

Practical Lab Exercises

Lab- Node

Web Programming (F28WP)

Introduction

In this lab, you'll further develop your understanding of NodeJS.

1.1 NodeJS Command Prompt

Go to the command prompt and type 'node'.

This should launch the node.exe interpreter in the command prompt directly.

You can then directly type and test out node commands in the command prompt.

```
C:\>node  
>var aa = "test";  
>undefined  
>aa  
'test'
```

To exit the node interpreter in the terminal, type 'Ctrl C' twice.

Just to note, the 'undefined' returned when executing instructions, is to inform you that no return was given from the execution.

2.1 NodeJS Sandbox (<https://codesandbox.io/>)

Code Sandbox (<https://codesandbox.io/>) is an online editor which you can use to try out and explore node examples.

For example, to see a simple nodejs example configured and for you to look at goto:

<https://codesandbox.io/s/node>

However, you should read through the examples and tutorials and implement a simple node system yourself from scratch so you comprehend and understand the syntax and workings (e.g., http output and possibly some simple sockets and other packages available to node)

Some of the examples on code sandbox include, chat clients, shared drawing applications.

3.1 NodeJS Socket.io

Minimal client/server chat app

For the socket.io, review the simple example on codesandbox.io – attempt to modify the core implementation (e.g., if certain words are entered, such as, 'hello', the server will highlight them in red/blue):

<https://codesandbox.io/s/socketio-f5m03>

Core elements to identify are:

1. require
2. init
3. integrates into Node.js

3.1 NodeJS Sandbox Examples

Try out various demos, for example, simple 2D multiplayer game:

<https://codesandbox.io/s/2vmx2l1x9n>

However, be aware of dependences, assets and versions, get into the good practice of reading around and experimenting - looking at other examples for inspiration and insights (avoid simply 'copying' or plagiarising).