

## Research Exercise REST API

Jamison:

**Navigation:** The REST API uses URLs to navigate. This can be done a couple different ways. First, a “/noun” where you replace the word noun with some list of data you want to expose, for example, customers. Next, you can filter that data with “/customers?filter = ...” and then the filter parameters. Finally, you can retrieve more detailed information about that list with “/customers/1” where 1 is the index of the customers list. This navigation provides a complete flow of data and does not provide any state information.

**Methods:** The main methods in the REST API are get, post, put, and delete. Get is an HTTP method used to get data from the server. Post is used to send or push data to the server. Put is used to update existing data on the server. Delete will delete existing data from the server.

Mason:

**Headers:** REST uses headers to ensure that all information about a resource is returned as a response. The headers of a REST API represent the metadata information associated with an API resource. Request headers are accept, content-type, if-match, and if-none-match. Response headers are allowed, content-type, ETag, and status.

**Eventing:** Eventing has two types of APIs polling and webhooks. Polling API is when the consumer initiates a new request. When we need an API to be in real time the API is configured with a callback URL, which is automatically triggered when an update event occurs on the server, this is how webhook works.

Kandace:

**Error Codes:** The REST API supports active solutions to errors that occur when there is an exception on the server. The REST API uses the status line component of an HTTP response to inform clients of the request's result. Some of the more common error codes are 204 (no content), 401 (unauthorized), 404 (not found) and 502 (bad gateway).

**Authentication:** Authentication refers to the accessibility for a particular resource i.e. the person with permission can access a resource. The REST API standardized authentication such that authentication has the ability to identify the caller and log a request client id from the server. There are some widely known authentication mechanisms such as basic, bearer, digest and open authentication.

Alazar:

**Bulk API**