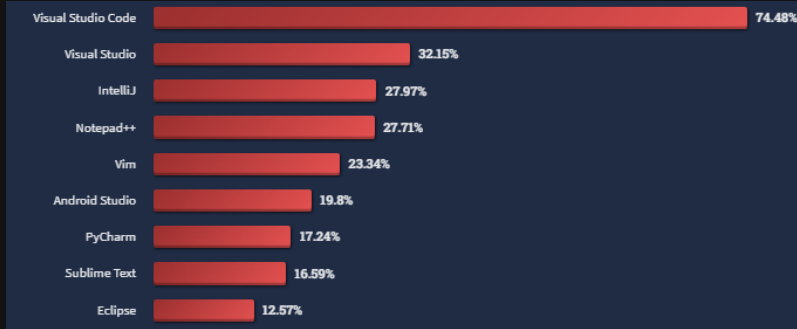
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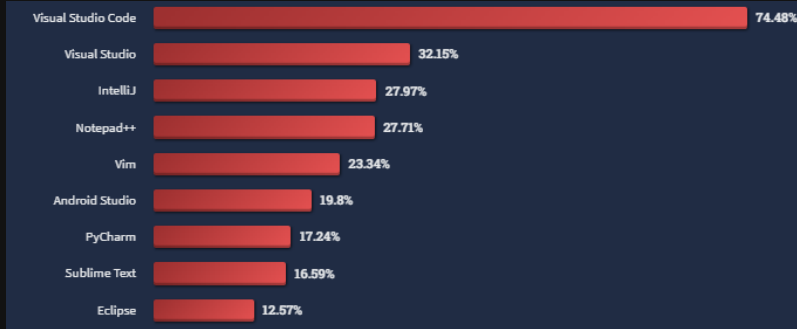
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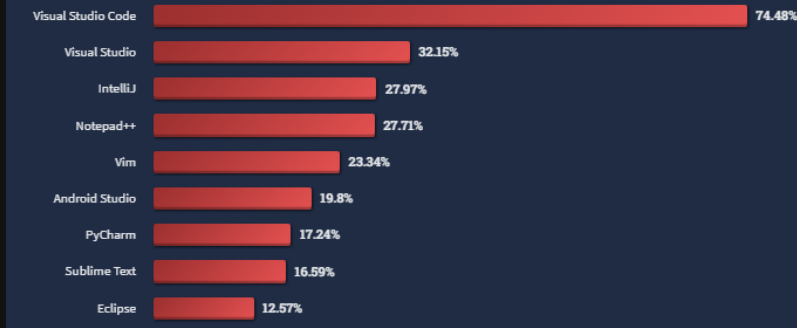
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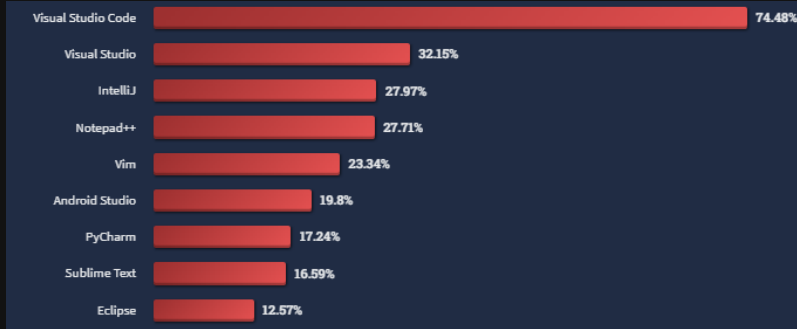
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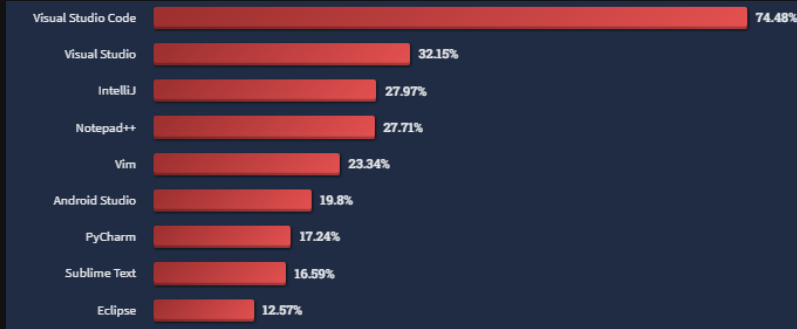
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- Extension API fairly well documented (Samples: <https://github.com/microsoft/vscode-extension-samples>)

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- Takeaways from this talk not specific to VS Code.

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Other benefits

- Learn another programming language & ecosystem (typescript / npm)
- Have fun!

Let's try to create a hello world extension

Just follow the guide here: <https://code.visualstudio.com/api/get-started/your-first-extension>

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- Open `src/extension.ts`

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- Answer the questions asked
- Open `src/extension.ts`
- Press F5 to start an extension debugging session

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Learning a new language?

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ChatGPT can be both of those things

- Has deep knowledge about TypeScript
- Has knowledge about the vscode API
- You can ask it to elaborate on solutions
- This advice comes with all the caveats against ChatGPT

Let's make a useful command

Automate repetitive tasks

Text-editor commands

- Advanced search-and-replace
- Autocomplete include paths

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#include "lib1.h"  
#include "lib2.h"  
int main()  
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Live demo

Wasn't that fun?

A case study

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- A surprising amount of developers make do with whats easily available

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IDE extensions as a painkiller

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- Did we succeed?

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 - No

IDE extensions as a painkiller

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 - No
 - It was FUN

Customizing launch.json and tasks.json

Resolving files and paths dynamically

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Demo time!

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 - Task providers

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 - Debug configuration providers

Legacy build systems

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- Introducing terribuild

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- Tries to emulate legacy custom build system

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Demo: Let's try to integrate it into vs code

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- Eclipse Theia is compatible with VS Code extensions
- One common extension API for all editors would be great

Thank you