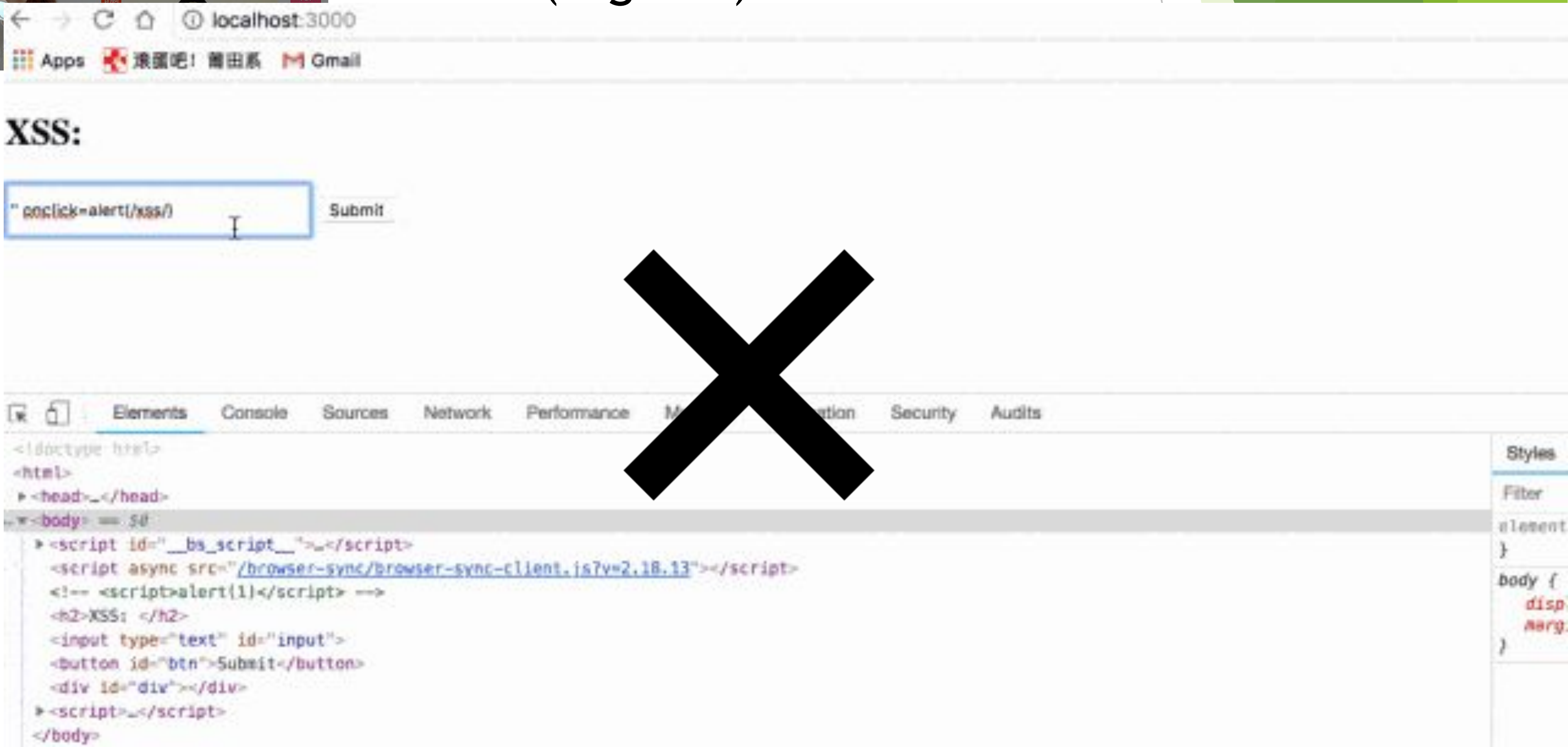
Team dietCoke

Pop-up
ads

Malicious Attack
(e.g.XSS)



XSS:

" onclick=alert(/xss/)

```
<!doctype html>
<html>
 ▶<head>…</head>
…▼<body> == $0
  ▶<script id="__bs_script__">…</script>
   <script async src="/browser-sync/browser-sync-client.js?v=2.18.13"></script>
   <!-- <script>alert(1)</script> -->
   <h2>XSS: </h2>
   <input type="text" id="input">
   <button id="btn">Submit</button>
   <div id="div"></div>
  ▶<script>…</script>
 </body>
```

```
element
}
body {
  disp
  marg
}
```

Concept/ Idea:

- Main goal: Increase web surfing security by creating a blockchain of secure and trusted websites

Why do we use blockchain?

a) SECURITY:

- Increased Security from private blockchain
- Prevent users to be redirected to malicious websites from their current webpage

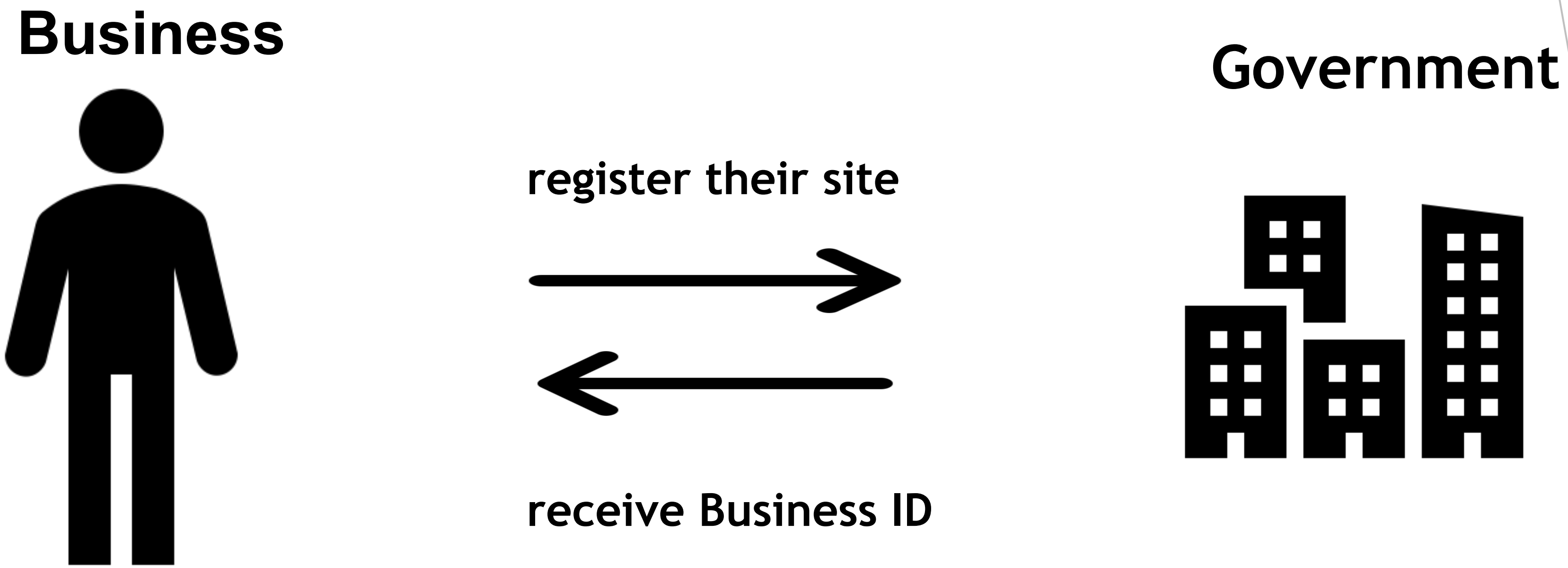
b) COST/ REMOVAL OF THIRD PARTY :

- Businesses and their legality are authenticated by the government, no longer requiring a third party security certifications

Design

- Government registration
- IOTA registration
- Adding a new website
- Website redirects

Government Registration



Business

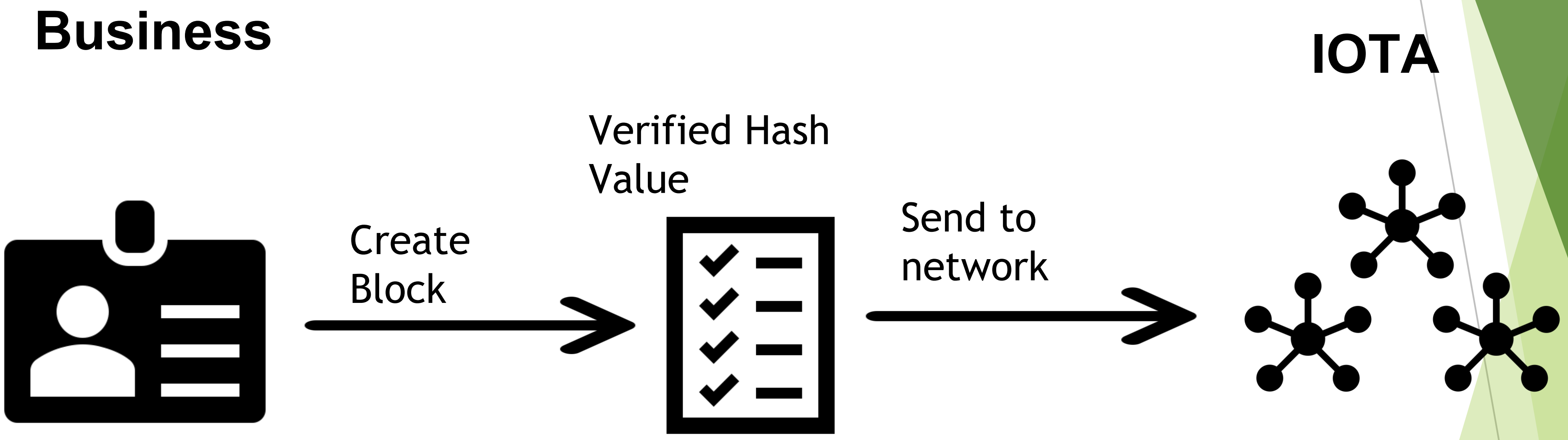
register their site

receive Business ID

Government

<u>No 3rd party involvement</u>

IOTA REGISTRATION



Business

Create Block

Verified Hash Value

Send to network

IOTA

Website 1

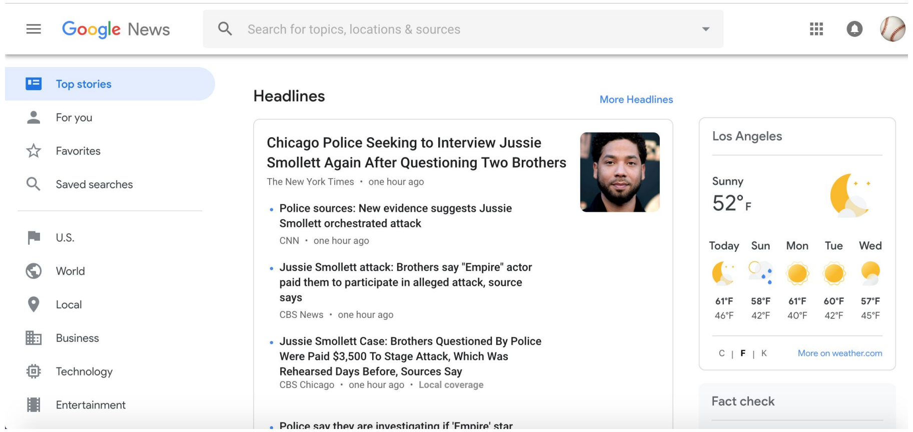
Website 2

Website 3

Website 4

Website 5

Users can access all these websites, which are secured by the blockchain.



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Headlines

More Headlines

Chicago Police Seeking to Interview Jussie Smollett Again After Questioning Two Brothers
The New York Times • one hour ago

- Police sources: New evidence suggests Jussie Smollett orchestrated attack
  CNN • one hour ago
- Jussie Smollett attack: Brothers say "Empire" actor paid them to participate in alleged attack, source says
  CBS News • one hour ago
- Jussie Smollett Case: Brothers Questioned By Police Were Paid $3,500 To Stage Attack, Which Was Rehearsed Days Before, Sources Say
  CBS Chicago • one hour ago • Local coverage
- Police say they are investigating if 'Empire' star

Los Angeles

Sunny
52° F

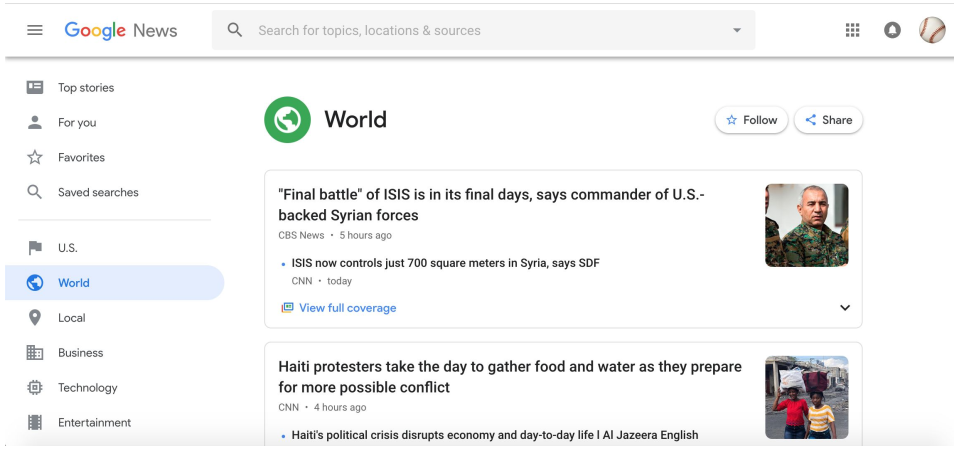
Today	Sun	Mon	Tue	Wed
61°F	58°F	61°F	60°F	57°F
46°F	42°F	40°F	42°F	45°F

C | F | K   More on weather.com

Fact check

Address is included

Address is NOT included



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World

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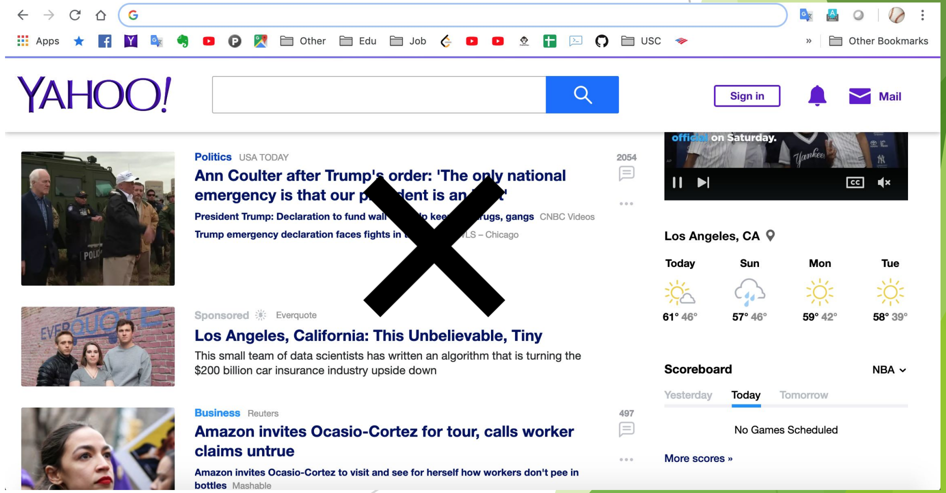

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Today	Sun	Mon	Tue
61° 46°	57° 46°	59° 42°	58° 39°

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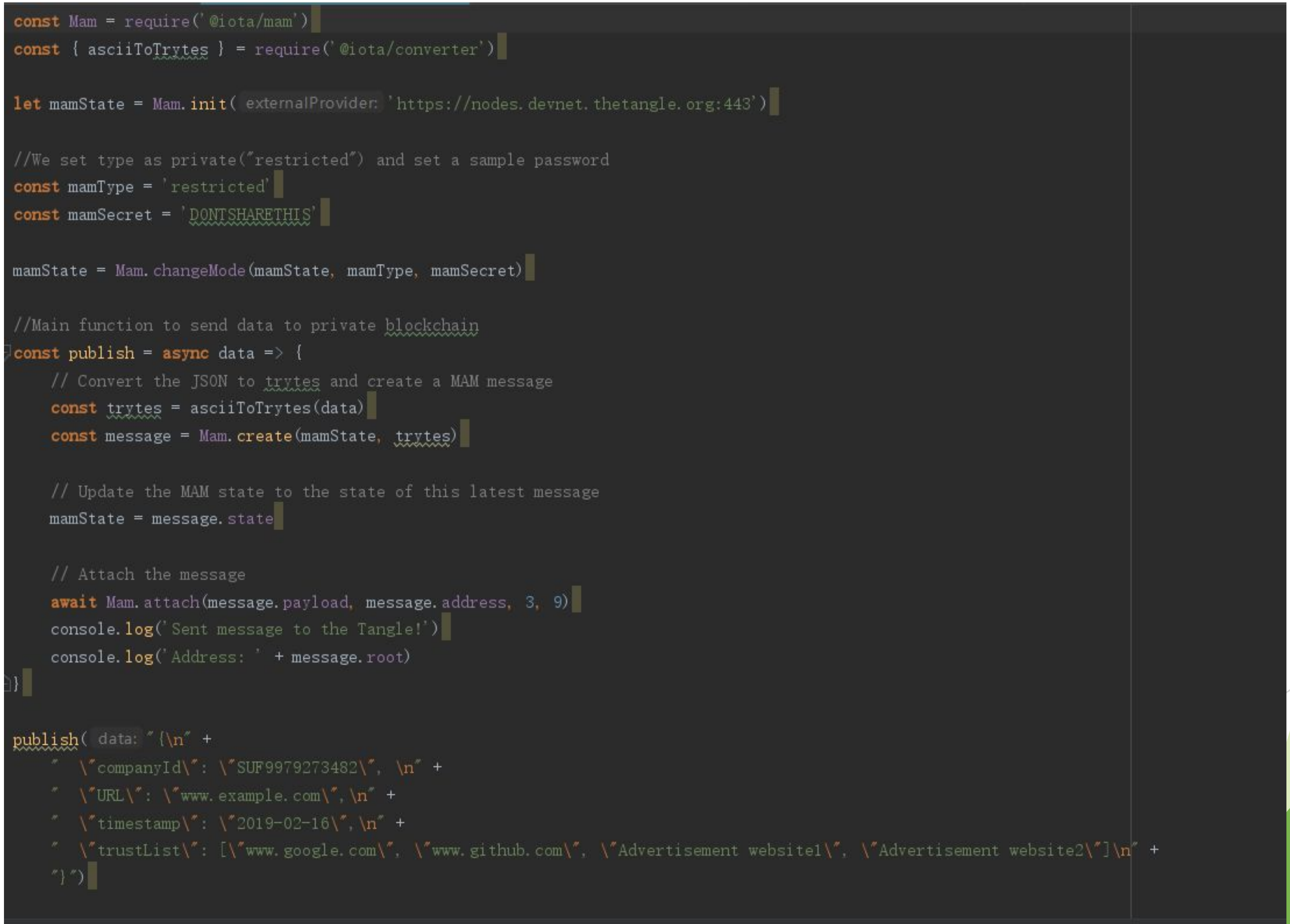
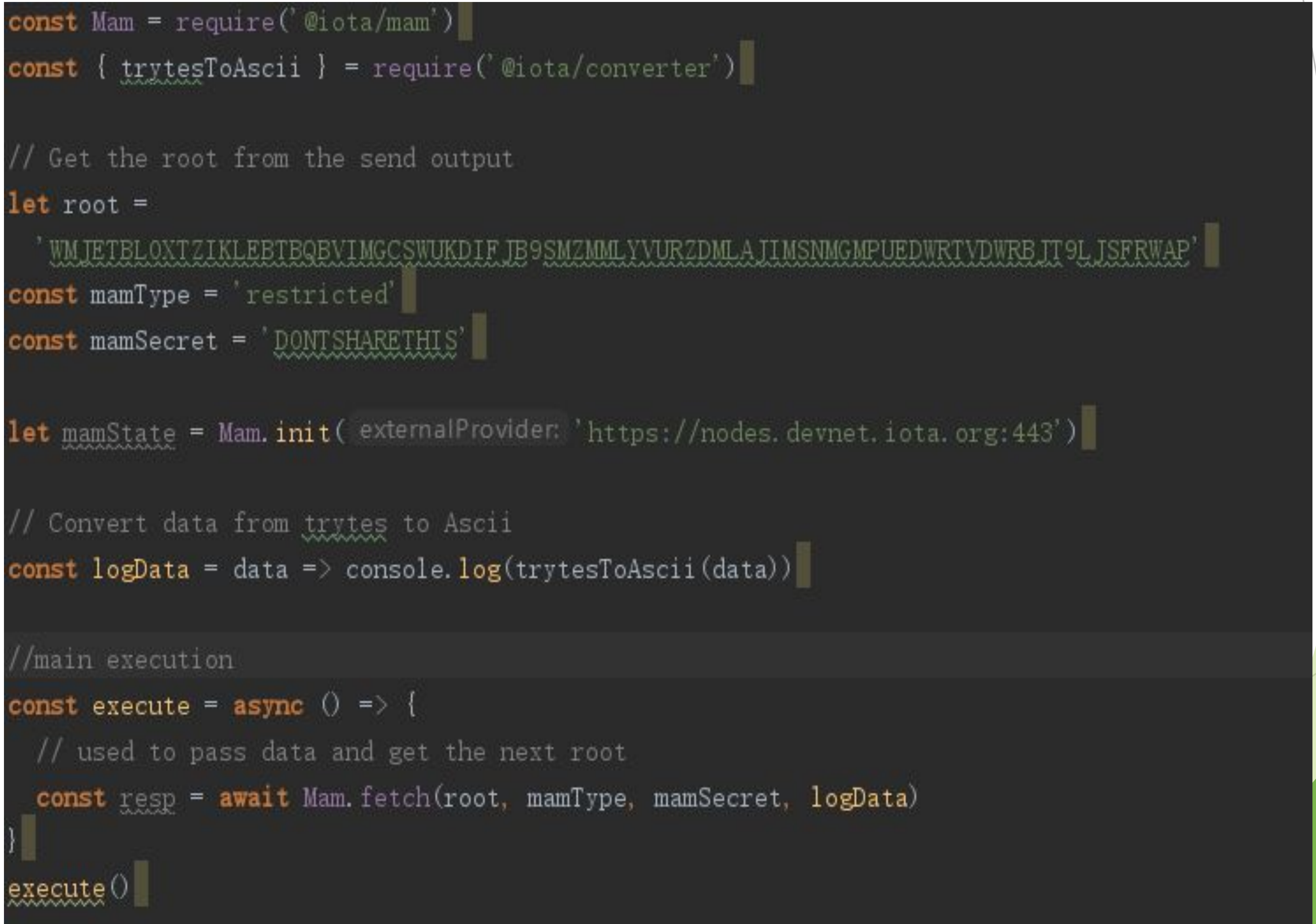
Blockchain code: networkSecuritySend.js



```
const Mam = require('@iota/mam')
const { asciiToTrytes } = require('@iota/converter')

let mamState = Mam.init( externalProvider: 'https://nodes.devnet.thetangle.org:443')

//We set type as private("restricted") and set a sample password
const mamType = 'restricted'
const mamSecret = 'DONTSHARETHIS'

mamState = Mam.changeMode(mamState, mamType, mamSecret)

//Main function to send data to private blockchain
const publish = async data => {
    // Convert the JSON to trytes and create a MAM message
    const trytes = asciiToTrytes(data)
    const message = Mam.create(mamState, trytes)

    // Update the MAM state to the state of this latest message
    mamState = message.state

    // Attach the message
    await Mam.attach(message.payload, message.address, 3, 9)
    console.log('Sent message to the Tangle!')
    console.log('Address: ' + message.root)
}

publish( data: "{\n" +
    "  \"companyId\": \"SUF9979273482\",  \n" +
    "  \"URL\": \"www.example.com\",\n" +
    "  \"timestamp\": \"2019-02-16\",\n" +
    "  \"trustList\": [\"www.google.com\", \"www.github.com\", \"Advertisement website1\", \"Advertisement website2\"]\n" +
    "}")
```

Blockchain code: networkSecurityFetch.js



```
const Mam = require('@iota/mam')
const { trytesToAscii } = require('@iota/converter')

// Get the root from the send output
let root =
  'WMJETBLOXTZIKLEBTBQBVIMGCSWUKDIFJB9SMZMMLYVURZDMLAJIMSNMGMPUEDWRTVDWRBJT9LJSFRWAP'
const mamType = 'restricted'
const mamSecret = 'DONTSHARETHIS'

let mamState = Mam.init( externalProvider: 'https://nodes.devnet.iota.org:443')

// Convert data from trytes to Ascii
const logData = data => console.log(trytesToAscii(data))

//main execution
const execute = async () => {
  // used to pass data and get the next root
  const resp = await Mam.fetch(root, mamType, mamSecret, logData)
}
execute()
```

What’s next?

We plan to upload the certification number and domain name into the public chain so that anyone could see and verify that the website is safe.