IUT Sync-Meeting Notes

Date: 2016/5/4

Time: 4:00 p.m.

Attendants:

* Morgan Stanley: Baiyan Huang, Jing Li
* Shanghai Jiao Tong University: Ziyi Lin, Weizhao Yuan, Feiyue Yu(Over the phone)

Discussions (in time order):

**About CDT and Clang:**

1. One concern is that CDT might not yield an AST as strict as what Clang API can yield, given that Clang parses source code to AST for compilation purpose but CDT is just a plugin for static source code analysis in Eclipse’s text editor.
2. Further study in Clang API for AST manipulation is needed for the comparison between these two methods. Clang is preferred unless there is enough evidence to proof that CDT is as effective and efficient as Clang.

**About Diff:**

1. The output of Diff should be a list of functions that are modified.
2. When parsing source code, the program should be able to omit noises such as blank lines and comments to avoid false positives.
3. There is an assumption that the source code to be parsed can be successfully compiled. But it’s advisable that the program can detect syntax errors.
4. We are temporally focused on “.cpp”, “.c” and “.h” file. Hopefully users can specify files to process by configuration files.

**About rerunning test cases:**

1. When functions are modified, test cases that are affected must be rerun.
2. When facing modifications outside functions, the program should rerun all test cases.
3. To do 2), we need to figure out how to find differences of various c++ syntax elements out side a function, and maybe set a more specific strategy for how to rerun test cases with respect to these modifications.

**About gcov:**

We should get more familiar with how gcov runs, processes files and generates reports, and avoid I/O as possible as we can.

**About scripts:**

We prefer Python to shell script because Python codes are easier to read and maintain.