

ET-PoC-Study

Post-Questionnaire

- How easy/hard did you experience the program comprehension tasks?

| Very Easy | Easy | Neutral | Hard | Very Hard |
|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Optional Comment:

Will be easier if the code is not obfuscated

- How do you feel after the study?

| Very Exhausted | Exhausted | Neutral | Energetic | Very Energetic |
|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Optional Comment:

Time to party

- You are presented with the displayed code snippets. Which of the excerpts did you find particularly easy/difficult? Why?

Please annotate them on the pages themselves.

- How do your problem-solving strategies change with the code snippets?

At first I tried to look at the code line by line and comprehend it linearly, after a while I realized some of them are already well-established algorithms, so in that case I tried to recognize which algorithm it is and just applied it.

5. Did you detect any changes in yourself in comprehending the code snippets? If so, what did this change look like?

At first I was a bit overwhelmed by the variable names and trying to match which name belongs to which variable, and that was quite frustrating. After a while I stopped doing so and instead just focused on the logic and that made things easier and I became more efficient.

6. Did **Type Annotations** (`number: int` instead of `number`) help you comprehend the code snippets?

| Yes | No |
|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

How did they help? Please elaborate.

Helped me distinguish between strings and lists. And since the variable names are not very helpful, at some point I just ignored the names and remembered the types instead.

7. Beyond this study, do Type Annotations help you comprehend code in general?

| Yes | No |
|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Why? Please elaborate.

If I already know the types then it would be easier to prepare myself for the kind of operations that could happen to them. And also help me quickly see what the input and output should look like. So it is also easier to guess what the functions are trying to achieve.

8. Were earlier or later code snippets easier for you to comprehend?

Generally later snippets are easier because I felt more prepared, experienced and confident in doing the task.

9. Do you have any suggestions or ideas for improvement for us?