Responsible for the survey: Legal notice | Privacy statement | Note on accessibility





Survey on Code Review in Open Source Projects

Thank you for your interest in our study!

Before you take part in our survey, we would like to explain the purpose of this study and the procedures involved. Please read the following information carefully.

If you have any questions or uncertainties, please feel free to contact who is responsible for the current study at

TARGET GROUP

Whether you're a long-time maintainer, a new contributor, or an interested browser, we want to hear from you. We're inviting you to take part based on having been active in at least one open source project on GitHub. This survey is open to anyone aged 18 or older who uses, contributes to, or thinks about open source software.

PURPOSE & DURATION

Your participation contributes to the research into understanding code review processes in open source projects at the . The results will inform the development of targeted support tools to enhance code understanding and increase code review performance.

The survey will take ca. 15 minutes.

DATA PROTECTION

All data remains anonymous and is used only for scientific purposes. For more details on data protection refer to the note on privacy at the bottom of this site.

By clicking the 'Next' button you confirm that you agree to the aforementioned conditions and participate in this survey voluntarily. Thank you for your time and your trust!

A note on privacy

This survey is anonymous.

The record of your survey responses does not contain any identifying information about you, unless a specific survey question explicitly asked for it. If you used an identifying token to access this survey, please rest assured that this token will not be stored together with your responses. It is managed in a separate database and will only be updated to indicate whether you did (or did not) complete this survey. There is no way of matching identification tokens with survey responses.

		R	esponsible for the survey:	Legal notice Privacy st	atement Note on accessibility
Universität Hambu	rg				
<mark>%</mark>	Language: Er	nglish	*		
Open Source Project E	xperience				
How many years have you been involve	ed in open source project:	s? (contributing, maintainin	ng or authoring etc.)		
		• Only numbers may be	entered in this field.		
		years			
What role(s) do you have in open sourc	e projects?	• Check all th	nat apply		
Member (Definition: user who is a magnetic Collaborator (Definition: user who had Contributor (Definition: user who had None (Definition: user who has no as Other:	nas been invited to collabor	ate on the repository) the repository)			
How often do you engage in each of the	e following activities?				
	Never	Rarely	Occasionally	Often	Always
Contribute code	\circ	\circ	\circ	\circ	\bigcirc
Contribute documentation	0	0	0	0	0
Maintain project (e.g. review and nerge contributions, manage re-eases)	0	0	0	0	0
Report or document bugs and unexpected behaviors Offer ideas for new features	0	0	0	0	0
Perform organizational or admin-	0	0	0	0	0
strative functions (e.g. manage nailing lists, organize events)					
Code reviews have multiple goals. Which goals primarily motivate code re	eviews in the projects tha	t you contribute to?			
Find defects Code improvement Enforce the project's coding style Share knowledge Document rationale Avoid build fails Share code ownership Find alternative solutions Other:		• Check all th	nat apply		
What do you find particularly challengi	ing about reviewing code:	?			
					//
Cognitive effort is defined as the total a Which code review activity requires me				d to complete a certain task.	
Understanding the purpose of the Finding defects Understanding code changes Suggesting an alternative solution Evaluating the pull request usefuln Other:		SHOCK All U			

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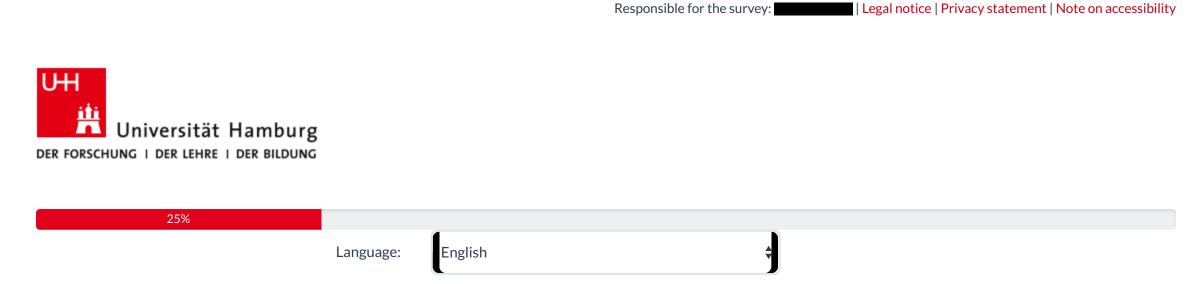




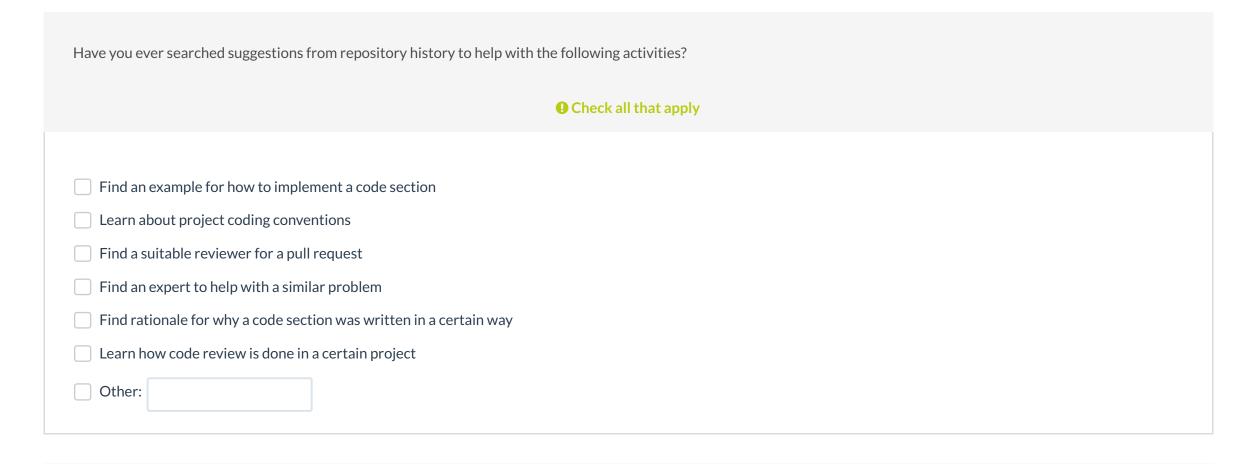


itHub suggestions id a feature introduced in 2018 to enable code reviewers	to suggest changes to the code. A suggestion can be integrated by a simple commit.
n example of a GitHub suggestion is shown below: Suggested change ①	
4 - return nums[1:len(nums)]	
4 + return nums[1:]	
Commit suggestion ▼ Add suggestion to batch	
re you familiar with the "Suggestion" feature on GitHub for Pull Request rev	views?
• Choose	e one of the following answers
) No	
Yes, I have seen it in pull requests but I have not used or received any sug	ggestions
Yes, I have received suggestions on previous pull requests	
Yes, I have used suggestions in my reviews	
Yes, I have received and used suggestions before	

There is a variety of automation tools available on GitHub, for example bots that automate tasks such as assigning a reviewer, ensuring license agreement signing, reporting continuous integration failures, etc. What do you think of automating code review suggestions? can you name a case in which this can reduce code review effort?



GitHub suggestions id a feature introduced in 2018 to enable code reviewers to suggest changes to the code. A suggestion can be integrated by a simple commit. An example of a GitHub suggestion is shown below: Suggested change ① 4 - return nums[1:len(nums)] 4 + return nums[1:] Commit suggestion ▼ Add suggestion to batch Are you familiar with the "Suggestion" feature on GitHub for Pull Request reviews? Choose one of the following answers O No Yes, I have seen it in pull requests but I have not used or received any suggestions Yes, I have received suggestions on previous pull requests Yes, I have used suggestions in my reviews Yes, I have received and used suggestions before



There is a variety of automation tools available on GitHub, for example bots that automate tasks such as assigning a reviewer, ensuring license agreement signing, reporting continuous integration failures, etc. What do you think of automating code review suggestions? can you name a case in which this can reduce code review effort?





		ions id a feature in GitHub suggestio		enable code reviewers
Suggested			TIS SHOWN BEIOW.	
4 -	ı	return nums[1:len(num	s)]	
4 +	ı	return nums[1:]		
			Commit suggestion ▼	Add suggestion to batch
No				• Choose
) No				
) Yes,	I have	e seen it in pull requ	uests but I have not u	sed or received any sug
Yes,	I have	e received suggesti	ons on previous pull r	equests
Yes,	I have	used suggestions	in my reviews	
Yes,	I have	e received and used	I suggestions before	

Listed below are statements about you code review suggestion usage as a pull request author Please indicate to which extent you agree or disagree with each statement.

	Strongly disagree	Somewhat disagree	Neither agree nor dis- agree	Somewhat agree	Strongly agree
I frequently receive suggestions in the reviews of the pull requests I create	\bigcirc		\circ	\bigcirc	
I am more likely to integrate a code review suggestion when the suggesting reviewer is a team member	\circ	0	\circ	\circ	0
I am more likely to integrate a code review suggestion when the suggesting reviewer is a first time contributor	\bigcirc		\bigcirc	\bigcirc	\bigcirc
I am more likely to integrate a code review suggestion when the suggesting reviewer is a recurrent contributor	0	0	\circ	\circ	0
I am more likely to integrate a code review suggestion when the suggesting reviewer is a collaborator	\bigcirc		\bigcirc	\bigcirc	\bigcirc
I find code review suggestions about documentation changes (e.g. comments) useful	\circ	0	\circ	\circ	0
I find code review suggestions about code style changes (e.g. naming) useful	\bigcirc		\bigcirc	\bigcirc	\bigcirc
I find code review suggestions about code improvements (e.g. performance) useful	\circ	\circ	\circ	\circ	0
I find code review suggestions about fixes to code defects (e.g. comments) useful	\bigcirc		\bigcirc	\bigcirc	\circ
Code review suggestions help learn about project coding conventions	\circ	\circ	\circ	\circ	0
Code review suggestions help understand code rationale (i.e. why code was written a certain way)	\circ		\bigcirc	\bigcirc	
Code review suggestions help learn from more experienced developers	\circ		\circ		0
Code review suggestions help learn about the implications of certain changes	\bigcirc		\circ	\bigcirc	

Have you ever searched suggestions from repository history to help with the following activities?

Check all that apply

Find an example for how to implement a code section

Learn about project coding conventions

Find a suitable reviewer for a pull request

Find an expert to help with a similar problem

Find rationale for why a code section was written in a certain way

Learn how code review is done in a certain project

Other:

There is a variety of automation tools available on GitHub, for example bots that automate tasks such as assigning a reviewer, ensuring license agreement signing, reporting continuous integration failures, etc.	
What do you think of automating code review suggestions? can you name a case in which this can reduce code review effort?	

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Suggested ch	ange (i)		
4 -	return nums[1:len(nums)]		
4 +	return nums[1:]		
		Commit suggestion ▼	Add suggestion to batch
			• Choose
) No			• Choose
	have seen it in pull reques	sts but I have not us	
Yes, I	have seen it in pull reques have received suggestions		sed or received any sug
Yes, I		s on previous pull re	sed or received any sug

Listed below are statements about you code review suggestion usage as a code reviewer. Please indicate to which extent you agree or disagree with each statement.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I frequently use the suggestion feature in my code reviews			\bigcirc	\circ	
I am more likely to use code review suggestions when the author of the pull request is a team member	0	0	0	0	
I am more likely to use code review suggestions when the author of the pull request is a first time contributor	\bigcirc	\bigcirc	\circ	\bigcirc	\circ
I am more likely to use code review suggestions when the author of the pull request is a recurrent contributor	\circ	0	0	0	0
I am more likely to use code review suggestions when the author of the pull request is a collaborator			\bigcirc	\circ	
I use suggestions in my reviews to provide solutions to defects in the code	\circ		\circ	\circ	
I use suggestions in my reviews to suggest code style changes (e.g. naming)	\bigcirc		\bigcirc	\bigcirc	
I use suggestions in my reviews to suggest documentation changes (e.g. comments)	0	0	0	\circ	
I use suggestions in my reviews to suggest code improvements (e.g. performance)	\bigcirc		\bigcirc	\bigcirc	
I use suggestions in my reviews to explain code rationale to others	0	0	0	\circ	
I use suggestions in my reviews to point out alternative solutions to others	\circ	\circ		\circ	\circ
I use suggestions in my reviews to ensure newcomers stick to the project's coding convention	0	0		0	0
I use suggestions in my reviews to point potential implications that others may not be aware of	\circ	\circ	\circ	\circ	0

Have you ever searched suggestions from repository history to help with the following activities?
① Check all that apply
Find an example for how to implement a code section
Learn about project coding conventions
Find a suitable reviewer for a pull request
Find an expert to help with a similar problem
Find rationale for why a code section was written in a certain way
Learn how code review is done in a certain project
Other:

There is a variety of automation tools available on GitHub, for example bots that automate tasks such as assigning a reviewer, ensuring license agreement signing, reporting continuous integration failures, etc.
What do you think of automating code review suggestions? can you name a case in which this can reduce code review effort?





Sug	Suggested change (i)	
	4 - return nums[1:len(nums)]	
	4 + return nums[1:] Commit suggestion ▼ Add suggestion to batch	
Are	re you familiar with the "Currection" facture on City by far Dull Dequest reviews?	
	e you familiar with the "Suggestion" feature on GitHub for Pull Request reviews?	
		he following answers
		he following answers
\supset		he following answers
0	• Choose one of the	
	• Choose one of the No	
	No Yes, I have seen it in pull requests but I have not used or received any suggestions	

Listed below are statements about you code review suggestion usage as a code reviewer. Please indicate to which extent you agree or disagree with each statement.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I frequently use the suggestion feature in my code reviews	\bigcirc				
I am more likely to use code review suggestions when the author of the pull request is a team member	\circ			0	
I am more likely to use code review suggestions when the author of the pull request is a first time contrib- utor	\circ	\circ	\circ	0	\circ
I am more likely to use code review suggestions when the author of the pull request is a recurrent contributor	0	0		0	0
I am more likely to use code review suggestions when the author of the pull request is a collaborator	\bigcirc	\circ		\circ	
I use suggestions in my reviews to provide solutions to defects in the code	\circ	0	0	0	
I use suggestions in my reviews to suggest code style changes (e.g. naming)		\bigcirc			
I use suggestions in my reviews to suggest documentation changes (e.g. comments)	\circ	0	0	0	
I use suggestions in my reviews to suggest code improvements (e.g. performance)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
I use suggestions in my reviews to explain code rationale to others	\circ	0		0	\circ
I use suggestions in my reviews to point out alternative solutions to others	\circ	0	\circ	0	
I use suggestions in my reviews to ensure newcomers stick to the project's coding convention	\circ	0	0	0	\circ
I use suggestions in my reviews to point potential implications that others may not be aware of	0	0	0	0	0

Listed below are statements about you code review suggestion usage as a pull request author Please indicate to which extent you agree or disagree with each statement.

Have you ever searched suggestions from repository history to help with the following activities?

Other:

	Strongly disagree	Somewhat disagree	Neither agree nor dis- agree	Somewhat agree	Strongly agree
I frequently receive suggestions in the reviews of the pull requests I create			\circ	\circ	\bigcirc
I am more likely to integrate a code review suggestion when the suggesting reviewer is a team member	0	0	0	0	0
I am more likely to integrate a code review suggestion when the suggesting reviewer is a first time contributor	\circ		\circ	\circ	\circ
I am more likely to integrate a code review suggestion when the suggesting reviewer is a recurrent contributor	0	0	\circ	0	0
I am more likely to integrate a code review suggestion when the suggesting reviewer is a collaborator	\bigcirc		\bigcirc	\bigcirc	
I find code review suggestions about documentation changes (e.g. comments) useful		0	\circ	0	0
I find code review suggestions about code style changes (e.g. naming) useful	\bigcirc		\bigcirc	\circ	
I find code review suggestions about code improvements (e.g. performance) useful	0	0	\circ	0	0
I find code review suggestions about fixes to code defects (e.g. comments) useful	\bigcirc		\bigcirc	\bigcirc	
Code review suggestions help learn about project coding conventions		0	\circ	0	0
Code review suggestions help understand code rationale (i.e. why code was written a certain way)	\circ		\circ	\circ	0
Code review suggestions help learn from more experienced developers		0	\circ	0	0
Code review suggestions help learn about the implications of certain changes	\circ		\circ	\circ	\bigcirc

☐ Check all that apply

☐ Find an example for how to implement a code section
☐ Learn about project coding conventions
☐ Find a suitable reviewer for a pull request
☐ Find an expert to help with a similar problem
☐ Find rationale for why a code section was written in a certain way
☐ Learn how code review is done in a certain project

There is a variety of automation tools available on GitHub, for example bots that automate tasks such as assigning a reviewer, ensuring license agreement signing, reportin continuous integration failures, etc.	ıg
What do you think of automating code review suggestions? can you name a case in which this can reduce code review effort?	

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Information Sources for Software Development

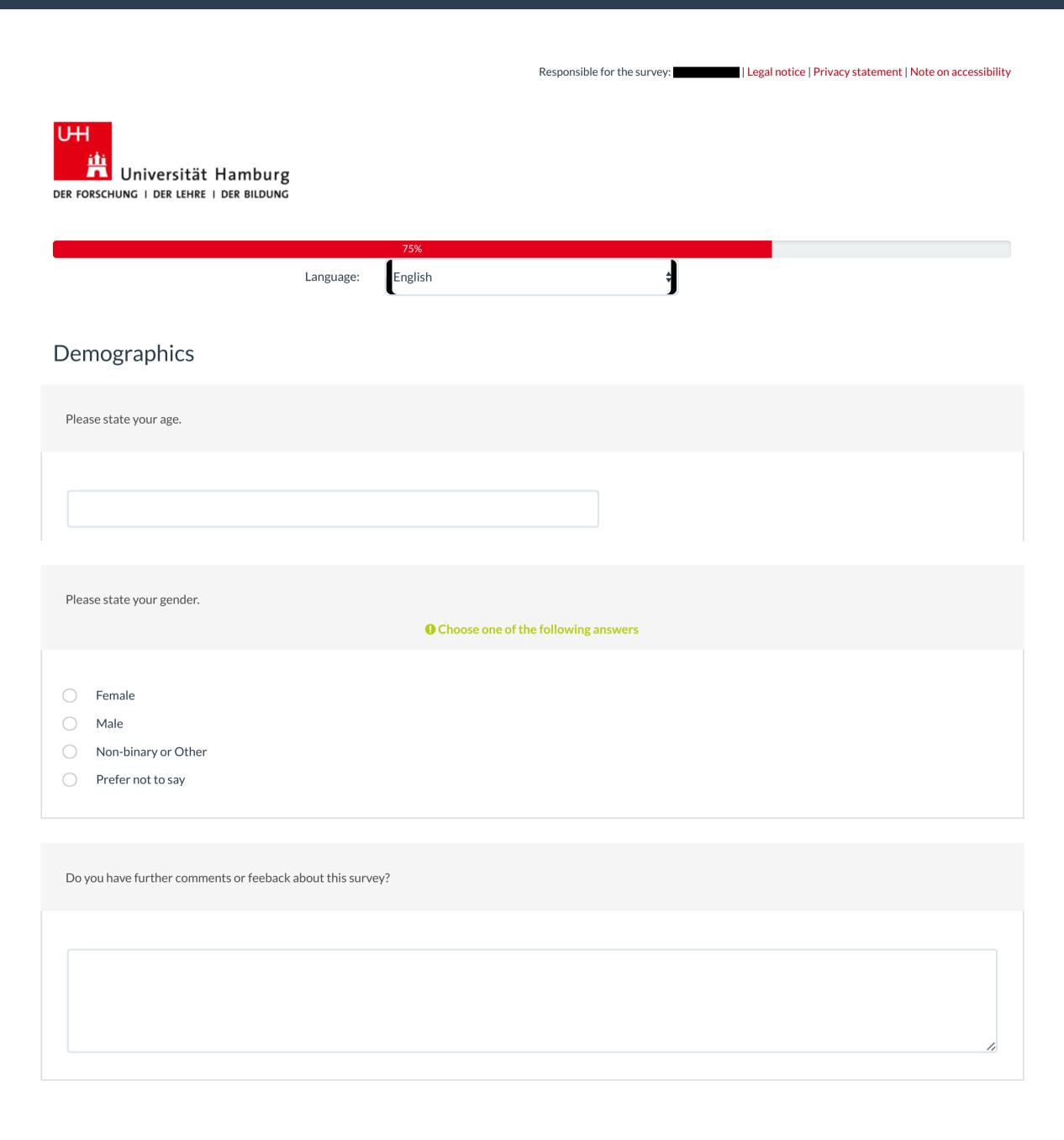
How likely are you to consult the following information sources while engaging in the development activities:										
	Ac	plementing	Activity 2: Bug Fixing							
	Very unlikely	Rather unlikely	Neither likely nor unlike- ly	Rather likely	Very likely	Very unlikely	Rather unlikely	Neither likely nor unlikely	Rather likely	Very likely
Technical Blogs	\circ	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\circ	\bigcirc	\circ	\bigcirc	\circ
Documentation sites	0	0	\circ	\circ	0	\circ	\circ	\circ	\circ	0
Q&A web sites	\circ	\bigcirc	\circ	\bigcirc	\circ	\circ	\bigcirc	\circ	\bigcirc	\bigcirc
API specification	0	0	\circ	\circ	0	\circ	\circ	\circ	\circ	0
Forum discussions	\circ	\circ	\circ	0	\circ	\circ	\bigcirc	\circ	\circ	\circ
Code example sites	0	0	0	0	0	0	0	0	0	\circ
Experts or team colleagues	0	0	\circ	0	\circ	0	\circ	0	\circ	\circ
Previous or other projects	0	0	0	0	0	0	\circ	0		0

How likely are you to consult the following information sources while engaging in the development activities:

		<u>y 3</u> : Reviewir	Activity 4: Refactoring code							
	Very unlikely	Rather unlikely	Neither likely nor unlike- ly	Rather likely	Very likely	Very unlikely	Rather unlikely	Neither likely nor unlikely	Rather likely	Very likely
Technical Blogs	\circ	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\circ	\bigcirc	\circ	\bigcirc	\bigcirc
Documentation sites	0	0	\circ	\circ	\circ	0	0	\circ	\circ	\circ
Q&A web sites	\circ	\circ	\circ	0	\circ	\circ	\circ	\circ	\circ	\circ
API specification	0	0	\circ	0	\circ	0	\circ	0	\circ	\circ
Forum discussions	\circ	0	\circ	0	\circ	0	\circ	\circ	\bigcirc	\circ
Code example sites	0	0	\circ	0	\circ	0	0	0	0	0
Experts or team colleagues	\circ	0	\circ	0	\circ	\circ	\circ	\circ	\circ	\circ
Previous or other projects	0	0	0	0	0	0	0	0	0	0
Online tutorials	0	\circ	0	\circ	0	0	\circ	\circ	\circ	\circ

Online tutorials

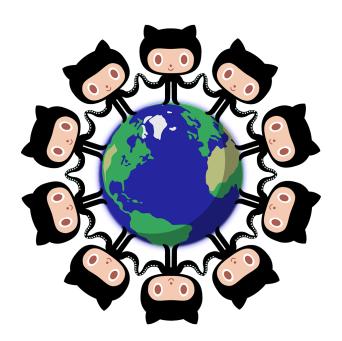
Resume later Exit and clear survey Question index ▼



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Thank you for your participation!



In the next couple of weeks, we will collect and analyse the the answers of the survey. If you are interested in this topic and want to be keep up to date with the research progress, please feel free to contact us.

For further questions, feedback or suggestions do not hesitate to reach out to