

METHOD AND SYSTEM FOR DETERMINING ONE OR MORE FRONTIER BRANCHES DURING SOFTWARE TESTING

ABSTRACT

The present disclosure relates to field of software testing that discloses method and system for determining frontier branches during software testing. System receives branch of software code under test from fuzzer. Further, system determines status of each of two end-points to be “processed” or “not-processed” based on corresponding key information. Thereafter, based on determination of status of each of two end points, system performs predefined operations for end-points whose status is determined to be not-processed, and for end-points whose status is determined to be processed. Furthermore, system determines status of at least one of, child blocks of second end-point based on basic block information of second end-point and sibling blocks of second end-point based on basic block information of first end-point. Finally, system determines frontier branches based on determined status of at least one of, child blocks and sibling blocks. The present disclosure helps in reducing time consumed for testing.

FIG. 1B