Identifying the reusability of the triangle and intersection schemes on mobile devices

Abstract

Graphical passwords are vulnerable to shoulder-surfing attacks as the images are easier to remember than text. Therefore, existing graphical password schemes incorporate anti-shoulder-surfing mechanisms to ensure that the graphical password is safe against such attacks. Unfortunately, according to the literature review, most graphical password schemes with anti-shoulder-surfing mechanisms are for general devices, not mobile devices. Therefore, in this experiment, two general device graphical password anti-shoulder-surfing mechanisms, which are the Triangle and Intersection schemes, are reconstructed on a mobile device to test if general device graphical password anti-shoulder-surfing mechanisms can be reused in mobile devices.