

## **DA51 Lab Session 6: Ethereum Decentralized Application**

### **Description:**

This lab session introduces Ethereum decentralized applications (Dapps) and the Truffle Suite for developing them. It covers setting up the development environment, including Node.js, npm, and Truffle, and explains the purpose of various tools like Ganache, web3.js, MetaMask, Lite-Server, and Gulp. The session then guides students through creating a Truffle project using the Pet-Shop box and understanding its directory structure.

Truffle framework is used to develop a smart contract for a pet adoption application, including writing the contract, compiling and migrating it to a local blockchain, testing it, and creating a user interface. Boilerplate HTML is used to speed up the development of the client-side UI, and MetaMask Wallet is configured to interact with the local blockchain. Finally, the lite server is set up to serve the front-end files.

All questions in this Lab Session are answered in the subject.