**EXPRESS JS**

**Overview**

Basics

ExpressJS is a web framework for nodejs. It uses the MVC pattern.

To create an expressjs application:

1. Mkdir && cd in to new directory
2. Npm init
3. Npm install express –save
4. Npm install body-parser –save

In your entry js file (i.e. app.js, index.js…):

Const express = require(‘express’);

Const bodyParser = require(‘body-parser’);

Const path = require(‘path’) // core module so does not need npm install

Const app = express();

// routes

App.get(‘/’, (req, res) => {

Res.send(‘Hello world’);

// can also use res.json() to send json to the route

})

// start server

App.listen(3000, () => {

Console.log(‘server started’);

})

Middleware

Middleware is a computer software that connects software components or applications.

The software consists of a set of services that allow multiple processes running on one or more machines to interact.

Const logger = function(req, res, next) {

Console.log(‘logging….’);

Next();

}

App.use(logger);

Body parser middleware

App.use(bodyParser.json());

App.use(bodyParser.urlencoded({extended: false});

Set static path

To use static files, i.e. images, css…

App.use(express.static(path.join(\_\_dirname, ‘public’)));

// where *public* is the name of the dir with all static files located

An index.html file in the public folder will now render automatically.

*\* Use nodemon to prevent having to refresh the server constantly after making changes \**

Template engine

Npm install ejs –save

In entry js file (app.js):

App.set(‘viewengine’, ‘ejs’); // state which engine is being used

App.set(‘views’, path.join(\_\_dirname, ‘views’)); // name of views folder

In views/index.ejs:

<h1>Hello world</h1>

In app.js:

App.get(‘/’, function(req, res) {

Res.send(‘index’); // knows to look in folder for index.ejs file

})

Post requests

<form method=”post” action=”/users/add”>

// rest of form

</form>

App.js:

App.post(‘/users/add’, (req, res) => {

Console.log(‘form submitted’);

})

To access the request parameters: *req.body.nameofinput*

MongoDB

1. Sudo apt install mongodb
2. Sudo service mongodb start
3. Mongo // type in terminal

Basic commands:

* Show dbs
* Use dbname // creates db if typed in name does not exist
* Use customerapp
* Db.createCollection(‘users’) // table
* Show collections // view all tables
* Db.users.insert([{name: “Ali”},

{name: “Lauren”}]) // insert to users collection

* Db.users.find // view records in users table

To bring the DB to the express js app:

* Npm install mongojs

In app.js:

Const mongojs = require(‘mongojs’);

Const db = mongojs(connectionString, [collections])

// connection string is DB name e.g. ‘customerapp’

// collections are a list of tables to use from the DB

In post route:

Db.users.find(function(err, docs) {

Console.log(docs);

Res.render(‘index’, {users: docs});

}); // where docs is data from t able

*Look at mongojs website documentation for more queries*