

How to Create Your Own Basic Web3 Wallet

Introduction

Step 1: Create a Folder for Your Project

1. Create a new folder:
 - Right-click in an empty space and select "New" > "Folder."
 - Name it "Aleixwallet"
2. Open the folder:
 - Double-click "Aleixwallet" to open it.

Step 2: Create the Web Page File (index.html)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Aleixwallet</title>
</head>
<body>
  <h1>Aleixwallet</h1>
  <button onclick="generateWallet()">Generate Wallet</button>
  <p>Public Address: <span id="address"></span></p>
  <p>Private Key: <span id="privateKey"></span></p>
  <p>Seed Phrase: <span id="mnemonic"></span></p>
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/ethers/5.7.2/ethers.umd.mi
n.js"></script>
    <script src="index.js"></script>
  </body>
</html>
```

Save the file as "index.html" inside the "Aleixwallet" folder.

Step 3: Create the JavaScript File (index.js)

1. Open a new document in your text editor.

```
function generateWallet() {
  const Aleixwallet = ethers.Wallet.createRandom();
  document.getElementById("address").innerText =
Aleixwallet.address;
  document.getElementById("privateKey").innerText =
Aleixwallet.privateKey;
  document.getElementById("mnemonic").innerText =
Aleixwallet.mnemonic.phrase;
}
```

2. Save the file as "index.js" inside the "Aleixwallet" folder.

Step 4: Install a Local Server

To test the page properly, we need a simple local server.

1. Install Node.js:
 - Visit nodejs.org.
 - Download and install the LTS version.
2. Open a terminal or command prompt:
 - On Windows: Press Windows + R, type "cmd," and press Enter.
 - On Mac: Open "Terminal."
3. Navigate to the "Aleixwallet" folder:
 - Run: `cd Path/Aleixwallet` (replace "Path" with your actual folder path).
4. Install `http-server`:
 - Run: `npm install -g http-server`
5. Start the server:
 - Run: `http-server`
 - Note the URL displayed (e.g., `http://localhost:8080`).

Step 5: Test Your Wallet

1. Open your web browser.
2. Go to `http://localhost:8080`.
3. Click the "Generate Wallet" button.
4. View your generated wallet details:
 - Public Address
 - Private Key (keep this secret!)
 - Seed Phrase (backup your wallet)

Step 6: Save Your Details

- Copy and store your wallet details securely.
- The "Private Key" and "Seed Phrase" should never be shared.

Optional: Connect to a Test Network

To interact with the Ethereum blockchain, you can connect to the Sepolia test network.

1. Modify `index.js` to include:

```
const provider = ethers.getDefaultProvider("sepolia");
const connectedAleixwallet = Aleixwallet.connect(provider);
provider.getBalance(Aleixwallet.address).then((balance) => {
  console.log("Balance:", ethers.utils.formatEther(balance), "ETH");
});
```

2. Request test ETH from [Sepolia Faucet](#).

Troubleshooting

- If the button doesn't work:
 - Ensure `index.html` and `index.js` are in the same folder.
 - Double-check the `http-server` is running.