To Show **Helo world** in **Visual Studio** By **Express(First Express work)**

1. Create a Visual studio Application>Basic Node.Js Express 4 Application(Javascript)>Next>Create
2. Check app.js file:

'use strict';

var debug = require('debug')('my express app');

var express = require('express');

var path = require('path');

var favicon = require('serve-favicon');

var logger = require('morgan');

var cookieParser = require('cookie-parser');

var bodyParser = require('body-parser');

**var routes = require('./routes/index');//index.js file in routes folder**

var users = require('./routes/users');

var app = express();

// view engine setup

app.set('views', path.join(\_\_dirname, 'views'));

app.set('view engine', 'pug');

// uncomment after placing your favicon in /public

//app.use(favicon(\_\_dirname + '/public/favicon.ico'));

app.use(logger('dev'));

app.use(bodyParser.json());

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

app.use(cookieParser());

app.use(express.static(path.join(\_\_dirname, 'public')));

**app.use('/', routes);**

app.use('/users', users);

// catch 404 and forward to error handler

app.use(function (req, res, next) {

var err = new Error('Not Found');

err.status = 404;

next(err);

});

// error handlers

// development error handler

// will print stacktrace

if (app.get('env') === 'development') {

app.use(function (err, req, res, next) {

res.status(err.status || 500);

res.render('error', {

message: err.message,

error: err

});

});

}

// production error handler

// no stacktraces leaked to user

app.use(function (err, req, res, next) {

res.status(err.status || 500);

res.render('error', {

message: err.message,

error: {}

});

});

app.set('port', process.env.PORT || 3000);

var server = app.listen(app.get('port'), function () {

debug('Express server listening on port ' + server.address().port);

});

1. In Routes/index.js modify the following lines:

'use strict';

var express = require('express');

var router = express.Router();

/\* GET home page. \*/

router.get('/', function (req, res) {

**//res.render('index', { title: 'Express' });**

**res.send("Hello world");**

});

module.exports = router;

1. Right click the project in solution explorer>Properties>Application Port: 8080
2. Run the project

**Second** **Express work-Web Service by Javascript**

1. Create a Visual studio Application>Basic Node.Js Express 4 Application(Javascript)>Next>Create
2. Check app.js file. Remove all previous codes and add the following codes:

var express = require('express');

var app = express();

app.use(express.static(\_\_dirname + '/public'));

app.get('/', function (request, response) {

response.writeHead(200, { 'Content-Type': 'text/html' });

response.write('Hello world');

});

app.get('/SubmitHello', function (request, response) {

response.writeHead(200, { 'Content-Type': 'text/html' });

response.write('Hello ' + request.query.userName + '!<br />');

response.end('Have a great day!');

console.log('Handled request from ' + request.query.userName);

});

var port = 8080;

app.listen(port);

console.log('Listening on port: ' + port);

1. Right click the project in solution explorer>Properties>Application Port: 8080
2. Run the project

**Test the web service(second express) by html client**

1. Right click public folder>Add>New Item>Html Page>Page1.html>OK
2. Codes in page1.html:

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8" />

<title></title>

</head>

<body>

**<form method="get" action="/SubmitHello">**

**Enter Name: <input type="text" name="userName" />**

**<input type="submit" value="Submit" />**

**</form>**

</body>

</html>

1. Run the project. Migrate to <http://localhost:8080/page1.html>. Execute it

**Mid Monthly Exam work(web service by express)**

1. Create a Visual studio Application>Basic Node.Js Express 4 Application(Javascript)>Next>Create
2. Check app.js file. Remove all previous codes and add the following codes:

var express = require("express");//loading built-in module express

var app = express();

app.use(express.static(\_\_dirname + "/public"));

app.get("/", function (req, res) {

res.end("hello world");

});

app.get("/myurl", function (req, res) {

var a = req.query.id;

var b = req.query.location;

var c = req.query.dt;

var d = req.query.rd;

res.end(`ID:${a}, Location: ${b}<br/>Date:${c}, Course: ${d}`);

});

var port = 8080;

app.listen(port);

console.log('Listening(today) on port: ' + port);//powershell

1. Right click the project in solution explorer>Properties>Application Port: 8080
2. Run the project

**Client work**

1. In public folder create an html file named page1.html.
2. Copy jquery file into public folder
3. Codes in page1.html:

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

<head>

<meta charset="utf-8" />

<title></title>

**<script src="jquery-1.12.4.min.js"></script>**

</head>

<body>

<form method="get">

<label for="id">ID</label><input id="id" name="id" type="text" />

<label for="location" />

<select id="location" name="location">

<option>Dhaka</option>

<option>Ctg</option>

</select>

<label for="dt" /><input id="dt" name="dt" type="date" />

<label for="dt" />

<input id="rd" name="rd" type="radio" value="ESAD" />ESAD

<input id="rd" name="rd" type="radio" value="ESAD" />NT

<hr />

<input id="Submit1" type="button" value="submit" />

<div id="result"></div>

</form>

<script>

$(document).ready(function () {

$("#Submit1").click(function () {

u = "http://localhost:8080/myurl?id=" + $("#id").val() + "&location=" + $("#location").val() + "&dt=" + $("#dt").val() + "&rd=" + $("#rd").val();

$.get(u, function (data) {

$("#result").html(data);

});

});

})

</script>

</body>

</html>

1. Run the project. Migrate to <http://localhost:8080/page1.html>. Execute it