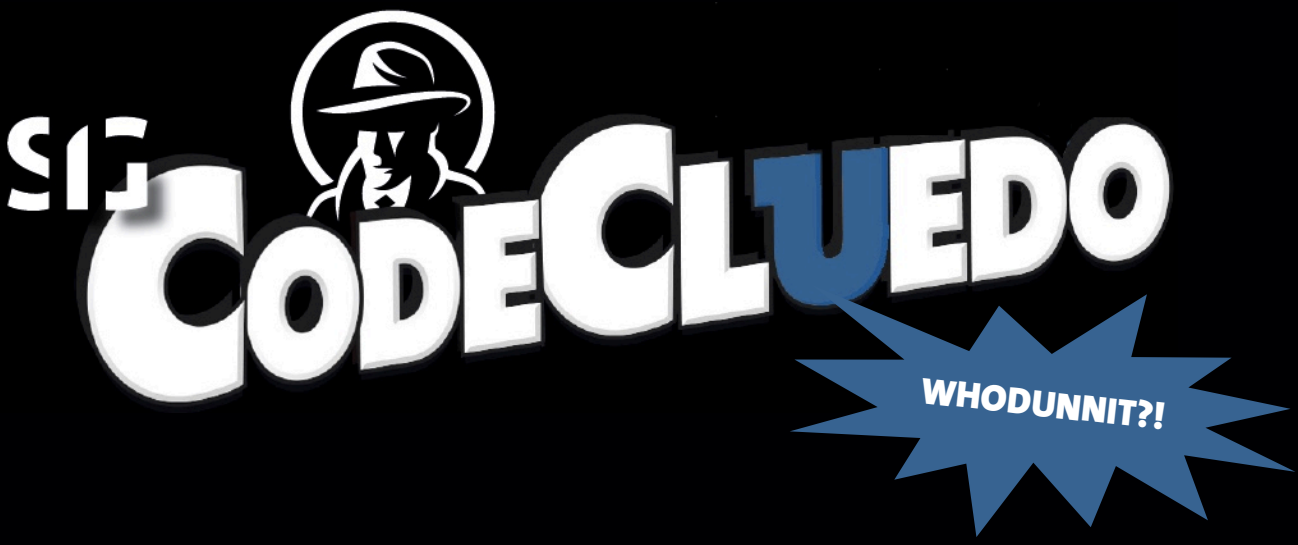


```python
from flask import Flask, url_for, json, request
from pyDes import des
import commands
import md5
import pyDes

app = Flask(__name__)
RANDOM_KEY = md5.new("085ZMVsBnTYuO60K7gfJpGXeik5VZamC").digest(); # Tim (Jo's husband,from IT) created random key
SECURE_DIRECTORY = '/tmp/' # John from Products called last night: marketing can't wait for IT's new directory

def secure_store(filename, suffix, data):
    IV = b"\0\0\0\0\0\0\0\0";
    d = des(RANDOM_KEY[0:8],pyDes.ECB, IV, pad=None, padmode=pyDes.PAD_PKCS5)
    f = open(SECURE_DIRECTORY + '/' + filename + '-' + suffix, 'w')
    f.write(d.encrypt(bytes(data)))
    f.close()
    return 'data stored'

def list_secure_data(path): return commands.getstatusoutput('ls ' + SECURE_DIRECTORY + '/' + path)[1]

@app.route('/')
def api_root(): return 'Welcome to employee data storage api'

@app.route('/employee')
def api_employee():
    # Jo(Marketing) needs social security nr temporarily in next demo
    s = {"list": lambda: list_secure_data(request.args['ssn']),
         "add": lambda: secure_store(request.args['ssn'], request.args['email'],
             request.args['data'])}
    return s.get(request.args['cmd'], lambda: "no such command")()

if __name__ == '__main__': app.run()
```

Software Improvement Group (SIG) analyses code for weaknesses and then diagnoses these to find root causes: much like a game of Cluedo. Whodunnit? Was it the CEO with the tight deadline in the board room, or was it the lead developer with the selfmade crypto in the home office?

Sharing of this document is allowed, but not partially.

SIG