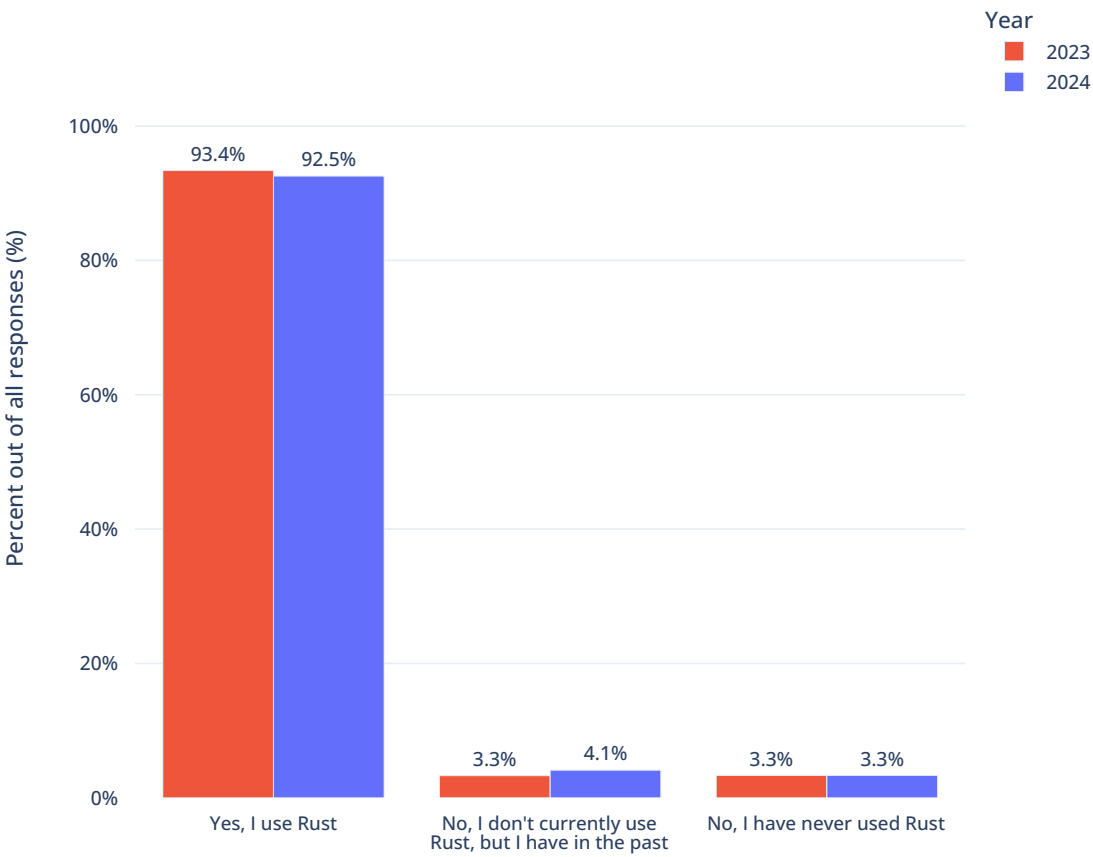
Rust Annual survey 2024 report

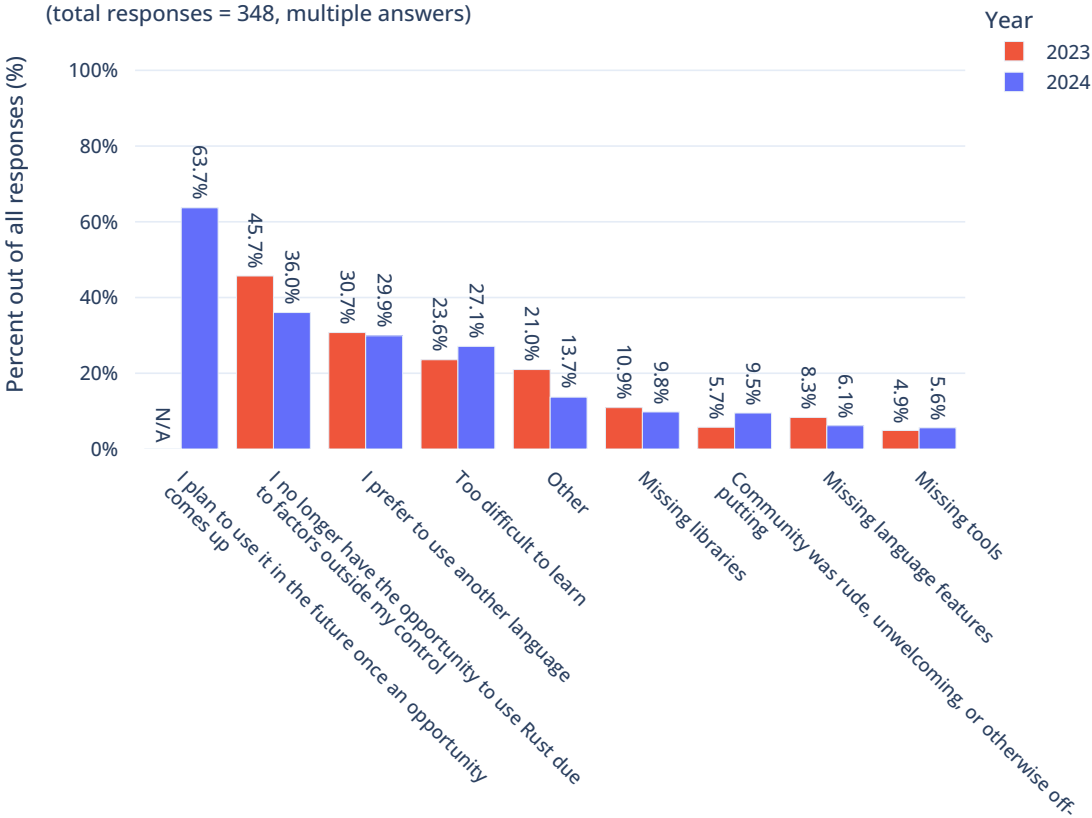
Do you use Rust?

(total responses = 11906, single answer)

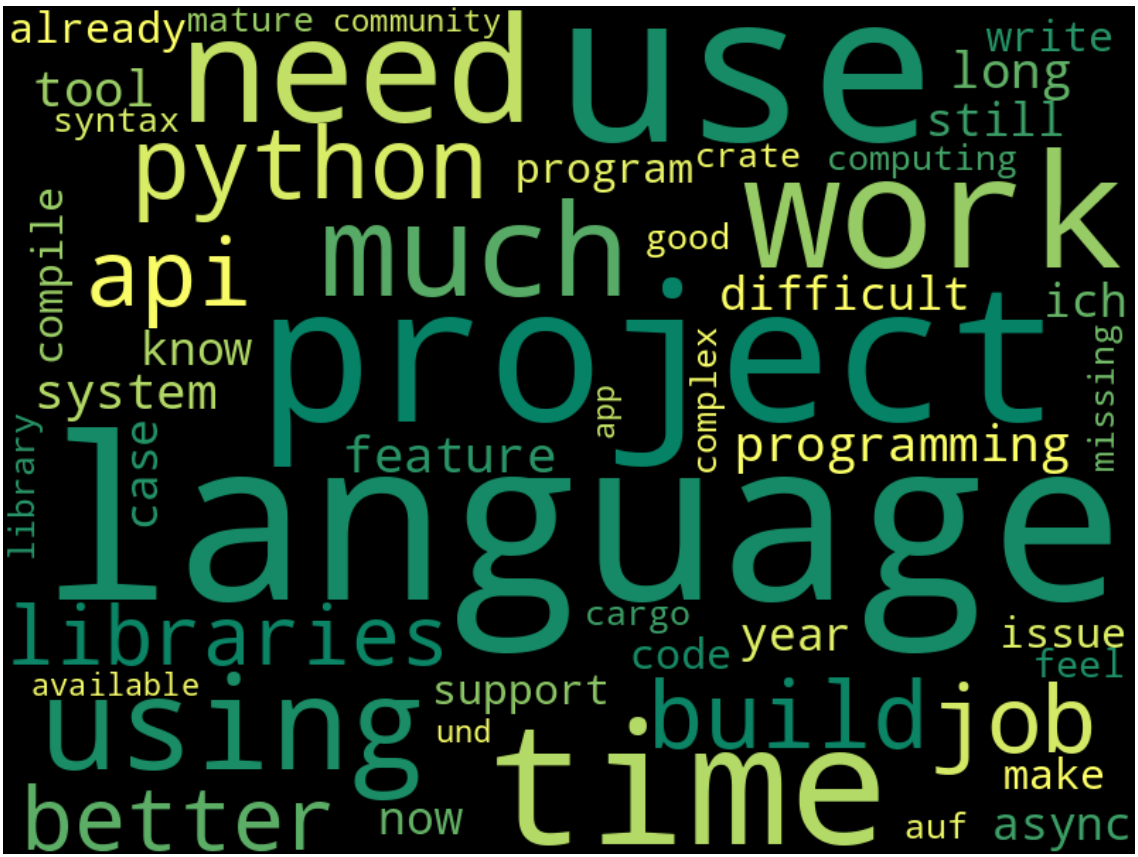


As you have indicated that you're no longer using Rust, why did you stop using Rust?

(total responses = 348, multiple answers)

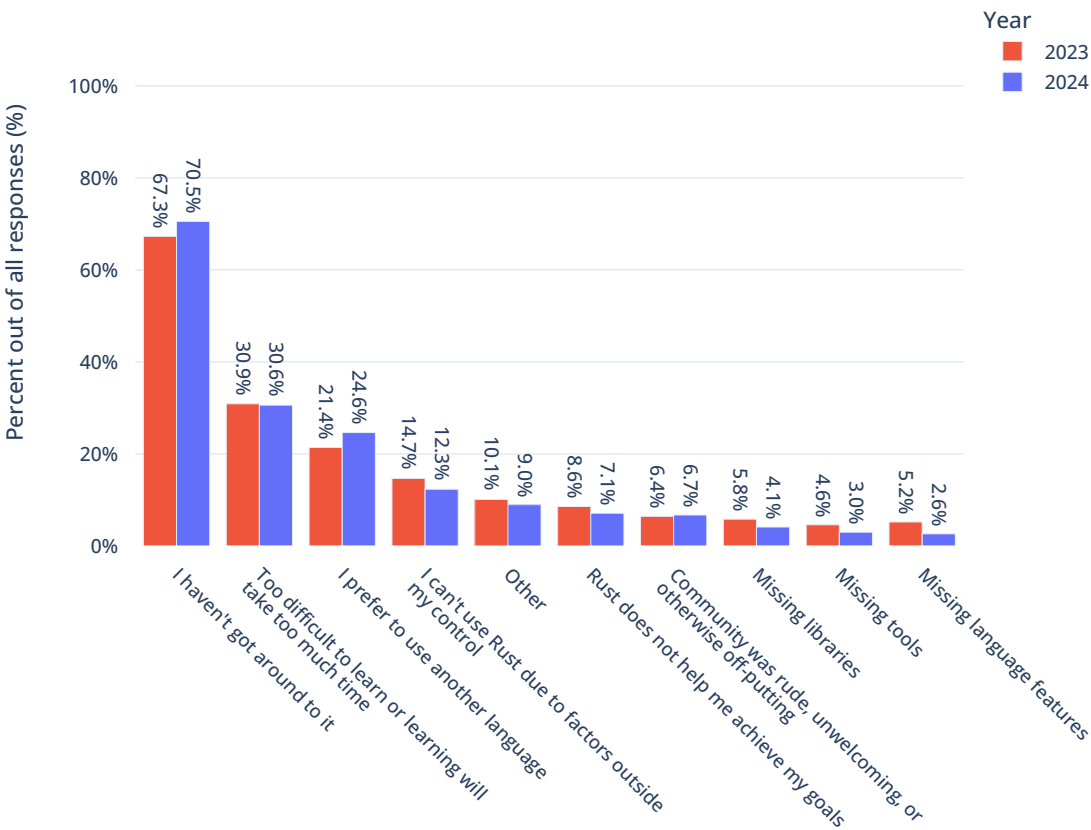


Wordcloud of open answers for the previous chart:



Why don't you use Rust?

(total responses = 327, multiple answers)



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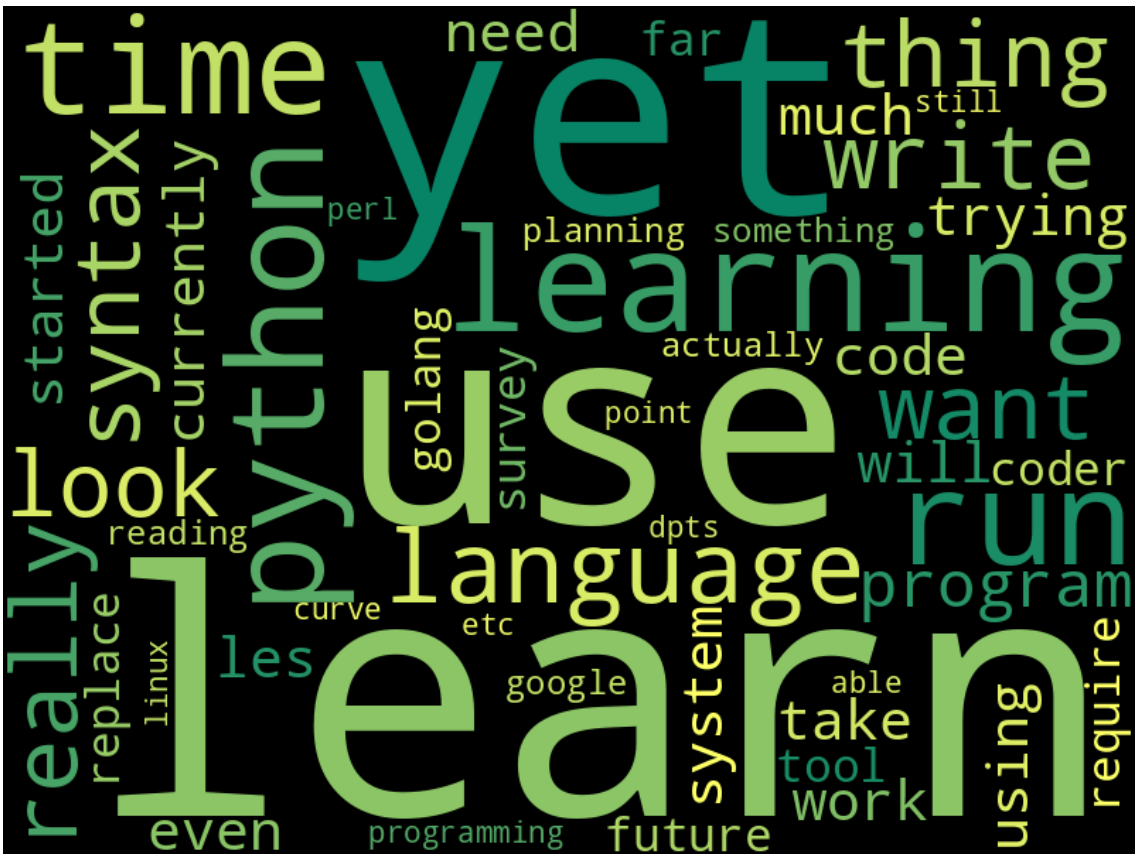
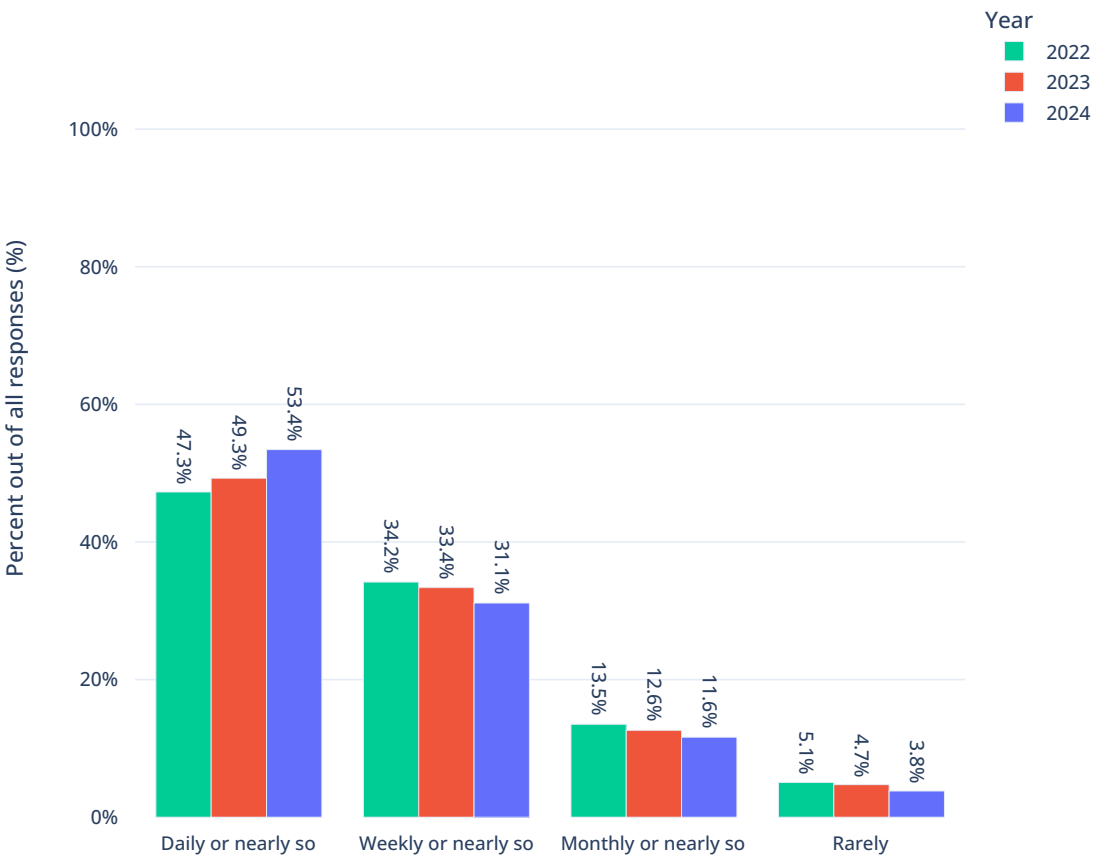


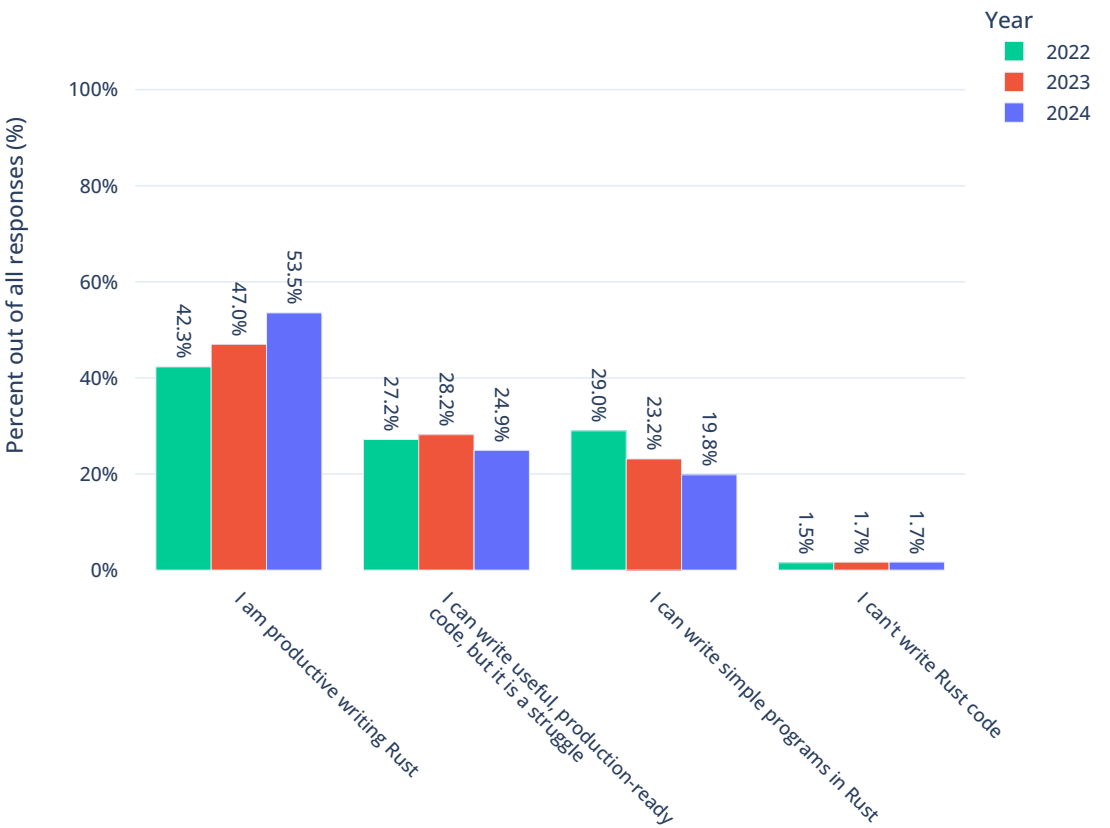
On average, how often do you use Rust?

(total responses = 9849, single answer)



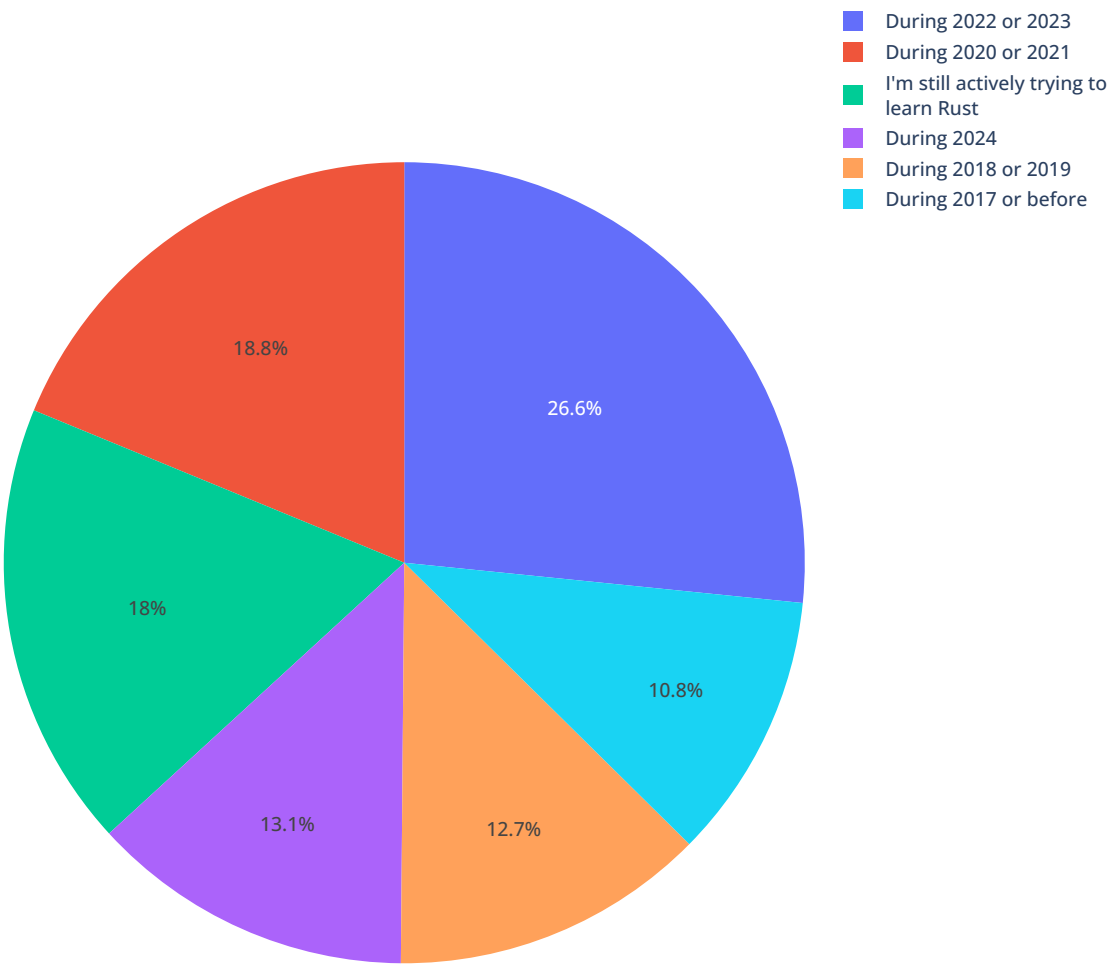
How would you rate your Rust expertise?

(total responses = 9851, single answer)



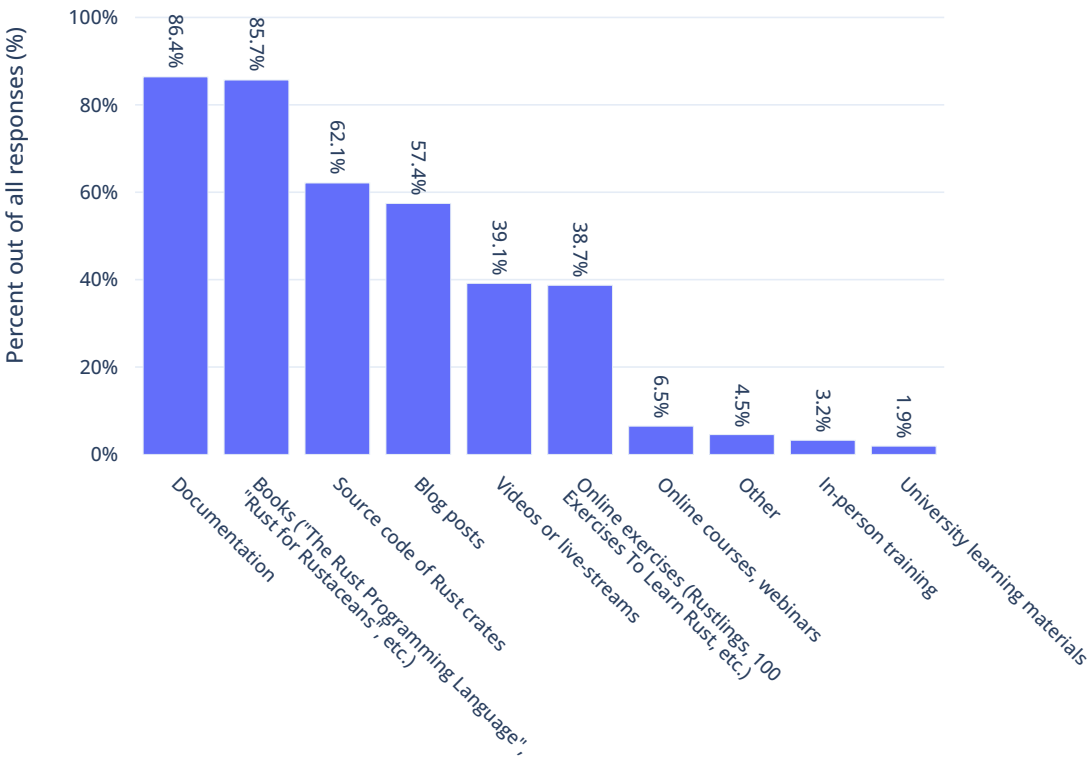
When did you learn to program in Rust?

(total responses = 7394)



If you consumed learning material about Rust, which kind of material did you consume?

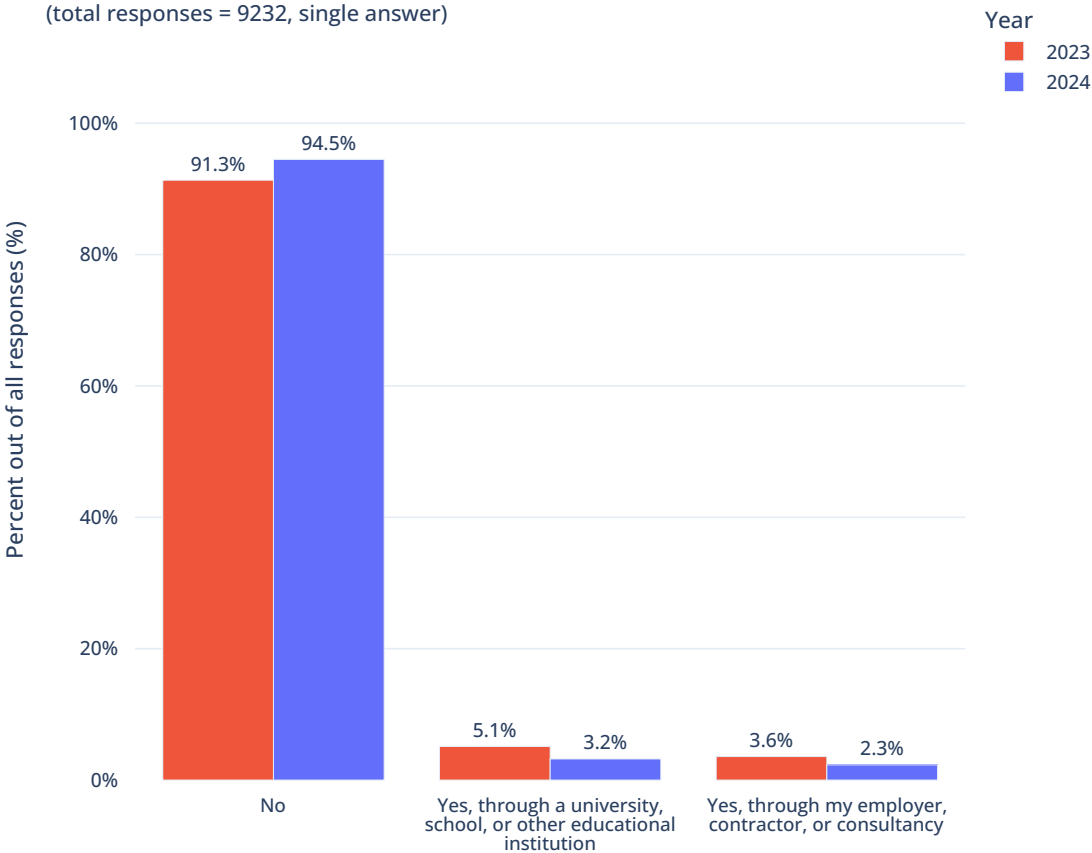
(total responses = 7385, multiple answers)



Wordcloud of open answers for the previous chart:

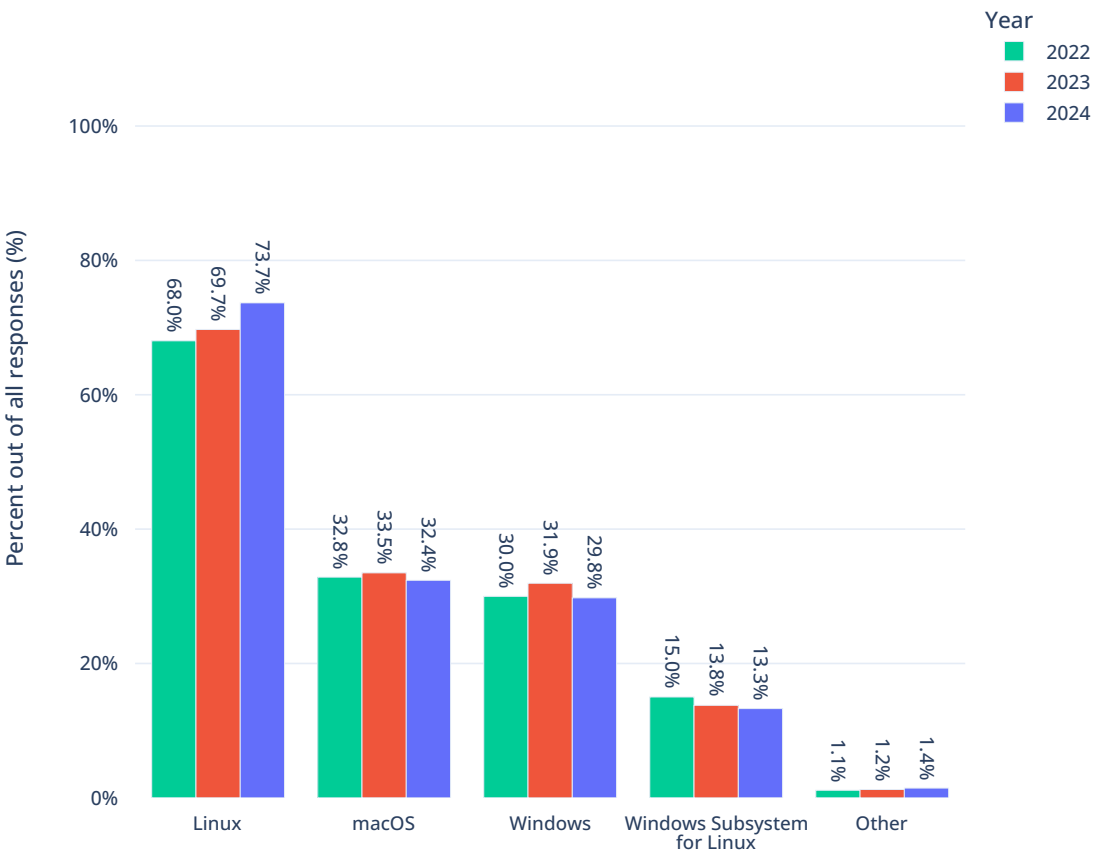
Are you currently taking a course that uses or teaches Rust OR have you taken a course of this type in the last year?

(total responses = 9232, single answer)

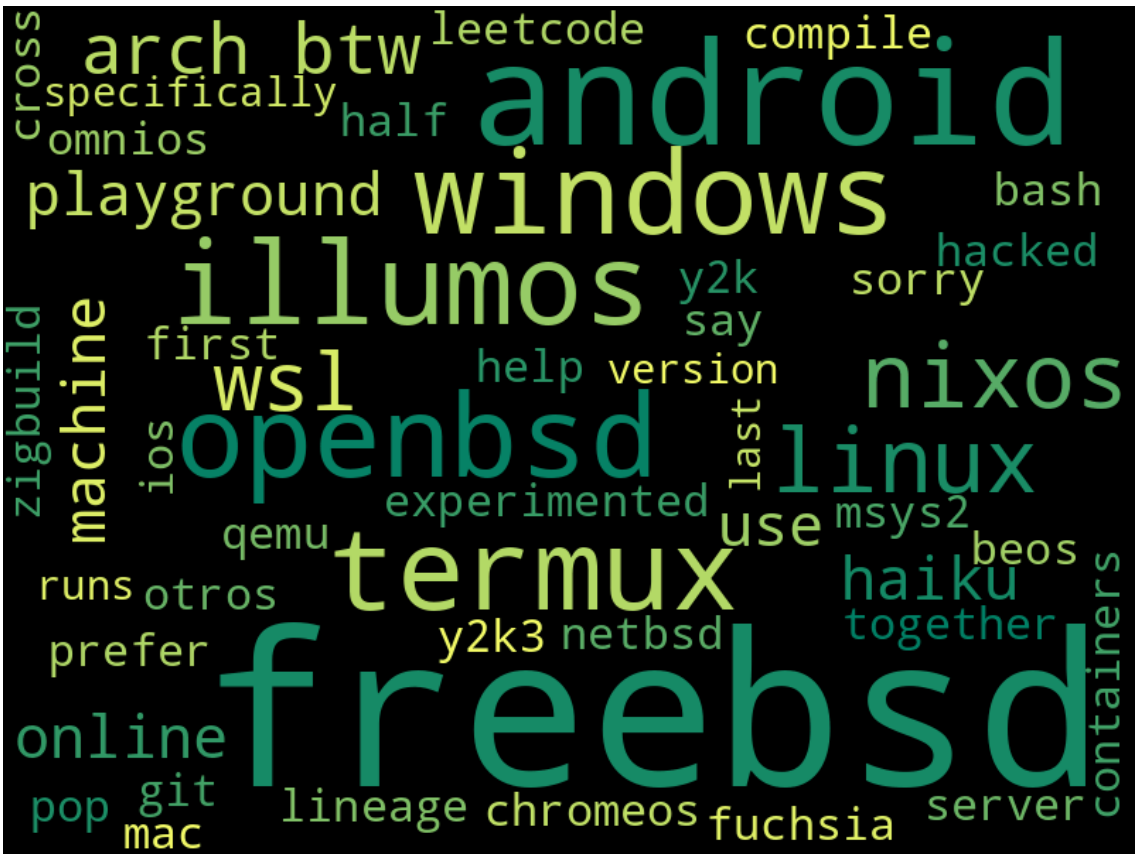


Which operating systems do you use regularly for Rust development?

(total responses = 9846, multiple answers)

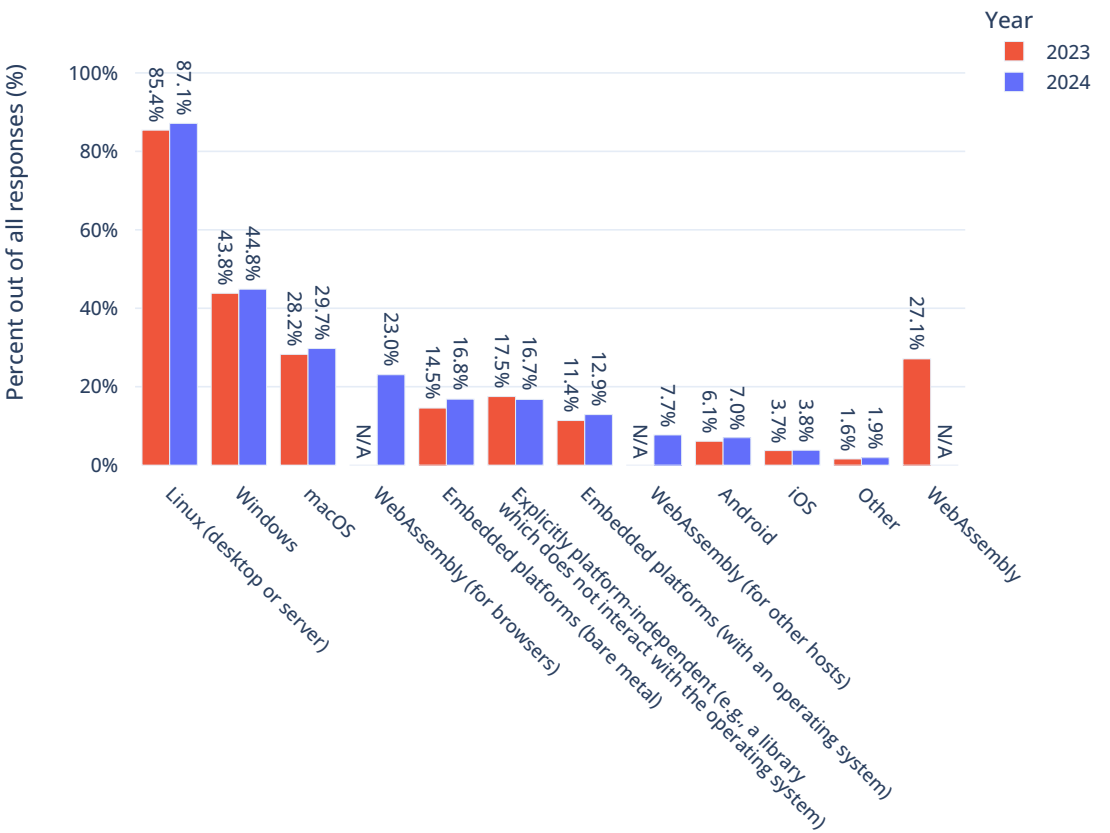


Wordcloud of open answers for the previous chart:



Which operating systems or runtimes do you develop Rust software for?

(total responses = 10433, multiple answers)



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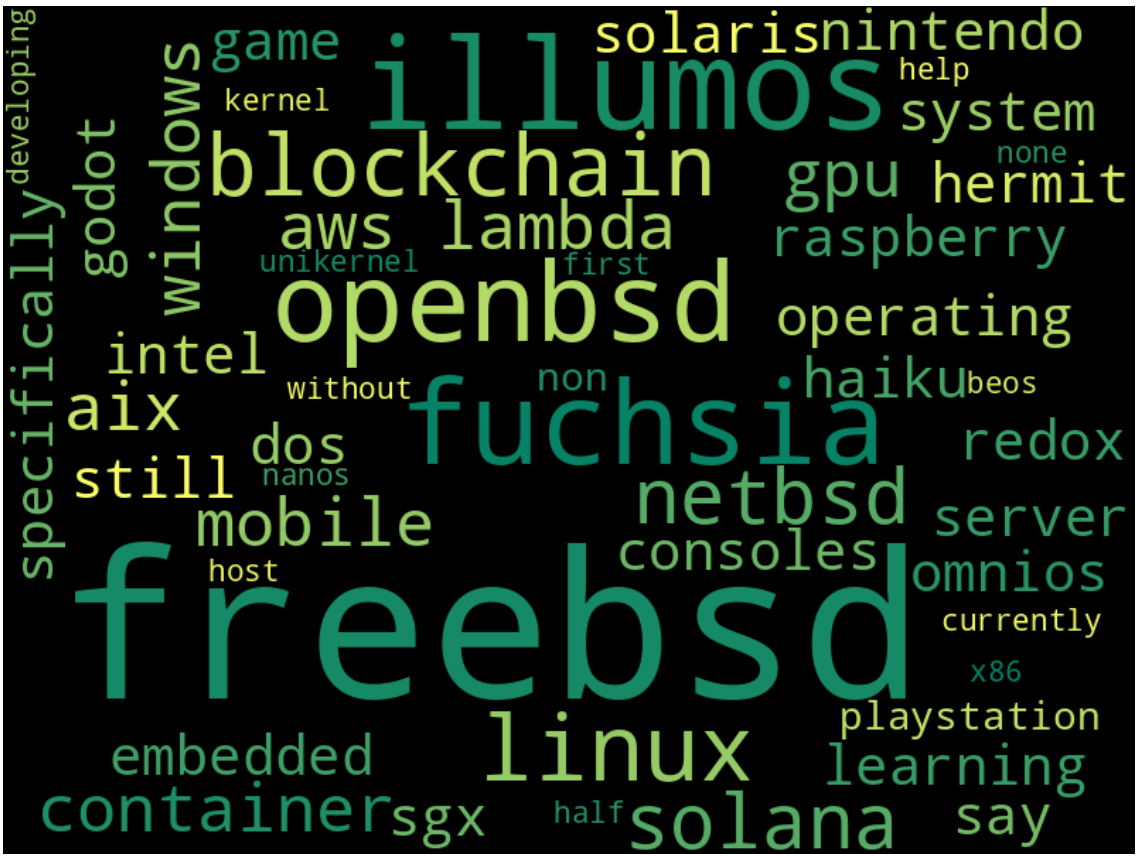
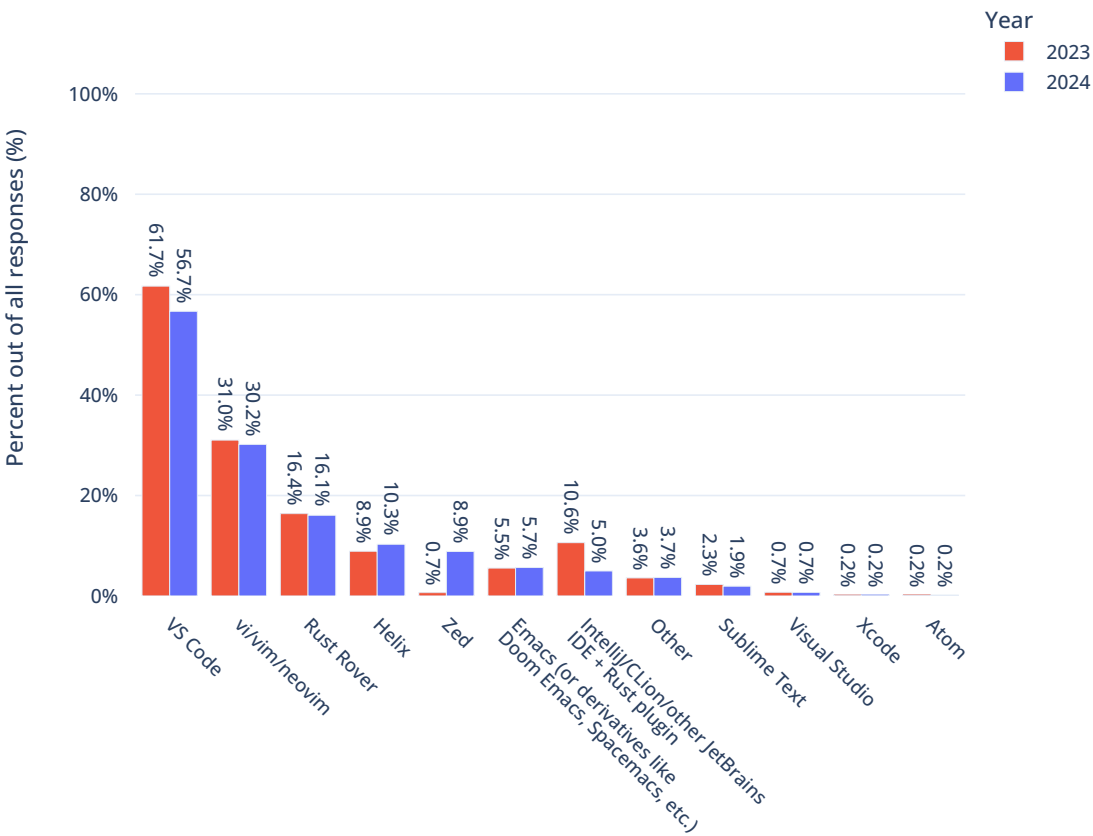


Which editor or IDE setup do you use with Rust code on a regular basis?

(total responses = 10480, multiple answers)



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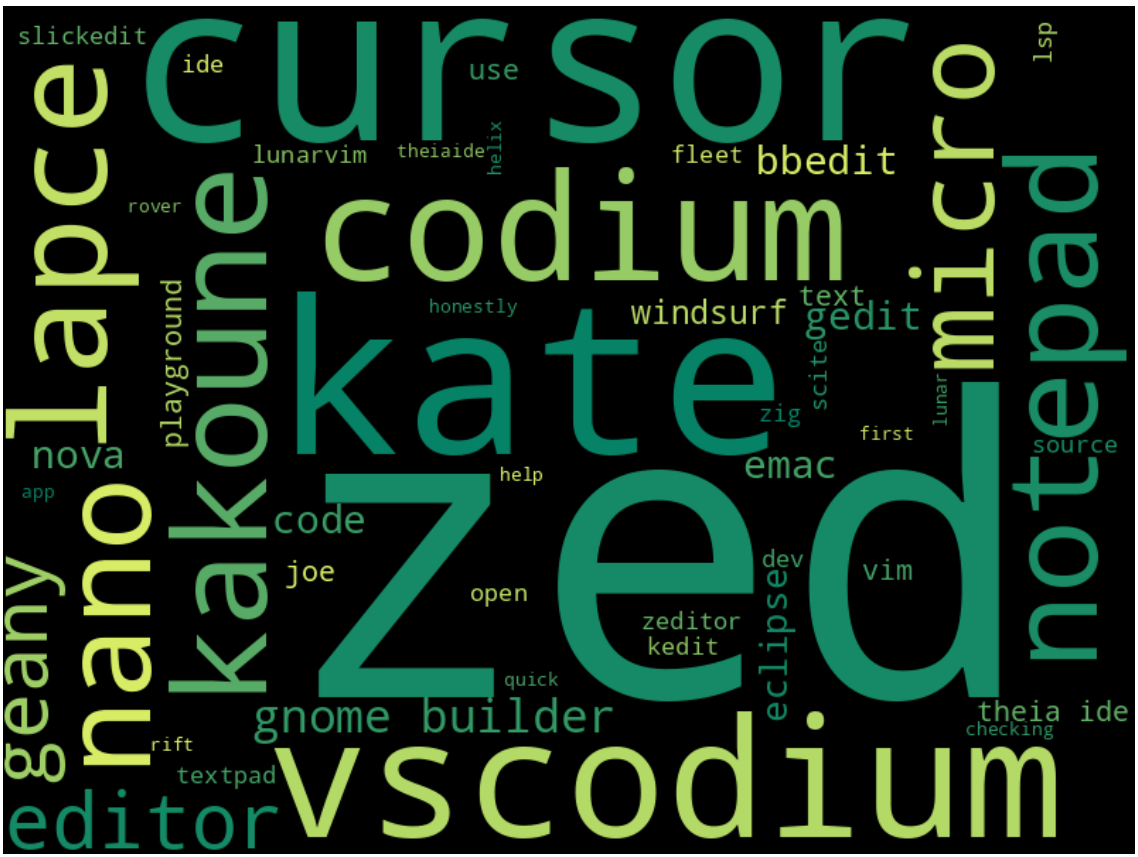
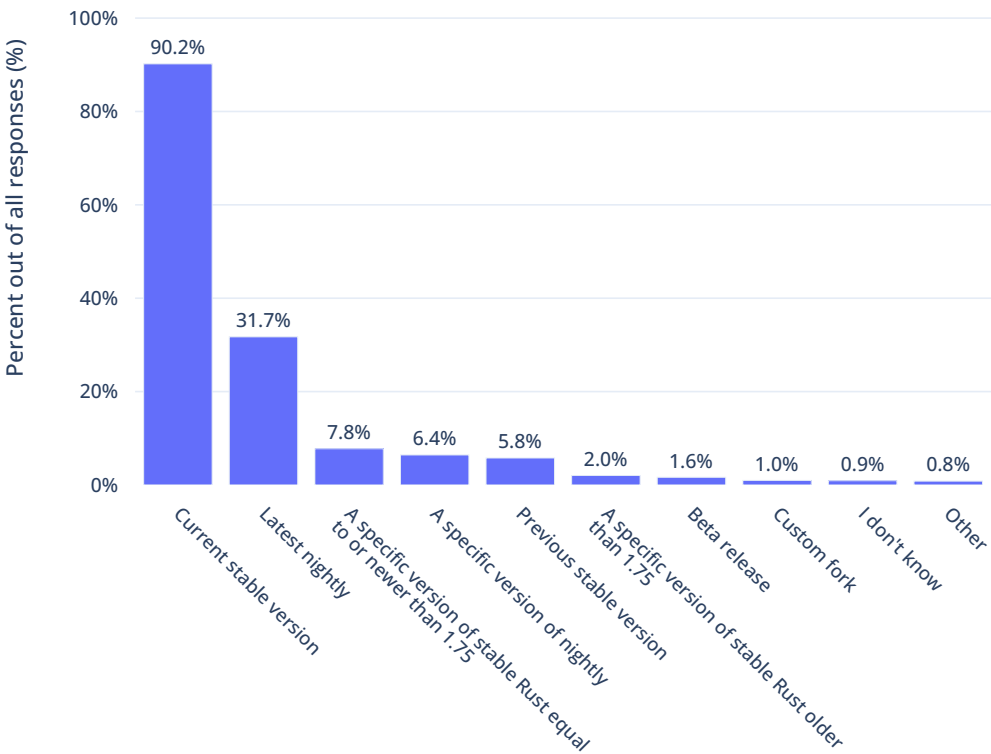


Which version(s) of Rust do you use for development?

(total responses = 8152, multiple answers)



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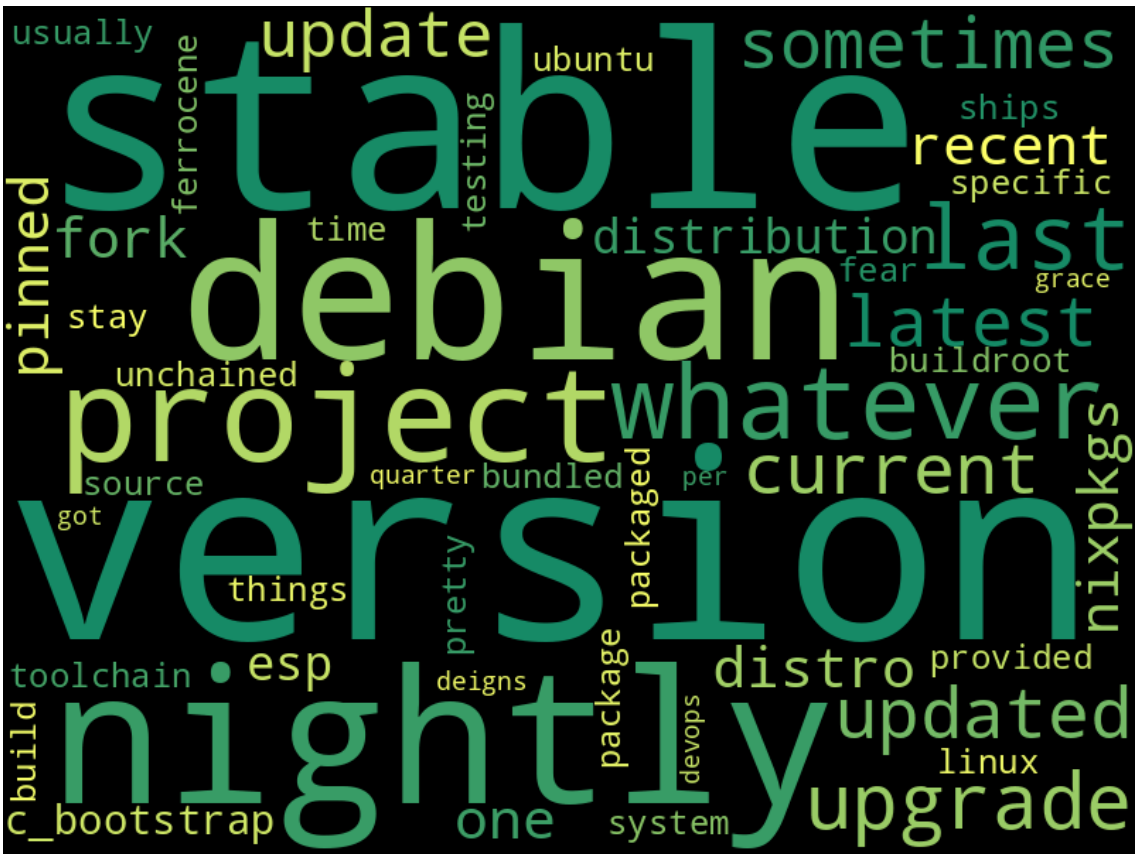
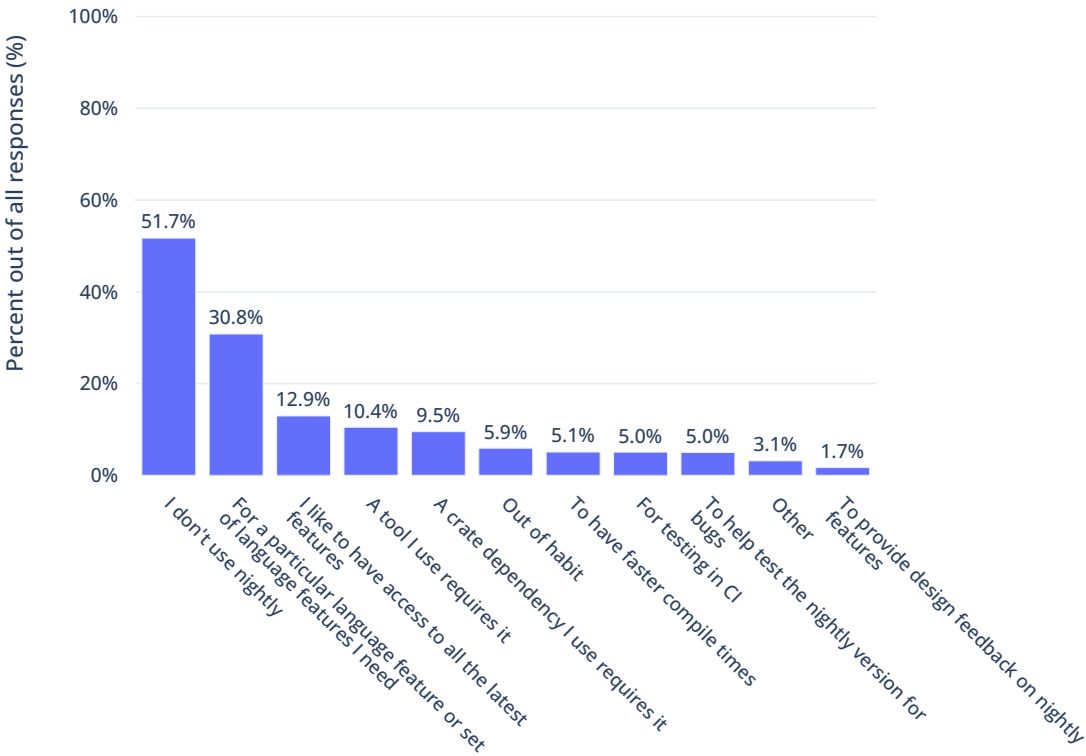
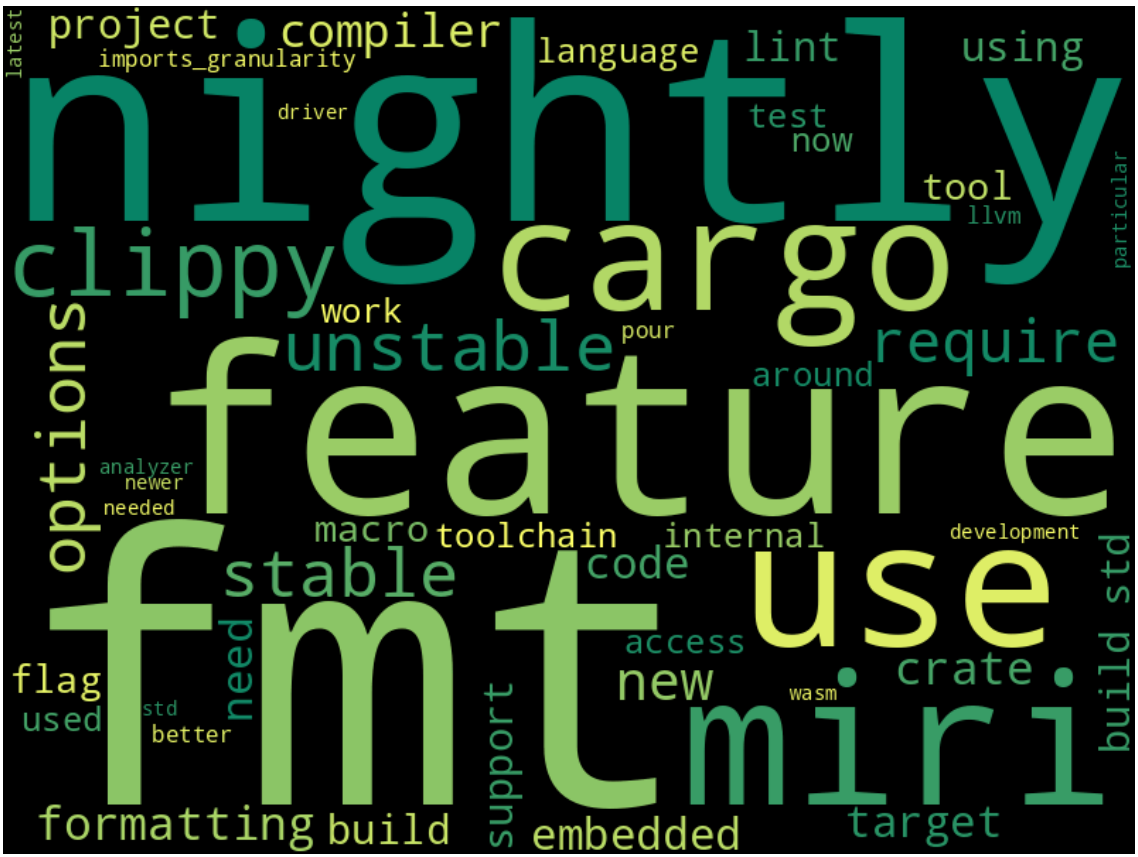


If you use nightly, why?

(total responses = 7426, multiple answers)

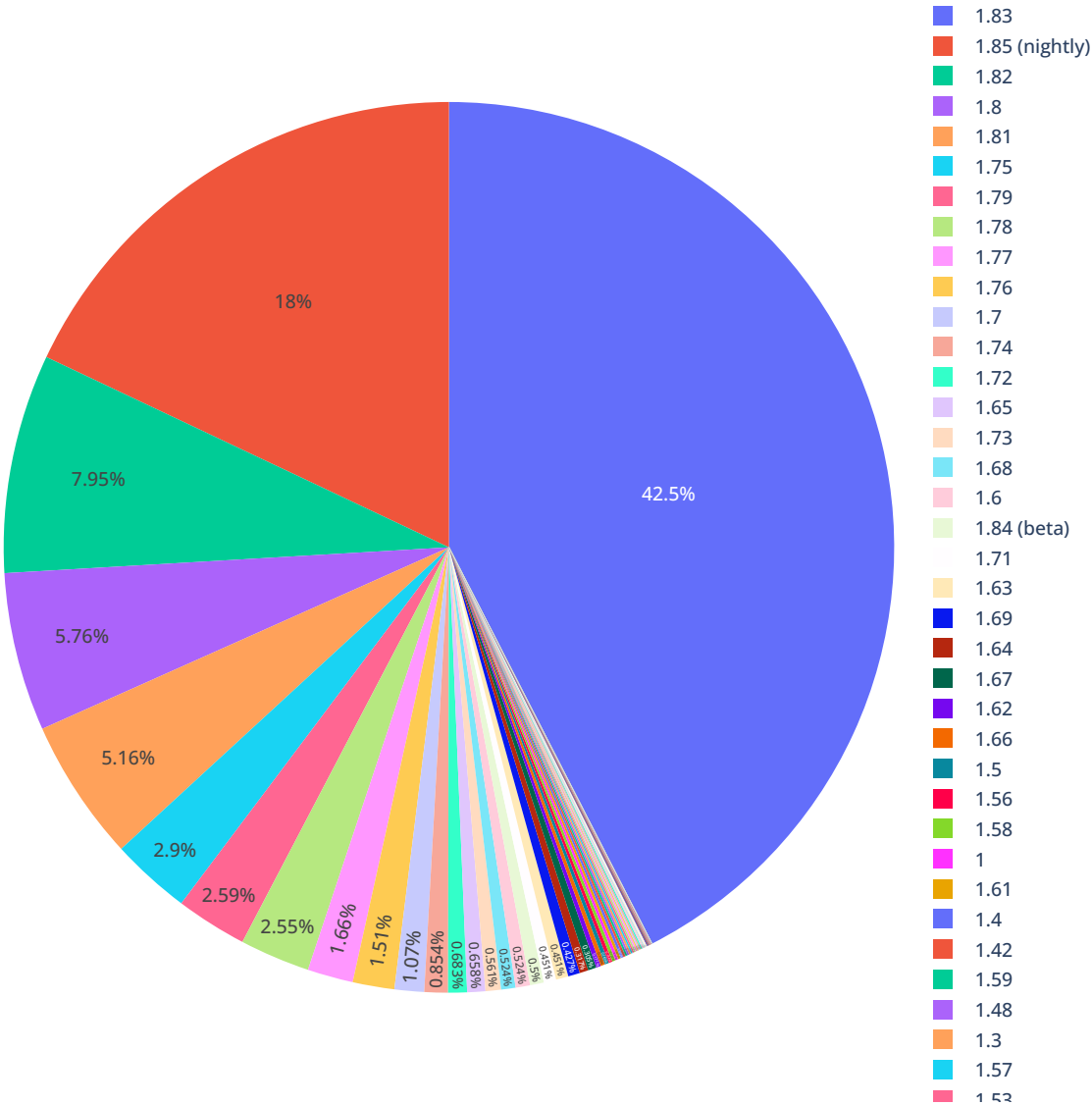


Wordcloud of open answers for the previous chart:



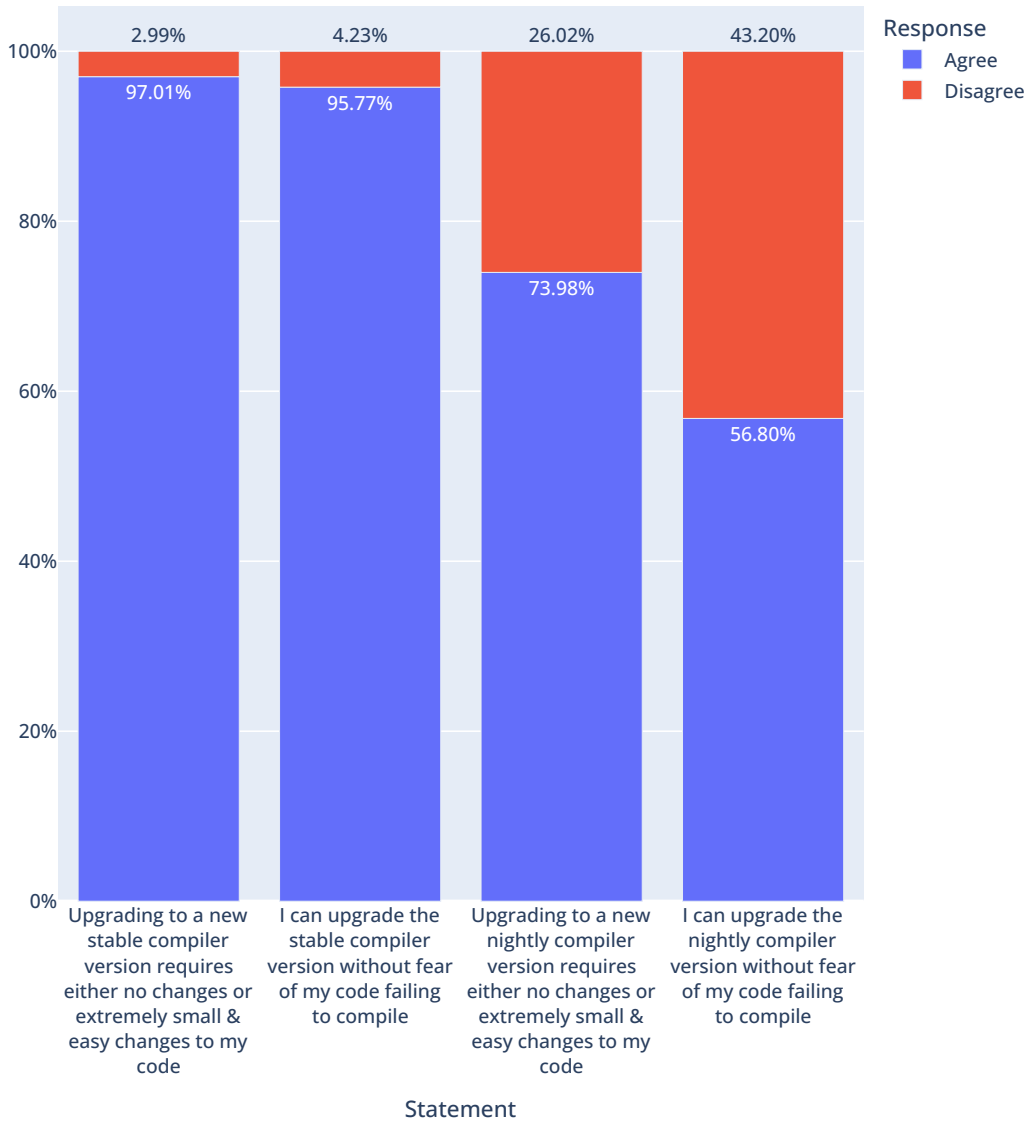
What is the oldest version of Rust you use for any development task?

(total responses = 8201)



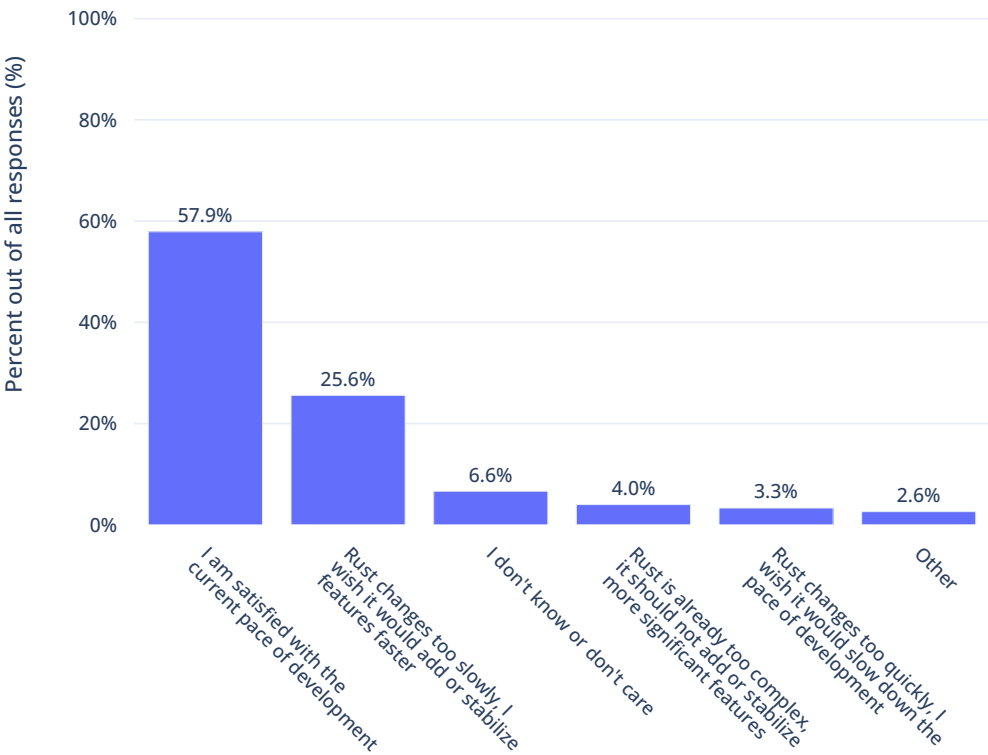
Do you agree with the following statements on Rust stability?

(total responses = 7933)



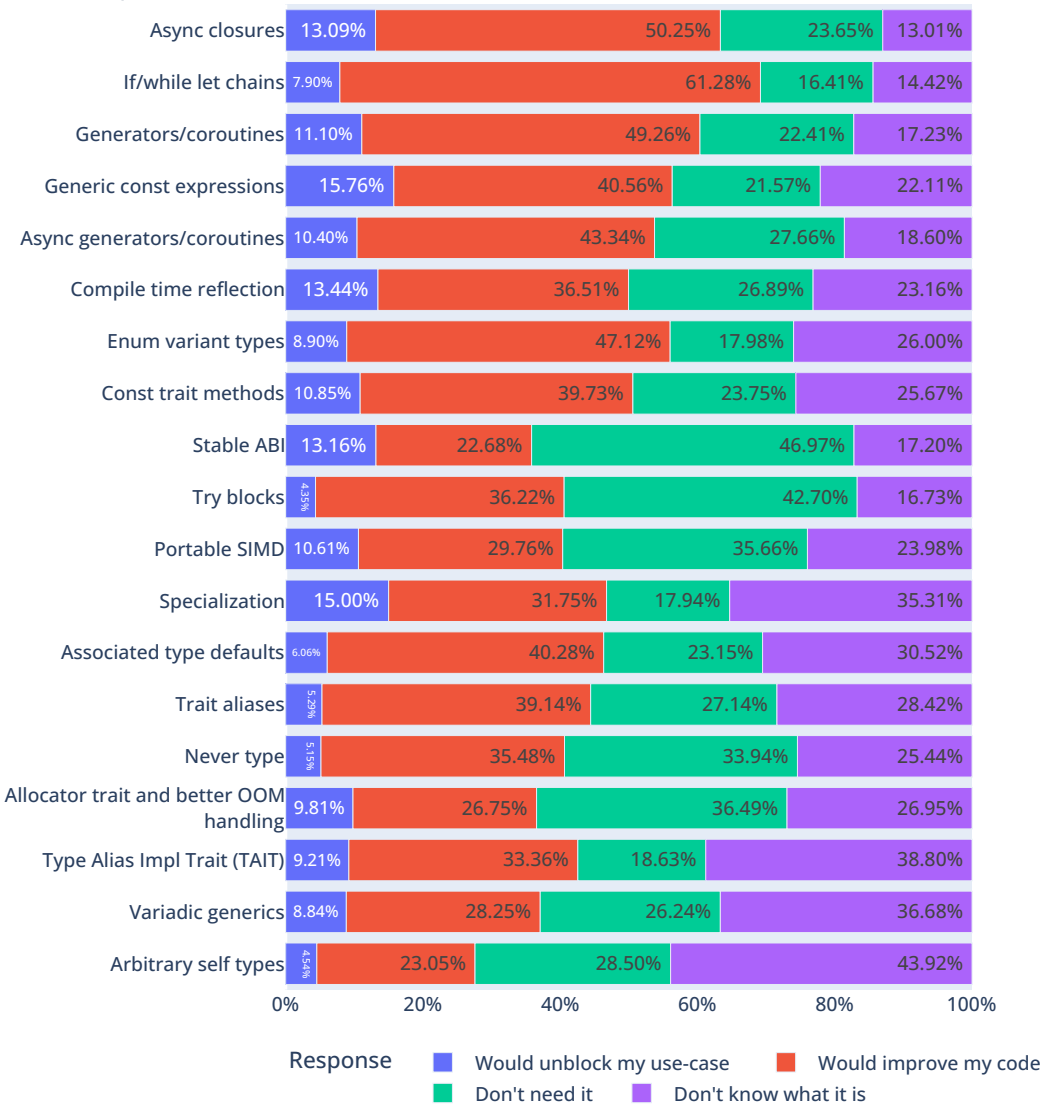
What is your opinion on how fast Rust evolves?

(total responses = 7088, single answer)

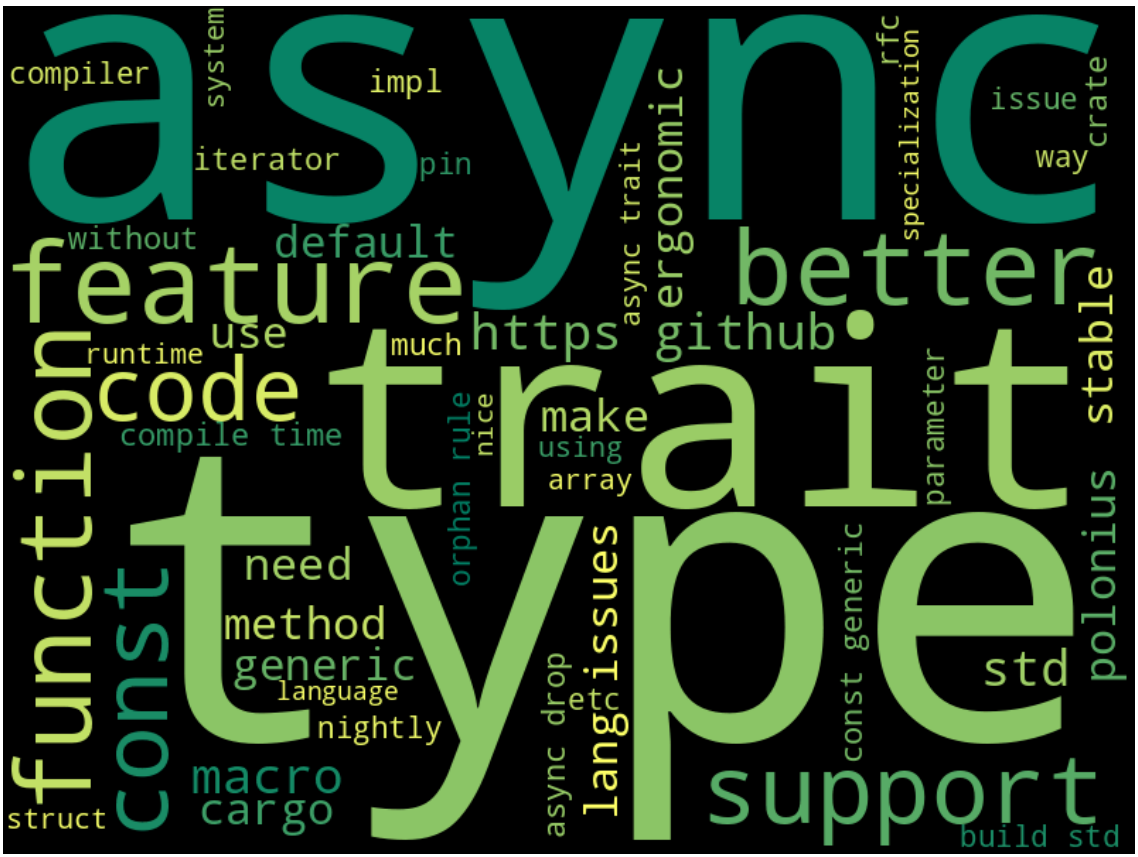


Which unimplemented (or nightly only) features are you looking for to be stabilized?

(total responses = 6792)

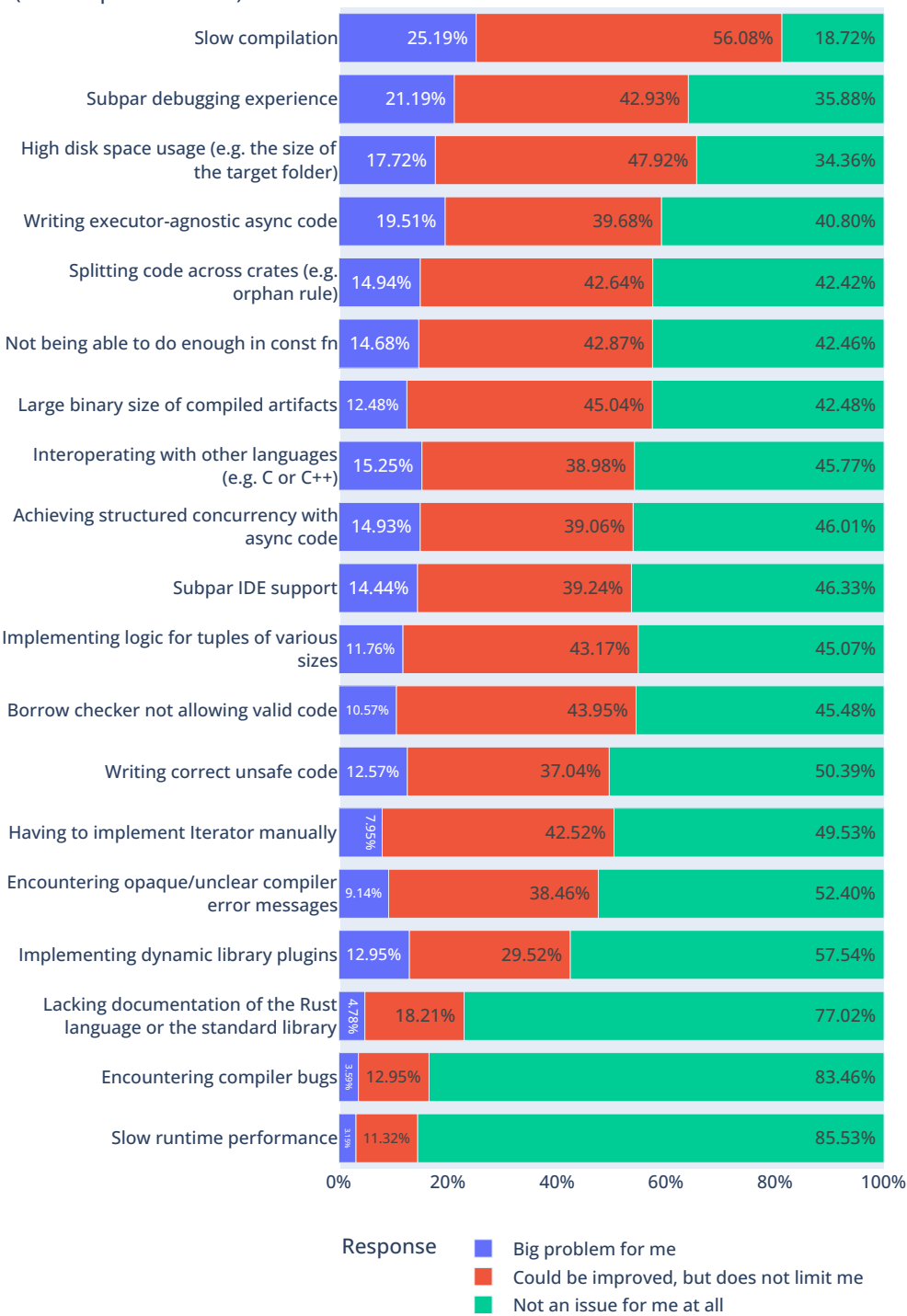


Wordcloud of open answers for the previous chart:

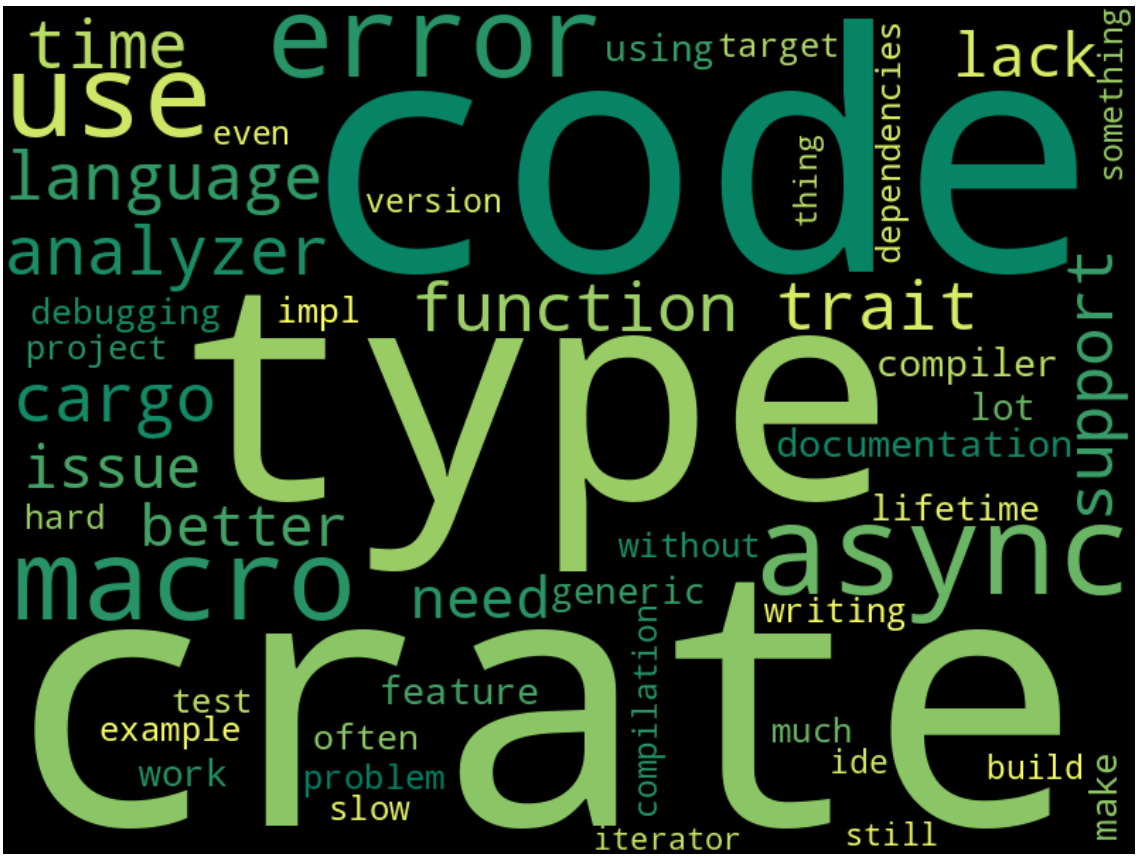


Which of the following aspects of Rust present non-trivial problems to your programming productivity?

(total responses = 6862)

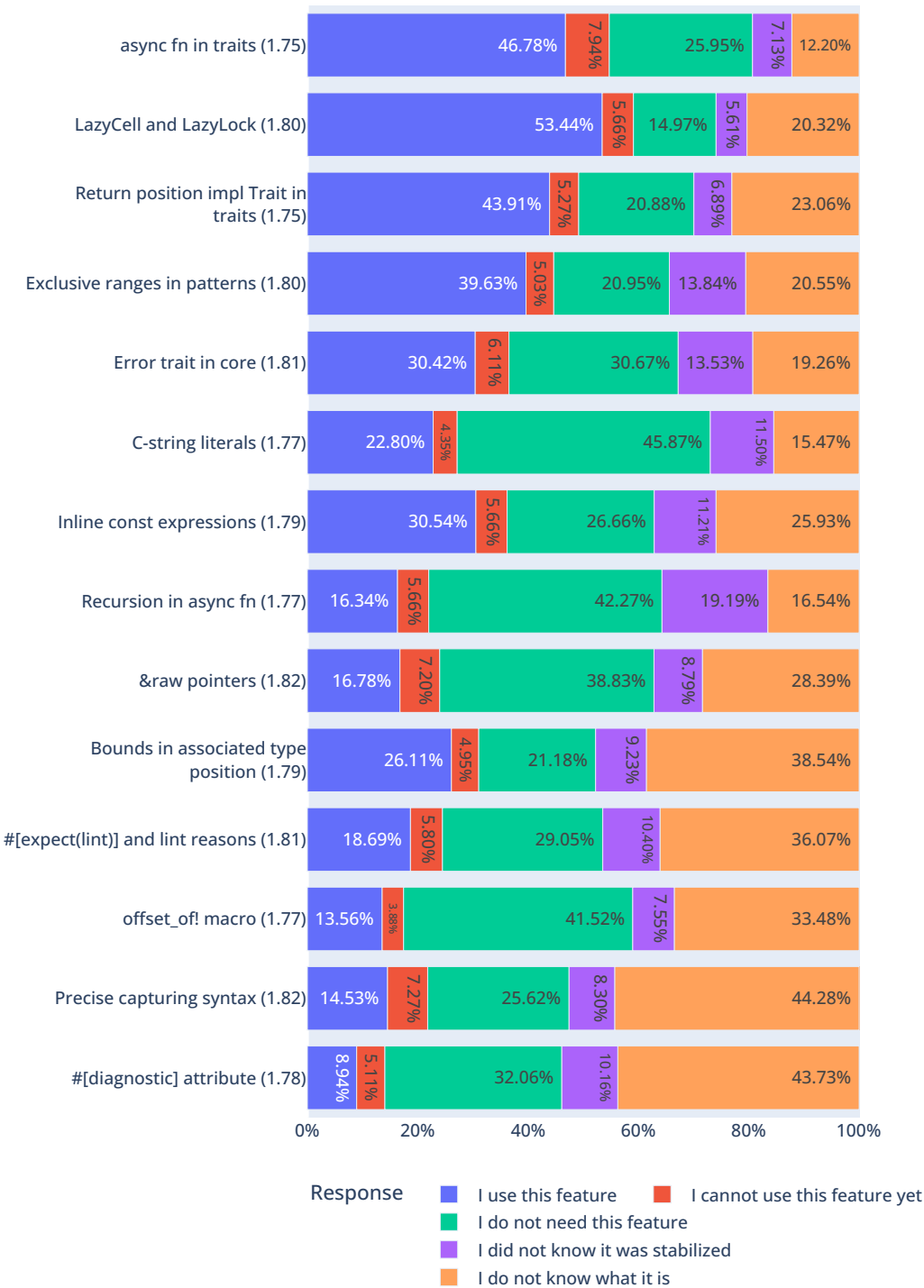


Wordcloud of open answers for the previous chart:



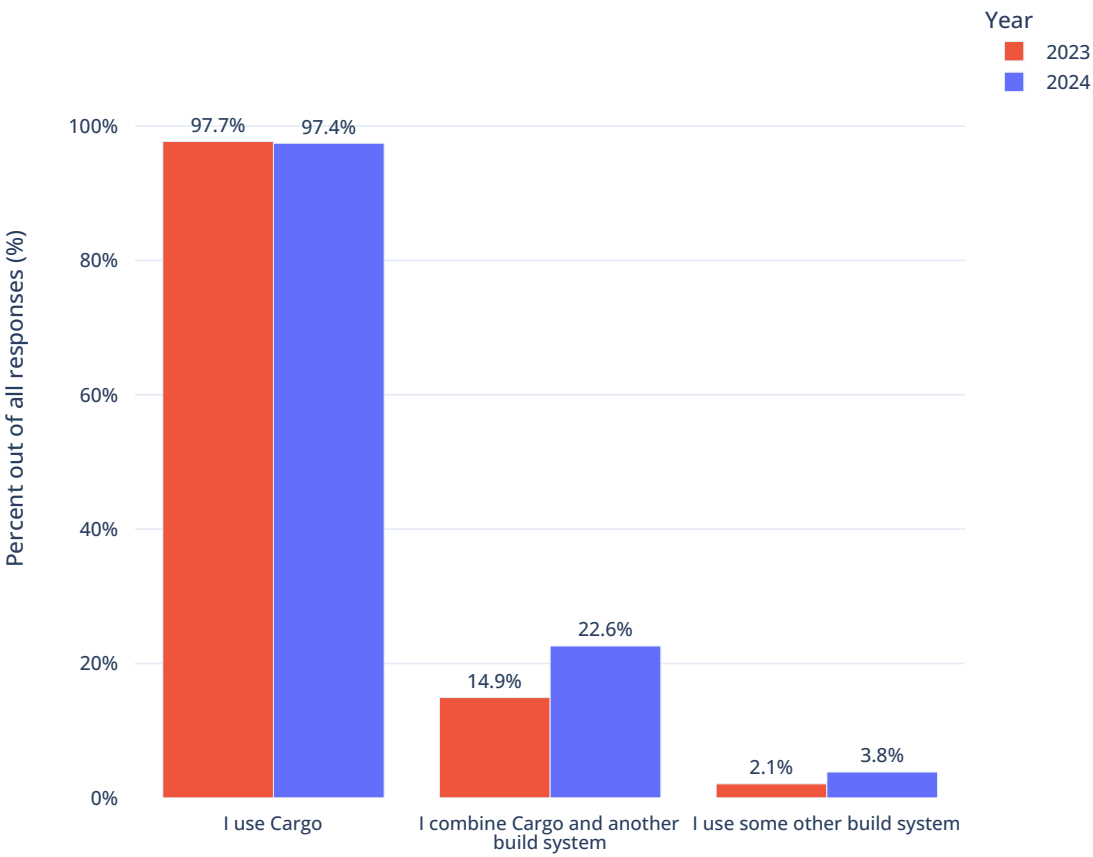
Which features stabilized in the past 12 months do you use the most?

(total responses = 6532)

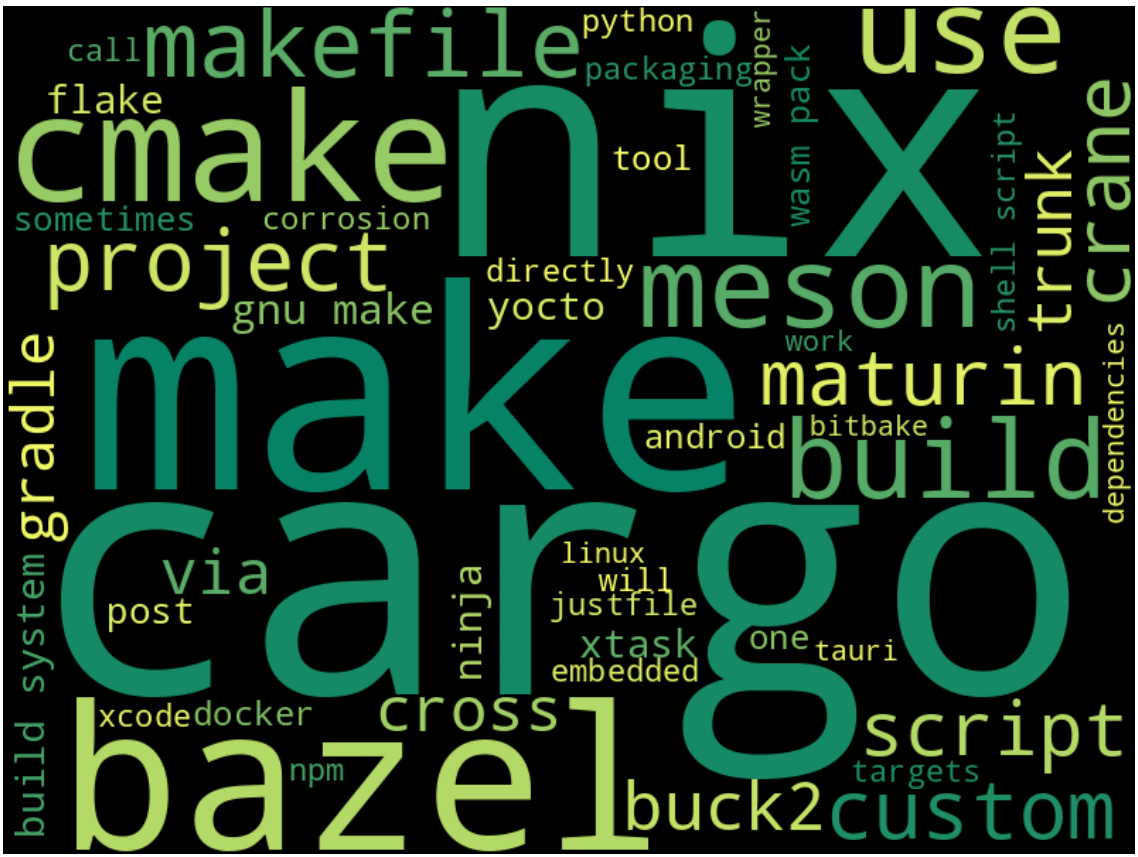


How do you build your Rust projects

(total responses = 9635, multiple answers)

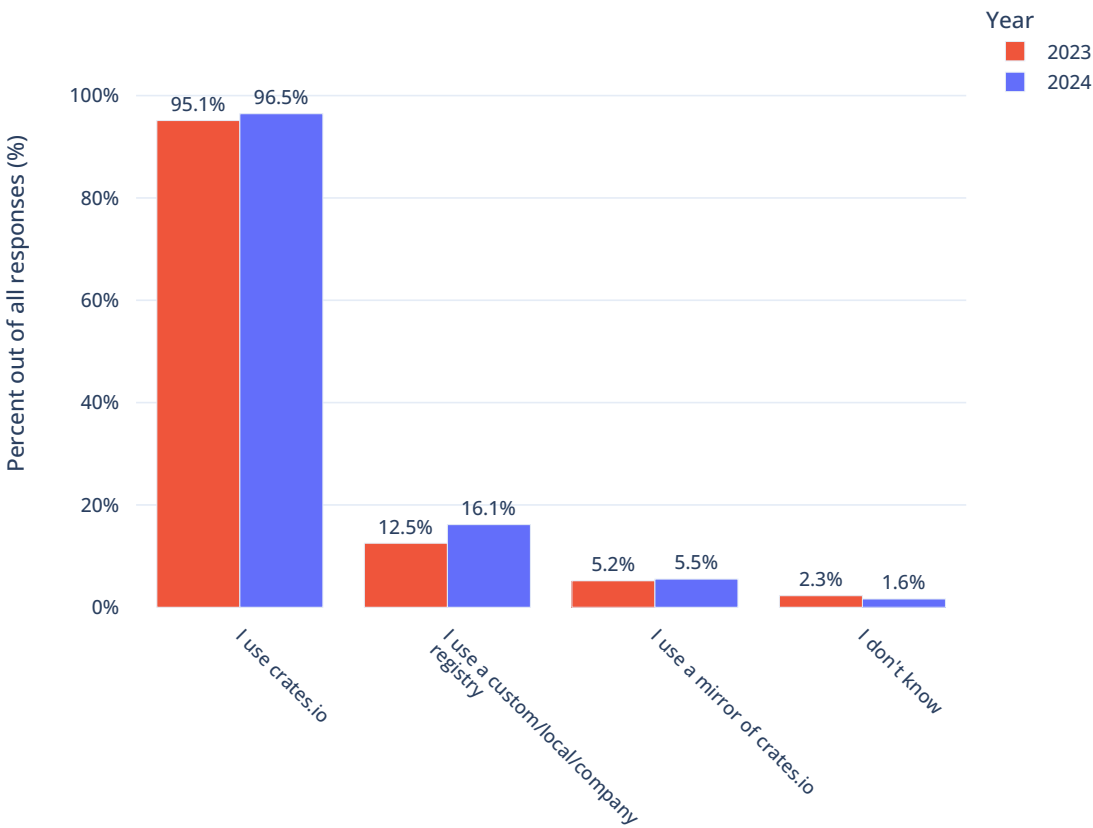


Wordcloud of open answers for the previous chart:



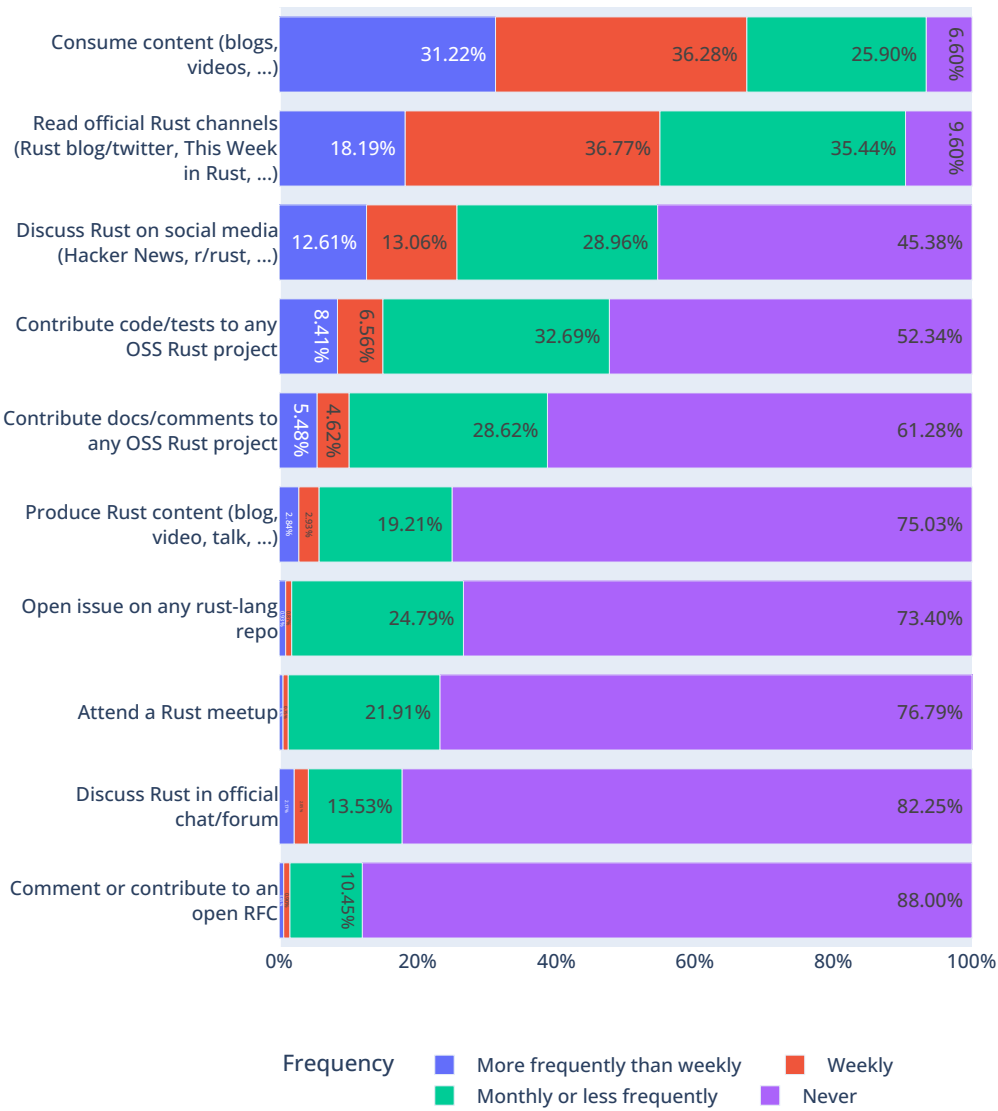
How do you download crates to build Rust projects?

(total responses = 9598, multiple answers)



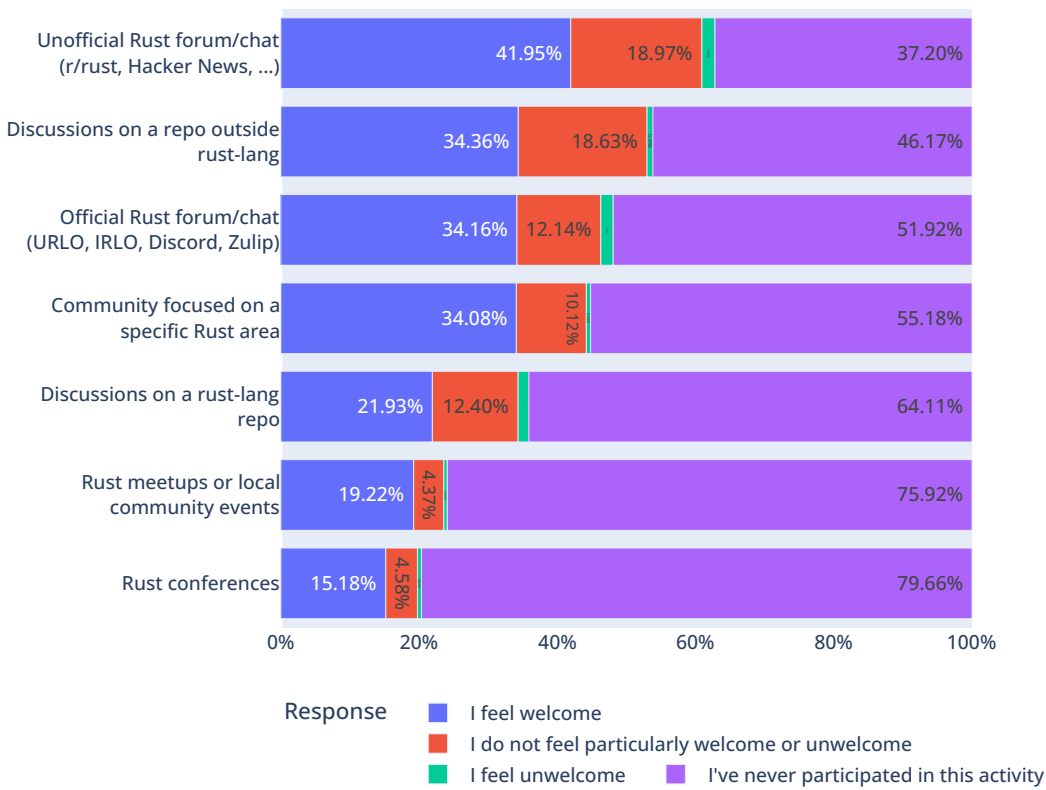
Roughly how often do you engage in the following Rust community activities?

(total responses = 6756)



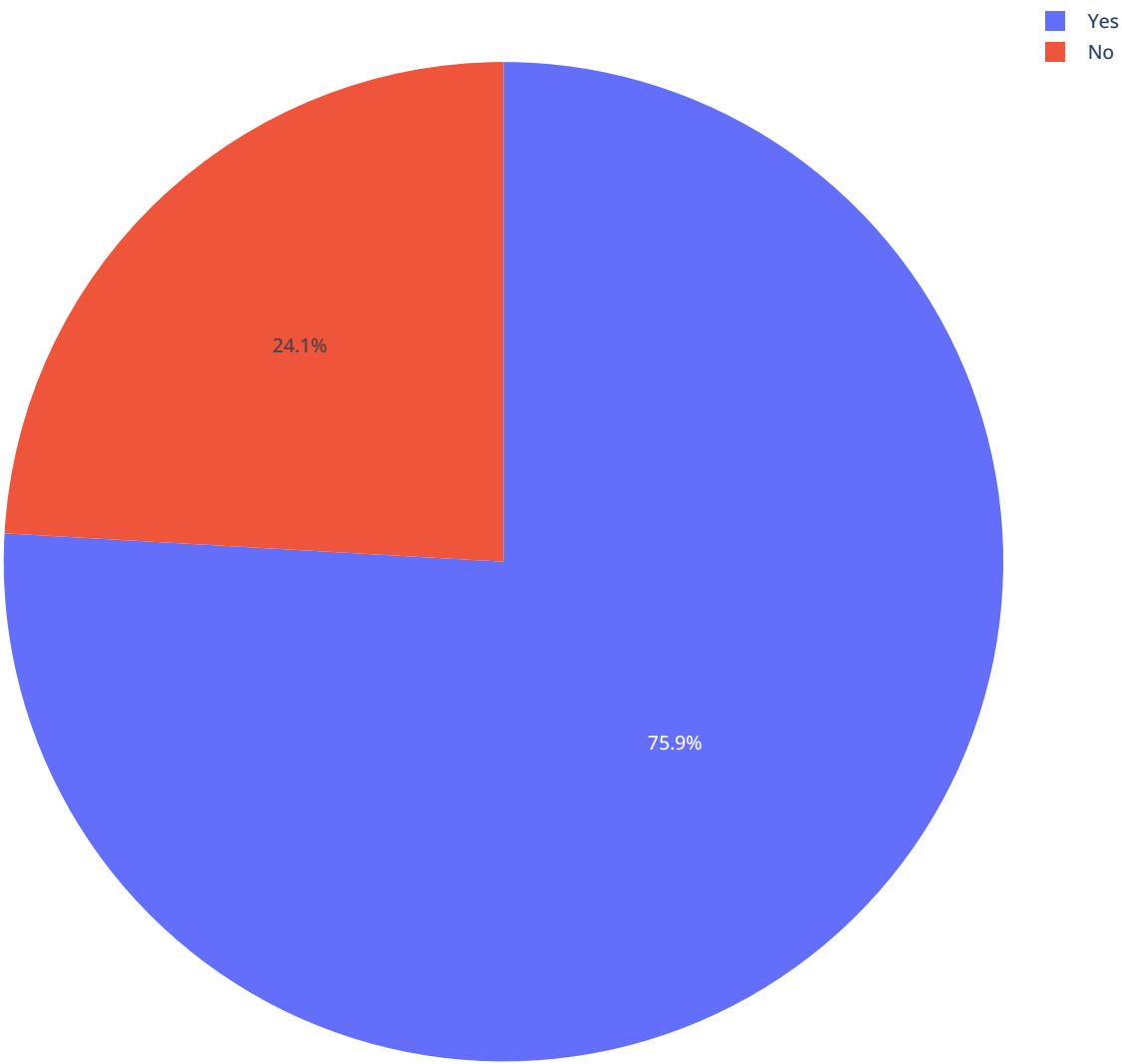
What has your experience been like in the following Rust community spaces?

(total responses = 6585)



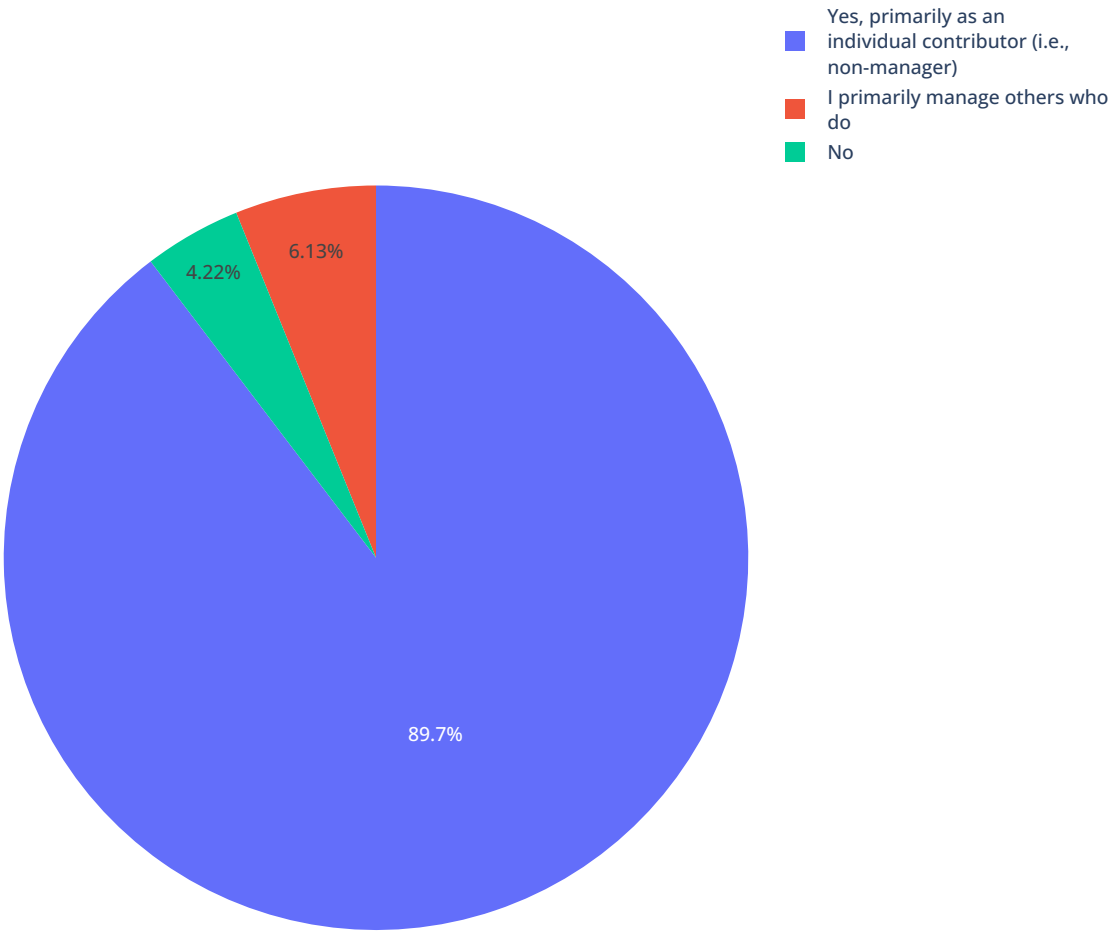
Are you employed full- or part-time (including paid internships)?

(total responses = 7466)



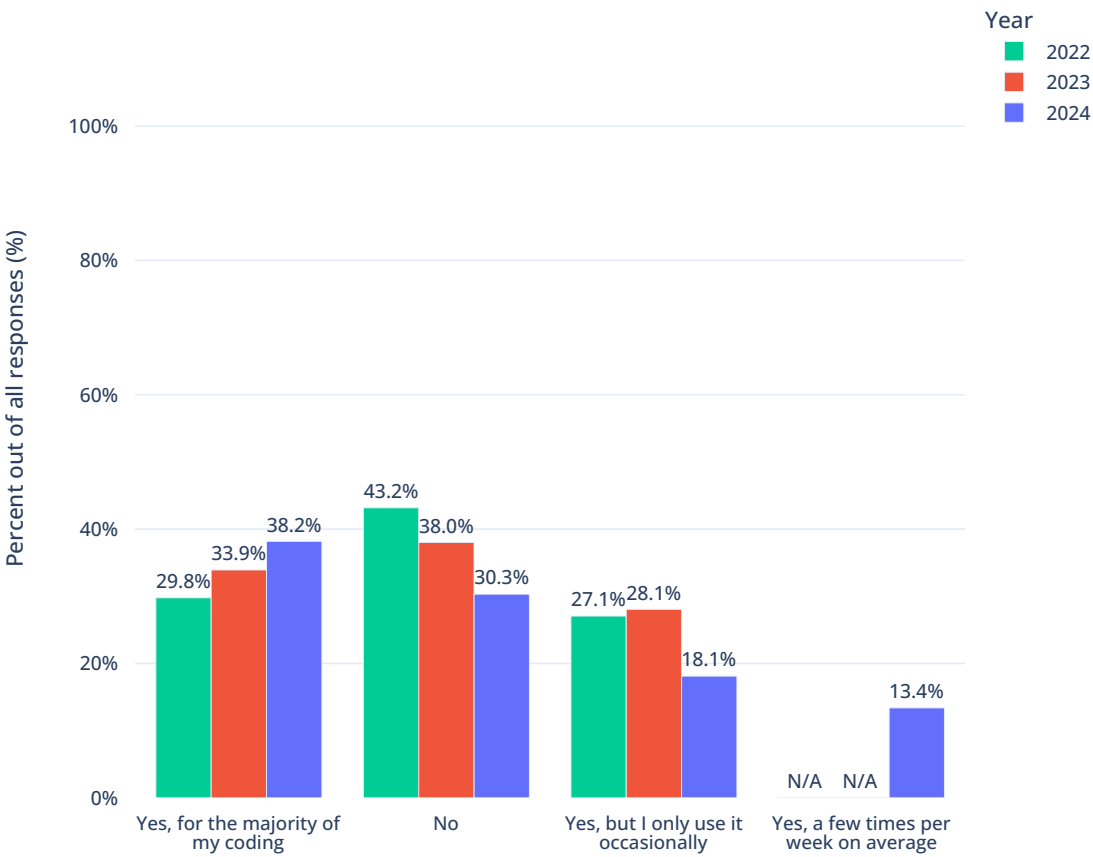
Do you write or design software in your work?

(total responses = 5662)



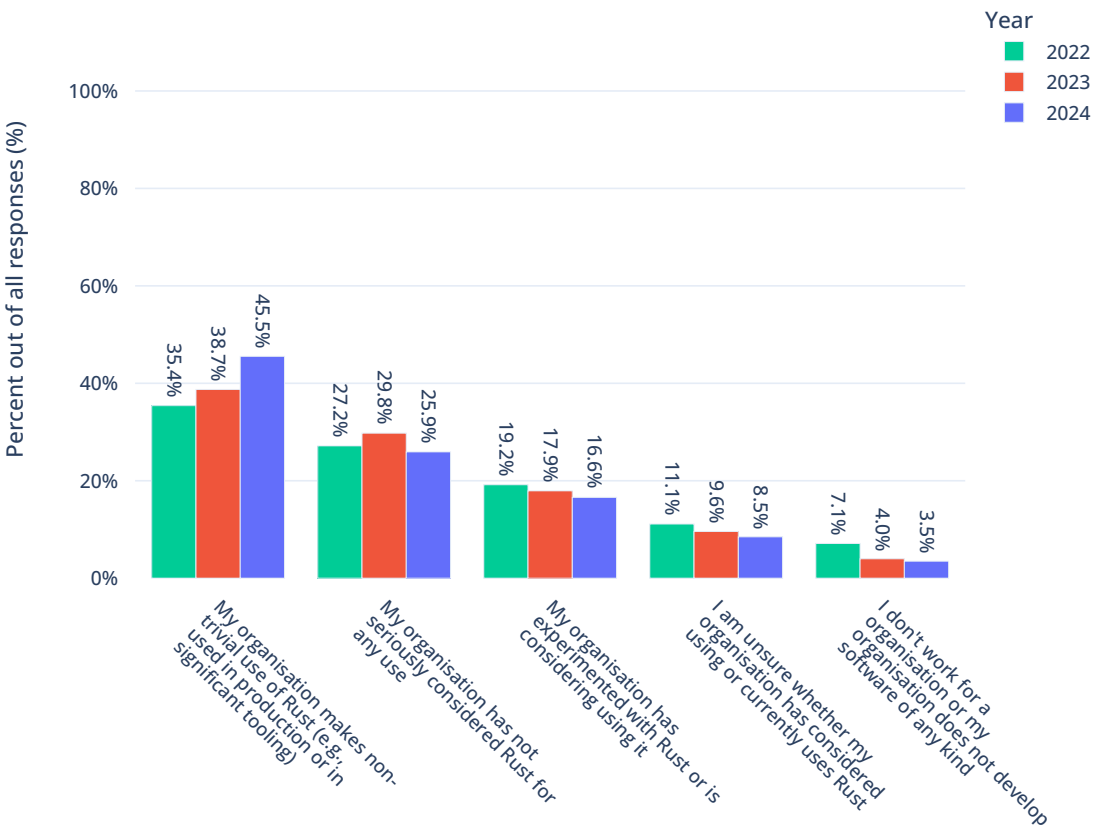
Are you using Rust at work?

(total responses = 7144, single answer)



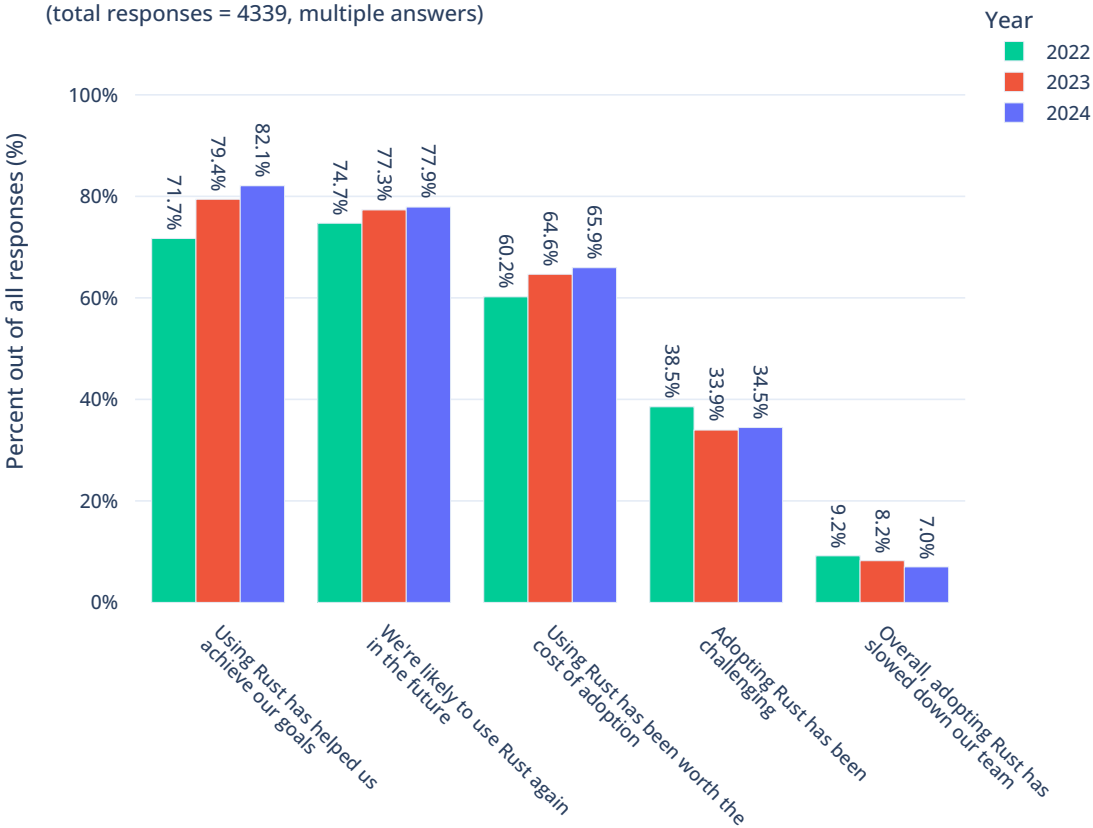
To what extent is Rust currently being used by your company?

(total responses = 7805, single answer)



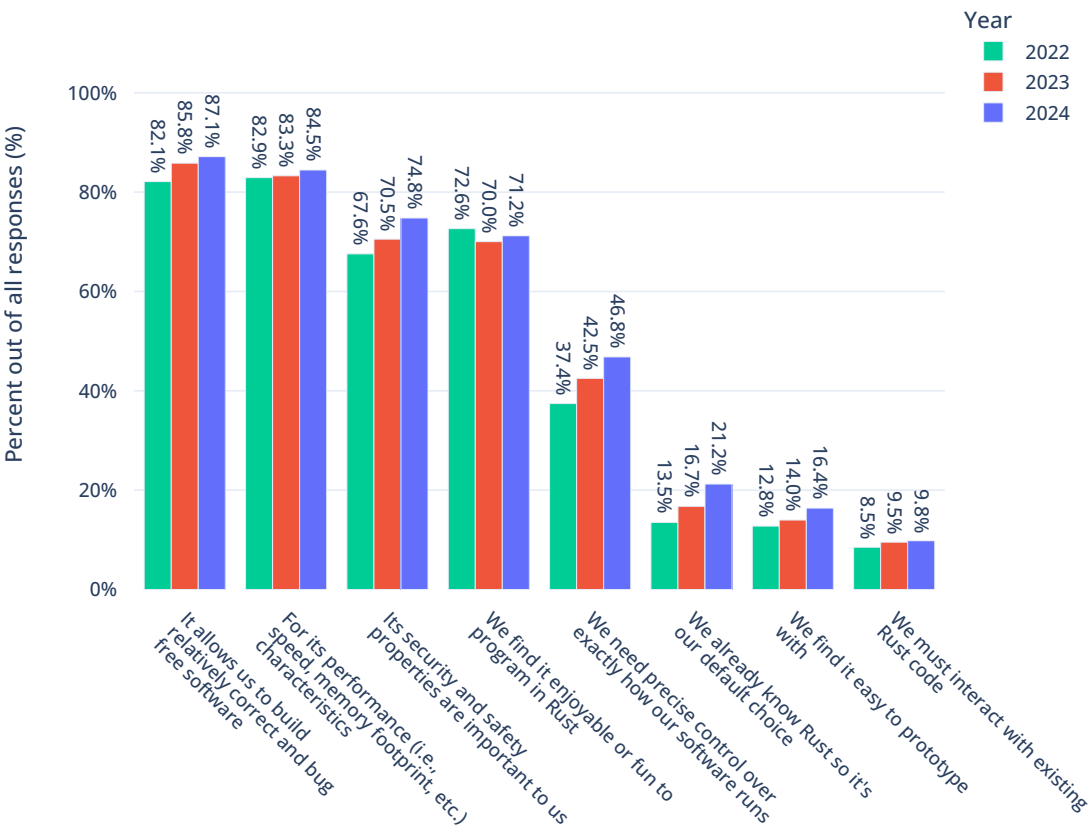
Which of the following statements apply to your experience using Rust at work?

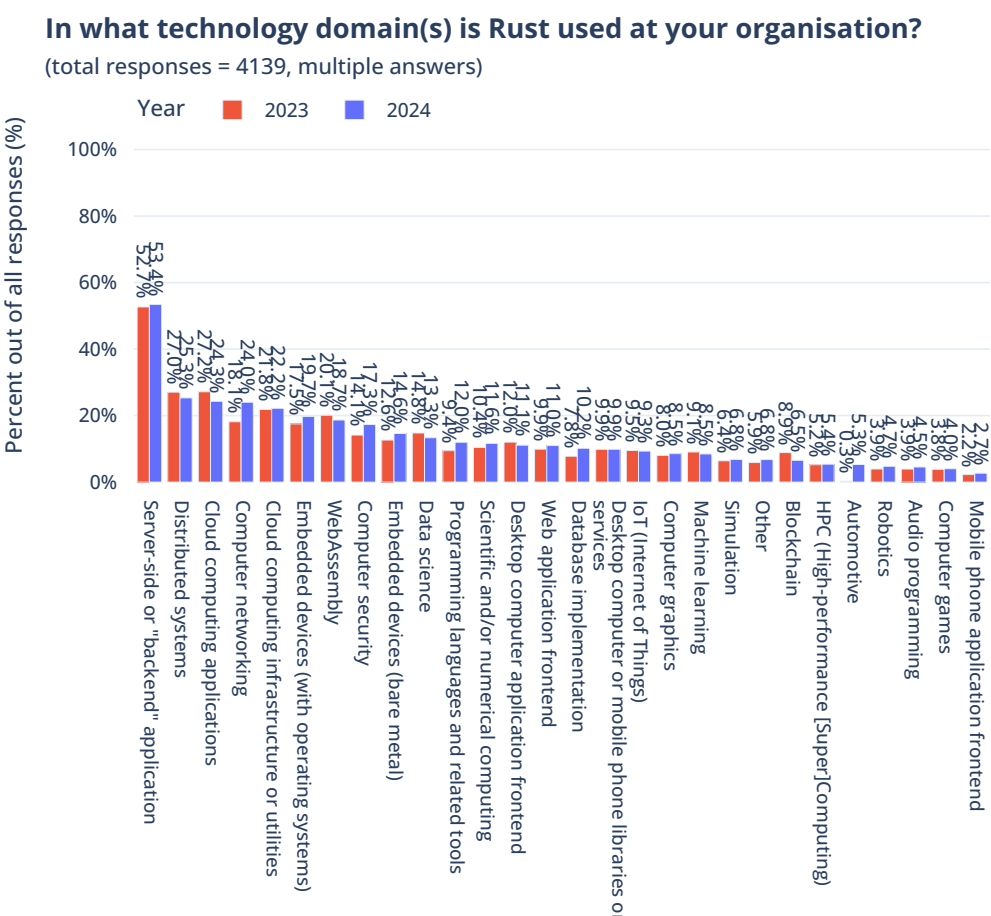
(total responses = 4339, multiple answers)



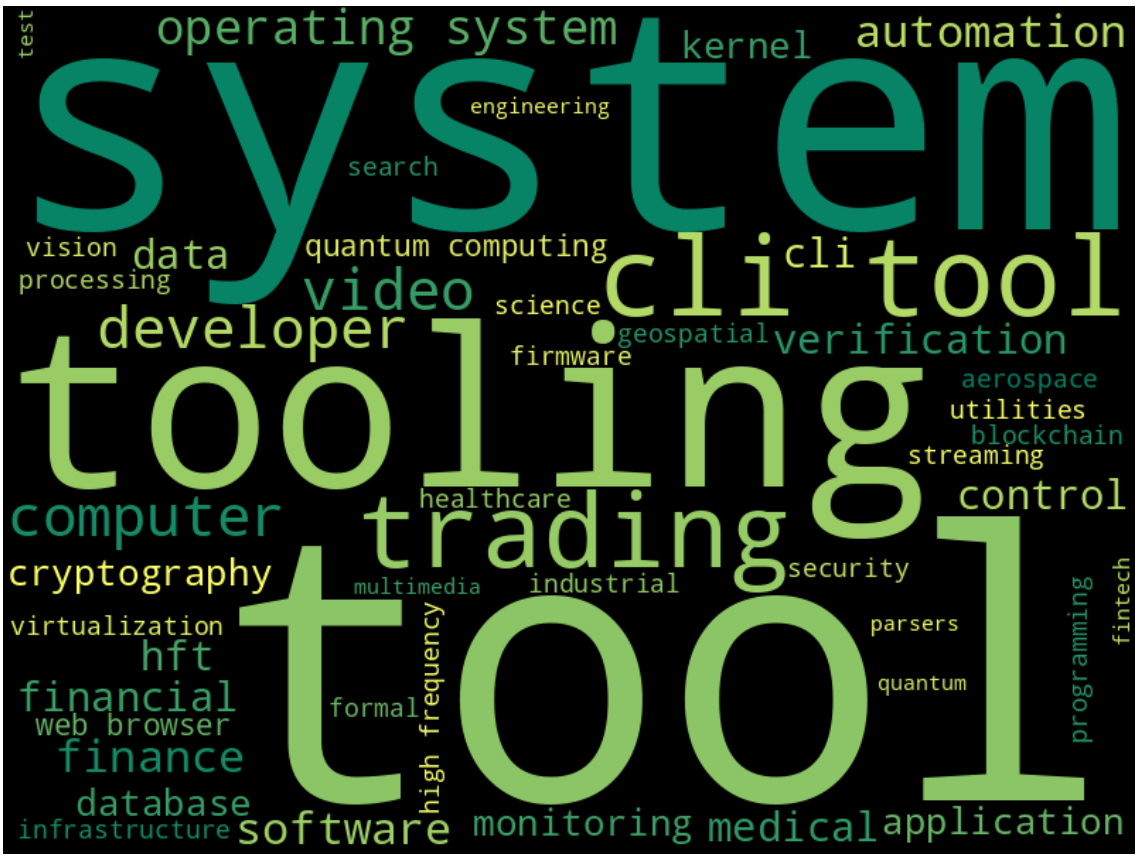
Which of the following statements are reasons why you use Rust at work?

(total responses = 4529, multiple answers)



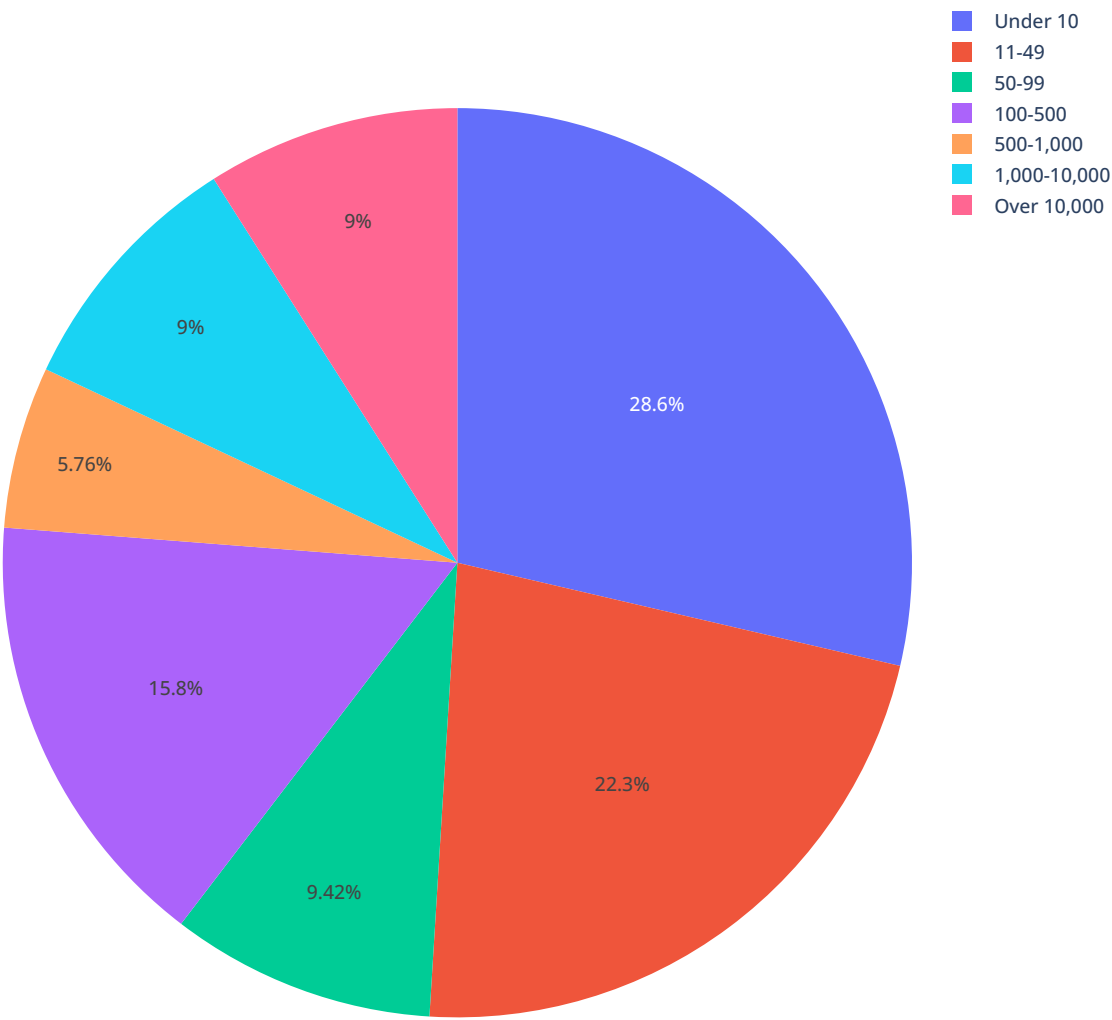

In what technology domain(s) is Rust used at your organisation?
(total responses = 4139, multiple answers)
Year
2023
2024
Percent out of all responses (%)
100%
80%
60%
40%
20%
0%
Server-side or "backend" application
52.7%
53.4%
Distributed systems
27.0%
25.3%
Cloud computing applications
27.2%
24.3%
Computer networking
18.1%
24.0%
Cloud computing infrastructure or utilities
21.8%
22.3%
Embedded devices (with operating systems)
17.5%
19.7%
WebAssembly
20.1%
18.7%
Computer security
14.1%
17.3%
Embedded devices (bare metal)
12.6%
14.6%
Data science
14.8%
13.3%
Programming languages and related tools
12.0%
9.4%
Scientific and/or numerical computing
10.9%
11.4%
Desktop computer application frontend
11.0%
11.1%
Web application frontend
11.9%
9.9%
Database implementation
10.2%
7.8%
Desktop computer or mobile phone libraries or services
9.9%
9.9%
IoT (Internet of Things)
9.5%
9.5%
Computer graphics
8.0%
8.5%
Machine learning
9.1%
8.5%
Simulation
6.4%
6.8%
Other
5.9%
6.8%
Blockchain
8.9%
6.5%
HPC (High-performance [Super]Computing)
5.4%
5.2%
Automotive
5.3%
4.3%
Robotics
4.7%
3.9%
Audio programming
3.9%
4.5%
Computer games
3.8%
4.6%
Mobile phone application frontend
2.2%
2.7%

Wordcloud of open answers for the previous chart:



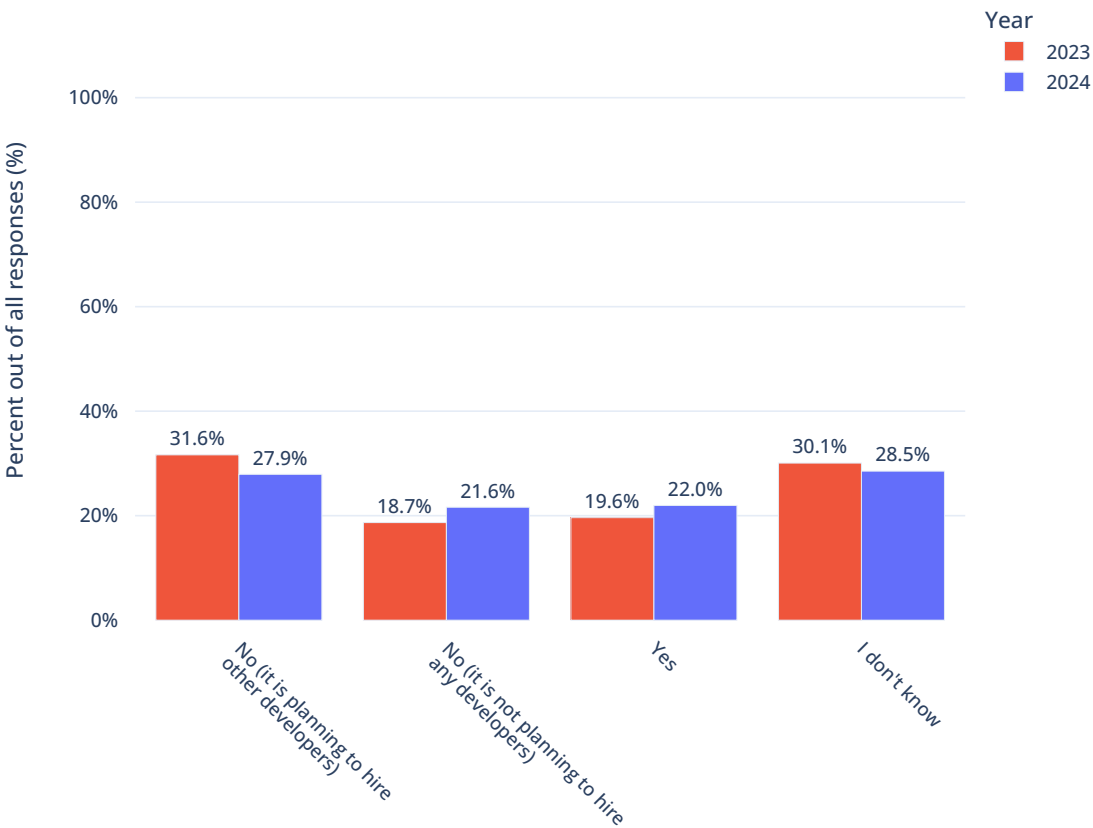
Approximately how many total developers does your organisation employ?

(total responses = 5310)



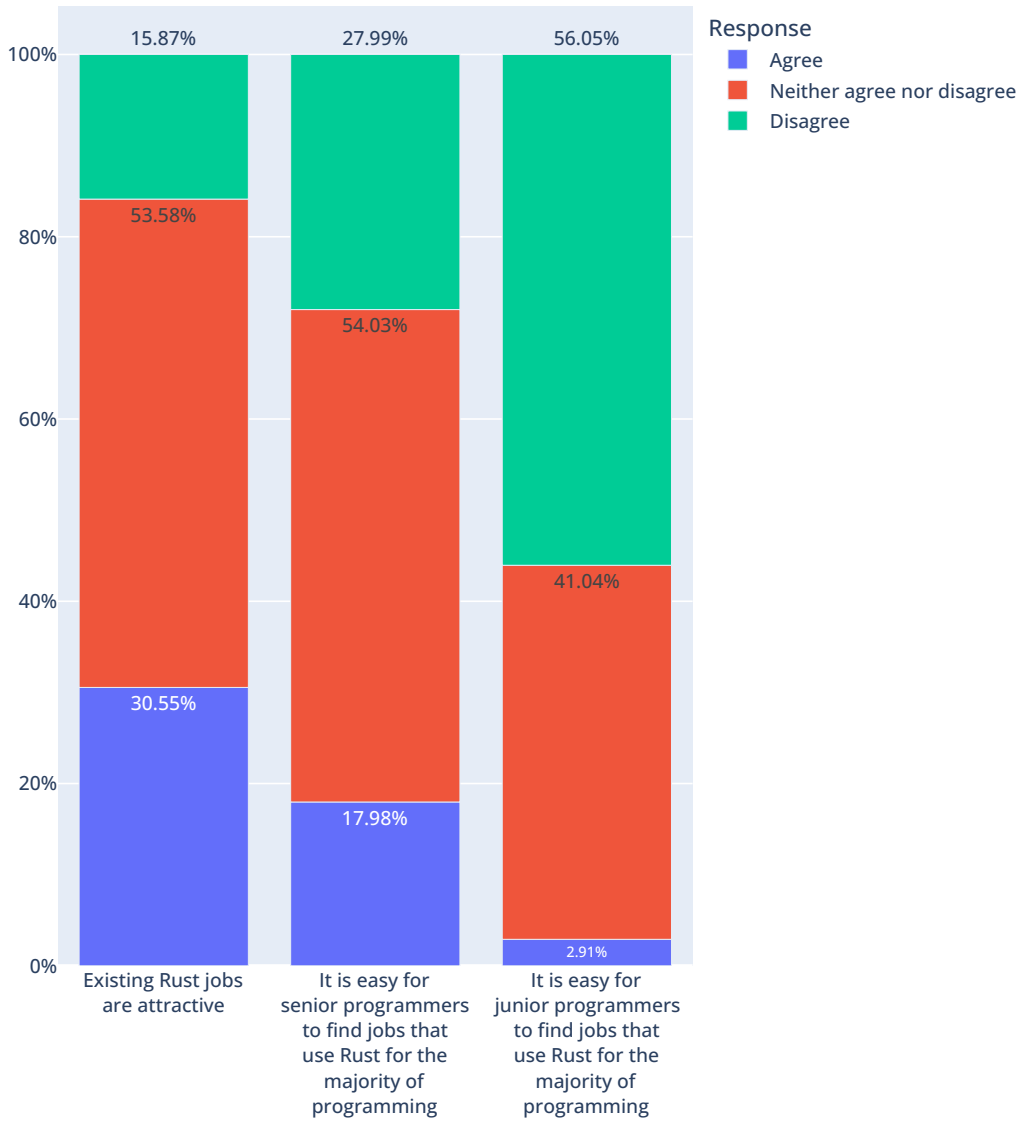
Is your organisation planning on hiring Rust developers in the next year?

(total responses = 7197, single answer)



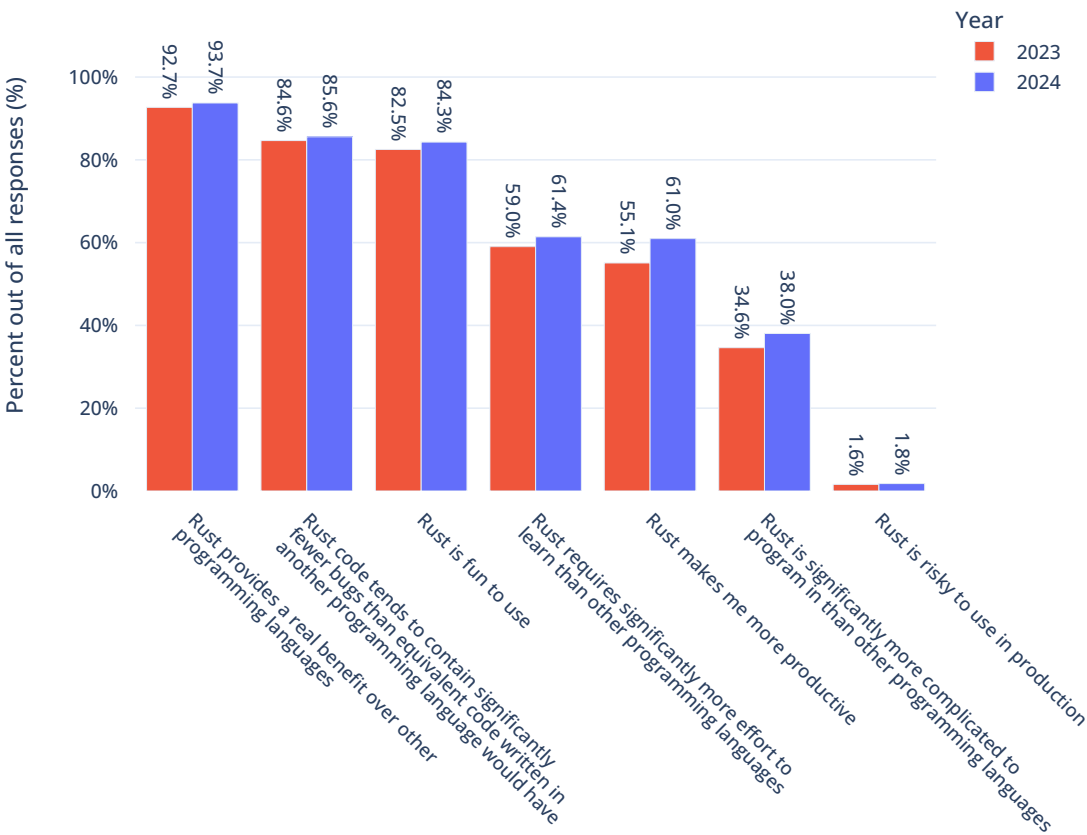
Please share your assessment of the following statements on Rust employmen

(total responses = 4969)



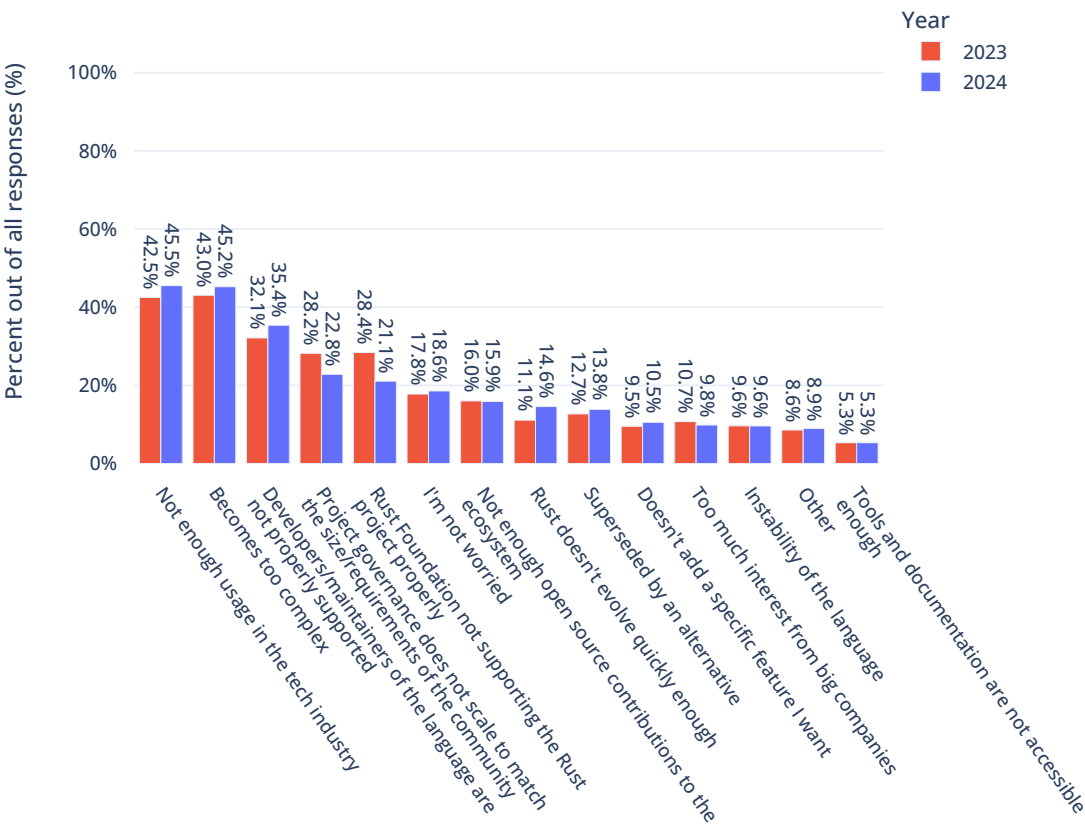
Which of the following statements about Rust do you feel are true?

(total responses = 9413, multiple answers)



What are your biggest worries for the future of Rust?

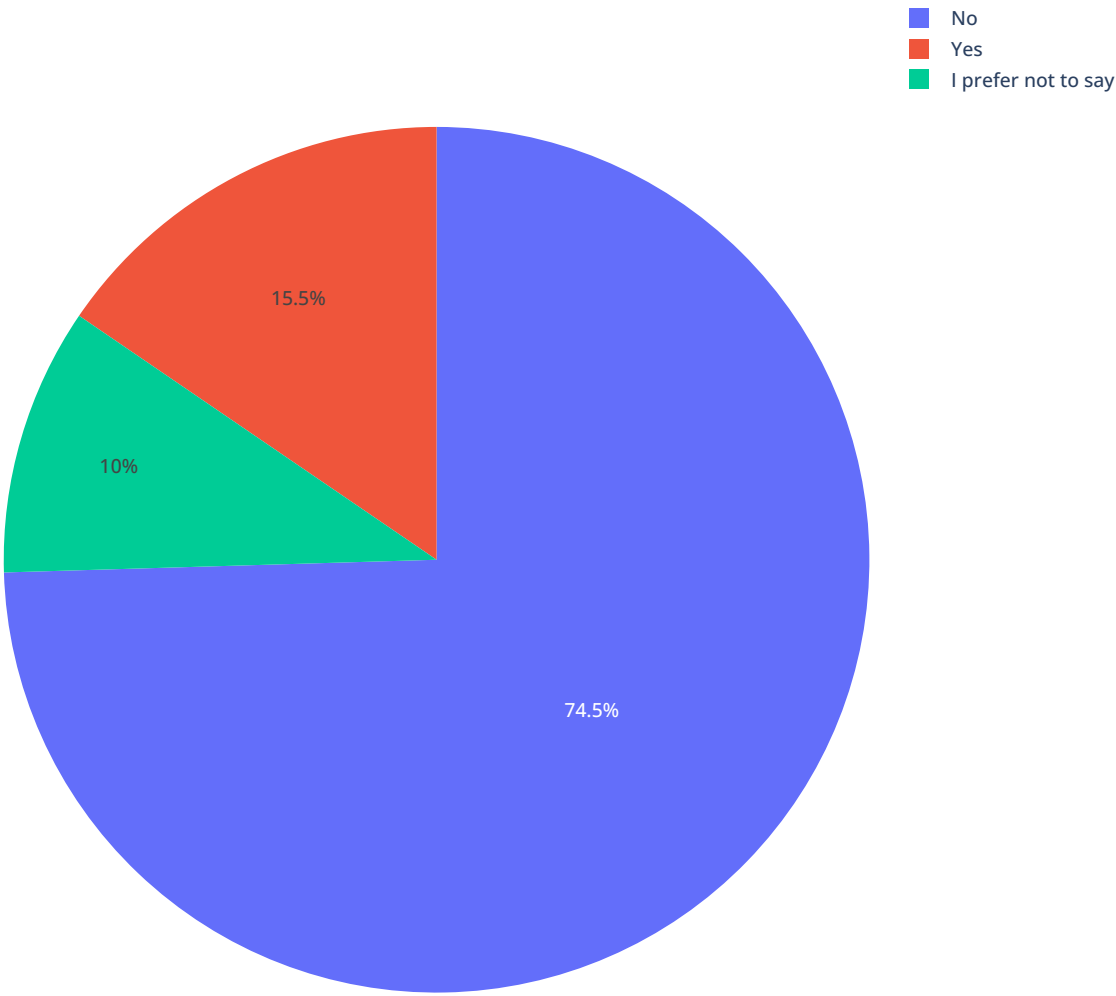
(total responses = 9374, multiple answers)



Wordcloud of open answers for the previous chart:

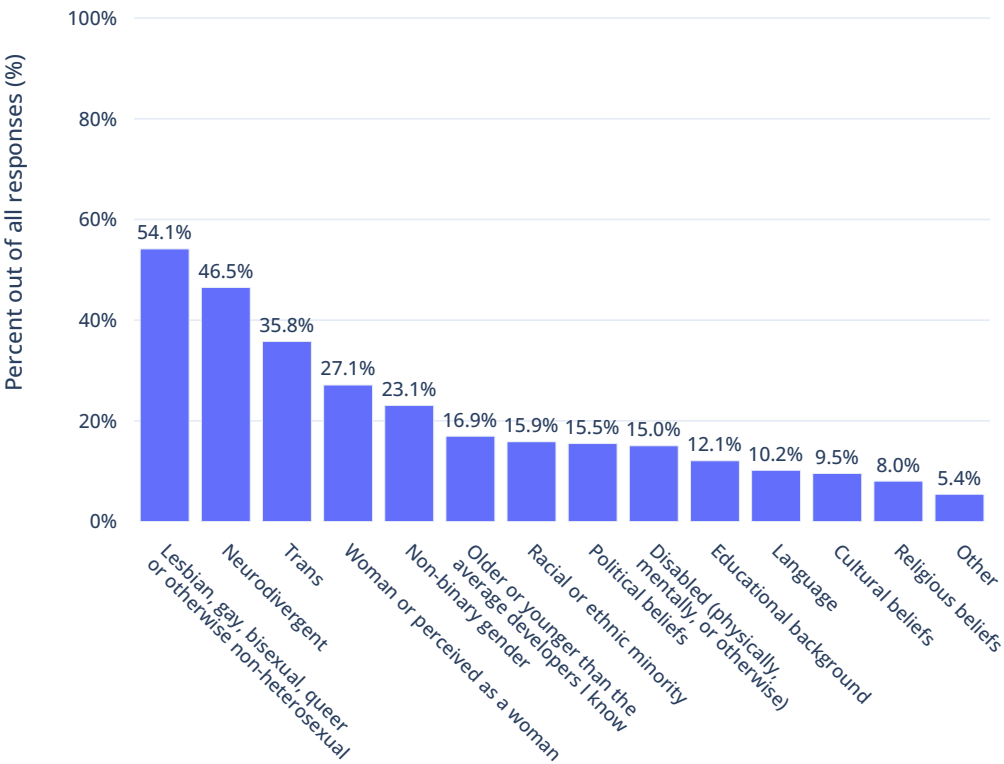
Do you consider yourself a member of a group that is underrepresented or marginalized in technology?

(total responses = 7260)



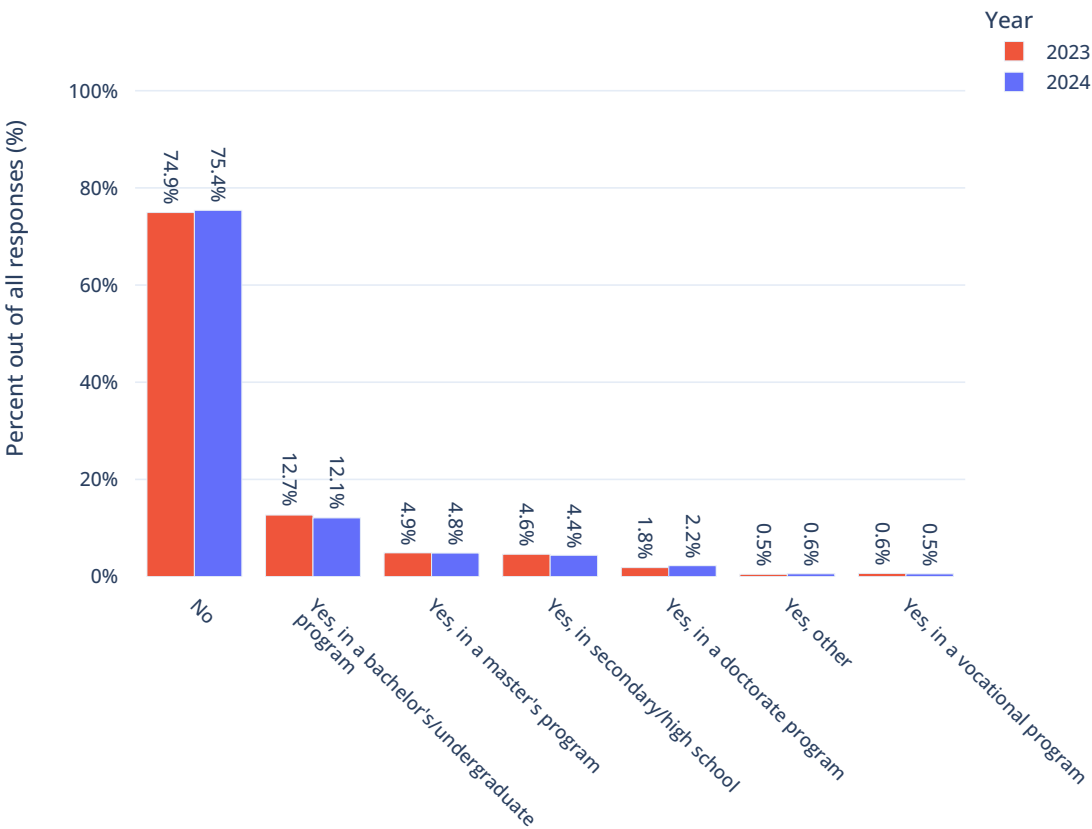
Which of the following underrepresented or marginalized groups in technology do you consider yourself a part of?

(total responses = 1110, multiple answers)



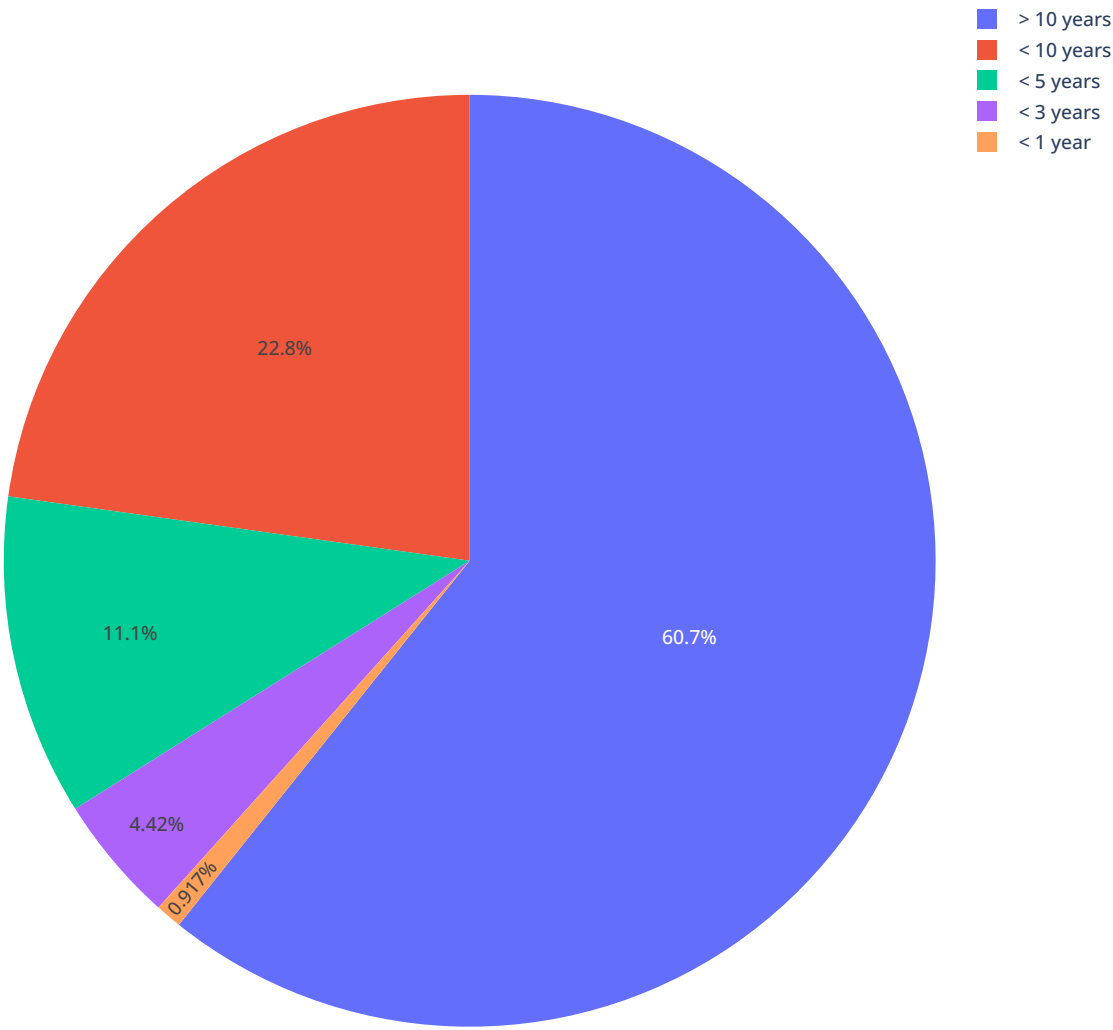
Are you a full- or part-time student?

(total responses = 9662, single answer)



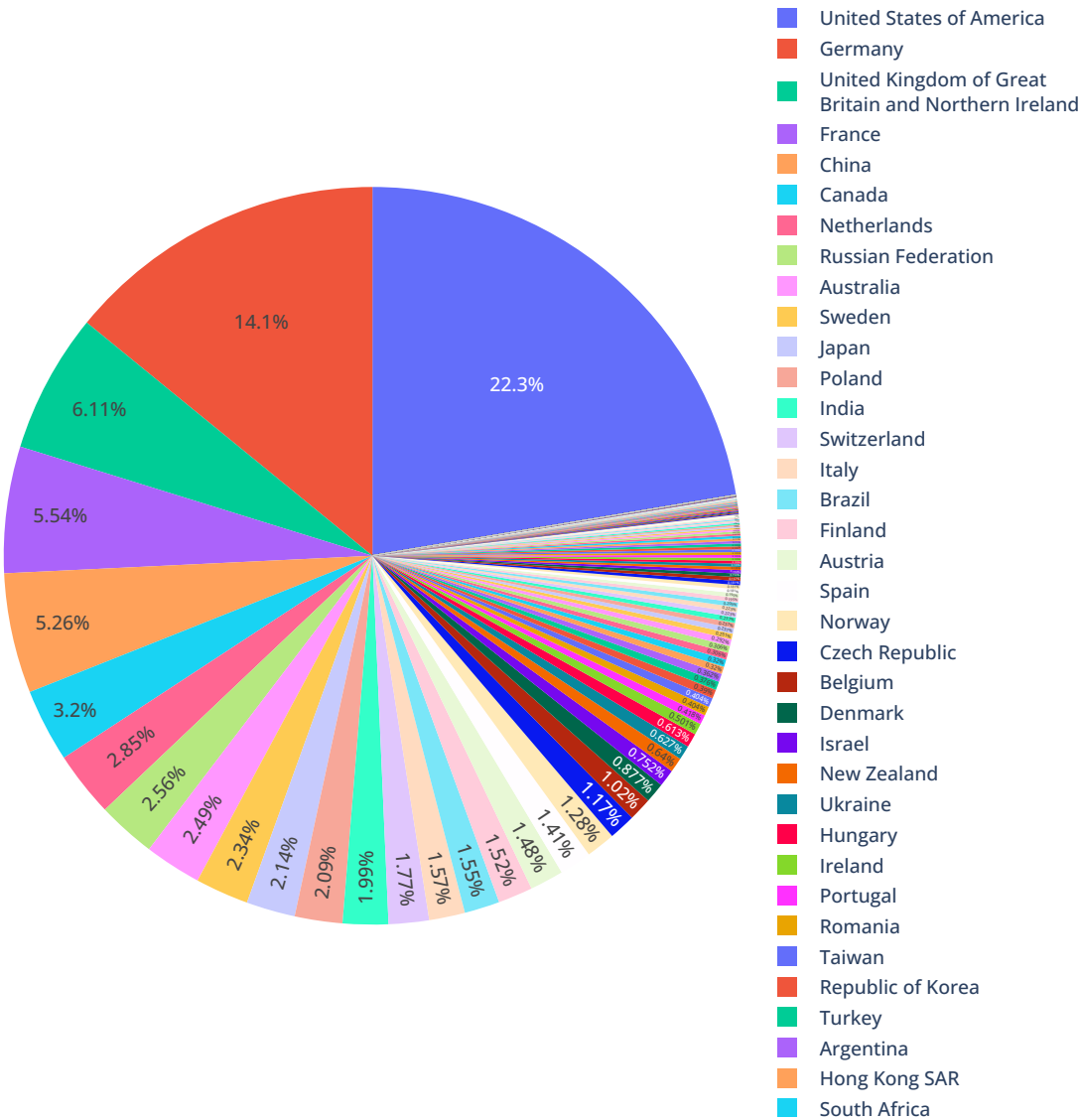
How long have you been programming (in any language, for any reason)?

(total responses = 7305)



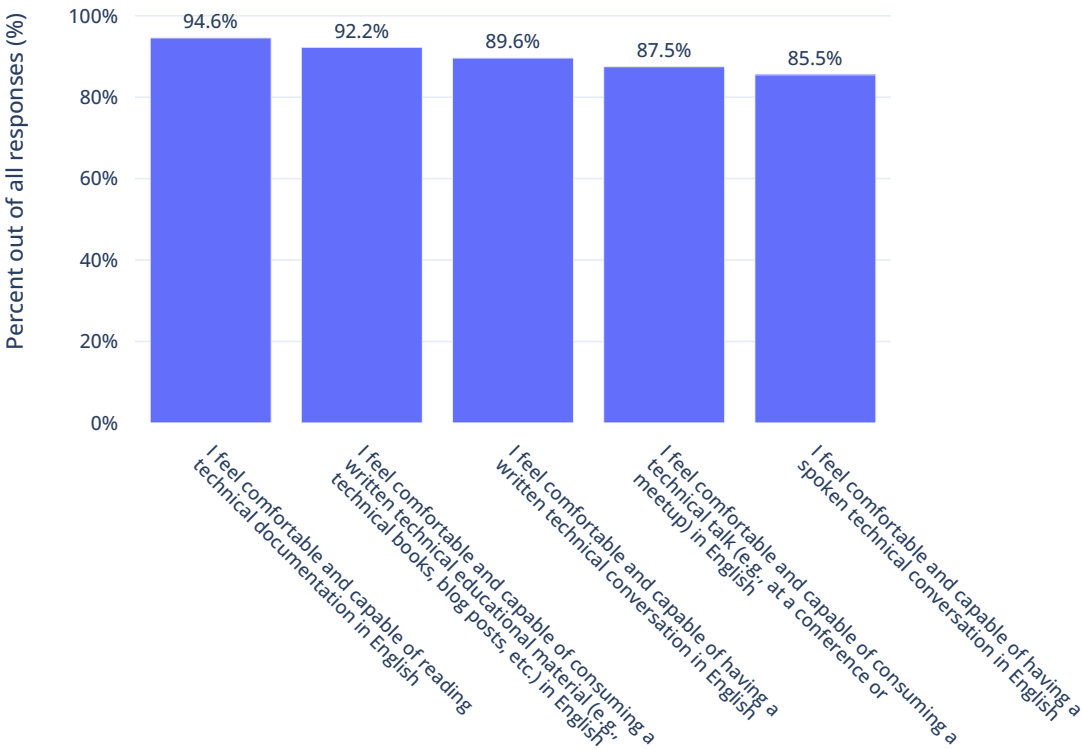
Where do you live?

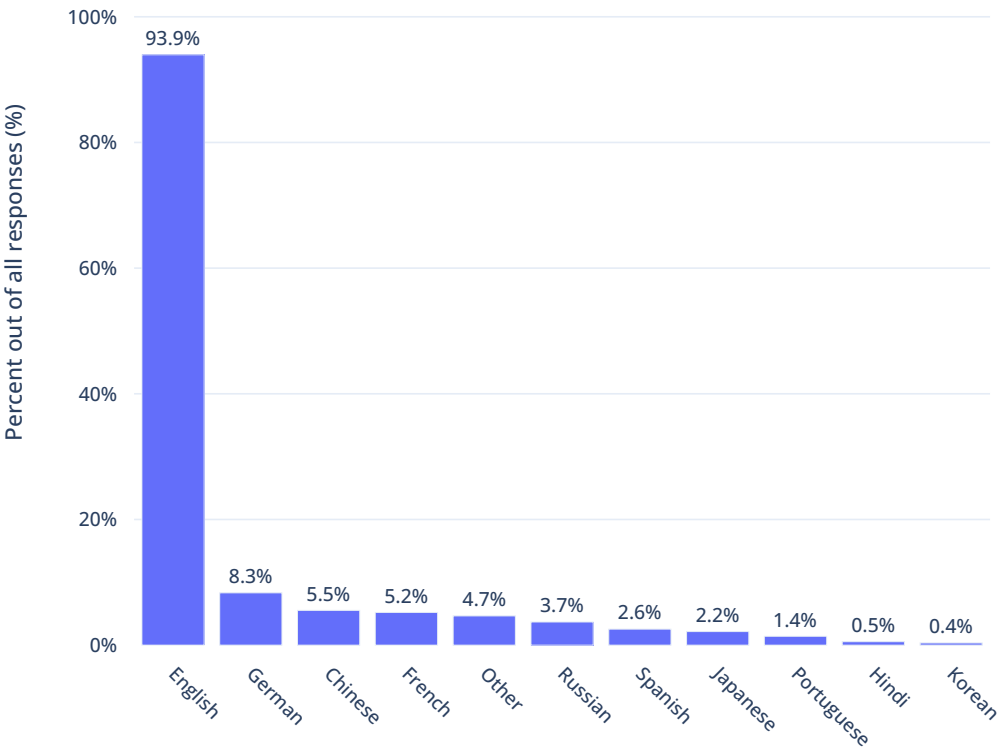
(total responses = 7182)



In what ways are you comfortable communicating about technical topics in English?

(total responses = 7203, multiple answers)



In which language(s) are you most comfortable when consuming existing technical content (e.g. blog posts, documentation, etc.)?

(total responses = 7137, multiple answers)