

IronFox

<https://ironfox.org>

**Websites, Mobile Apps & APIs Full
Protection**

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Outline

- **IronFox**
 - Team
- **Products**
 - **Bot Protector**
 - Real-Time Bot Detection & Protection
 - **App Armor**
 - Real-Time API Protection & Mobile Applications Security



- AppArmor
 - Mobile Applications & APIs Protection
 - Full API & Real-Time Service Protection
 - Mobile Application Cracking, Clone, Malicious code injection detection and Protection.
 - Tracking & Reporting
 - Anti-Debugging & self protection
 - Self Destruction Call (SIG KILL)
 - Easy to use Mobile SDK
 - Apply protection with minimal coding
 - Third-Parties Integration & Modules (Back-End)
 - Web Servers
 - Nginx Module
 - Application Frameworks
 - C Library, Java, Kotlin & Python API
 - SOC and other third-parties.

Easy To Use Mobile SDK



Step 1: Login to your dashboard ~ 60 second

Step 2: Get your clients key ~ 10 second

Step 3: Add line of code in your app ~ 60 second

```
String url = "http://demo.ironfox.org/v1/info";

OkHttpClient.Builder builder = new OkHttpClient.Builder();
builder.addInterceptor(new IronFoxSDK( clientKey: "840015187341961821195933321864796696998360530909"));
OkHttpClient client = builder.build();
Request request = new Request.Builder()
    .url(url)
    .build();

client.newCall(request).enqueue(new Callback() {
    @Override
    public void onFailure(@NotNull Call call, @NotNull IOException e) {
```

Client Key

Real-Time Bot Protection



- Gen 1 : Simple crawlers with basic action

- Example: In home scripts
- Detection: Absence of Cookie

- Gen 2 : Still easy to detection



- Example: wrk, HTTP load generator, Very simple yet powerful DDoS tools
- Detection: Absence of JavaScript

- Gen 3 : Look like browsers, Start of low and slow attack



- Example: PhantomJs, Selenium
- Detection: challenge tests and fingerprinting

- Gen 4: Bots mimic human behavior such as non-linear mouse movements



- Example: Chrome Headless || cbot, Gen4 bot in C(18K), developed by IronFox team
- Detection: behavioral Analysis

Reference and more information: <https://datadome.co/bot-management-protection/how-to-detect-malicious-bots/>
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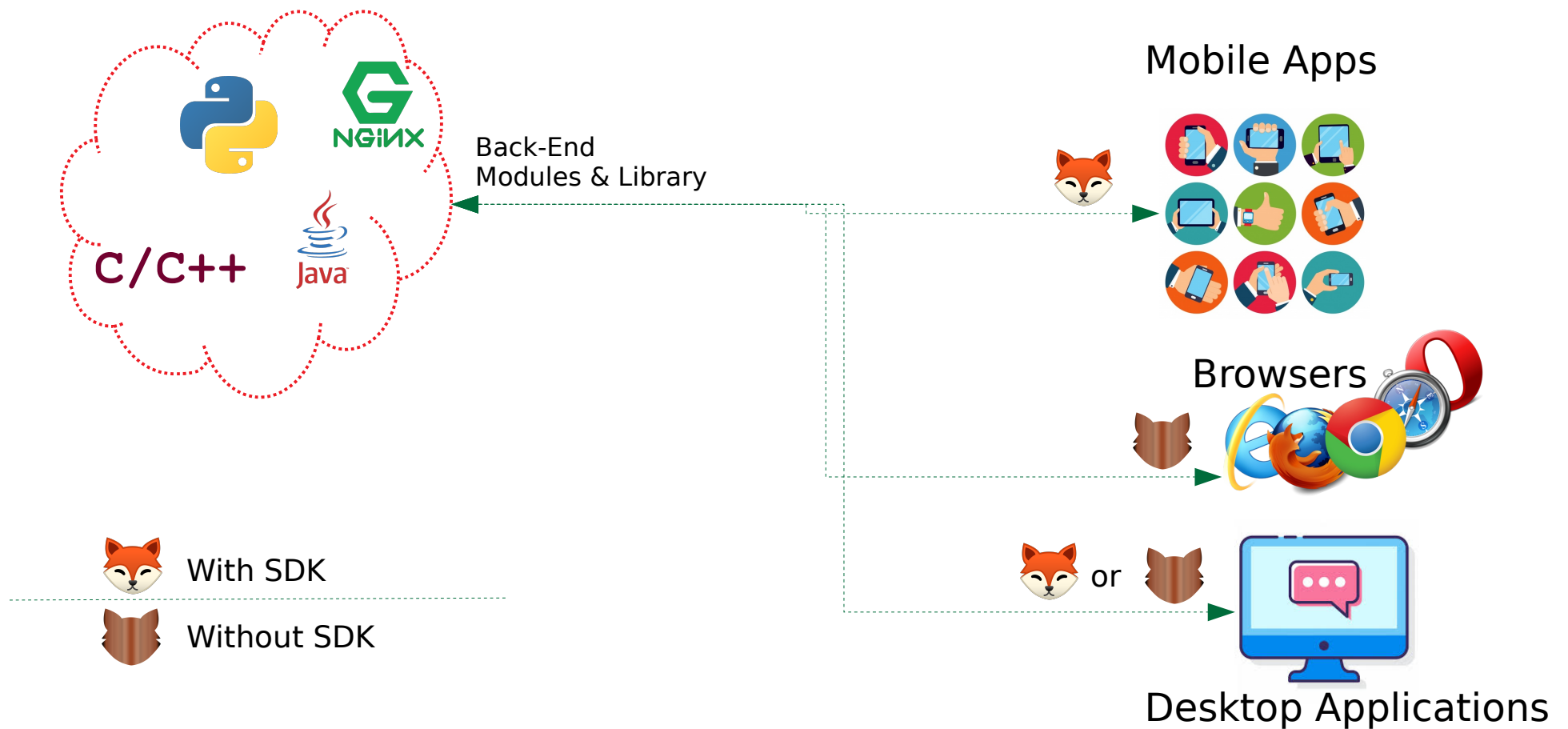
Real-Time Bot Protection



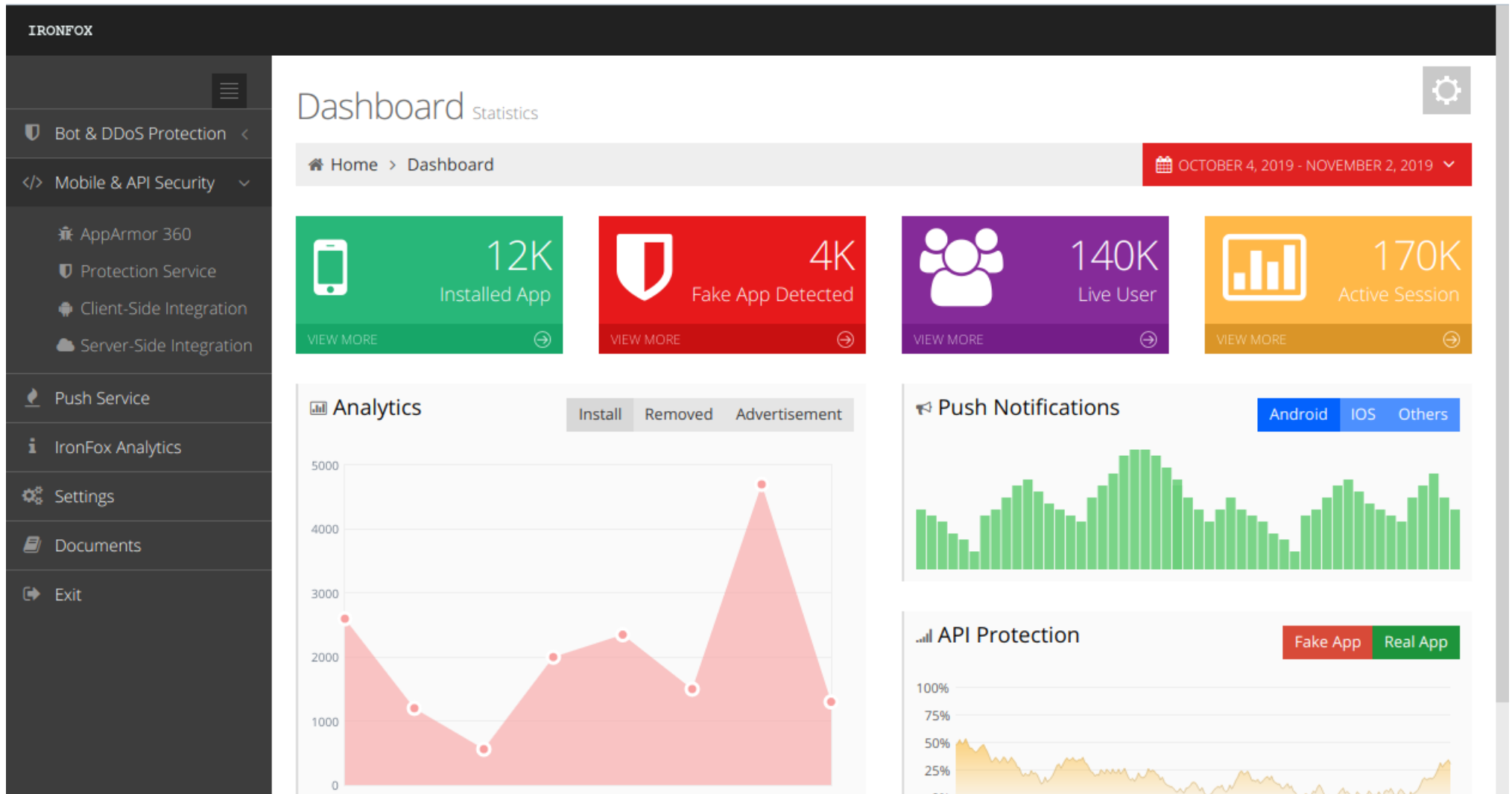
Real-Time Bot Detection & providing service such as:

- **100% Transparent & fully works in Agent-Less mod. No additional changes is required in your side or in your source code**
 - Like Cloud-Flare, Only set our DNS name on your domains entry, and let him to protect your services
- Identify & classification of real users vs bots (also determine a good or a bad bots) with tracking and control their activities
- Tracking and control clients by real & unique information
 - because cookie based or source IP tracking are deprecated
- Complex Web Application Layers (L7) DDoS attacks detection & prevention
- Save Your Money. Detection & blocking Ad-Fraudsters
- Blocking automatic vulnerability & security scanners
- Blocking Spammers, Crawlers & unexpected auto/semi-auto clients
- Server & Service overload protection
 - From API service to Web Servers, form Web Servers to your Web Application Firewalls, All of them protected by IronFox botCop.
- And all of BOT activities effected your business and service

How it's work



Dashboard



Dashboard

IRONFOX

Bot & DDoS Protection <

</> Mobile & API Security <

Push Service

IronFox Analytics

Settings

Documents

Exit

Dashboard Clinet-Side Integration

Home > Dashboard

OCTOBER 4, 2019 - NOVEMBER 2, 2019

IronFox provides a simple implementation of the SDK by okhttp Interceptor.

Example

```
public class MainActivity extends AppCompatActivity {  
  
    ...  
  
    String url = "https://example.com/v1/sms";  
  
    OkHttpClient.Builder builder = new OkHttpClient.Builder();  
    builder.addInterceptor(new IronFoxSDK("YOUR API KEY"));  
    OkHttpClient client = builder.build();  
  
    Request request = new Request.Builder()  
        .url(url)  
        .build();  
  
    ...  
  
}
```

Download Android SDK

Sample App

Developers Guide

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Dashboard

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Dashboard AppArmor 360

Home > Dashboard

OCTOBER 4, 2019 - NOVEMBER 2, 2019

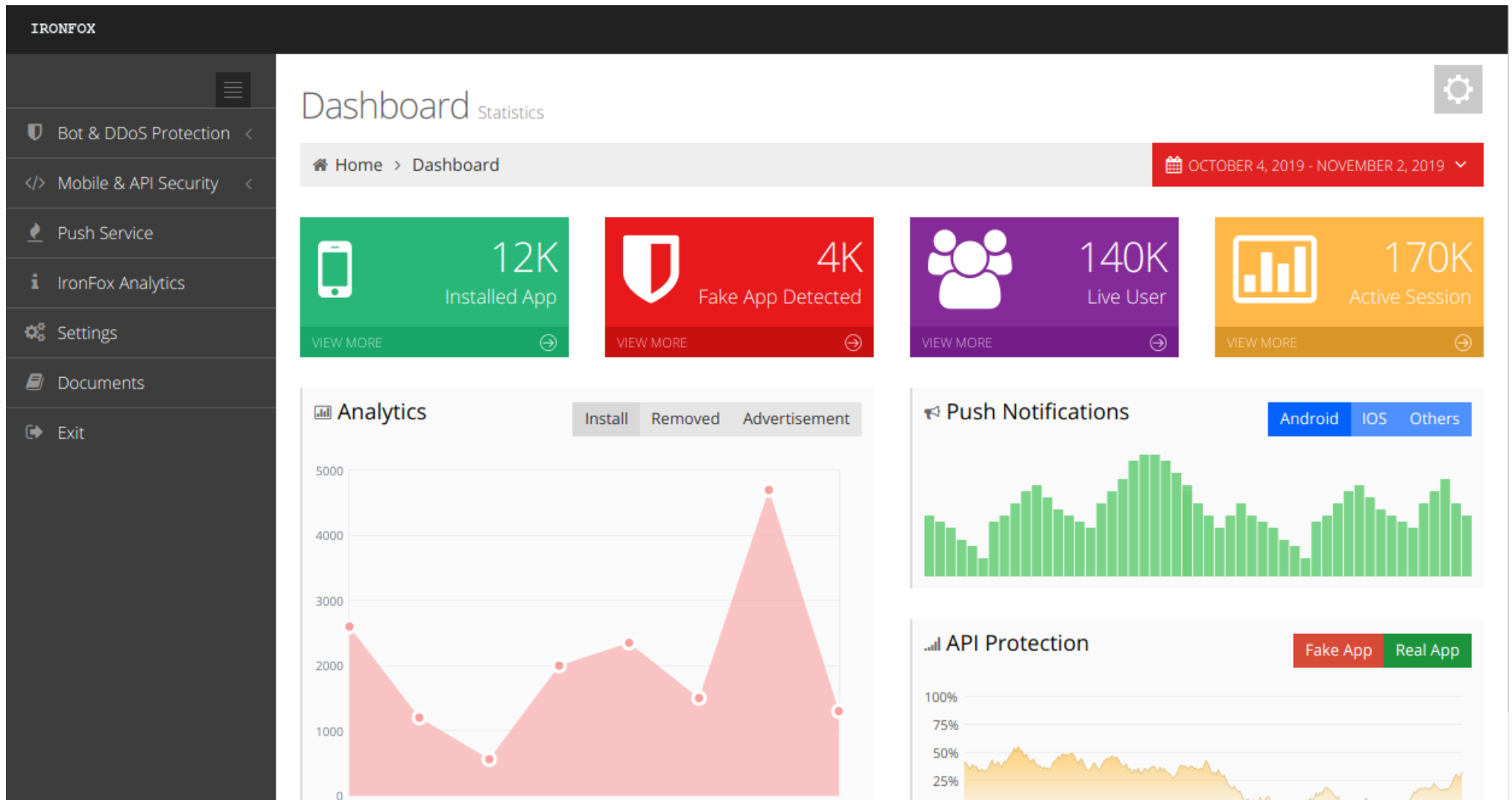
IronFox AppArmor 360 will protect your mobile application against malicious code and/or any abuse. In order to activate and protect your mobile app, you should enter your app hash here and use IronFox SDK as a piece of your app code.

Mobile Application Protection

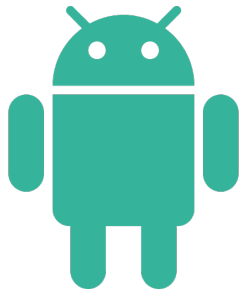
App Name	<div>Divar</div> <div>Mobile app name. e.g myapp.</div>
App hash code	<div>b836096ec98514bb9f24adb6d316a75f</div> <div>Your mobile App's hash code How to generate my App hash code?</div>
App Armor	<div><div><input checked="" type="checkbox"/> Protect in Offline Mod</div><div><input checked="" type="checkbox"/> Let me know if someone cracked it</div><div><input type="checkbox"/> Track my App's activities if somebody cracked it (NOT recommended)</div><div>What's happen if my App crack or reversed by hackers?</div></div>
<div><div>✓ Protect</div><div>Cancel</div></div>	

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Dashboard



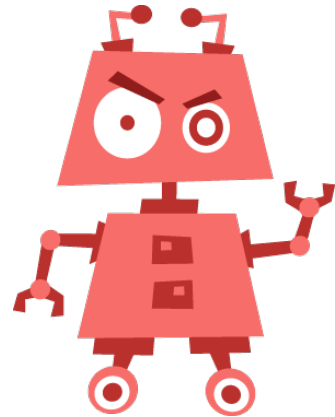
Demo



Mobile Application
Protection

{ **REST:API** }

API Protection



Bot Detection &
Protection

Thanks