# 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 view over text description shown for multiple bugs at a line of code?
- 3. Does vertical view help in getting overview of presence of multiple bugs over horizontal views?
- 4. Do users prefer bug icons or list 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 to a list 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 be able to keep up in state of workflow as tools scale?
- 3. While tracing previous bug fixes in a method, do users prefer a table view to a before/after multiple windows?