

ET-PoC-Study

Post-Questionnaire

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

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

Optional Comment:

The source of difficulty is the random variable naming which made me take a longer time to comprehend the code snippets.

2. How do you feel after the study?

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

Optional Comment:

3. 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.

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

- Immediately stopped depending on the variable names
- Use the variable types, indexing, slicing, operators applied to the input in order to guess the input-output relation
- Related the semantic of the function to the algorithms I'm familiar with

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

Yes. I mentioned them in 4 (see above).

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.

- enable classifying the code as a manipulation of text, integers, ..etc.
- know the expected output type

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.

- know the expected type of specification (expected input-output)
- understand the role of the local variables (which are usually indices or flags)

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

later

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

No :)