Assignment 3: Build a Restful API

Ashley Owens

10/18/2021

Link: [https://cs493-project3.uw.r.appspot.com](https://cs493-project3.uw.r.appspot.com/)

In critiquing the RESTful API project, I have discovered some flaws in my implementation. First, the method to modify, or edit, a boat uses the HTTP verb PATCH. My implementation requires that all parameters are supplied. My helper function rebuilds the values and assigns them to the requisite key. However, after some research, apparently this should be the functionality of a PUT request. PATCH is meant to only update one or more specified values, rather than all values. Apparently, I performed PUT and PATCH requests in the reverse of how they should be used. For example, when a boat arrives at a slip, I use a PUT request to call a helper function to update the slip’s current\_boat parameter. Instead of updating all the slip’s parameters, which is how PUT should be used, I essentially perform a PATCH request and simply update the single current\_boat parameter. In addition to these misuses of HTTP requests, my DELETE request for removing a boat from a slip should have been a PATCH request. Rather than deleting the boat entity, my helper function updates a single parameter in my slip object. Again, this is the functionality of a PATCH request, rather than a DELETE request. Otherwise, I think the REST URL endpoints follow RESTful design. The marina project URLs only represent resources or nouns, as opposed to a verbs or actions. They contain noun-based naming conventions such as: boats, slips, and boat or slip id numbers for specific references. REST APIs are stateless, meaning that no data is stored on the server regarding the client or the client’s previous sessions. There were times where my server created a variable on the fly and returned it; however, this data was not stored in my database and couldn’t be retrieved again. Therefore, I believe my API follows a stateless design. Overall, due to the inappropriate use of HTTP requests, appropriate noun-based URL endpoint naming conventions, and the statelessness of the API, I have concluded that it is only partially in alignment with RESTful practices.