Research Questions – UX 3

Problem Statement

How to integrate the results of Multiple Static Analysis Tools in a Unified User Interface?

Research Question 1

How to display the results of same code base from different analysis tools?

1. Do users prefer to see bugs one by one or at once in context of multiple bugs in same line?
2. Do users prefer for table in code view over text description shown for multiple bugs at a line of code?
3. Does vertical presentation of bugs help in getting overview of presence of multiple bugs over horizontal presentation of bugs?
4. Do users prefer bug icons in code view or table in results view for bugs in same file?
5. Do users prefer having 'similar bugs' in bug description with onclick pops up similar bug description boxes at the identified line in code view to a list in results view at the bottom?
6. Do users need to know the tool names in context of bug description in code view?

Research Question 2

What feedback works to know that bug fixing is on-going?

1. Does alert notification help in fixing more bugs in contrast to its absence in current tools user interfaces?
2. Does MSAT-UI with 5 feedback mechanisms help in fixing the bugs in faster way in comparison to using multiple tools with native UI's?
3. Does MSAT-UI with 5 feedback mechanisms help in fixing more bugs in comparison to using multiple tools with native UI's?

Research Question 3

How to carry traceability of bug fixing?

1. Do users prefer having multiple windows to single interface in tracing previous bug fixes in a method?

2. Do users think they will be able to keep up in state of workflow as tools scale with before/after windows in contrast to table view?

3. While tracing previous bug fixes in a method, do users prefer a table view to a before/after multiple windows?