### **Express Router**

#### Objectives and Outcomes

In this exercise, you will develop a web server that exports a REST API. You will use the Express framework, and the Express router to implement the server. At the end of this exercise, you will be able to:

* Use application routes in the Express framework to support REST API
* Use the Express Router in Express framework to support REST API

#### Setting up a REST API

* You will continue in the node-express folder and modify the server in this exercise.
* Install body-parser by typing the following at the command prompt:

     npm install body-parser

* Update index.js as shown below:
* . . .
* const bodyParser = require('body-parser');
* . . .
* app.use(bodyParser.json());
* app.all('/nations', (req,res,next) => {
* res.statusCode = 200;
* res.setHeader('Content-Type', 'text/plain');
* next();
* });
* app.get('/nations', (req,res,next) => {
* res.end('Will send all the nations to you!');
* });
* app.post('/nations', (req, res, next) => {
* res.end('Will add the nation: ' + req.body.name + ' with details: ' + req.body.description);
* });
* app.put('/nations', (req, res, next) => {
* res.statusCode = 403;
* res.end('PUT operation not supported on /nations');
* });
* app.delete('/nations', (req, res, next) => {
* res.end('Deleting all nations');
* });
* app.get('/nations/:nationId', (req,res,next) => {
* res.end('Will send details of the nation: ' + req.params.nationId +' to you!');
* });
* app.post('/nations/:nationId', (req, res, next) => {
* res.statusCode = 403;
* res.end('POST operation not supported on /nations/'+ req.params.nationId);
* });
* app.put('/nations/:nationId', (req, res, next) => {
* res.write('Updating the nation: ' + req.params.nationId + '\n');
* res.end('Will update the nation: ' + req.body.name +
* ' with details: ' + req.body.description);
* });
* app.delete('/nations/:nationId', (req, res, next) => {
* res.end('Deleting nation: ' + req.params.nationId);
* });
* . . .
* Start the server and interact with it from the browser/postman.
* Do a Git commit with the message "Express Simple REST".

#### Using Express Router

* Create a new folder named routes in the node-express folder.
* Create a new file named nationRouter.js in the routes folder and add the following code to it:
* const express = require('express');
* const bodyParser = require('body-parser');
* const nationRouter = express.Router();
* nationRouter.use(bodyParser.json());
* nationRouter.route('/')
* .all((req,res,next) => {
* res.statusCode = 200;
* res.setHeader('Content-Type', 'text/plain');
* next();
* })
* .get((req,res,next) => {
* res.end('Will send all the nations to you!');
* })
* .post((req, res, next) => {
* res.end('Will add the nation: ' + req.body.name + ' with details: ' + req.body.description);
* })
* .put((req, res, next) => {
* res.statusCode = 403;
* res.end('PUT operation not supported on /nations');
* })
* .delete((req, res, next) => {
* res.end('Deleting all nations');
* });
* module.exports = nationRouter;
* Update index.js as follows:
* . . .
* const nationRouter = require('./routes/nationRouter');
* app.use('/nations', nationRouter);
* . . .
* Start the server and interact with it and see the result.
* Do a Git commit with the message "Express Router".

#### Conclusions

In this exercise, you used the Express framework and Express router to build a server supporting a REST API.