

Crowdtesting intermediary tool for managing public service software project

ABSTRACT

Software testing is important to ensure correctness of the software, gaining confidence from stakeholders, and contributing towards achieving high quality software. One approach to conduct software testing is through crowdtesting. It allows people from the crowd to test a particular software using their own devices in real environment. Currently in public service sector there is no existing intermediary tool to manage crowdtesting activities for public service software project. Therefore, public service software project relied on common testing approaches such as testing by internal employees or outsourced to specific suppliers, that in turn making public service software projects facing the risk of inadequate testing. This study intends to determine whether the implementation of crowdtesting is able to address the problems of inadequate testing in public service software project and to propose an application as intermediary tool for crowdtesting in public service. This study employed interviews and survey with IT practitioners in public service sector to understand the applicability of crowdtesting in public service and specifications for the proposed intermediary tool. The intermediary tool is developed and evaluated to determine its effectiveness in managing crowdtesting for public service software project. The evaluation shows that most of the participants agree that the intermediary tool shows effectiveness in terms of defect detection, cost benefit, time, and testing coverage.

Keyword: Software crowdtesting; Crowdtesting intermediary tool; Crowdtesting for public service