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EXPLORING MYETHERWALLET

Lab Assignment 5

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Contents

1	Objective	2
2	Theory 2.1 What is MyEtherWallet (MEW)? 2.2 What is Ganache?	
3	FAQs 3.1 Glossary	2
R	eferences	4

1 Objective

This document aims to guide users through the process of setting up MyEtherWallet (MEW) and connecting it to the Ganache network. It includes step-by-step instructions on wallet setup, network configuration, importing accounts, sending transactions, and acquiring test Ether.

2 Theory

2.1 What is MyEtherWallet (MEW)?

MyEtherWallet (MEW) is a free, open-source, client-side interface that allows users to interact with the Ethereum blockchain. It enables users to create wallets, send and receive Ether, and manage ERC-20 tokens. Unlike centralized exchanges, MEW gives users full control over their private keys.

2.2 What is Ganache?

Ganache is a personal Ethereum blockchain used for testing and development. It provides an isolated environment where developers can deploy and test smart contracts, simulate transactions, and debug applications without interacting with the main Ethereum network.

3 FAQs

1. What is MyEtherWallet and how to set it up?

MyEtherWallet (MEW) is a non-custodial wallet that allows users to manage Ethereum-based assets. To set it up:

- (a) Visit MyEtherWallet's official website.
- (b) Click on "Create a New Wallet."
- (c) Choose a method to create a wallet (MEW wallet app, Keystore file, etc.).
- (d) Securely store your private key or recovery phrase.
- (e) Access your wallet using the chosen method.

2. How to connect MyEtherWallet to the Ganache network?

To connect MEW to Ganache:

- (a) Open Ganache and note the RPC server URL (default: http://127.0.0.1:7545).
- (b) Open MEW and go to "Networks."
- (c) Click "Add Custom Network."
- (d) Enter the following details:
 - Network Name: Ganache
 - New RPC URL: http://127.0.0.1:7545
 - Chain ID: 1337 (default for Ganache)
 - Currency Symbol: ETH
- (e) Save and select the Ganache network.

3. How to import a Ganache Ethereum account into MyEtherWallet?

- (a) Open Ganache and copy the private key of any pre-funded account.
- (b) Open MEW and go to "Access My Wallet."
- (c) Choose the "Private Key" method and paste the copied key.
- (d) Click "Access Wallet" to import the account.

4. How to send a transaction to the Ganache network using MyEtherWallet?

- (a) Ensure you are connected to the Ganache network in MEW.
- (b) Go to the "Send Transaction" section.
- (c) Enter the recipient's address (another Ganache account).
- (d) Specify the amount of ETH to send.
- (e) Set the gas limit (default: 21000 for simple transfers).
- (f) Click "Send" and confirm the transaction.
- (g) The transaction should appear in Ganache's transaction log.

5. How to get more Ether on the Ganache network for testing purposes?

Ganache provides pre-funded accounts with test Ether. To get more:

- (a) Restart Ganache to reset accounts and replenish Ether.
- (b) If developing a smart contract, modify the Ganache configuration to allocate more initial Ether.
- (c) Use the built-in Ganache console to manually assign Ether to an address.

3.1 Glossary

- **Ethereum:** A decentralized, open-source blockchain that supports smart contracts and decentralized applications (DApps).
- **Gas:** A unit of measurement for computational work required to execute transactions or smart contracts on Ethereum.
- **Ganache:** A personal Ethereum blockchain used for testing and development, simulating a real Ethereum network.
- **MEW** (**MyEtherWallet**): A free, open-source, client-side interface for managing Ethereum wallets and transactions.
- **Private Key:** A secret key used to sign transactions and prove ownership of an Ethereum account.
- **RPC** (**Remote Procedure Call**): A protocol that allows interaction with a blockchain network by sending requests to a node.

References

- [1] MyEtherWallet Documentation. Available at: https://www.myetherwallet.com/
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