## Summary of Towards an Approach for Improving Exploratory Testing Tour Assignment based on Testers' Profile

DOI: 10.5220/0011113800003179

by Groza Vlad, Guia Alex, Hideg Paul

This study aims to develop a recommendation system for assigning test tasks in Exploratory Testing (ET) based on tester profiles. The researchers will explore how a tester's background and experience (profile) influences their performance on different types of ET tasks (tours from the Tourist Metaphor). They will collect data from 60 testers through questionnaires and analyze it to identify correlations between tester profiles and their efficiency in applying different tours. This information will be used to design a system that recommends the most suitable test tasks for each tester, potentially improving overall testing productivity.

The methodology of this study involved four phases: research planning, data collection, data analysis, and reporting the results. Data collection focused on participants' profiles. Researchers recruited 60 participants from undergraduate software engineering and computer science courses. Questionnaires were used to gather information about their educational background, expertise, computer knowledge, and preferences for various testing approaches (tours) within the Tourist Metaphor for Exploratory Testing (ET). This data will be analyzed to identify correlations between tester profiles and their efficiency in applying different tours. This information is intended to be used to develop a recommendation system for assigning ET tasks based on tester profiles.

The study found that testers with different educational backgrounds preferred different Exploratory Testing tours. Students with less experience tended to favor tours that were quicker to complete, such as the Anti-Social and Couch Potato tours. These tours focus on practical testing approaches or finding unexpected behaviors in the software. Testers with more experience were also interested in these tours, but they additionally showed interest in the Intellectual tour, which involves putting more load on the software than it can handle. Overall, the study suggests that a recommendation system could be designed to assign testing tasks based on tester profiles and experience.

This study has implications for both research and practice in software testing. By identifying relationships between tester profiles and their performance on different testing tasks, the research lays the groundwork for a recommendation system that assigns tasks based on tester strengths. This could improve efficiency in software testing practices by matching testers with tasks they are more likely to succeed at. Additionally, the study suggests that a similar approach could be applied in development contexts, potentially improving developer effectiveness and satisfaction. Overall, this research points towards a more human-centered approach to task allocation in software development processes.