**Transpilation**

At this point, you are familiar with ES6+ browser compatibility issues and how to address them with transpilation.

In this project, you will practice setting up a JavaScript directory with Babel to transpile ES6+ code to ES5.

Before you begin, take note of the chart to the right. The first column displays the percentage of web browsers that support the ES6+ syntax in the second column. At the end of this project, we will populate the third and fourth columns with the equivalent ES5 syntax and the percentage of web browsers that recognize it.

Because this is a short project and knowing the steps to set up Babel is important, we recommend you complete it a couple of times. Also, if you’re stuck and think you may have typed the wrong command, select the reset project button and start from the beginning.

If you get stuck during this project or would like to see an experienced developer work through it, click “**Get Help**“ to see a **project walkthrough video**.

**Tasks**

**6/6Complete**

Mark the tasks as complete by checking them off

**Transpilation with Babel**

**1.**

Use npm to create a **package.json** file in the root directory.

The resulting file should have the following name and description values:

* name — babel-project
* description — Transpile code in a Babel project.

Press enter to skip all of the remaining prompts.

Hint

From the terminal, run npm init and type the above values when prompted for a name and description.

**2.**

Install the Babel command line and Babel preset environment npm packages.

Also, add these packages to the devDependencies property in **package.json**.

Hint

Use npm install package-name -D to install a package and add it to devDependencies in one step.

Use npm install to install babel-cli and babel-preset-env.

**3.**

Add a **.babelrc** file to the project folder.

Hint

Run touch .babelrc to add the **.babelrc** file to the root directory.

**4.**

In **.babelrc**, preset your local project’s config to "env".

Hint

Use the file navigator to open **.babelrc**. Copy the following object into the file:

{

"presets": ["env"]

}

**5.**

In **package.json**, add a script called "build".

When run, the "build" script should use Babel to transpile JavaScript code inside of the **src** folder and write it to a folder called **lib**.

Don’t forget to add a comma after the “test” script.

Hint

Open **package.json**, and add the following code below the "test" script:

"build": "babel src -d lib"

**6.**

Transpile, then save your code. Look at the browser to see the changes in the website.

Notice the difference between the percentage of browsers that support ES6 syntax and the transpiled ES5 equivalent.

Hint

Use npm run build to transpile the code in **src** and write it to **lib**.