Abstract

Every five years, we held general elections to determine the future leaders of the next period. Approaching the election day, many survey institutions competed to provide information related to the elections. One of them is by creating a polling system. The results of the polls issued by each survey institute were different and claimed that the poll results they issued were the most accurate. Therefore, a faster polling system with higher accuracy by utilizing social media is required. In this study, a polling system was created based on Twitter social media, using the API for polling participants' data collection. In the developed system, the authentication process consists of two stages. In the first stage, the system utilizes social media authentication API to filter out the bots. Whereas, the second stage uses reCaptcha which is a program that can distinguish humans from computer programs or bots. The polling system that was built by applying reCaptcha as user authentication was able to prevent 100% bot accounts from participating the polling. 70% of bot accounts were suspended by social media (twitter) while the remaining were blocked by reCaptcha.

Keywords: polling, social media, authentication, API, reCaptcha, bot.