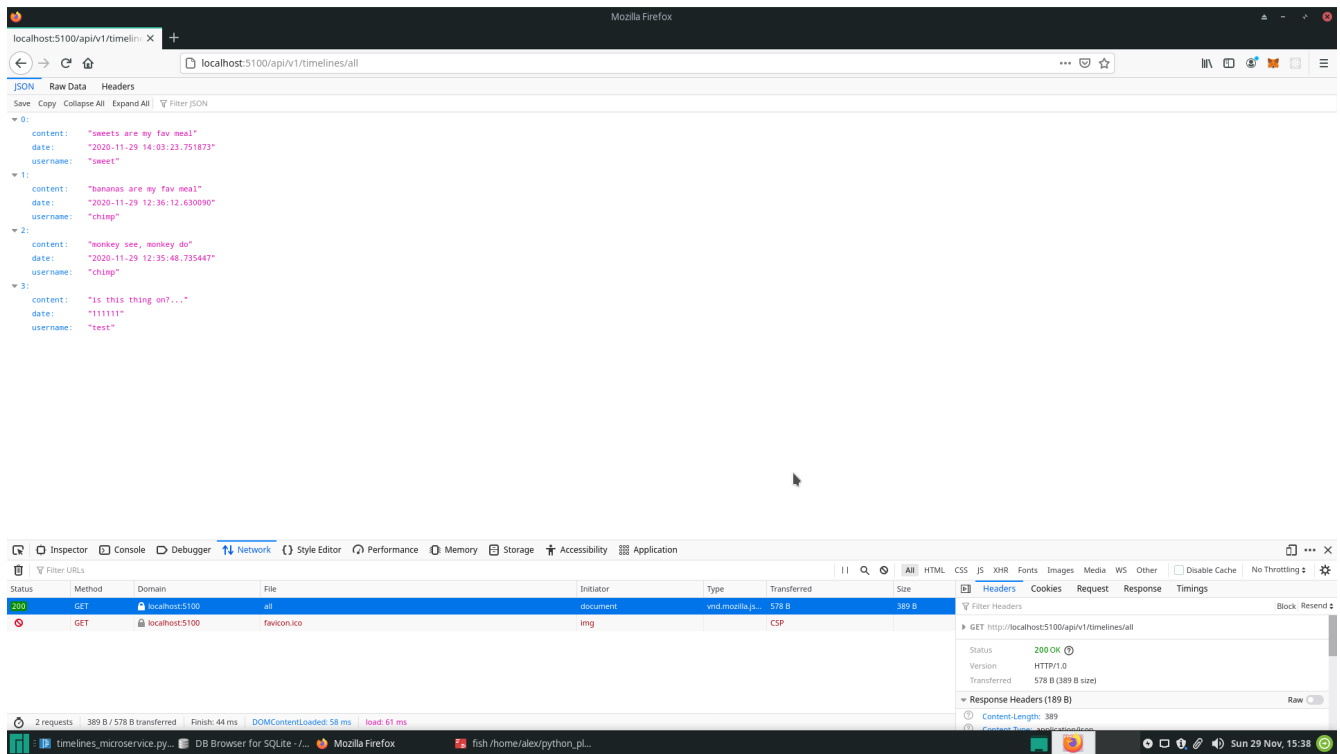
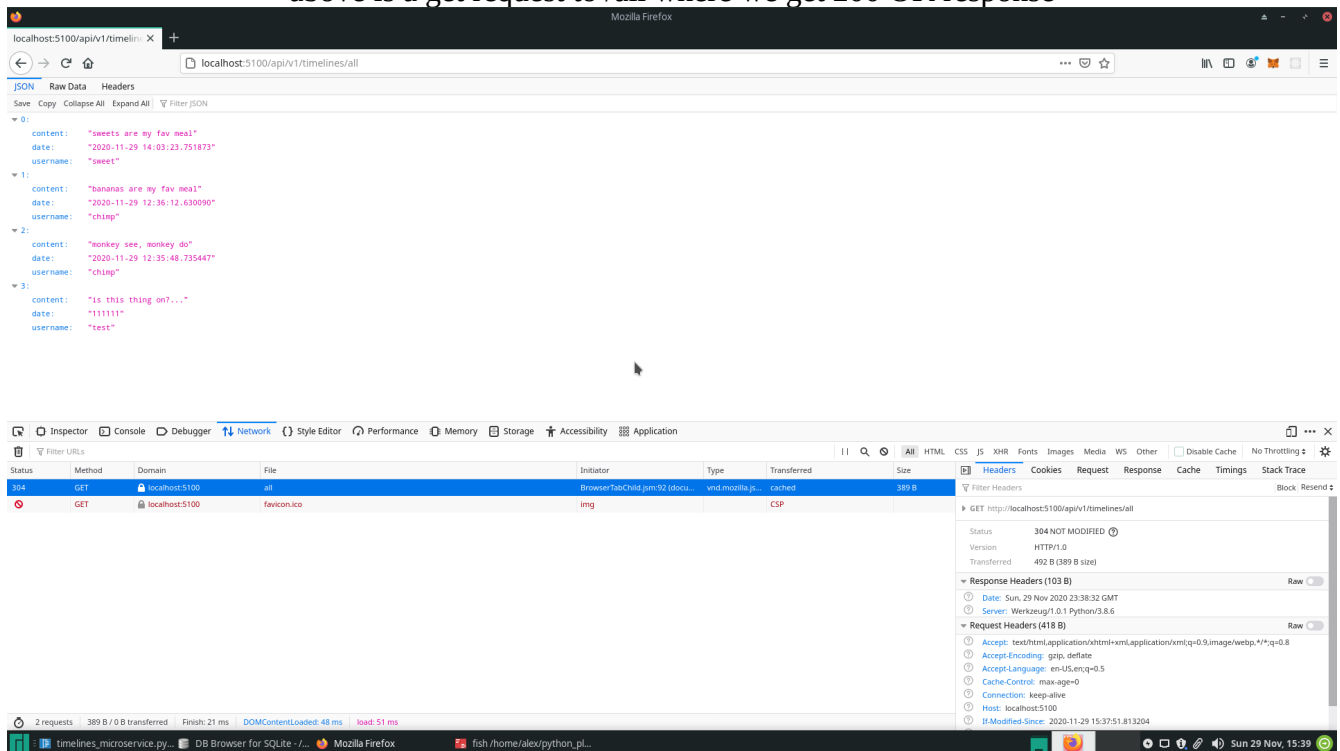


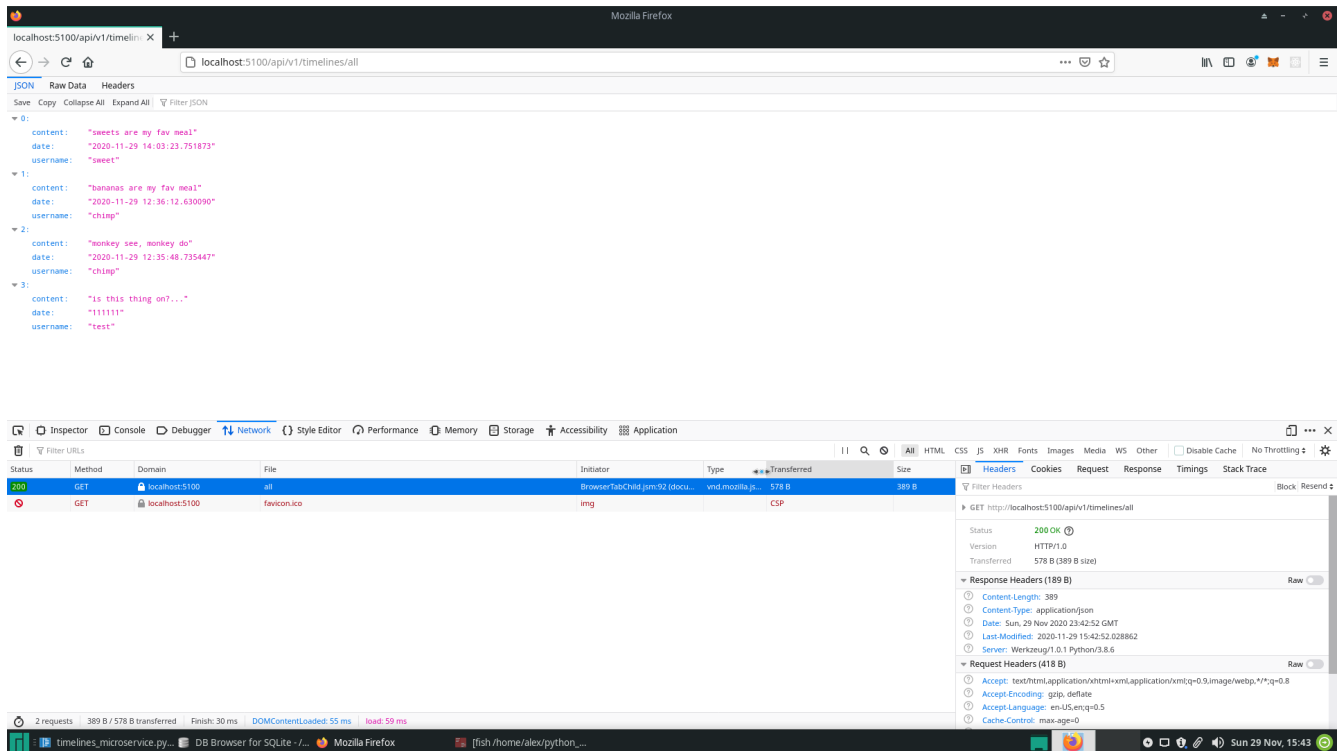
HTTP CACHING



above is a get request to `/all` where we get 200 OK response

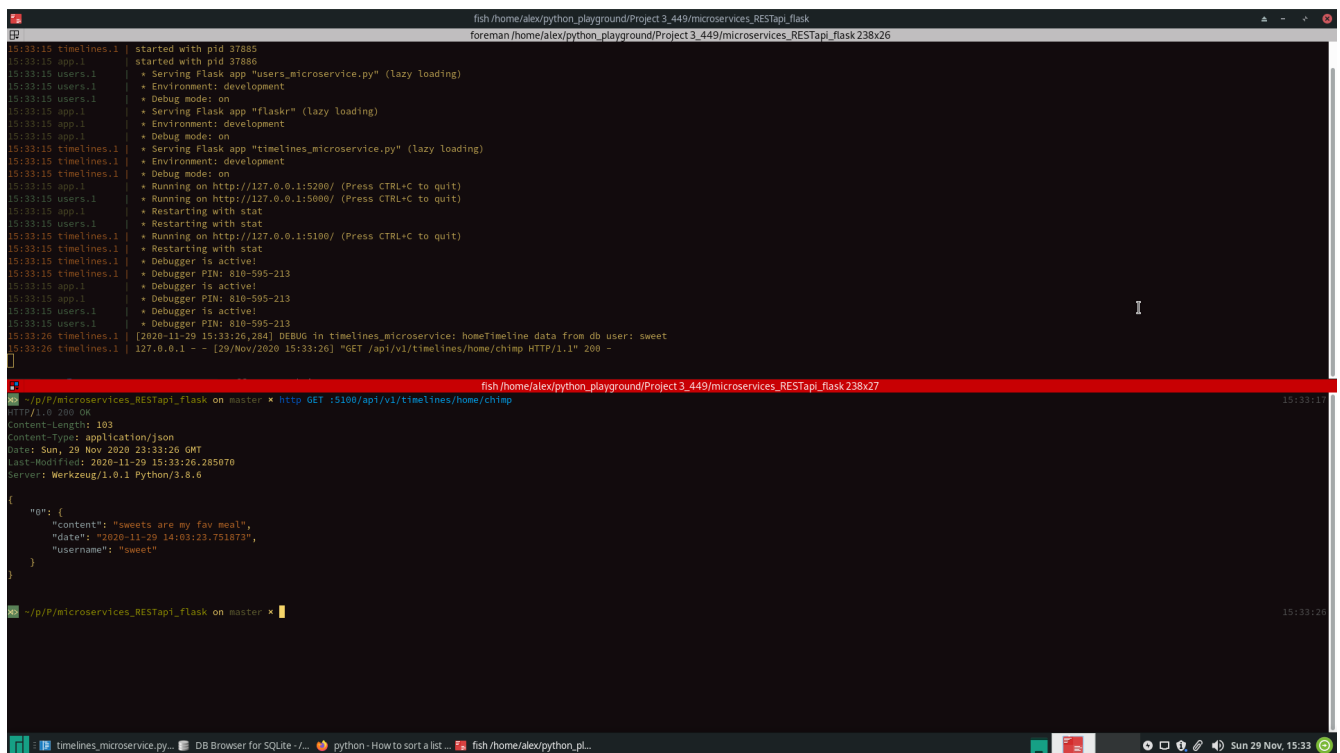


When we make the call again we see that we get 304 response instead with a 'if-modified-since' tag of 15:37



Lastly we wait 5 minutes making another get request at 15:43 this time getting 200 OK

OBJECT CACHING



In the top terminal after making a request for a user's home timeline we see that the data comes from the database since it was not already in cache

```
fish /home/alex/python_playground/Project 3.449/microservices_RESTapi_flask
foreman/home/alex/python_playground/Project 3.449/microservices_RESTapi_flask238x26

13:33:15 users.1 | • Debug mode: on
13:33:15 app.1 | • Serving Flask app "flask" (lazy loading)
13:33:15 app.1 | • Environment: development
13:33:15 app.1 | • Debug mode: on
13:33:15 timelines.1 | • Serving Flask app "timelines_microservice.py" (lazy loading)
13:33:15 timelines.1 | • Environment: development
13:33:15 timelines.1 | • Debug mode: on
13:33:15 app.1 | • Running on http://127.0.0.1:5200/ (Press CTRL+C to quit)
13:33:15 users.1 | • Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
13:33:15 app.1 | • Restarting with stat
13:33:15 users.1 | • Restarting with stat
13:33:15 timelines.1 | • Running on http://127.0.0.1:5100/ (Press CTRL+C to quit)
13:33:15 timelines.1 | • Restarting with stat
13:33:15 timelines.1 | • Debugger is active!
13:33:15 timelines.1 | • Debugger PIN: 810-595-213
13:33:15 app.1 | • Debugger is active!
13:33:15 app.1 | • Debugger PIN: 810-595-213
13:33:15 users.1 | • Debugger is active!
13:33:15 users.1 | • Debugger PIN: 810-595-213
13:33:26 timelines.1 | [2020-11-29 15:33:26,284] DEBUG in timelines_microservice: homeTimeline data from db user: sweet
13:33:26 timelines.1 | 127.0.0.1 - - [29/Nov/2020 15:33:26] "GET /api/v1/timelines/home/chimp HTTP/1.1" 200 -
13:34:09 timelines.1 | [2020-11-29 15:34:09,399] DEBUG in timelines_microservice: homeTimeline data from db user: test
13:34:09 timelines.1 | [2020-11-29 15:34:09,399] DEBUG in timelines_microservice: homeTimeline data from db user: chimp
13:34:09 timelines.1 | [2020-11-29 15:34:09,400] DEBUG in timelines_microservice: homeTimeline data from cache user: sweet
13:34:09 timelines.1 | 127.0.0.1 - - [29/Nov/2020 15:34:09] "GET /api/v1/timelines/home/admin HTTP/1.1" 200 -

Server: Werkzeug/1.0.1 Python/3.8.6
fish /home/alex/python_playground/Project 3.449/microservices_RESTapi_flask238x27

{
  "0": {
    "content": "sweets are my fav meal",
    "date": "2020-11-29 14:03:23.751073",
    "username": "sweet"
  },
  "1": {
    "content": "bananas are my fav meal",
    "date": "2020-11-29 12:36:12.630090",
    "username": "chimp"
  },
  "2": {
    "content": "monkey tee, monkey do",
    "date": "2020-11-29 12:35:48.735447",
    "username": "chimp"
  },
  "3": {
    "content": "is this thing on?...",
    "date": "111111",
    "username": "test"
  }
}
```

In this subsequent call we see that this user shares a following user as the previous. We see that two of the user's post data comes directly from the database while one of the user's data comes from cache where it was recently stored