1 Cases besides functions in C++

In addition to functions changes in C++ source code, we are also able to specify the following cases.

Case	Description	example
Macro Definition	Macro defined in the source files of the target project, can be divided into Object style and Function style.	#define PI 3.14 //object #define P(x) x //function
Class Definition	Class defined in the source file.	Class A{};
Namespace Definition	Namespace defined in the source file.	
Other Simple Definition	Common definitions such as global variable, class field members etc. We can now detect whether a simple definition is a field member definition.	int a = 0; ClassFoo foo;

Problem	Code that cannot be recognized, such as macro whose definition cannot be found, and common syntax errors.	TEST(…){} //as we encountered in gtest
		int b //missing ";"
		int //meaningless

The current plan to deal with these cases is when we find these cases have been changed, we rerun all test cases.

2 Simplifying Java Workflow

Currently, we managed to simplify the Java workflow to only 3 commands, indicating 2 phases of the workflow:

Phase	Command	Description
Prerequisite	N/A	1. Setting IUT_HOME folder -> $HOME/.iut (which contains files that are required to run iut. 2. Modify the "build.gradle" file of the target project
Phase1: Preprocessing	*iut init <projectName>*	Initialize db file and several settings.
	iut preproc <projectName>	instrumentation -> run testcases -> update database
Phase2: Incremental Testing	*iut increm <projectName> <oldVersionPath> <newVersionPath>*	diff to find changed methods -> query for affected testcases -> run affected testcases