

Date _____ Time _____ Target Population? _____

- _ This (2 pages)
- _ Cover Letter
- _ Pen
- _ PC with demos open

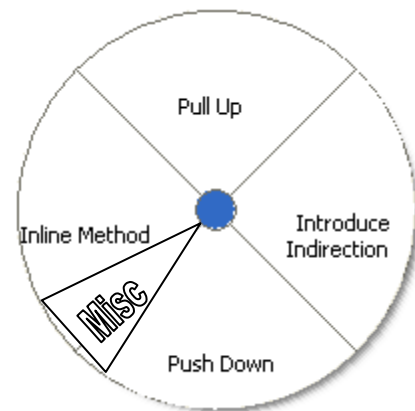
I'm going to ask you a few questions about your opinions about refactoring tools, as well as show you some new tools. Please answer as candidly as possible.

1. How many years have you been programming? _____
2. Over the last year, about how many hours do per week would you say you spend programming, on average? _____
3. On a scale of 1 to 5, how often would you say you use refactoring tools?
1 – not at all, 5 – every time I refactor _____
If 1, do you typically have refactoring tools available for use? _____
4. Which refactoring tools to you typically use, if any?

5. How do you typically activate refactoring tools? Hotkeys, menus, others?
 - a. Have you remapped refactorings that have no default hotkeys? Y/N
How many refactoring hotkeys do you remember? _____
 - b. If menus, how often do you avoid using menus because they take longer to activate than just doing it by hand? _____

Demo Pie Menus from webpage. Supposed advantages

- + *can be activated used hotkeys or mouse*
- + *faster to activate than context menus*
- + *easier to remember than hotkeys*
- + *placement should be especially memorable*
- *some refactorings don't make sense to put on this menu*
- *adding new refactorings will disrupt memory*



Suppose you used pie menus for the activating refactoring tools. Would you want to use a second mechanism (such as linear menus or hotkeys) for activating the remaining refactorings (such as Rename), or would you like to see all refactorings activated by pie menus?

Demo Selection Cues from webpage (pause after activation to show what's going on)

- + *can be activated used hotkeys our mouse*
- + *many items can be refactored at once*
- + *selection errors are cut down*
- + *makes "what is refactorable" explicit*
- + *configuration becomes optional*
- *all refactoring activators must be shown*

Suppose that your development environment already provides access to refactoring tools via regular menus and hotkeys. If pie menus were offered as an additional way to activate refactorings, how might your tool usage change, on a scale of 1 to 5?

1 – I would refactor much less, 3 – no change, 5 – I would refactor much more _____

And With Selection Cues? _____

What kinds of refactorings do you think you would use Selection Cues to perform?

Which refactorings wouldn't you use them for?

If you could change something about pie menus, what would it be?

And changing something about selection cues?

Suppose you had regular menus, hotkeys, pie menus, and selection cues to activate refactorings in your programming environment. For each mechanism, on a scale from 1 to 5, how often you think you would use each tool (1=not at all, 5=very often)

Regular Menus: _____

Hotkeys: _____

Pie Menus _____

Selection Cues: _____