2018 State of Rust Language Survey

Whether or not you use Rust Programming Language (https://rust-lang.org) today, we want to hear from you!

The Rust Community Team has created this survey to help us gauge how we're doing, what can be improved, and how we can best engage with all of you as we move forward.

Our survey will run to September 8, 2018. This is your chance to have a say in the development priorities for Rust.

Unless you choose to enter your email, your answers will be anonymous. Any personal data you submit as a part of this survey will be handled in accordance with our policy as described in our Frequently Asked Questions:

https://github.com/rust-community/team/wiki/State-of-the-Rust-Language-Community-Survey-FAQ

We estimate it will take about 10-15 minutes to complete.

*Required

1. Do you use Rust? *

   Mark only one oval.

   ( ) Yes   *Skip to question 6*

   ( ) No, I stopped using Rust   *Skip to question 2*

   ( ) No, I've never used Rust   *Skip to question 4*

Stopped using Rust

2. How long did you use Rust before you stopped?

   Mark only one oval.

   ( ) Less than a day

   ( ) Less than a week

   ( ) Less than a month

   ( ) Less than a year

   ( ) More than a year

3.   Why did you stop using Rust?

_____

_____

_____

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_____

Skip to question 44

Never used Rust

4.   I don't currently use Rust because...
Select all that apply

Check all that apply.

☐ Rust doesn't solve a problem for me
☐ Rust is too intimidating, too hard to learn, or too complicated
☐ Rust doesn't have the libraries I need
☐ Rust doesn't have the tools I need
☐ Rust doesn't have good IDE support
☐ Rust doesn't support the platforms I need
☐ Rust seems too risky to use in production
☐ My company doesn't use Rust
☐ Switching to Rust would slow me down too much
☐ I haven't learned Rust, yet, but I want to.
☐ I haven't learned Rust, yet, and I don't want to.

5.   Please provide any more details on why you are not using Rust

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Skip to question 44

Using Rust

6. How did you get interested in Rust?

_____

_____

_____

_____

_____

7. How long have you been working with Rust?

Mark only one oval.

- ( ) Less than a week
- ( ) Less than a month
- ( ) 1 to 3 months
- ( ) 3 to 6 months
- ( ) 6 to 12 months
- ( ) 1 to 2 years
- ( ) 2 to 3 years
- ( ) More than 3 years

8. How long did it take you to get productive in Rust?

Mark only one oval.

- ( ) Less than a week
- ( ) Less than a month
- ( ) Less than a year
- ( ) More than a year
- ( ) I don't feel productive, yet

9. If you summed the size of all Rust projects you work on, how big would it be?

    Mark only one oval.

    ⬭ Less than 1,000 lines

    ⬭ 1,000 to 10,000 lines

    ⬭ 10,000 to 100,000 lines

    ⬭ More than 100,000 lines

    ⬭ I don't know

10. How regularly do you work with Rust?

    Mark only one oval.

    ⬭ Daily

    ⬭ Weekly

    ⬭ Monthly

    ⬭ Rarely

11. How would you rate your Rust expertise?

    Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Beginner	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	Expert

12. How would you rate the difficulty of learning these concepts/topics?

Mark only one oval per row.

	Easy	Moderate	Tricky	Very Difficult	Still don't get it	N/A (haven't gotten there yet)
Enums	⬭	⬭	⬭	⬭	⬭	⬭
Modules	⬭	⬭	⬭	⬭	⬭	⬭
Ownership & Borrowing	⬭	⬭	⬭	⬭	⬭	⬭
Iterators	⬭	⬭	⬭	⬭	⬭	⬭
Traits	⬭	⬭	⬭	⬭	⬭	⬭
Trait Bounds	⬭	⬭	⬭	⬭	⬭	⬭
Lifetimes	⬭	⬭	⬭	⬭	⬭	⬭
Cargo	⬭	⬭	⬭	⬭	⬭	⬭
Macros	⬭	⬭	⬭	⬭	⬭	⬭
Unsafe	⬭	⬭	⬭	⬭	⬭	⬭

Rust Compiler and Tools

13. Which version(s) of Rust do you use for your applications?
Select all that apply

Check all that apply.

- ☐ Current Stable Release
- ☐ Previous Stable Release
- ☐ Beta Release
- ☐ Nightly
- ☐ Custom Fork
- ☐ I don't know

14. If you do not use the latest Stable compiler, why? Please name specific dependencies or unstable features, if relevant.

_____

_____

_____

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_____

15. Has upgrading to a new stable version of the Rust compiler (not when upgrading any library dependencies) broken your code in the past year?

Mark only one oval.

◯ Yes

◯ No

16. If so, how much work did it take to fix your code when you upgraded to a newer stable version of the Rust compiler?

Mark only one oval.

	1	2	3	4	5	
A little	◯	◯	◯	◯	◯	A lot

17. Please provide details about what broke and what was needed to fix it

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_____

_____

_____

_____

18. **What's your preferred way of installing Rust?**

Select all that apply

Check all that apply.

- [ ] Official rust-lang.org tarballs
- [ ] Official rust-lang.org Windows .msi installers
- [ ] Official rust-lang.org OS X .pkg installers
- [ ] rustup.rs
- [ ] Linux distribution package
- [ ] Homebrew

19. **If you prefer an alternative method, how do you install Rust?**

20. **If you do not use rustup.rs, why not?**

21. **If you do not use Cargo, why not?**

22. What is your experience with other tools you use?

Mark only one oval per row.

	Really dislike	Dislike	Neither like or dislike	Like	Really like	Never used
rustfmt	◯	◯	◯	◯	◯	◯
clippy	◯	◯	◯	◯	◯	◯
rustdoc or cargo doc	◯	◯	◯	◯	◯	◯
racer	◯	◯	◯	◯	◯	◯
Rust Language Server	◯	◯	◯	◯	◯	◯
bindgen	◯	◯	◯	◯	◯	◯

23. Feel free to tell us more about your experience with these tools, or other Rust tools

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Rust Platform

24. What platforms are you developing on?
Select all that apply

Check all that apply.

☐ Windows
☐ Apple macOS
☐ Linux
☐ BSD-variant

25. What other platforms do you develop on?

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_____

_____

_____

_____

26. What platforms are you targeting?
Select all that apply

Check all that apply.

- ☐ Android
- ☐ Windows
- ☐ Apple iOS
- ☐ Apple macOS
- ☐ Linux
- ☐ BSD-variant
- ☐ WebAssembly / asm.js
- ☐ Embedded

27. What other platforms are you targeting?

_____

_____

_____

_____

_____

Editors

28. What editor do you use when writing Rust?

Select all that apply

Check all that apply.

- [ ] Atom
- [ ] Eclipse
- [ ] Emacs
- [ ] IntelliJ
- [ ] Sublime
- [ ] Vim
- [ ] Visual Studio
- [ ] VSCode

29. What other editors do you use?

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Rust Ecosystem

30. What libraries do you consider critical in the Rust ecosystem?

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31. Has a minor version upgrade of a dependency broken your code?

The Rust ecosystem uses semantic versioning to signal to users if upgrading a library to a particular version is backwards compatible, or contains breaking changes. You can read more about it here: http://doc.crates.io/manifest.html#the-version-field

Mark only one oval.

◯ Yes

◯ No

32. If so, please provide details here on how minor version upgrades broke your code.

_____

_____

_____

_____

_____

33. How many of your dependencies are 1.0 or above?

Mark only one oval.

◯ None

◯ Some

◯ Most

◯ All

◯ I don't know

34. What critical libraries are missing in the Rust ecosystem?

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_____

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_____

There are a growing number of companies using Rust at work: https://www.rust-lang.org/en-US/friends.html. This section asks about professional experience with our project.

35.   Do you or your company use Rust at work?

Mark only one oval.

◯ Yes, I work with Rust full time   *Skip to question 39*

◯ Yes, I work with Rust part time   *Skip to question 39*

◯ No, but my company uses Rust   *Skip to question 39*

◯ No   *Skip to question 37*

◯ Not sure   *Skip to question 44*

◯ Not applicable   *Skip to question 44*

36.   For programmers - what languages, other than Rust, do you use at work?

_____

Skip to question 39

Not using Rust at Work

37.   Does your company plan to use or evaluate Rust in the future?

Mark only one oval.

◯ Yes

◯ No

◯ I don't know

38. How could we make Rust more appealing to your company?

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_____

Using Rust at Work

39. How many developers at your company use Rust at work?

    Mark only one oval.

    ⬭ 1

    ⬭ 2-5

    ⬭ 6-10

    ⬭ 11-25

    ⬭ 25-100

    ⬭ More than 100

    ⬭ I don't know

40. If you summed the size of all Rust projects at work, how big would it be?

    Mark only one oval.

    ⬭ Less than 1,000 lines

    ⬭ 1,000 to 10,000 lines

    ⬭ 10,000 to 100,000 lines

    ⬭ More than 100,000 lines

    ⬭ I don't know

41. Is your company planning on hiring Rust developers in the next year?

   Mark only one oval.

   ◯ Yes

   ◯ No

   ◯ I don't know

42. What are some ways you or your company is using Rust at work?

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   _____

   _____

   _____

   _____

43. How could we help make Rust more accepted at your company?

   _____

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   _____

   _____

   _____

Skip to question 44

Technical Background

This section asks about your technical and professional experience outside of the Rust project.

44. Which titles do you believe best match your role?

Optional. Select all that apply

Check all that apply.

- ☐ Analyst
- ☐ Architect
- ☐ Consultant / Freelance
- ☐ Data Scientist
- ☐ Designer
- ☐ DevOps / SRE
- ☐ Executive
- ☐ Founder
- ☐ Hobbyist
- ☐ Manager / Team Leader
- ☐ Programmer / Software Engineer
- ☐ QA Engineer
- ☐ Research Assistant
- ☐ Scientist
- ☐ Student
- ☐ System Operations
- ☐ Teacher / Professor
- ☐ Technical Writer
- ☐ Web Developer / Front End Developer

45. Is there a title not in this list that better describes your role?

_____

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_____

46. What industries do you work in?

Optional. Select all that apply

Check all that apply.

- [ ] Advertising
- [ ] Advertising / Marketing Technology
- [ ] Aerospace
- [ ] Audio
- [ ] Automated Share Trading
- [ ] Big Data
- [ ] Bioinformatics
- [ ] Computer Administration
- [ ] Data Science
- [ ] Databases
- [ ] Desktop Applications
- [ ] Distributed Systems
- [ ] Education / Academia
- [ ] Embedded Devices
- [ ] Enterprise Software
- [ ] Financial
- [ ] Gaming
- [ ] Geospatial
- [ ] Government / Military
- [ ] Health Care
- [ ] High-Performance Computing (HPC)
- [ ] Internet of Things
- [ ] IT
- [ ] Industrial
- [ ] Machine Learning
- [ ] Entertainment / Media
- [ ] Medical Devices
- [ ] Mobile (Android)
- [ ] Mobile (iOS)
- [ ] Network Programming
- [ ] Retail / e-commerce
- [ ] Robotics
- [ ] Scientific and Numeric Computing
- [ ] Security
- [ ] Simulation
- [ ] Technology
- [ ] Telecom

☐ Web Application Backend
☐ Web Application Frontend

47. Is there a better industry term that describes your workplace?

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_____

48. How many software developers work at your company?

Mark only one oval.

○ Not Applicable

○ None

○ 1-10

○ 10-20

○ 20-50

○ 50-100

○ 100-1000

○ More than 1000

49. Have you contributed to any open source code in the past year?

Mark only one oval.

○ Yes

○ No

50. If you answered yes, have you ever contributed to a Rust crate or tool?

Mark only one oval.

○ No, but if I find something that bothers me, I'll try to help fix it

○ No, and I probably won't

○ Yes, a couple times

○ Yes, I contribute regularly

○ Yes, I maintain crates

51. What programming languages are you comfortable with?
Select all that apply

Check all that apply.

☐ C
☐ C++
☐ C#
☐ Clojure
☐ Elm
☐ Elixir
☐ Erlang
☐ Go
☐ Haskell
☐ Java
☐ JavaScript
☐ Objective-C
☐ PHP
☐ Python
☐ Ruby
☐ Rust
☐ Scala
☐ Swift

52. Are there other programming languages you are comfortable with that are not in this list?

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_____

Demographics

Our teams are committed to making the Rust community a welcoming space for all. This will help us measure the effectiveness of our outreach efforts. Feel free to fill in as much or as little as you would like.

53. Do you feel welcome in the Rust community?

Mark only one oval.

◯ Yes

◯ No

◯ I don't know

54. What actions could we take to make you feel more welcome?

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55. Do you consider yourself a member of an underrepresented demographic in technology?

Optional - Select all that apply. Please share only what you are comfortable sharing. This will help us understand how well our outreach efforts are going.

Check all that apply.

- ☐ No
- ☐ Yes, but I prefer not to specify
- ☐ Cultural beliefs
- ☐ Disabled or person with disability (including physical, mental, and other)
- ☐ Educational background
- ☐ Language
- ☐ Lesbian, gay, bisexual, queer or otherwise non-heterosexual
- ☐ Non-binary gender
- ☐ Older or younger than the average developers I know
- ☐ Political beliefs
- ☐ Racial or ethnic minority
- ☐ Religious beliefs
- ☐ Trans
- ☐ Woman or perceived as a woman

56. Do you consider yourself a member of an underrepresented demographic that is not in this list?

Optional. Please share only what you are comfortable sharing.

_____

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57. Do you feel your situation makes it difficult for you to participate in the Rust community?

Optional. Please share only what you are comfortable sharing.

Mark only one oval.

◯ Yes

◯ No

◯ Maybe

58. If you find it difficult to participate in the Rust community, and feel comfortable giving more details, please tell us what makes it difficult

Optional. Please share only what you are comfortable sharing.

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_____

59. What city / state / region / country do you live in?

Optional. Please share only what you are comfortable sharing. This helps us understand where our community is located so we can help develop local content, meetups, and other events.

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_____

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_____

60. What language(s) are you fluent in?

Optional - Select all that apply

Check all that apply.

- [ ] Arabic
- [ ] Bengali
- [ ] Cantonese
- [ ] English
- [ ] French
- [ ] German
- [ ] Hindi
- [ ] Japanese
- [ ] Mandarin
- [ ] Polish
- [ ] Portuguese
- [ ] Punjabi
- [ ] Russian
- [ ] Swedish
- [ ] Spanish

61. What other languages are you fluent in?

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Rust Conferences

62. Did you attend a Rust conference in the past year? If so, which ones?

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63.   If you wanted to attend a Rust conference, but couldn't, why not?

_____

_____

_____

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_____

64. If you are interested in attending a Rust conference, which of these regions would you travel to?

Select all that apply - This list is derived from
https://en.wikipedia.org/wiki/Template:Regions_of_the_world

Check all that apply.

- ☐ Africa - North
- ☐ Africa - East
- ☐ Africa - Central
- ☐ Africa - West
- ☐ Africa - South
- ☐ North America - Canada
- ☐ North America - United States
- ☐ North America - Mexico
- ☐ North America - Central
- ☐ North America - Caribbean
- ☐ South America - North
- ☐ South America - South
- ☐ South America - West
- ☐ South America - East
- ☐ Asia - Central
- ☐ Asia - North
- ☐ Asia - East
- ☐ Asia - West
- ☐ Asia - South
- ☐ Asia - Southeast
- ☐ Europe - North
- ☐ Europe - East
- ☐ Europe - Central
- ☐ Europe - West
- ☐ Europe - South
- ☐ Oceania - Australia
- ☐ Oceania - New Zealand
- ☐ Oceania - Melanesia
- ☐ Oceania - Micronesia
- ☐ Oceania - Polynesia

65. Please provide more precise details on where you would travel to for a Rust conference

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Challenges and Feedback

66. What do you feel are the biggest challenges or problems for the Rust project? What could we do to improve adoption?

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67. What new things related to the Rust project are you most excited about in 2018?

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68. Anything else you would like to tell us?

Contact Information

If you would like to be contacted by a member of the Rust Community or Core teams, please enter your email address. We will not share this information with third parties. You may also send an email to community-team@rust-lang.org or the core-team@rust-lang.org if you would like to avoid associating your answers in this survey with your identity. If you would like to read more about out how we will use and protect contact information, you can read more about it on our FAQ:

https://github.com/rust-community/team/wiki/State-of-the-Rust-Language-Community-Survey-FAQ

69. **Email Address**

Optional - Only share if you are comfortable.

_____

70. **What are the reasons you would like to be contacted?**

Optional - Select all that apply

Check all that apply.

- [ ] I'm interested in attending Rust meetups or conferences
- [ ] I am interested in starting a Rust meetup or conference
- [ ] My company uses Rust, or would like to, and I would like to talk to the Core or Community team
- [ ] I am interested in Rust training
- [ ] I am interested in being contacted for more details on my survey answers.

71. **If other, why would you like to be contacted?**

Optional

_____
_____
_____
_____
_____