Regex usage in practice

This survey is to collect information for a research project in analyzing regex usage in practice. As this is for research, please answer as accurately as possible, not guessing what is the desired answer and providing that.

This survey will be available until Thursday, August 14 at 5:00pm CST.

Participants who complete the survey will be entered in a drawing to receive a gift certificate to Target.

Your username will be recorded when you submit this form.
* Required

1. **I am a professional software developer/maintainer.** *
   (one year or more experience developing and/or maintaining software)
   Mark only one oval.

   ( ) True

   ( ) False   *After the last question in this section, skip to "Thanks for your participation!."*

2. **How many years of programming/maintenance experience do you have?** *
   (rounding up if not sure)

   ....

3. **I have used regular expressions (regex) in a work environment.** *
   Mark only one oval.

   ( ) True

   ( ) False   *Skip to "Thanks for your participation!."*

Quantifying my usage of regex in a work environment

4. **Please estimate the N regex you compose per year (by technical environment).** *

   Mark only one oval per row.

	0	1-5	6-10	11-20	21-50	51-100	101+
General purpose languages (Java, C++, C#, etc.)	◯	◯	◯	◯	◯	◯	◯
scripting languages (Bash, Perl, Python)	◯	◯	◯	◯	◯	◯	◯
query languages (sql and similar)	◯	◯	◯	◯	◯	◯	◯
command line search (grep, awk, sed, find, etc.)	◯	◯	◯	◯	◯	◯	◯
searching within a text editor (IntelliJ, TextWrangler, Vim, etc.)	◯	◯	◯	◯	◯	◯	◯
other	◯	◯	◯	◯	◯	◯	◯

5. **Please describe how often you compose regex for a particular problem type.** *

   (regardless of technical environment)
   Mark only one oval per row.

	never	very rarely	rarely	occasionally	frequently	very frequently
capturing parts of strings	◯	◯	◯	◯	◯	◯
counting the number of lines that match a pattern	◯	◯	◯	◯	◯	◯
counting the number of substrings total that match a pattern	◯	◯	◯	◯	◯	◯
locating content within a huge file or files	◯	◯	◯	◯	◯	◯
filtering collections (lists, tables, etc)	◯	◯	◯	◯	◯	◯
checking for the existence of a single character	◯	◯	◯	◯	◯	◯
parsing user input	◯	◯	◯	◯	◯	◯
parsing generated text	◯	◯	◯	◯	◯	◯
other	◯	◯	◯	◯	◯	◯

6. **If you selected 'other' in either or both of the above 2 questions, please explain below what you are indicating**

   ....

   ....

   ....

   ....

   ....

7. **Overall, I compose about N regex per year.**
   *

   (please fill in the text box with an integer)

   ....

8. **On average, I go about N days without using regex.** *

_____

Usage frequency of select features

9. **How often do you use endpoint anchors?** *

example: with input "I like my sandwich", the regex 'my .*' can find a match, but the regex '^my .*$' does not find a match, because it uses endpoint anchors: '^' and '$'
Mark only one oval.

- ( ) never
- ( ) very rarely
- ( ) rarely
- ( ) occasionally
- ( ) frequently
- ( ) very frequently

10. **How often do you use capture groups?** *

example: with input "my name is mud", the regex 'my name is (.*)' will capture 'mud'
Mark only one oval.

- ( ) never
- ( ) very rarely
- ( ) rarely
- ( ) occasionally
- ( ) frequently
- ( ) very frequently

11. **How often do you use look-aheads, negative look-aheads, look-behinds or negative look-behinds?** *

example: with input "xyz", the regex '(?<!x)yz' will fail to find a match because x comes before yz (it's a negative look-behind because of the '!' character. A regex with positive look-ahead looks like: 'a(?=bc)')
Mark only one oval.

- ( ) never
- ( ) very rarely
- ( ) rarely
- ( ) occasionally
- ( ) frequently
- ( ) very frequently

12. **How often do you use lazy repetition?** *

example: with input "\<g\>good\</g\>\<b\>bad\</b\>" the regex '(<.+?>)' will onlycapture "<g>good</g>" , whereas the regex '(<.+>)' will capture the whole input. (notice the '?' character in the first regex)
Mark only one oval.

( ) never

( ) very rarely

( ) rarely

( ) occasionally

( ) frequently

( ) very frequently

13. **How often do you use word boundaries?** *

example: with input "smooshedwords", the regex '\bwords' will not match because the cursor between 'smooshed' and 'words' sees a word character on both sides. With input "spaced words", the same regex will match because the space is a non-word character.
Mark only one oval.

( ) never

( ) very rarely

( ) rarely

( ) occasionally

( ) frequently

( ) very frequently

Your preferences

14. **Do you prefer to use custom character classes or default character classes more often?** *

example of a custom character class: '[0-9]' and of a default character class: '\d' (both will match digits 0-9)
Mark only one oval.

( ) use only default

( ) use default more than custom

( ) use both equally

( ) use custom more than default

( ) use only custom

15. **Why do you prefer that?** *

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16. **To solve a small parsing problem would you prefer to write a regex or write a parser in a general purpose language?** *

example: an extremely simple parser in java might look like 's.startsWith('myPattern')' and a similar regex could be '^myPattern'
Mark only one oval.

( ) use only regex

( ) use only custom parser

( ) it depends

17. **If you chose 'it depends', please explain why.**

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18. **If you know it won't affect your use case would you prefer to use '.*' or '.+' ?** *

example: you are capturing the content between two commas. You know there will always be content between the commas in your input. Would you rather write ',.*,' or ',.+,' ?
Mark only one oval.

( ) always use '.*'

( ) use '.*' more than '.+'

( ) use both equally

( ) use '.+' more than '.*'

( ) always use '.+'

19. **Why do you prefer that?** *

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20. **Assuming you need to use back-references, would you prefer to use numbered or named back-references?** *

example: with input "aaabaabab" and regex '(a+)b\1', the 'aabaa' portion will be matched (also the later 'aba' portion). You could do the same thing with the regex '(?P<ayes>a+)b(?P=ayes)' which uses named back-references.

Mark only one oval.

○ always use numbered backreferences

○ always use named backreferences

○ it depends

21. **If you chose 'it depends', please explain why.**

....

....

....

....

....

Testing code with regex

22. **In General, how often do you write tests for your code?** *

Mark only one oval.

○ never

○ very rarely

○ rarely

○ occasionally

○ frequently

○ very frequently

○ always

23. **How often do you write tests for your regexes?** *

Mark only one oval.

○ never

○ very rarely

○ rarely

○ occasionally

○ frequently

○ very frequently

○ always

24. **What tools do you use, if any, to help compose/test your regexes?** *

(please write 'None' if you never use any tools to help)

User experiences

25. **I have used the options wrapper** *

example: the regex '(?i)caps' will be case insensitive because of the '(?i)'
Mark only one oval.

◯ True

◯ False

26. **I have used regex to parse HTML or XML** *

Mark only one oval.

◯ True

◯ False

27. **What pain points have you encountered with regular expressions?** *

(this can be anything)

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28. **What do you use the 'word character' default character class '\w' for?** *

(it is equal to the custom character class '[a-zA-z_]')

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29. **I have used the repetition range modifier** *

example: a{4,12} will match the letter 'a' repeated between 4 and 12 times
Mark only one oval.

( ) True

( ) False

30. **Do you have anything else to add about your experiences with regexes?** *

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Thanks for your participation!

☐ Send me a copy of my responses.