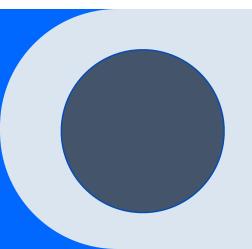# 1st Group Meeting: Android Malware Detection Using DREBIN API Features

Introduction & Project Scope

Motivation behind focusing on Android malware detection.

Understanding of DREBIN API features for malware classification.

Scope: Enhance malware detection algorithms using machine learning.

Project Objectives

Objective 1: Identify effective feature sets for malware classification.

Objective 2: Evaluate explanation methods to improve algorithm design.

Challenges: Explainability, detection performance, computational efficiency.

Planned Approach

Adoption of machine learning models (e.g., Linear SVM, Random Forest).

Analysis of DREBIN dataset with API features from 2014 to 2018.

Exploration of explanation methods like SHAP, LIME for insights.

Difficulties & Solutions

Addressing the challenge of fast concept drift in malware variants.

Mitigating the high cost of false positives and negatives.

Seeking advice on computational efficiency and semantics gap.