

Security Bug

Contract

```
contract Example {
    address public owner;
    string private mySecret;
    constructor {
        owner = msg.sender;
    function setSecret(string secret) public {
        require(msg.sender == owner);
       mySecret = secret;
    function getSecret() public returns (string) {
        require(msg.sender == owner);
        return mySecret;
```

Security Bug



```
contract Example {
    address public owner;
    string private mySecret;
    constructor {
        owner = msq.sender;
    function setSecret(string secret) public {
        require(msg.sender == owner);
        mySecret = secret;
    function getSecret() public returns (string) {
        require(msg.sender == owner);
        return mySecret;
```

Hint: who would be able to read *mySecret*?

Security Bug



```
Any variable is readable on the public
                                                  Ethereum blockchain.
contract Example {
                                      Declaring a variable private only restricts the
    address public owner;
                                      automatic creation of getter for that variable,
    string private mySecret;
                                                   but does not hide it.
    constructor {
        owner = msq.sender;
    function setSecret(string secret) public {
        require (msg.sender == owner);
        mySecret = secret;
    function getSecret() public returns (string) {
        require(msg.sender == owner);
        return mySecret;
```

Hint: who would be able to read *mySecret*?