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For my API how to project I have decided to work with the Recreation Information Database (RIDB) API offered through <https://ridb.recreation.gov> . This API provides information for recreational opportunities across twenty-four Federal agencies as well as the state park systems for Maryland, Texas, and Utah. This information is freely available for usage and incorporation into other websites and includes information for federal lands, museums, historic sites and more.

This existing documentation for their API is very good at showing the user what query options are available and what kinds of data can be obtained. Everything from finding out which agencies have available data, information regarding specific recreation areas and facilities under the purview of a particular agency, information for events, campgrounds, tours, activities, links, media (such as images or videos), trails, and historical reservation information can all be obtained.

This can be a very useful tool. A cabin rental company can incorporate the data within their website to showcase what types of nearby recreational activities are available. A tour guide can use the information to help their customers locate handicap accessible camping opportunities, or to present various tours options at specific times, lengths, or by physical effort required. These are just a few of the possible uses for the available information. In my 'How To', I am proposing to show how this API can be used to solve these kinds of problems, and how the results from one query can be mapped and filtered and then fed into new requests.

I will begin the 'how to' with an overview of what an API is and how to obtain access to the API. I will then go into more detail about what an XMLHttpRequest() is and what it returns. Using the first query example listed on the RIDB API documentation site to obtain organization data, I will show what the raw string return looks like and how the user can parse this into something more useful, and then walk the reader through how to create a list of the participating agencies.

From there, I intend to get more technical and show how the data can be used to solve problems such as those mentioned above, and how the results of a query can then be used to populate a new query. My intention is to show how the returned JSON can be parsed, mapped, and filtered to meet the needs of the user.

In each subsequent page, my goal is to introduce a new hypothetical situation or scenario, with a slightly higher level of complexity and walk the reader on how the problem could be solved. I intend to start with a simple list of available recreation opportunities, then move to how a mountain biking club can use the data to find the perfect trail, and close with showing what a business might be able to do with historic reservation data. Of course, these are all dependent upon the quality of the data collected by the agencies, which I suspect may be inconsistent across agencies or management units.