

# REST Planning and Implementation

## How to Run the Program on Windows

1. make sure that you have installed the Google Cloud SDK and initialized the gcloud tool.

Tutorial can be found here: <https://cloud.google.com/appengine/docs/standard/python/download>

2. Open command prompt and cd into the folder where this program is saved.

3. Start the local development server by typing in the command: `dev_appserver.py app.yaml` or `dev_appserver.py ./`

4. Visit `http://localhost:8080/` in your web browser to view the app.

5. The main page simply displays "hello" and does nothing.

6. Follow the How to Use the API section to perform desired operation. ie. `http://localhost:8080/boat` to view all boats.

## How to Use the API

This API is deployed on Google Cloud engine. URL: <http://rest-implementation-182721.appspot.com/>

### BOATS

**Add a boat:** POST `/boat`

```
body: { "name": "Sea Witch", #The name of the boat, a string
"type":"Catamaran", #The type of boat, power boat, sailboat, catamaran etc. a string
"length":28, #The length of the boat
"at_sea":false #A boolean indicating if the boat is at sea or not
}
```

The boat id will be automatically generated by the API (a string)

**Delete a boat:** DELETE `/boat/{{boat_id}}`

**View a boat:** GET `/boat/{{boat_id}}`

**View all boats:** GET `/boat`

**Modify a boat:** PATCH `/boat/{{boat_id}}`

Use PATCH to set a boat at sea

```
body: {"at_sea":true}
```

**Replace a boat:** PUT /boat/{{boat\_id}}

## SLIP

**Add a slip:** POST /slip

```
body: {"number": [an_integer_number]} #The the slip number, essentially the human
understandable identifier
```

The ship id will be automatically generated by the API (a string).

All newly created slips should be empty and only have a slip id and slip number.

**Delete a slip:** DELETE /slip/{{slip\_id}}

**View a slip:** GET /slip/{{slip\_id}}

**View all slips:** GET /slip

**Modify a slip:** PATCH /slip/{{slip\_id}}

```
body: { "number": 5, #The the slip number, essentially the human understandable identifier
"current_boat": "abc555", #The id of the current boat, null if empty
"arrival_date": "1/1/2015", #A string indicating the date the boat arrived in the slip
}
```

Use PATCH to add a boat to a slip:

```
body: {"current_boat": {{boat_id_to_add}},
      "arrival_date": "date_of_arrival"
}
```

**Replace a slip:** PUT /slip/{{slip\_id}}