What is a polyfill?

> A polyfill, or polyfiller, is a piece of code (or plugin) that provides the technology that you, the developer, expect the browser to provide natively.

Coined by Remy Sharp - https://remysharp.com/2010/10/08/what-is-a-polyfill

> We, as developers, should be able to develop with the HTML5 APIs, and scripts can create the methods and objects that should exist. Developing in this future-proof way means as users upgrade, your code doesn't have to change but users will move to the better, native experience cleanly. From the HTML5 Boilerplate team on polyfills - https://github.com/Modernizr/Modernizr/wiki/HTML5-Cross-Browser-Polyfills

Further research:

https://en.wikipedia.org/wiki/Polyfill

An example polyfill

The code below is a polyfill for the new ES6 String method, `startsWith()`:

```
if (!String.prototype.startsWith) {
  String.prototype.startsWith = function (searchString, position) {
    position = position || 0;
    return this.substr(position, searchString.length) === searchString;
  };
}
```

As you can see, a polyfill is just regular JavaScript.

This code is a simple polyfill (check it out on MDN), but there's also a significantly more robust one, here

QUIZ QUESTION

Why does the `startsWith()` polyfill begin with the following line?:

```
if (!String.prototype.startsWith)
```

- Without it, the script would throw an error.
- It checks to make sure the `String.prototype` exists.
- It avoids overwriting the native `startsWith` method.

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