Introduction to Information Security

HW1

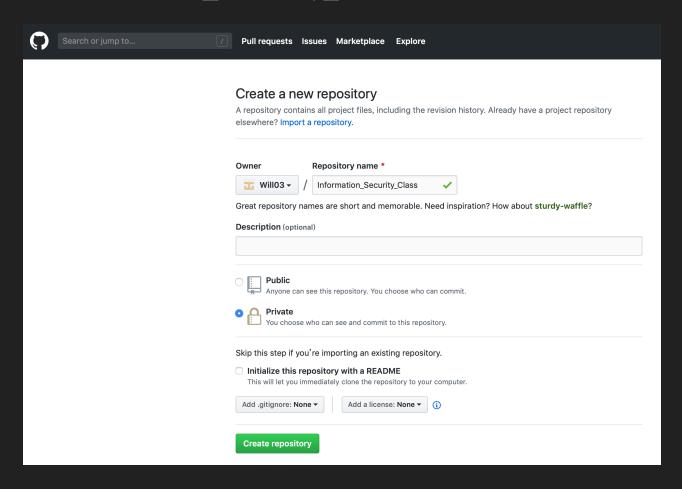
2019/9/26

寫題目之前你需要...

- 有一個 github 帳號
- 一個組員
- 上表單填寫 你們的學號 和 github id
 - 連結: https://forms.gle/oAbxFAwcoBaFRvvv8

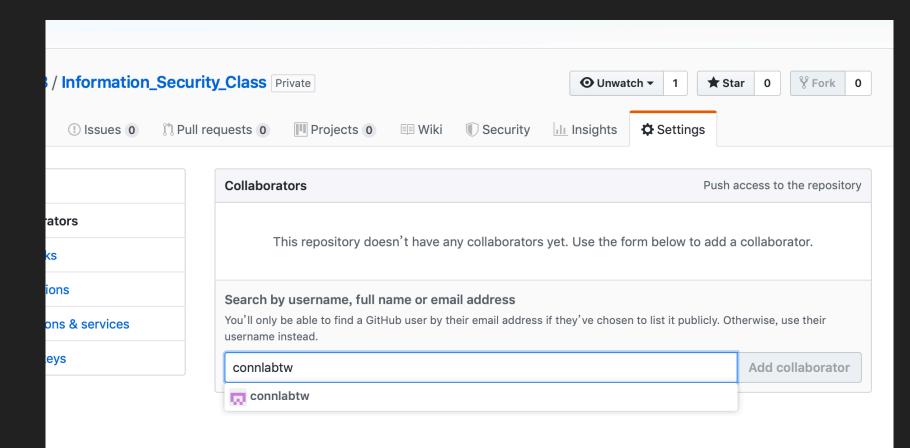
建立 github 專案

Repository name: Information_Security_Class



Collaborator

• 將 connlabtw 加入Collaborator 名單



Programing Language

- C
- Python
- C++

Introduction to Information Security

作業繳交

- 程式碼部分 github
- 說明文件部分 moodle

說明文件部分

- 沒有格式限定
- 證明code是你寫的

分工

四資工四 B10415052 葉力維 Encrypt 四資工四 B10415030 黄智威 Decrypt

開發環境

Ubuntu18.04 Python3

範例

1. Caesar cipher

Input:

Key: 7

Ciphertext: RLLWNVPUNULCLYNPCLBW

Output:

Decrypt: keepgoingnevergiveup

```
def decryptCaesar(key,origin):
ans = ''
mwKey=int(key) % 26
```

Coding Style

Input

```
./Encrypt{suffix} {Cipher} {Key} {Plaintext}
```

./Decrypt{suffix} {Cipher} {Key} {Ciphertext}

Output

{Plaintext} or {Ciphertext}

{Cipher}

caesar

playfair

vernam

row

rail_fence

Example

Python example

Input: ./Encrypt.py caesar 7 keepgoingnevergiveup

Output: RLLWNVPUNULCLYNPCLBW

Input ./Decrypt.py caesar 7 RLLWNVPUNULCLYNPCLBW

Output: keepgoingnevergiveup



Plaintext 請用小寫 Ciphertext 請用大寫 Key 請用大寫

C example

Input: ./Encrypt vernam CON keepgoingnevergiveup

Output: IKJFCKHLIFJTJVTMEC][

Input: ./Decrypt vernam CON IKJFCKHLIFJTJVTMEC][

Output: keepgoingnevergiveup

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Troubleshooting

• 如果輸出結果不是全英文的時候請單就英文的部分做大 小寫轉換即可