# a Node.js and Express

Backend: implementing functionality on the server side of the stack.  
*16.13.2* of Node.js. You can check the version by running node -v in the command line. Our goal is to implement a backend that will work with the *notes application* from part 2.

Let's navigate to an appropriate directory, and create a new template for our application with the npm init command. We will answer the questions presented by the utility, and the result will be an automatically generated *package.json* file at the root of the project that contains information about the project.

{

"name": "backend",

"version": "0.0.1",

"description": "",

"main": "index.js",

"scripts": {

"test": "echo \"Error: no test specified\" && exit 1"

},

"author": "Matti Luukkainen",

"license": "MIT"

}

The file defines, for instance that the entry point of the application is the *index.js* file.

{

// ...

"scripts": {

"start": "node index.js", "test": "echo \"Error: no test specified\" && exit 1"

},

// ...

}

Next, let's create the first version of our application by adding an *index.js* file to the root of the project with the following code:  
console.log('hello world')

We can run the program directly with Node from the command line:  
node index.js

Or we can run it as an [npm script](https://docs.npmjs.com/misc/scripts" \t "_blank):  
npm start

The *start* npm script works because we defined it in the *package.json* file:  
{

// ...

"scripts": {

"start": "node index.js",

"test": "echo \"Error: no test specified\" && exit 1"

},

// ...

}

Even though the execution of the project works when it is started by calling node index.js from the command line, it's customary for npm projects to execute such tasks as npm scripts.

By default the *package.json* file also defines another commonly used npm script called *npm test*. Since our project does not yet have a testing library, the npm test command simply executes the following command:

echo "Error: no test specified" && exit 1

**Simple web server**