Protecting Data in Electronic Payment

Sang Young 楊和生
Internet Society Hong Kong

Electronic Payment

- … is a financial exchange that takes place online between two parties in form of digital means

Examples (in Hong Kong)

- Apple Pay
- Alipay HK
- Android Pay
- BoC Pay
- Electronic Cheque (e-cheque)
- FPS
- O!e Pay

- PayPal
- PayMe
- TNG Wallet
- Tap&Go
- Samsung Pay
- WeChat Pay
- … …

Common Methods

- Credit/Debit Card
- Mobile Device
- Mobile App
- NFC
- QR Code
- Online/Offline

Tips ...

Debit Card vs Credit Card

Use one card / link one bank account

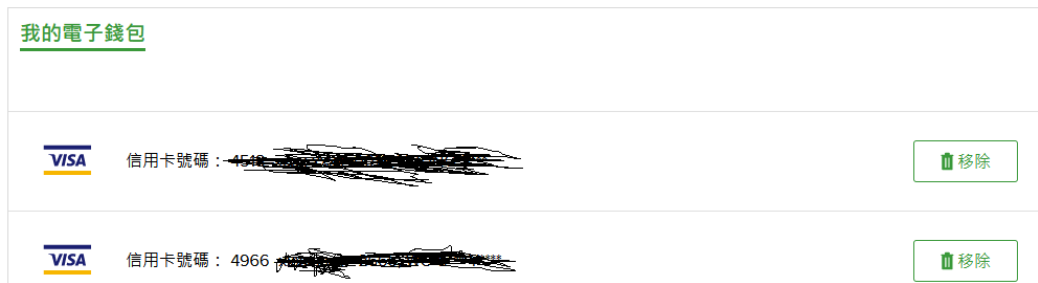Check statement / transaction records

Tips …

- Network Security
  - Ensure secure connection
    - OV Certificate vs EV Certifiate
  - No insecure Wi-Fi

Tips

我的電子錢包

VISA 信用卡號碼：~~4548~~ ~~~~~~~

VISA 信用卡號碼：4966 ~~~~~~~~~**

移除

移除

- Don't store credit card information in Merchant Websites

Tips …

- Apps
    - Review Security & Privacy
    - Set transaction Passcode
    - Set the Maximum Transaction Amount

Tips …

- Use Up-to-Date version of …
  - Apps
  - Browsers
  - OS (Mobile, Desktop)

- Anti-malware tool

Tips …

- Data / Identity Protection
  - email address
  - mobile phone number
  - remote voice mail access
  - remote call forward
  - internet call forward
  - date of birth

Tips …

HOW PASSWORD
LENGTH WINS
THE INTERNET

Passwords 102

intel
Security

- Strong Password

- Don't use "same" password

NIST Password Guidelines 2019

- ==8 character minimum== when a human sets it
- 6 character minimum when set by a system/service
- ==Support at least 64 characters== maximum length
- All ASCII characters (including space) should be supported
- Truncation of the secret (password) shall not be performed when processed
- Check chosen password with known password dictionaries
- Allow at least 10 password attempts before lockout
- ==No complexity requirements==
- ==No password expiration period==
- ==No password hints==
- ==No knowledge-based authentication==
- ==No SMS for 2FA==

LogMeIn Accounts: ws...

Microsoft:wsyoung@w...

Other:wsyoung@proto...

Personal

root-account-mfa-devi...

371 162

Expires in **25** seconds

Copy

Tips...

- 2FA
    - SMS / Voice Callback
    - Apps (OTP)

Tips …

- Activate "locate & wipe"
  - iOS: Find My iPhone
  - Android: Find My Device
  - Security Apps

Tips ...

Beware of **Phishing** Attack

Questions?