Automatically Translating Bug Reports into Test Cases for Mobile Apps

Motivating Example

Technique Overview

Empirical Evaluation

Benchmarks and Setup

Research Question #1

9 bug reports had at least one implicit action
7 bug reports with at least one generic abstract step
19 bug reports reproduced only one execution
6 bug reports reproduced exploring more than one execution
4 test cases with additional actions

Research Question #2

UI Actions search phase takes the longest on average
Average analysis time is 5m50s and median time is 2m58s
Longest analysis time is 29m41s

Future Work