

You have just seen how you can use APIs to retrieve structured data that you can use for your work. There are a lot of other data points that you can get from the National Weather Service and you should feel free to play around some more.

To give you some more practice, let's look at a fairly simple API from <http://worldcup.sfg.io>.

This API lets you retrieve results from the 2015 Women's FIFA World Cup (i.e., the Women's Soccer World Championship). I know that you are dying to know who won that year, and instead of googling for that information, you want to use R to find the winner. One of of doing this is to take a look at the list of team statistics and search for the team with the most points.

You can find that list at:

<http://worldcup.sfg.io/teams/results>

Now think about the steps you have to go through:

- Which libraries do you need to achieve your goal?
- Where do you need to go to get your data?
- How can you get the dataset you need?
- How do you access the specific pieces of information you need?
- **BONUS:**
 - Note that when you parse the JSON data, it will be loaded into a data frame, not a list like in the example in class.
 - Unlike the exercise you saw in class, you are not calculating an average, but are rather looking for the row in the data frame that has the highest value in the point column. Can you figure out how to do this?
- After you have found the correct row from the data frame, you want to print the name of the winner. How do you extract that information from the data frame?

When you run your script, it should print out a line that says something like "2015 Women's FIFA World Cup Champion: Atlantis".

One possible solution with explanations is shown in the file `json_api_exercise.R`.