



Welcome

Hello world!

Thank you for taking the 2019 Stack Overflow Developer Survey, the largest and most comprehensive survey of software developers (and anyone else who codes!) on Earth.

As in previous years, anonymized results of the survey will be made publicly available under the Open Database License, where anyone can download and analyze the data. On that note, throughout the survey, certain answers you and your peers give will be treated as personally identifiable information, and therefore kept out of the anonymized results file. We'll call out each of those in the survey with a note saying "This information will be kept private."

There are six sections in this survey. The 2nd, 3rd, and 4th sections will appear in a random order.

1. Basic Information
2. Your Education, Work, and Career
3. Technology and Tech Culture
4. Stack Overflow Usage + Community
5. Demographic Information
6. Survey Review

If you use security or ad-blocking plugins, you may see error messages

Our third-party software provider, Qualtrics, does not work well with certain ad blockers and security software. To avoid error messages that prevent you from taking the survey, please try specifically unblocking Qualtrics in your plugin or pausing the plugin while you take the survey.

Most questions in this survey are optional. Required questions are noted with an *.

The survey should take 25 minutes to complete. We encourage you to complete it in one sitting. To begin, click **Next**.

Browser Meta Info

This question will not be displayed to the recipient.

Browser: **Chrome**

Version: **71.0.3578.98**

Operating System: **Macintosh**

Screen Resolution: **3440x1440**

Flash Version: **-1**

Java Support: **0**

User Agent: **Mozilla/5.0 (Macintosh; Intel Mac OS X 10_13_6)**

AppleWebKit/537.36 (KHTML, like Gecko) Chrome/71.0.3578.98 Safari/537.36

Qualification

Basic Information

The first section will focus on some basic information about who you are.

Most questions in this section are required. Required questions are noted with an *.

* Which of the following options best describes you today? Here, by "developer" we mean "someone who writes code."

- I am a developer by profession
- I am not primarily a developer, but I write code sometimes as part of my work
- I used to be a developer by profession, but no longer am
- I am a student who is learning to code
- I code primarily as a hobby
- None of these

* Do you code as a hobby?

- Yes
- No

* How often do you contribute to open source?

- Never
- Less than once per year
- Less than once a month but more than once per year
- Once a month or more often

How do you feel about the quality of open source software (OSS)?

- OSS is, on average, of HIGHER quality than proprietary / closed source software
- The quality of OSS and closed source software is about the same
- OSS is, on average, of LOWER quality than proprietary / closed source software

Which of the following best describes your current employment status?

- Employed full-time
- Employed part-time
- Independent contractor, freelancer, or self-employed
- Not employed, but looking for work
- Not employed, and not looking for work
- Retired
- I prefer not to say

We're thinking about creating a coding music playlist. What is your favorite music artist or genre that helps you focus?

Location

* In which country do you currently reside?

In which state or territory of the USA do you live? *This information will be kept private.*

In which part of the United Kingdom do you live?

In which federal state do you live? *This information will be kept private.*

In which state of Brazil do you live? *This information will be kept private.*

In which province or territory do you live? *This information will be kept private.*

In which department of France do you live? *This information will be kept private.*

In which state or union territory of India do you live? *This information will be kept private.*

In which state do you live? *This information will be kept private.*

In which province of Poland do you live? *This information will be kept private.*

In which city or town do you live? *This information will be kept private.*

2 - Education + Work + Career

Education, work, and career

This section will focus on your education, work, and career.

Most questions in this section are optional. Required questions are noted with an *.

Are you currently enrolled in a formal, degree-granting college or university program?

- Yes, full-time
- Yes, part-time
- No
- I prefer not to say

Which of the following best describes the highest level of formal education that you've completed?

- I never completed any formal education
- Primary/elementary school
- Secondary school (e.g. American high school, German Realschule or Gymnasium, etc.)
- Some college/university study without earning a degree
- Associate degree
- Bachelor's degree (BA, BS, B.Eng., etc.)

- Master's degree (MA, MS, M.Eng., MBA, etc.)
- Professional degree (JD, MD, etc.)
- Other doctoral degree (Ph.D, Ed.D., etc.)
- Something else:

What was your main or most important field of study?

- Computer science, computer engineering, or software engineering
- Web development or web design
- Information systems, information technology, or system administration
- Mathematics or statistics
- Another engineering discipline (ex. civil, electrical, mechanical)
- A business discipline (ex. accounting, finance, marketing)
- A health science (ex. nursing, pharmacy, radiology)
- A humanities discipline (ex. literature, history, philosophy)
- A natural science (ex. biology, chemistry, physics)
- A social science (ex. anthropology, psychology, political science)
- Fine arts or performing arts (ex. graphic design, music, studio art)
- I never declared a major
- Other:

Which of the following types of non-degree education have you used or participated in? Please select all that apply.

- Taken an online course in programming or software development (e.g. a MOOC)
- Participated in a full-time developer training program or bootcamp
- Taken a part-time in-person course in programming or software development
- Completed an industry certification program (e.g. MCPD)
- Received on-the-job training in software development
- Taught yourself a new language, framework, or tool without taking a formal course
- Participated in online coding competitions (e.g. HackerRank, CodeChef, TopCoder)
- Participated in a hackathon
- Contributed to open source software
- None of these

Which of the following best describes the industry you work in? If you or your employer are involved in several industries, please choose the one most relevant to the products or services you work on. *This information will be kept private.*

- Consulting
- Data and analytics
- Energy or Utilities
- Education and Training
- Financial and Banking
- Government or Public Administration
- Health Care or Social Services
- Information technology
- Internet
- Manufacturing

You selected "Other." Please tell us the industry you work in.

Approximately how many people are employed by the company or organization you work for?

- Just me - I am a freelancer, sole proprietor, etc.
- 2-9 employees
- 10 to 19 employees
- 20 to 99 employees
- 100 to 499 employees
- 500 to 999 employees
- 1,000 to 4,999 employees
- 5,000 to 9,999 employees
- 10,000 or more employees
- I don't know

Which of the following describe you? Please select all that apply.

- Academic researcher
- Data or business analyst
- Data scientist or machine learning specialist
- Database administrator
- Designer
- Developer, back-end
- Developer, desktop or enterprise applications
- Developer, embedded applications or devices
- Developer, front-end

- Developer, full-stack
- Developer, game or graphics
- Developer, mobile
- Developer, QA or test
- DevOps specialist
- Educator
- Engineer, data
- Engineer, site reliability
- Engineering manager
- Marketing or sales professional
- Product manager
- Scientist
- Senior Executive (C-Suite, VP, etc.)
- Student
- System administrator
- Other

Including any education, how many years have you been coding?

At what age did you write your first line of code or program? (E.g., webpage, Hello World, Scratch project)

How many years have you coded professionally (as a part of your work)?

* Overall, how satisfied are you with your career thus far?

- Very dissatisfied
- Slightly dissatisfied
- Neither satisfied nor dissatisfied
- Slightly satisfied
- Very satisfied

How satisfied are you with your current job? (If you work multiple jobs, answer for the one you spend the most hours on.)

- Very dissatisfied
- Slightly dissatisfied
- Neither satisfied nor dissatisfied
- Slightly satisfied
- Very satisfied

How confident are you that your manager knows what they're doing?

- Very confident
- Somewhat confident
- Not at all confident
- I don't have a manager

Do you believe that you need to be a manager to make more money?

- Yes
- No
- Not sure

Do you want to become a manager yourself in the future?

- Yes
- No
- Not sure
- I am already a manager

* Which of the following best describes your current job-seeking status?

- I am actively looking for a job
- I'm not actively looking, but I am open to new opportunities
- I am not interested in new job opportunities

When was the last time that you took a job with a new employer?

- Less than a year ago
- 1-2 years ago
- 3-4 years ago
- More than 4 years ago
- I've never had a job

NA - I am an independent contractor or self employed

In your most recent successful job interview (resulting in a job offer), you were asked to... (check all that apply)

- Write any code
- Write code by hand (e.g., on a whiteboard)
- Complete a take-home project
- Solve a brain-teaser style puzzle
- Interview with people in peer roles
- Interview with people in senior / management roles

Have you ever been asked to solve [FizzBuzz](#) in an interview?

- Yes
- No

Imagine that you are deciding between two job offers with the same compensation, benefits, and location. Of the following factors, which 3 are MOST important to you?

- Diversity of the company or organization
- Languages, frameworks, and other technologies I'd be working with
- Industry that I'd be working in
- How widely used or impactful my work output would be
- Specific department or team I'd be working on
- Flex time or a flexible schedule
- Remote work options

- Financial performance or funding status of the company or organization
- Office environment or company culture
- Opportunities for professional development

Think back to the last time you updated your resumé, CV, or an online profile on a job site. What is the PRIMARY reason that you did so?

- Re-entry into the workforce
- My job status changed (promotion, new job, etc.)
- I had a negative experience or interaction at work
- I heard about a job opportunity (from a recruiter, online job posting, etc.)
- Something else changed (education, award, media, etc.)
- I was preparing for a job search

What was your reason for re-entry into the workforce?

* Which currency do you use day-to-day? If your answer is complicated, please pick the one you're most comfortable estimating in.

AED United Arab Emirates dirham
AFN Afghan afghani
ALL Albanian lek
AMD Armenian dram
ANG Netherlands Antillean guilder
AOA Angolan kwanza
ARS Argentine peso
AUD Australian dollar
AWG Aruban florin
AZN Azerbaijan manat

What is your current total compensation (salary, bonuses, and perks, before taxes and deductions), in $\${q://QID50/ChoiceGroup/SelectedChoicesTextEntry}$? Please enter a whole number in the box below, without any punctuation. If you are paid hourly, please estimate an equivalent weekly, monthly, or yearly salary. If you prefer not to answer, please leave the box empty.

Is that compensation weekly, monthly, or yearly?

- Weekly
 Monthly
 Yearly

On average, how many hours per week do you work?

How structured or planned is your work?

- There is a schedule and/or spec (made by me or by a colleague), and I follow it very closely
- There is a schedule and/or spec (made by me or by a colleague), and my work somewhat aligns
- There's no schedule or spec; I work on what seems most important or urgent
- Other:

Of these options, what are your greatest challenges to productivity as a developer? Select up to 3:

- Distracting work environment
- Being tasked with non-development work
- Meetings
- Time spent commuting
- Not enough people for the workload
- Toxic work environment
- Inadequate access to necessary tools
- Lack of support from management
- Non-work commitments (parenting, school work, hobbies, etc.)

How often do you work remotely?

- It's complicated
- All or almost all the time (I'm full-time remote)
- More than half, but not all, the time
- About half the time
- Less than half the time, but at least one day each week
- A few days each month
- Less than once per month / Never

Where would you prefer to work?

- Home
- Office
- Other place, such as a coworking space or cafe

For the specific work you do, and the years of experience you have, how do you rate your own level of competence?

- Far below average
- A little below average
- Average
- A little above average
- Far above average

Do you review code as part of your work?

- No
- Yes, because I was told to do so

Yes, because I see value in code review

On average, how many hours per week do you spend on code review?

Does your company regularly employ unit tests in the development of their products?

- Yes, it's part of our process
- Yes, it's not part of our process but the developers do it on their own
- No, but I think we should
- No, and I'm glad we don't

How does your company make decisions about purchasing new technology (cloud, AI, IoT, databases)?

- Developers typically have the most influence on purchasing new technology
- Developers and management have nearly equal input into purchasing new technology
- The CTO, CIO, or other management purchase new technology typically without the involvement of developers
- Not sure
- Other:

What level of influence do you, personally, have over new technology purchases at your organization?

- I have some influence
- I have a great deal of influence
- I have little or no influence

3 - TechandTechCulture

Tech and tech culture

The next set of questions will focus on technology and tech culture.

Most questions in this section are optional. Required questions are noted with an *.

Which of the following programming, scripting, and markup languages have you done extensive development work in over the past year, and which do you want to work in over the next year? (If you both worked with the language and want to continue to do so, please check both boxes in that row.)

Worked
with in
PAST
year

W:
t
wc
wi
NE
ye

	Worked with in PAST year	W: t w: c w: i N: E y: e
Assembly	<input type="checkbox"/>	[
Bash/Shell/PowerShell	<input type="checkbox"/>	[
C	<input type="checkbox"/>	[
C++	<input type="checkbox"/>	[
C#	<input type="checkbox"/>	[
Clojure	<input type="checkbox"/>	[
Dart	<input type="checkbox"/>	[
Elixir	<input type="checkbox"/>	[
Erlang	<input type="checkbox"/>	[
F#	<input type="checkbox"/>	[
Go	<input type="checkbox"/>	[
HTML/CSS	<input type="checkbox"/>	[
Java	<input type="checkbox"/>	[
JavaScript	<input type="checkbox"/>	[
Kotlin	<input type="checkbox"/>	[
Objective-C	<input type="checkbox"/>	[
PHP	<input type="checkbox"/>	[
Python	<input type="checkbox"/>	[
R	<input type="checkbox"/>	[

	Worked with in PAST year	Want to work with in NE year
Ruby	<input type="checkbox"/>	<input type="checkbox"/>
Rust	<input type="checkbox"/>	<input type="checkbox"/>
Scala	<input type="checkbox"/>	<input type="checkbox"/>
SQL	<input type="checkbox"/>	<input type="checkbox"/>
Swift	<input type="checkbox"/>	<input type="checkbox"/>
TypeScript	<input type="checkbox"/>	<input type="checkbox"/>
VBA	<input type="checkbox"/>	<input type="checkbox"/>
WebAssembly	<input type="checkbox"/>	<input type="checkbox"/>
Other(s): <input style="width: 250px; height: 30px;" type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which of the following database environments have you done extensive development work in over the past year, and which do you want to work in over the next year? (If you both worked with the database and want to continue to do so, please check both boxes in that row.)

	Worked with in past year	Want to work with next year
Cassandra	<input type="checkbox"/>	<input type="checkbox"/>
Couchbase	<input type="checkbox"/>	<input type="checkbox"/>

	Worked with in past year	Want to work with next year
DynamoDB	<input type="checkbox"/>	<input type="checkbox"/>
Elasticsearch	<input type="checkbox"/>	<input type="checkbox"/>
Firebase	<input type="checkbox"/>	<input type="checkbox"/>
MariaDB	<input type="checkbox"/>	<input type="checkbox"/>
MongoDB	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft SQL Server	<input type="checkbox"/>	<input type="checkbox"/>
MySQL	<input type="checkbox"/>	<input type="checkbox"/>
Oracle	<input type="checkbox"/>	<input type="checkbox"/>
PostgreSQL	<input type="checkbox"/>	<input type="checkbox"/>
Redis	<input type="checkbox"/>	<input type="checkbox"/>
SQLite	<input type="checkbox"/>	<input type="checkbox"/>
Other(s): <input style="width: 280px; height: 50px;" type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which of the following platforms have you done extensive development work for over the past year? (If you both developed for the platform and want to continue to do so, please check both boxes in that row.)

	Worked with in past year	Want to work with next year
Android	<input type="checkbox"/>	<input type="checkbox"/>

Arduino

AWS

Worked with in
past year

Want to work
with next
year

Docker

Google Cloud Platform

Heroku

IBM Cloud or Watson

iOS

Kubernetes

Linux

Mac OS

Microsoft Azure

Raspberry Pi

Slack

Windows

Wordpress

Other(s):

Which of the following web frameworks have you done extensive development work in over the past year, and which do you want to work in over the next year? (If you both worked with the framework and want to continue to do so, please check both boxes in that row.)

	Worked with in past year	Want to work with next year
Angular/Angular.js	<input type="checkbox"/>	<input type="checkbox"/>
ASP.NET	<input type="checkbox"/>	<input type="checkbox"/>
Django	<input type="checkbox"/>	<input type="checkbox"/>
Drupal	<input type="checkbox"/>	<input type="checkbox"/>
Express	<input type="checkbox"/>	<input type="checkbox"/>
Flask	<input type="checkbox"/>	<input type="checkbox"/>
jQuery	<input type="checkbox"/>	<input type="checkbox"/>
Laravel	<input type="checkbox"/>	<input type="checkbox"/>
React.js	<input type="checkbox"/>	<input type="checkbox"/>
Ruby on Rails	<input type="checkbox"/>	<input type="checkbox"/>
Spring	<input type="checkbox"/>	<input type="checkbox"/>
Vue.js	<input type="checkbox"/>	<input type="checkbox"/>
Other(s): <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which of the following other frameworks, libraries, and tools have you done extensive development work in over the past year, and which do you want to work in over the next year? (If you both worked with the technology and want to continue to do so, please check both boxes in that row.)

	Worked with in past year	Want to work with next year
Ansible	<input type="checkbox"/>	<input type="checkbox"/>
Apache Spark	<input type="checkbox"/>	<input type="checkbox"/>
Chef	<input type="checkbox"/>	<input type="checkbox"/>
Cordova	<input type="checkbox"/>	<input type="checkbox"/>
CryEngine	<input type="checkbox"/>	<input type="checkbox"/>
Flutter	<input type="checkbox"/>	<input type="checkbox"/>
Hadoop	<input type="checkbox"/>	<input type="checkbox"/>
.NET	<input type="checkbox"/>	<input type="checkbox"/>
.NET Core	<input type="checkbox"/>	<input type="checkbox"/>
Node.js	<input type="checkbox"/>	<input type="checkbox"/>
Pandas	<input type="checkbox"/>	<input type="checkbox"/>
Puppet	<input type="checkbox"/>	<input type="checkbox"/>
React Native	<input type="checkbox"/>	<input type="checkbox"/>
TensorFlow	<input type="checkbox"/>	<input type="checkbox"/>
Torch/PyTorch	<input type="checkbox"/>	<input type="checkbox"/>
Unity 3D	<input type="checkbox"/>	<input type="checkbox"/>
Unreal Engine	<input type="checkbox"/>	<input type="checkbox"/>
Xamarin	<input type="checkbox"/>	<input type="checkbox"/>
Other(s): <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which development environment(s) do you use regularly? Please check all that apply.

- Android Studio
- Atom
- Coda
- Eclipse
- Emacs
- IntelliJ
- IPython / Jupyter
- Komodo
- Light Table
- NetBeans
- Notepad++
- PHPStorm
- PyCharm
- RStudio
- RubyMine
- Sublime Text
- TextMate
- Vim
- Visual Studio
- Visual Studio Code
- Xcode
- Zend
- Other(s):

What is the primary operating system in which you work?

- Linux-based
- Windows
- MacOS
- BSD
- Other(s):

How do you use containers (Docker, Open Container Initiative (OCI), etc.)?

- Development
- Testing
- Production
- Outside of work, for personal projects
- I do not use containers

How is your organization thinking about or implementing blockchain technology?

- Accepting Bitcoin or other coins and tokens as payments
- Implementing our own cryptocurrency
- Implementing cryptocurrency-based products
- Non-currency applications of blockchain
- Not at all
- Don't know

Blockchain / cryptocurrency technology is primarily:

- Useful across many domains and could change many aspects of our lives
- Useful for decentralized currency (i.e., Bitcoin)
- Useful for immutable record keeping outside of currency
- A passing fad
- An irresponsible use of resources
- Don't know / not sure

Do you think people born today will have a better life than their parents?

- Yes
- No

What individual person do you think will have the most influence in tech in the coming year?

Are you the "IT support person" for your family?

- Yes
- Also Yes
- Fortunately, someone else has that title

SIGH

Have you tried turning it off and on again?

- Yes
 No
 What?

What social media site do you use the most?

- Hello
 Weibo 新浪微博
 WeChat 微信
 Youku Tudou 优酷
 Reddit
 YouTube
 WhatsApp
 Facebook
 Twitter
 VK ВКонтáкте
 LinkedIn
 Instagram
 Snapchat
 Other:

I don't use social media

Do you prefer online chat or IRL conversations?

- Online
- In real life (in person)
- Neither

What do you call it?

- UserID
- Login
- Username
- Screen Name
- Handle
- Other:

4 - StackCommunity

Stack Overflow - usage and community

This section will focus on Stack Overflow usage and community questions.

Most questions in this section are optional. Required questions are noted with an *.

To the best of your memory, when did you first visit Stack Overflow?

How frequently would you say you visit Stack Overflow?

- I have never visited Stack Overflow (before today)
- Less than once per month or monthly
- A few times per month or weekly
- A few times per week
- Daily or almost daily
- Multiple times per day

I visit Stack Overflow to... (check all that apply)

- Get a sense of belonging to the developer community
- Pass the time / relax
- Find answers to specific questions
- Learn how to do things I didn't necessarily look for
- Contribute to a library of information
- Meet other people with similar skills or interests

On average, how many times a week do you find (and use) an answer on Stack Overflow?

- Less than once per week

- 1-2 times per week
- 3-5 times per week
- 6-10 times per week
- More than 10 times per week

Think back to the last time you solved a coding problem using Stack Overflow, as well as the last time you solved a problem using a different resource. Which was faster?

- Stack Overflow was much faster
- Stack Overflow was slightly faster
- They were about the same
- The other resource was slightly faster
- The other resource was much faster

About how much time did you save? If you're not sure, please use your best estimate.

- 0-10 minutes
- 11-30 minutes
- 31-60 minutes
- 60+ minutes

Do you have a Stack Overflow account?

- Yes
- No
- Not sure / can't remember

How frequently would you say you participate in Q&A on Stack Overflow? By participate we mean ask, answer, vote for, or comment on questions.

- I have never participated in Q&A on Stack Overflow
- Less than once per month or monthly
- A few times per month or weekly
- A few times per week
- Daily or almost daily
- Multiple times per day

Why have you never participated in Q&A on Stack Overflow?

Have you ever used or visited [Stack Overflow Jobs](#)?

- No, I didn't know that Stack Overflow had a job board
- No, I knew that Stack Overflow had a job board but have never used or visited it
- Yes

Have you ever used [Stack Overflow for Enterprise](#) or [Stack Overflow for Teams](#)?

- No, and I don't know what those are
- No, I've heard of them, but I am not part of a private Q&A instance
- Yes

Do you consider yourself a member of the Stack Overflow community?

- No, not at all
- No, not really
- Neutral
- Yes, somewhat
- Yes, definitely
- Not sure

Please elaborate on your answer.

Compared to last year, how welcome do you feel on Stack Overflow?

- A lot less welcome now than last year

- Somewhat less welcome now than last year
- Just as welcome now as I felt last year
- Somewhat more welcome now than last year
- A lot more welcome now than last year
- Not applicable - I did not use Stack Overflow last year

Please elaborate on your answer.

If you could change anything about Stack Overflow, what would it be?

Would you like to see any of the following on Stack Overflow? Check all that apply.

- Tech articles written by other developers
- Industry news about technologies you're interested in

- Tech meetups or events in your area
- Courses on technologies you're interested in
- None of the above

Demographics

Demographics

We are almost done! All questions in this section are optional. As a reminder, all reporting of the survey responses will be anonymized.

What is your age (in years)? If you prefer not to answer, you may leave this question blank.

Which of the following do you currently identify as? Please select all that apply. If you prefer not to answer, you may leave this question blank.

- Woman
- Man
- Non-binary, genderqueer, or gender non-conforming

Or, in your own words:

Do you identify as transgender?

Yes

No

Or, in your own words:

Which of the following do you currently identify as? Please select all that apply. If you prefer not to answer, you may leave this question blank.

Bisexual

Gay or Lesbian

Straight / Heterosexual

Prefer to self-describe

Prefer not to say

Which of the following do you identify as? Please check all that apply. If you prefer not to answer, you may leave this question blank.

Black or of African descent

- East Asian
- Hispanic or Latino/Latina
- Middle Eastern
- Native American, Pacific Islander, or Indigenous Australian
- South Asian
- White or of European descent
- Biracial
- Multiracial
- I don't know
- I prefer not to answer
- Or, in your own words:

Which of the following describe you, if any? This information will be kept private. If you prefer not to answer, you may leave this question blank.

- I am blind / have difficulty seeing
- I am deaf / hard of hearing
- I am unable to / find it difficult to type
- I am unable to / find it difficult to walk or stand without assistance
- I prefer not to answer
- None of the above
- Or, in your own words:

Which of the following describe you, if any? This information will be kept private. If you prefer not to answer, you may leave this question blank.

- I have a concentration and/or memory disorder (e.g. ADHD)
- I have a mood or emotional disorder (e.g. depression, bipolar disorder)
- I have an anxiety disorder
- I have autism / an autism spectrum disorder (e.g. Asperger's)
- I prefer not to answer
- None of the above
- Or, in your own words:

Do you have any dependents (e.g., children, elders, or others) that you care for?

- Yes
- No
- I prefer not to answer

FinalThoughtsSurveyReview

Final thoughts / survey review

How do you feel about the length of the survey this year?

- Too short
- Appropriate in length
- Too long

How easy or difficult was this survey to complete?

- Easy
- Neither easy nor difficult
- Difficult

Thank you for taking the survey. Do you have any feedback or thoughts you'd like to share?

Thank you for taking the 2019 Developer Survey.

Click **Finish** to submit your answers.

Powered by Qualtrics