Default Question Block

Heuristic Evaluation of Static Analysis Tools in IDEs

In this survey, we ask you to evaluate two quick fix tools: Quick Fix Version 1 and Quick Fix Version 2. The evaluation is based on ten different usability heuristics.

While completing the evaluation, **please have the following URL open**, which contains videos of the tools in operation:

http://static.barik.net/fixbugs_he

You may refer to these videos as needed as you complete the survey.

Finally, don't concern yourself about being too critical of the tool. Since the primary purpose of a heuristic evaluation is in fact to identify design problems, strong criticism is expected and encouraged.

The survey should take about 30 minutes to complete.

Thanks!

Block 12

Who is completing this survey? Please enter your name.
Your responses will be anonymized in any published materials (for example, R12), but it is helpful for the researchers to know who you are in case we need to follow-up with you.

Block 1

1 of 10. Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	○	○	○	○	○
Quick Fix Version 2	○	○	○	○	○

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

Block 2

2 of 10. Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	○	○	○	○	○
Quick Fix Version 2	○	○	○	○	○

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

Block 3

3 of 10. User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	○	○	○	○	○
Quick Fix Version 2	○	○	○	○	○

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

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Block 4

4 of 10. Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	◯	◯	◯	◯	◯
Quick Fix Version 2	◯	◯	◯	◯	◯

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

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Block 5

5 of 10. Error prevention

Even better than good error messages is a careful design which prevents a

problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	○	○	○	○	○
Quick Fix Version 2	○	○	○	○	○

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

[ ]

Block 6

6 of 10. Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	○	○	○	○	○
Quick Fix Version 2	○	○	○	○	○

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

Block 7

7 of 10. Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	O	O	O	O	O
Quick Fix Version 2	O	O	O	O	O

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

Block 8

8 of 10. Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	O	O	O	O	O
Quick Fix Version 2	O	O	O	O	O

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

Block 10

9 of 10. Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	◯	◯	◯	◯	◯
Quick Fix Version 2	◯	◯	◯	◯	◯

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

[text box]

Block 10
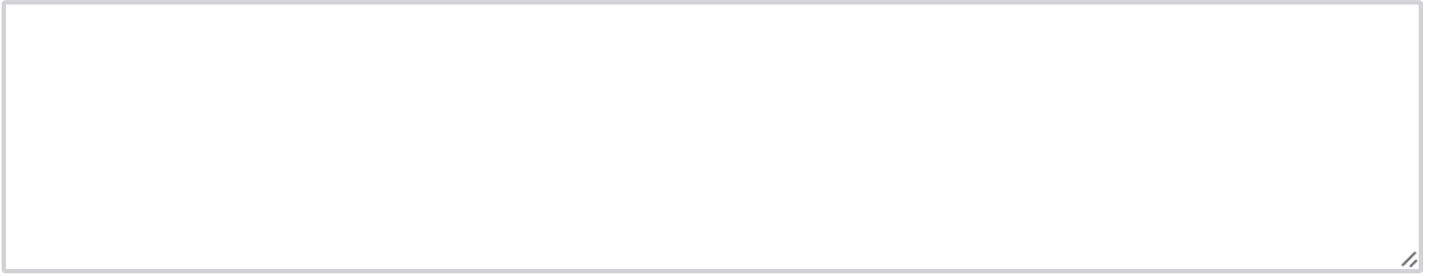
10 of 10. Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Please rate the two tools for this heuristic.

	Very Poor	Poor	Acceptable	Good	Very Good
Quick Fix Version 1	◯	◯	◯	◯	◯
Quick Fix Version 2	◯	◯	◯	◯	◯

Please provide a rationale for the ratings you have provided, indicating both positive and negative aspects of the two tools.

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