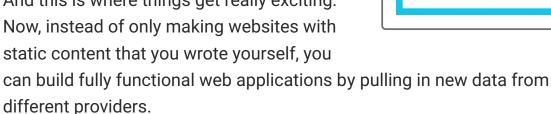# 6   Career Connection

Whoa—that was an intense week of material, right? You went from using jQuery and Web API methods like `setTimeout()` and `setInterval()` to retrieving complete datasets in JSON format from two different GitHub API endpoints.

And this is where things get really exciting. Now, instead of only making websites with static content that you wrote yourself, you can build fully functional web applications by pulling in new data from different providers.

You'll use third-party APIs every day on the job. Companies use these technologies in several ways, but the following two situations are among the most common use cases:

- **Collecting information from third-party services**

  Companies like Lyft, DoorDash, and Airbnb don't create their own proprietary mapping systems. Instead, they use the **Google Maps Platform** **(https://developers.google.com/maps/documentation)** , much like you did this week when you made requests to third-party servers.

Companies commonly use data and toolsets offered by others—so everything you learned this week will be incredibly useful moving forward!

- **Collecting information from another server in their own organization**

  Let's say you're working at an insurance company, building an application to track which premiums have been paid and which haven't. Your company has developed a standalone app that handles the customer payment portal. When your own application needs to know whether a premium has been paid or not, it makes an API call to the payment app, which sends its response in JSON format for you to handle how you'd like. You'll find in your career that this sort of internal communication—between two separate applications housed within one company—is common.

Becoming Employer-Competitive

As we always do, let's look at what you can do right now to become employer-competitive:

Step #1: Build a Small Application

With your new skills, you may be tempted to incorporate external data in your existing portfolio, like displaying today's weather. But why not take things a step further? Try building a small application that's enticing to prospective employers. For example, you could build a dynamic weather app that uses the browser API to get the user's location, then makes a request to an external API to display the weather. Be sure to push the final page to GitHub, get a live site going, and write a fully formed README file.

Step #2: Add AJAX as a Skill on Your Resume

The Technical Skills section of your resume should now proudly display AJAX next to JavaScript. This is a big deal because companies make server calls to APIs all the time!

Look to the Future

Take some time now to envision your future as a full-stack web developer. Complete the following task so you can be ready to get a job in just a few months:

Research Popular APIs and Brainstorm Use Cases

We don't have time in class to explore every popular API. Review this list of commonly used APIs, and jot down a few ideas for applications that could use them:

- Google's **GeoCoding API (https://developers.google.com/maps/documentation/geocoding/start)** converts addresses into geographic coordinates like longitude and latitude.

- The **Email Address Validation API (https://sendgrid.com/solutions/email-validation-api/)** handles email infrastructure and mailing transactions.

- **SkyScanner** **(https://skyscanner.github.io/slate/)** provides access to the latest information and pricing on flights, hotels, or car hire globally.

Prepare for the Technical Interview

Many companies use algorithm questions during the technical interview. We strongly recommend that you practice these. Doing so will prepare you to handle some of the most common questions in an interview or promotion discussion.

Please refer to the class repository to find these algorithms:

- Coding Algorithm #1: Factorial

- Coding Algorithm #2: Is Palindrome

- Coding Algorithm #3: Title Case

For practice in a live, interview-style IDE complete the following algorithm challenge. The solution will be discussed in the weekly recommended session.

Once you start, you'll have 7 days to complete it. After the 7 days has elapsed, the challenge will close.

- CodeSignal Algorithm: **Array Median (https://app.codesignal.com/public-test/KXE5b7L3CPKSdYkzh/35X8aLqz9hNStg)**

Career Services Events

If you want to learn more about the technical interviewing process and practice algorithms in a mock interview setting, attend one of our **upcoming workshops** **(https://careerservicesonlineevents.splashthat.com/)** !