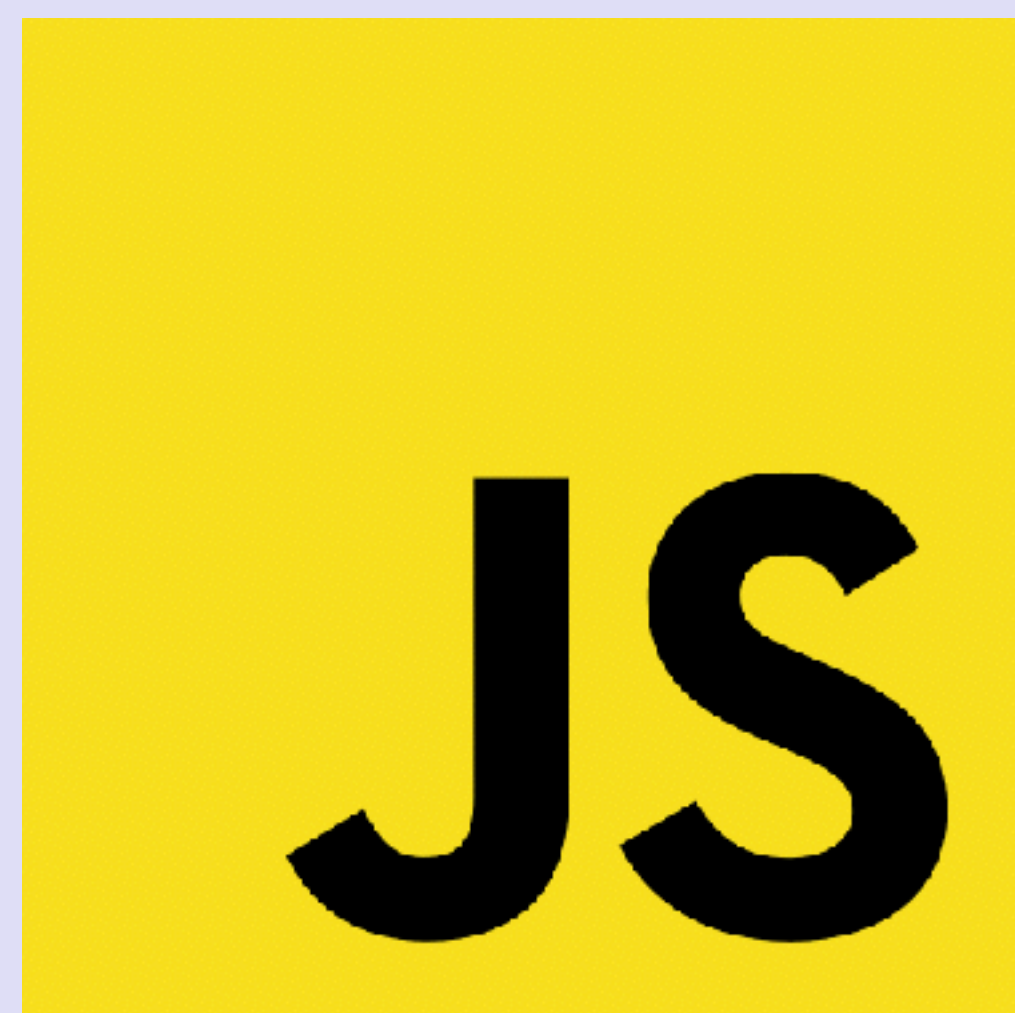


IOTA TUTORIAL 21

CryptoJS



cryptography

decryption

cipher

padding

public

message

algorithm

hash

keys

encryption

INTRO

- In this video I will explain what the Javascript CryptoJS library is and what the origin is of this library.
- But in this video I will not explain how to use the CryptoJS library.

CRYPTOJS LIBRARY

- CryptoJS is a collection of standard and secure cryptographic algorithms implemented in JavaScript using best practices and patterns. They are fast and they have a consistent and simple interface.
- Jeff Mott is the original author of the crypto-js library which was one of the many code projects hosted by the Google Code Project Hosting Service.
- The Google Code Project Hosting Service was turned down in early 2016.
- The many code projects can still be found at the Google Code Archive.
<https://code.google.com/archive/>

CRYPTOJS LIBRARY

- Jeff Mott's CryptoJS library can be found at:
<https://code.google.com/archive/p/crypto-js/>
- The CryptoJS last version is v3.1.2 and last updated in Jan 15, 2013.
See: <https://code.google.com/archive/p/crypto-js/downloads>
- How to use the CryptoJS functions, see:
<https://code.google.com/archive/p/crypto-js>
https://code.google.com/archive/p/crypto-js/wikis/QuickStartGuide_v3beta.wiki
- It seems that this library is not maintained by Jeff Mott anymore.

CRYPTOJS FORKS

- Jeff Mott's CryptoJS library has been forked by several developers and can be found at Github:
 - <https://github.com/brix/crypto-js>
 - <https://github.com/sytelus/CryptoJS>
 - <https://github.com/gwjjeff/cryptojs>
- The fork created by Evan Vosberg (brix/crypto-js) is still maintained.

GITHUB.COM/BRIX/CRYPTO-JS

- The (Brix) CryptoJS library can be found at:
<https://github.com/brix/crypto-js>
- An npm module has been created for the (Brix) CryptoJS library which can be found at: <https://www.npmjs.com/package/crypto-js>
- To include all CryptoJS libraries in JavaScript:

```
var CryptoJS = require( "crypto-js" );
```
- The (Brix) CryptoJS library is also available in the free and open source web front-end resource Content Delivery Network (CDN):
<https://cdnjs.com/libraries/crypto-js>

CRYPTOJS LIBRARY IN DISTRIBUTED LEDGER PROJECTS

- The (Brix) CryptoJS library are used by several Distributed Ledger projects, such as:
 - IOTA (in the `iota.lib.js` library)
<https://github.com/iotaledger/iota.lib.js/blob/master/package.json>
 - Ethereum (in the `web3js` library)
<https://github.com/ethereum/web3.js/blob/develop/package.json>
- Understanding how the CryptoJS library works would be beneficial to you if you are an IOTA or Ethereum front-end developer.
- The CryptoJS library has no asymmetric key algorithms, such as RSA.

HOW TO USE CRYPTOJS

- https://code.google.com/archive/p/crypto-js/wikis/QuickStartGuide_v3beta.wiki
- <https://github.com/brix/crypto-js>
- <https://www.davidebarranca.com/2012/10/crypto-js-tutorial-cryptography-for-dummies/>