Topic:
We would like you to write a “Bitcoin playground” web app that supports the following operations:

1. Generate a random mnemonic words following BIP39 standard
2. Generate a Hierarchical Deterministic (HD) Segregated Witness (SegWit) bitcoin address from a given seed and path
3. (Bonus) Generate an n-out-of-m Multisignature (multi-sig) Pay-To-Script-Hash (P2SH) bitcoin address, where n, m and public keys can be specified

You can use any open source library in this project. Please state the major 3rd party libraries you have used in the README documentation and publish your source code on a public repository on GitHub and share the link to us when you finish.

Requirements:

- UI/UX
  - Is it easy to use?
- Correctness
  - Is the generated address correct?
- Security
  - Is it safe for users to use?
- Coding
  - Does it follow any practices?
- Testing
  - Are there any test cases coverage?
- Creativity
  - Add features you can think of on top of the basic requirements

Reference:
BIP39: https://github.com/bitcoin/bips/blob/master/bip-0039.mediawiki
BIP44: https://github.com/bitcoin/bips/blob/master/bip-0044.mediawiki
Mnemonic Code Converter by iancoleman: https://iancoleman.io/bip39/

Time: 2 weeks