Project D: Accessing Blockchian Events 報告

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(a) Code

```
var fs = require('fs');
const Web3 = require('web3');
const quorumjs = require("quorum-js");
const web3 = new Web3("http://foodchain-node3.etherhost.org:22003/");
quorumjs.extend(web3);
function getContractAbi() {
    var abi_file = fs.readFileSync('food3.abi','utf-8');
    const CONTRACT_ABI = JSON.parse(abi_file);
    return CONTRACT_ABI;
}
function getContractAdd() {
    /* Load contract address */
const CONTRACT_ADDRESS = "0xA4fafbE0ea4823e262b4916EF93CC5A6306A5DBc";
    return CONTRACT_ADDRESS;
}
function eventQuery(){
    const CONTRACT_ABI = getContractAbi();
    const CONTRACT_ADDRESS = getContractAdd();
    const contract = new web3.eth.Contract(CONTRACT_ABI, CONTRACT_ADDRESS);
    const START_BLOCK = 0;
    const END_BLOCK = 5000;
    contract.getPastEvents("FoodSection",
        fromBlock: START_BLOCK,
        toBlock: END_BLOCK // You can also specify 'latest'
    .then(events => {
        for (i = 0; i < events.length; i++) {</pre>
             if(events[i]['returnValues']['logno']==7477){
                 console.log(events[i]);
        }
    })
    .catch((err) => console.error(err));
eventQuery();
```

(b) Result for logno = 7477

我設定 START_BLOCK 為 0, END_BLOCK 為 5000,

把其中 logon 為 7477 的 print 出來得到兩筆(助教檢查時

可以自行設定 BLOCK 數量)

```
S C:\Users\Arrow Huang\Desktop\區塊鍵D> node .\r08922156.js
 address: '0xA4fafbE0ea4823e262b4916EF93CC5A6306A5DBc',
 blockNumber: 4910, transactionHash: '0x921ffdc20b19e2fdedbd276ad0dbd9ab01e35254ed9687c488784654cd66fb83',
 transactionIndex: 10,
 blockHash: '0x345065afe8913b6a1a2fbc9d592928b9ad0768e16bd408a9a84cb30edf3f34ac',
 logIndex: 10,
 removed: false,
 returnValues: Result {
    '0': '7477',
'1': '綠茶 [自拍保證來源]',
'2': '0x0bf44392b580ae1f85cad79b30b59cfed1a58e0dce398bf5b0658c0c57429503',
'3': '0x0bf44392b580ae1f85cad79b30b59cfed1a58e0dce398bf5b0658c0c57429503',
   logno: '7477',
title: '緣茶 [自拍保證來源]',
begin: '0x0bf44392b580ae1f85cad79b30b59cfed1a58e0dce398bf5b0658c0c57429503',
   end: '0x0bf44392b580ae1f85cad79b30b59cfed1a58e0dce398bf5b0658c0c57429503
 event: 'FoodSection',
signature: '0x37eb6fd92b9911b83a4c49729ff496687bcbbdb623a777de2f5b7bb87246d544',
    topics: [
       0x0bf44392b580ae1f85cad79b30b59cfed1a58e0dce398bf5b0658c0c57429503
 address: '0xA4fafbE0ea4823e262b4916EF93CC5A6306A5DBc',
 blockNumber: 4955, transactionHash: '0x5697fd552fe750aaae1b21d782f6ae39e3f55ff7f81b5b6a6ed8cd0fc2230821',
 transactionIndex: 8,
 blockHash: '0x917963625cf20ed3d5b002b3c876a440f5c655acd29e540e9b94fc6539ed7402',
 logIndex: 8,
 removed: false,
 returnValues: Result {
   '0': '7477',
'1': '緣茶 [進貨作業]',
'2': '0x2dd8ffc94a312541743620338dd68475f38ea457ed27fd866c69f29a585ead47',
   '3': '0x17000bec4256bbe50a8c97969dd4207304bb5c7a72a5bd533dc459bcf8d1198
   logno: '7477',
title: '絲茶 [進貨作業]',
begin: '0x2dd8ffc94a312541743620338dd68475f38ea457ed27fd866c69f29a585ead47',
   end: '0x17000bec4256bbe50a8c97969dd4207304bb5c7a72a5bd533dc459bcf8d1198e
 signature: '0x37eb6fd92b9911b83a4c49729ff496687bcbbdb623a777de2f5b7bb87246d544',
   data: '0x00
   topics: [
PS C:\Users\Arrow Huang\Desktop\區塊鏈D> [
```