Cache Service for Looker wrapper API

End Points:

```
GET /_health
```

GET /v4/looks/flush/:lookid(\d+)

GET /v4/looks/flushAll

GET /v4/looks/:look_id(\d+)/run/:result_format

GET /v4/looks

API Calls for flushing the looks will required admin privileges. Initiating the end points without admin privileges will throw the below error

http://localhost:3000/v4/looks/flushAll

```
← → C ① localhost:3000/v4/looks/flushAll
```

{"id":"3ea74242-cd8a-485c-8887-7e79ce768864","result":{"success":false,"status":403,"content":{"message":"You do not have permissions to perform this action"}}}

```
[2020-01-07T08:17:31.778Z] INFO: tc-lookv3-service/26836 on Appirio-14012: (reques
tId=3ea74242-cd8a-485c-8887-7e79ce768864)
    end request { method: 'GET',
        url: '/v4/looks/flushAll',
        statusCode: 403,
        statusMessage: 'Forbidden',
        duration: 21.60729899999998 }
```

http://localhost:3000/v4/looks/flush/1695

```
← → C ① localhost:3000/v4/looks/flush/1695
```

{"id":"669cbf64-e7ee-45b2-b482-5e59eda70f7d","result":{"success":false,"status":403,"content":{"message":"You do not have permissions to perform this action"}}}

```
[2020-01-07T08:18:28.197Z] INFO: tc-lookv3-service/26836 on Appirio-14012: (reques
tId=669cbf64-e7ee-45b2-b482-5e59eda70f7d)
  end request { method: 'GET',
    url: '/v4/looks/flush/1695',
    statusCode: 403,
    statusMessage: 'Forbidden',
    duration: 4.424599 }
```

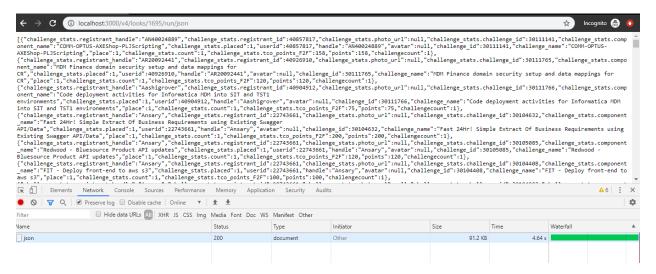
Hit 1:

URL: http://localhost:3000/v4/looks/1695/run/json

Result/Observation: The data loads in 4.46 seconds in the first attempt

Snippets:

Browser



```
[2020-01-07T07:15:39.007Z] INFO: tc-lookv3-service/7304 on Appirio-14012: start re
quest { method: 'GET', url: '/v4/looks/1695/run/json' } (requestId=85ff8a11-5f16-4c
e2-aa2f-0840229161d5)
(node:7304) [DEP0005] DeprecationWarning: Buffer() is deprecated due to security an
d usability issues. Please use the Buffer.alloc(), Buffer.allocUnsafe(), or Buffer.
from() methods instead.
[2020-01-07T07:15:43.634Z] INFO: tc-lookv3-service/7304 on Appirio-14012: (request
Id=85ff8a11-5f16-4ce2-aa2f-0840229161d5)
    end request { method: 'GET',
        url: '/v4/looks/1695/run/json',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 4627.101801 }
```

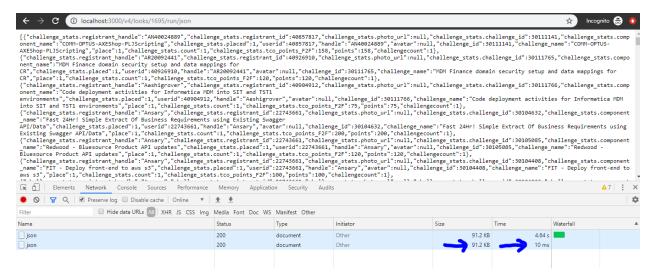
Hit 2:

URL: http://localhost:3000/v4/looks/1695/run/json

Result/Observation: The data loads significantly faster (from 4.46 seconds to 10 ms) as its being fetched from cache

Snippet:

Browser



```
[2020-01-07T07:16:16.748Z] INFO: tc-lookv3-service/7304 on Appirio-14012: start re
quest { method: 'GET', url: '/v4/looks/1695/run/json' } (requestId=0a5691ea-1f36-42
02-8db4-57978ffd5582)
0 : ttl not expired
from cache
[2020-01-07T07:16:16.751Z] INFO: tc-lookv3-service/7304 on Appirio-14012: (request
Id=0a5691ea-1f36-4202-8db4-57978ffd5582)
    end request { method: 'GET',
        url: '/v4/looks/1695/run/json',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 3.383000999999999997 }
```

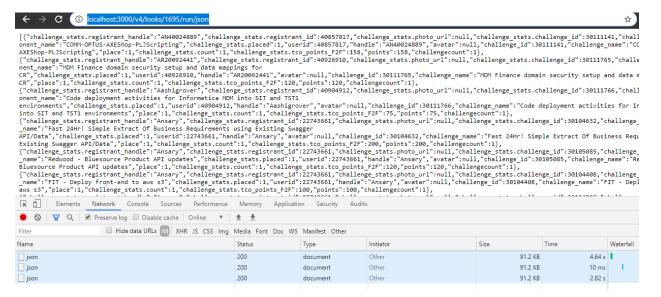
Hit 3:

URL: http://localhost:3000/v4/looks/1695/run/json

Result/Observation: Since the hit is done post cache time to live expires, it updates the cache in backend with new ttl and returns the data on the console. On command line, we can see that once the ttl has expired, the array has been updated with the new ttl

Snippet:

Browser



```
[2020-01-07T07:23:07.359Z] INFO: tc-lookv3-service/23448 on Appirio-14012: start r
equest { method: 'GET', url: '/v4/looks/1695/run/json' } (requestId=170c3a95-ea54-4
f91-a859-c837931e1dba)
ttl expired
Updated array
[2020-01-07T07:23:09.989Z] INFO: tc-lookv3-service/23448 on Appirio-14012: (reques
tId=170c3a95-ea54-4f91-a859-c837931e1dba)
    end request { method: 'GET',
        url: '/v4/looks/1695/run/json',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 2630.3736989999998 }
```

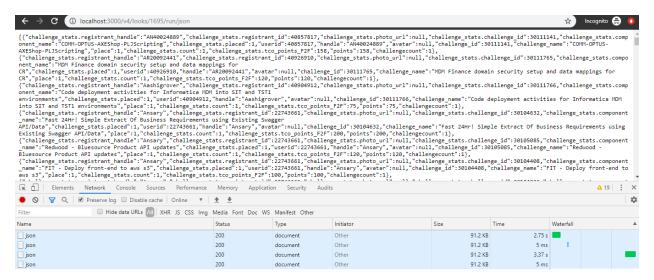
Hit 4:

URL: http://localhost:3000/v4/looks/1695/run/json

Result/Observation: Since the array has been updated and ttl is now updated, we will be fetching the data from the cache only until the new ttl expires.

Snippet:

Browser



```
[2020-01-07T07:27:17.992Z] INFO: tc-lookv3-service/27180 on Appirio-14012: start r
equest { method: 'GET', url: '/v4/looks/1695/run/json' } (requestId=d5a2a3e4-29e6-4
ce9-af12-3d5b8d980681)
0 : ttl not expired
from cache
[2020-01-07T07:27:17.995Z] INFO: tc-lookv3-service/27180 on Appirio-14012: (reques
tId=d5a2a3e4-29e6-4ce9-af12-3d5b8d980681)
    end request { method: 'GET',
        url: '/v4/looks/1695/run/json',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 2.070901 }
```

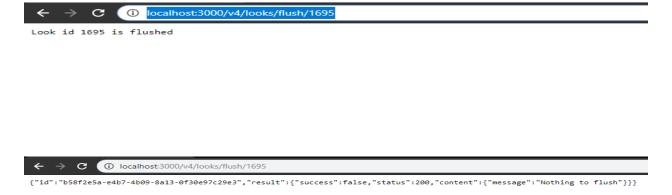
Hit 5: Flushing Specific Look

URL: http://localhost:3000/v4/looks/flush/1695

Result/Observation: The cache for the look has been flushed successfully i.e. the ttl for the entry is set to null so that the next call will fetch the data from the server only. If we hit the URL again, since its been flushed, it will show that there is nothing to flush in the array.

Snippet:

Browser



```
[2020-01-07T07:29:27.392Z] INFO: tc-lookv3-service/27180 on Appirio-14012: start r
equest { method: 'GET', url: '/v4/looks/flush/1695' } (requestId=7a9c17b5-9975-4331
-b6ed-e1732d36e3f8)
[2020-01-07T07:29:27.394Z] INFO: tc-lookv3-service/27180 on Appirio-14012: (reques
tId=7a9c17b5-9975-4331-b6ed-e1732d36e3f8)
   end request { method: 'GET',
        url: '/v4/looks/flush/1695',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 1.6753 }
```

```
[2020-01-07T07:32:55.432Z] INFO: tc-lookv3-service/27180 on Appirio-14012: start r
equest { method: 'GET', url: '/v4/looks/flush/1695' } (requestId=b58f2e5a-e4b7-4b09
-8a13-0f30e97c29e3)
[2020-01-07T07:32:55.433Z] ERROR: tc-lookv3-service/27180 on Appirio-14012: (reque
stId=b58f2e5a-e4b7-4b09-8a13-0f30e97c29e3, message="Nothing to flush", status=200)
[2020-01-07T07:32:55.439Z] INFO: tc-lookv3-service/27180 on Appirio-14012: (reques
tId=b58f2e5a-e4b7-4b09-8a13-0f30e97c29e3)
    end request { method: 'GET',
        url: '/v4/looks/flush/1695',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 6.7314 }
```

Hit 6

URL: http://localhost:3000/v4/looks/flushAll

Result: The end points results in flushing the array which stores the cache and hence any call post flushAll will result in new data being fetched straight from the server

Snippet:

Browser



Cache is flushed

```
[2020-01-07T08:11:08.950Z] INFO: tc-lookv3-service/27180 on Appirio-14012: start r
equest { method: 'GET', url: '/v4/looks/flushAll' } (requestId=42e11bdc-7f55-4496-b
5a5-b92853d01a89)
[2020-01-07T08:11:08.951Z] INFO: tc-lookv3-service/27180 on Appirio-14012: (reques
tId=42e11bdc-7f55-4496-b5a5-b92853d01a89)
    end request { method: 'GET',
        url: '/v4/looks/flushAll',
        statusCode: 200,
        statusMessage: 'OK',
        duration: 0.9498 }
```