REST Planning and Implementation Report

Before we begin with the different ways to use my API, here are the variables you'll need to understand:

- boat id = the id to whichever boat you want
- slip_id = the id to whichever slip you want
- The base url for my API is: https://mobile-assignment-0.appspot.com

Here is a list of the verbs and url's you'll need to use my API:

- 1. POST /boat: You will need to provide the "name", "type", and "length" of the boat as string, string, and integer respectively as a JSON object in the body when you make this post. If you properly provide all 3, this will post a new boat to the API.
- 2. POST /slip: You will need to provide the "number" of the slip as an integer as a JSON object in the body when you make this post. If you provide it properly, it will post a new slip to the API.
- 3. GET /boat: This returns a json array with every boat posted so far.
- 4. GET /boat/{boat_id}: This returns a single json object of the boat with the id you provide. If the id is invalid, it returns nothing.
- 5. GET /slip: This returns a json array with every slip posted so far.
- 6. GET /slip/{slip_id}: This returns a single json object of the slip with the id you provide. If the id is invalid, it returns nothing.
- 7. DELETE /boat/{boat_id}: This will delete the boat with the corresponding id when entered. You will not need to provide anything in the body. If the boat is currently in a slip, that slip will be emptied and the properties of the slip for "current_boat" and "arrival_date" will be set to null.
- 8. DELETE /slip/{slip_id}: This will delete the slip with the corresponding id when entered. You will not need to provide anything in the body. If a boat is currently occupying that slip, the boat's property of "at_sea" will be set to True.
- 9. PATCH /boat/{boat_id}: This will modify the boat with the corresponding id when entered. You will need to provide at least 1 of the "name", "type", or "length" in order to modify it. This call will return the boat as a JSON object with the specified edits but nothing else about the boat will change.
- 10. PATCH /slip/{slip_id}: This will modify the slip with the corresponding id when entered. The "number" you'd like the slip edited to must be entered as a JSON object. This call will return the slip as a JSON object with the specified edits but nothing else about the slip will change.
- 11. PUT /boat/{boat_id}: This will replace the boat with the corresponding id when entered. You will need to provide all 3 of the "name", "type", and "length" in order to replace it. This call will return the boat as a JSON object with the specified changes.
- 12. PUT /slip/{slip_id}: This will replace the slip with the corresponding id when entered. You will need to provide the new "number" in order to replace it. This call will return the boat as a JSON object with the specified changes.
- 13. PUT /arrival/{boat_id}: This will take the boat with the corresponding id and place it in an available slip. In order for this to work, in the body you must provide the "number" of the slip

you wish to dock in AND the "date" on which the boat arrives in the body as a JSON object. This will set the boat's "at_sea" property to False and put the boat's id in the "current_boat" property of your requested slip. This call, if executed properly, will return a JSON object of that slip the boat is now docked in.

- a. In case this explanation is confusing, here's a sample JSON object you could pass in the body if you had an available slip with the "number" of 9: {"number": 9, "date": "3/3/13"}
- 14. PUT /atsea/{boat_id}: This will take the boat with the corresponding id and place it at sea. The boat's "at_sea" property will be set to True and the slip it was previously in will have its "current_boat" and "arrival_date" properties set to null. You will not need to provide anything in the body, this should run fine with just the PUT and url. This will return a JSON object of the specified boat.