## Please add a brief explanation justifying the manuscript type you have chosen (Maximum 100 words)

In our manuscript, we propose a novel malware detection scheme in the Android platform, which is the most popular and occupies 85% of the smartphone market share in the world. Our manuscript has a hypothesis, investigation, solution, proposed detection scheme, some evaluations with real datasets, informative results for a related research community, limitation, and discussion about future work.

Therefore, we chose "Regular" as suitable manuscript type of our manuscript.

Please describe how your article fits the scope of IEEE Access. Note, the scope of IEEE Access covers all (but only) IEEE's fields of interest (Maximum 100 words)

Our article is related to information security which is an important topic.

Many articles that are related to this research topic have been published by IEEE's journal in the past.

Furthermore, our article presents a new solution against an unsolved problem and shows useful experimental results, limitations by using real datasets.

For these reasons, our article fits the scope of IEEE Access.

<u>Please state the unique contributions and advancements your article makes in the related</u> existing literature (Maximum 100 words)

We point out that none of conventional permission pairs based detection schemes are able to simultaneously meet requirements for practical application.

We discovered the fact that even the latest scheme cannot deal with recent malware samples.

We propose a practical malware detection scheme using a novel idea.

The proposed scheme enables to not only deal with recent malware but also offer numerical evidence of detection results to human.

Our scheme is compatible with other machine learning based schemes, which is helpful in deploying hybrid detection in practical situations.

Our work will contribute to enhancing security in the Android platform.