

Using npm Packages in Node.js (with Express)

In this guide, we'll install and use an npm package in a Node.js project. We'll use **Express**, a popular web framework for Node.js. Don't worry about the details of Express for now—we'll cover that later. The goal here is simply to show how to install and use packages with npm.

Step 1: Initialize a New Project

Create a new project folder and initialize it:

```
mkdir my-npm-app  
cd my-npm-app  
npm init -y
```

This creates a `package.json` file that keeps track of your project's dependencies.

Step 2: Install Express

Use `npm install` to install the Express package:

```
npm install express
```

After installing, you'll see a `node_modules` folder and a `package-lock.json` file created. The `package.json` file will also list Express under `dependencies`.

Step 3: Create a Simple Server with Express

Create a new file called `app.js` :

```
touch app.js
```

Add the following code to `app.js` :

```
const express = require('express');
const app = express();

app.get('/', (req, res) => {
  res.send('Hello from Express!');
});

const port = 3000;
app.listen(port, () => {
  console.log(`Server is running at http://localhost:${port}`);
});
```

We'll explore what this code does later. For now, it just starts a basic server.

Step 4: Run Your App

To start the app, run:

```
node app.js
```

Visit <http://localhost:3000> in your browser. You should see:

```
Hello from Express!
```

Step 5: Use Node.js Watch Mode

Node.js now supports **watch mode** natively (from version 18 and above)

To run your app in watch mode:

```
node --watch app.js
```

This means Node.js will automatically restart whenever you save changes to `app.js` or other imported files.

Note: Watch mode works best in modern versions of Node.js. You can check your Node.js version using:

```
node -v
```

Step 6: Uninstall a Package

If you ever want to remove a package (like Express), use:

```
npm uninstall express
```

This removes it from `node_modules` and updates your `package.json`.

Summary

- Initialized a Node.js project using `npm init -y`
- Installed an npm package (`express`)
- Used it in a basic server file (`app.js`)
- Ran the app using both normal and watch mode (`node` and `node --watch`)
- Learned how to uninstall packages with `npm uninstall`