

# Student Seminar: Exploiting Two Factor Authentication of Android and IOS

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## **Abstract**

Applications which can be used in different platforms now use two factor authentication (2FA) to allow users to conveniently switch from one platform to another. For example, when a user tries to login his gmail, it is not enough to enter correct password (first factor), it is also necessary to enter a PIN which is received by an SMS (second factor). The aim of this project explaining the attacks against 2FA in IOS and Android devices and what it can be the solution.

## **1 Introduction: The 2 Factors Authentication**

## **2 Key concepts**

### **2.1 Smartphone and anywhere computing**

Today smartphone are more present than ever and a large majority of person

### **2.2 MitB: Man in the browser attack**

MitB is a type of attack who assume that the attacker has an entier control and view on the PC browser of the victim. Like a man in the middle attack, the attaker can see all data exchanged by the browser and server and can modify them (on the fly). it also can send and receive data in the name of the user. But unlike the former it has acces to these data before they encrypted (or after they are decryted) And has also modify browser related setting like bookmark and current open tabs URLs. In short power full man

in the browser attack can remotelly perform the same action has someone getting physical acces to the browser

### **3 2FA Attack on**

#### **3.1 Android**

#### **3.2 Ios**

### **4 Discutions**

### **5 conclusion**