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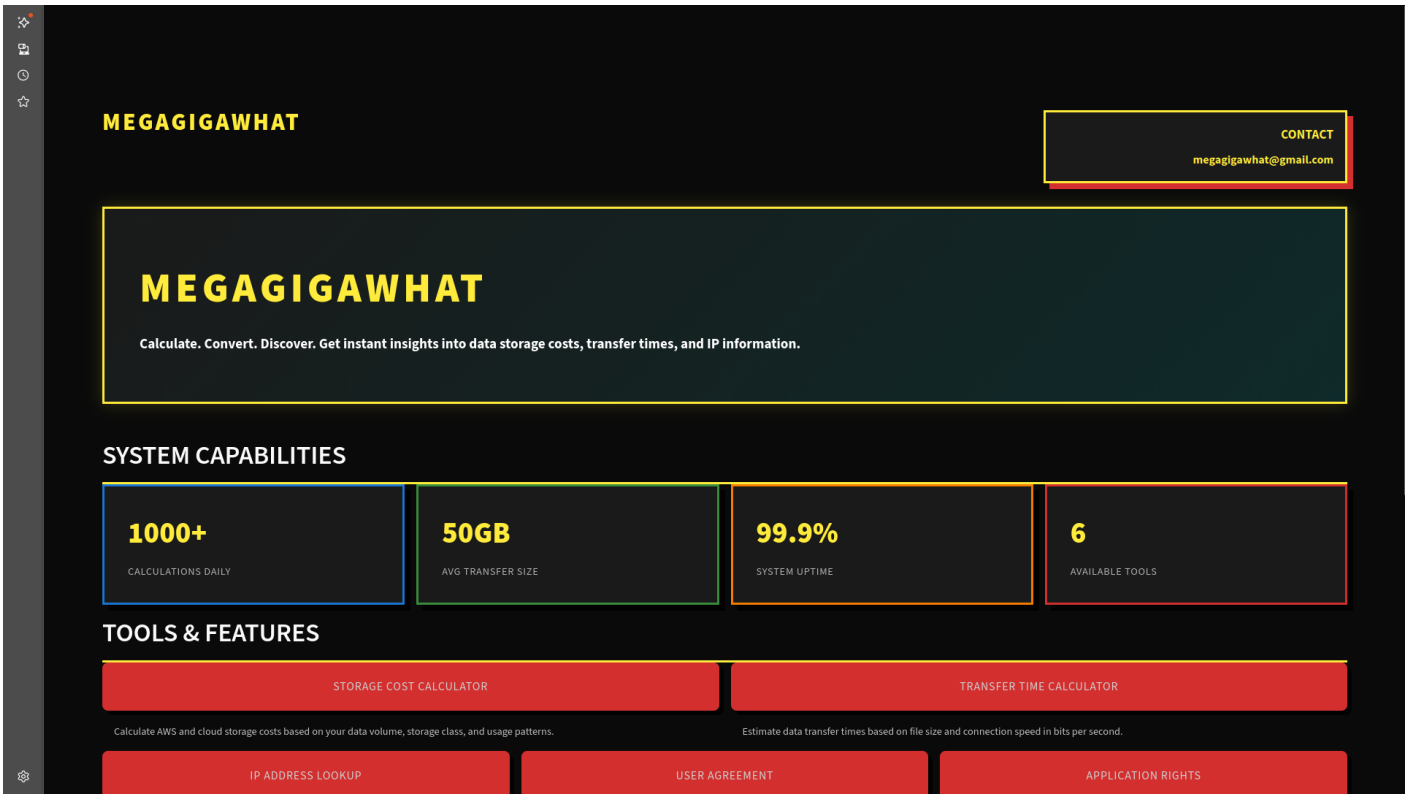
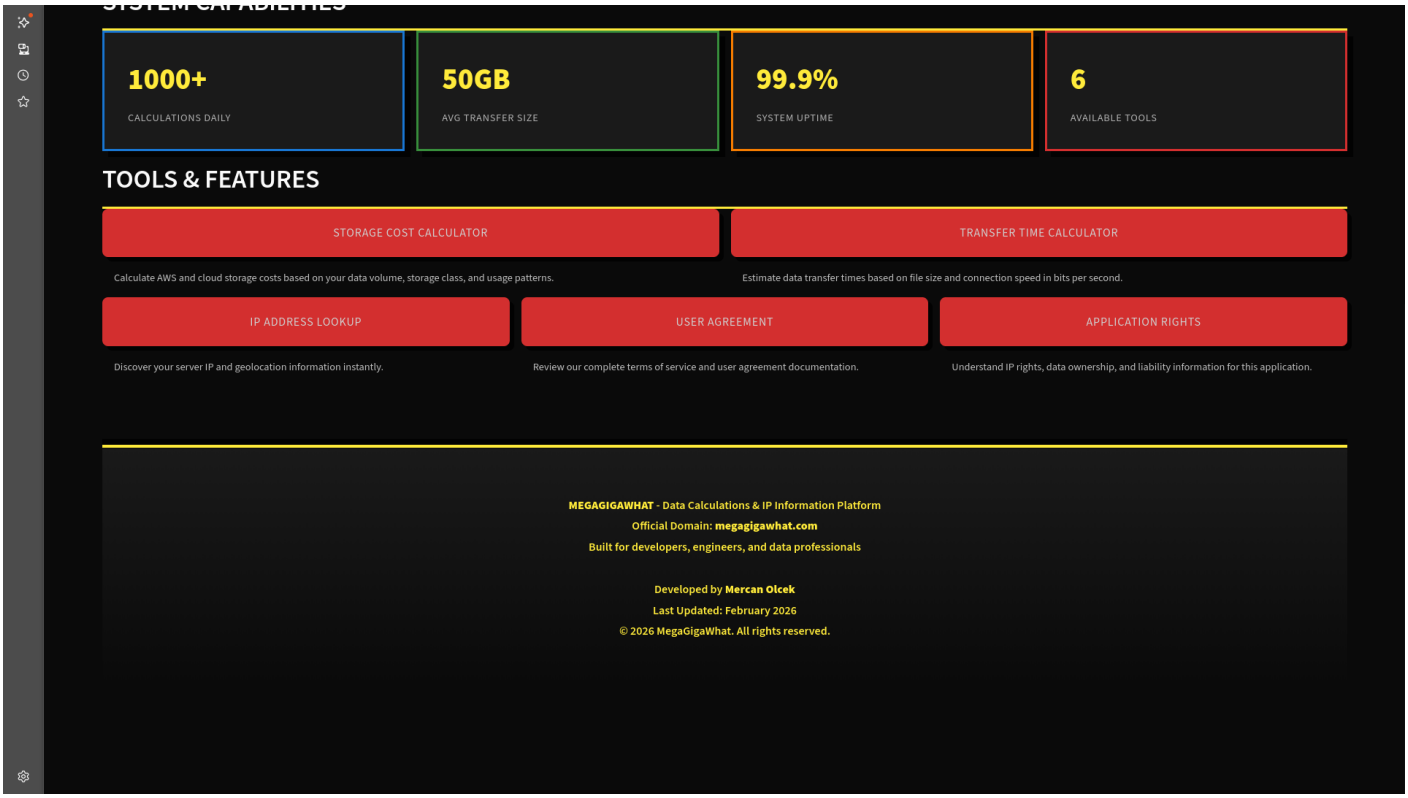
*Data Manager – Cloud Cost & Data Calculation Platform

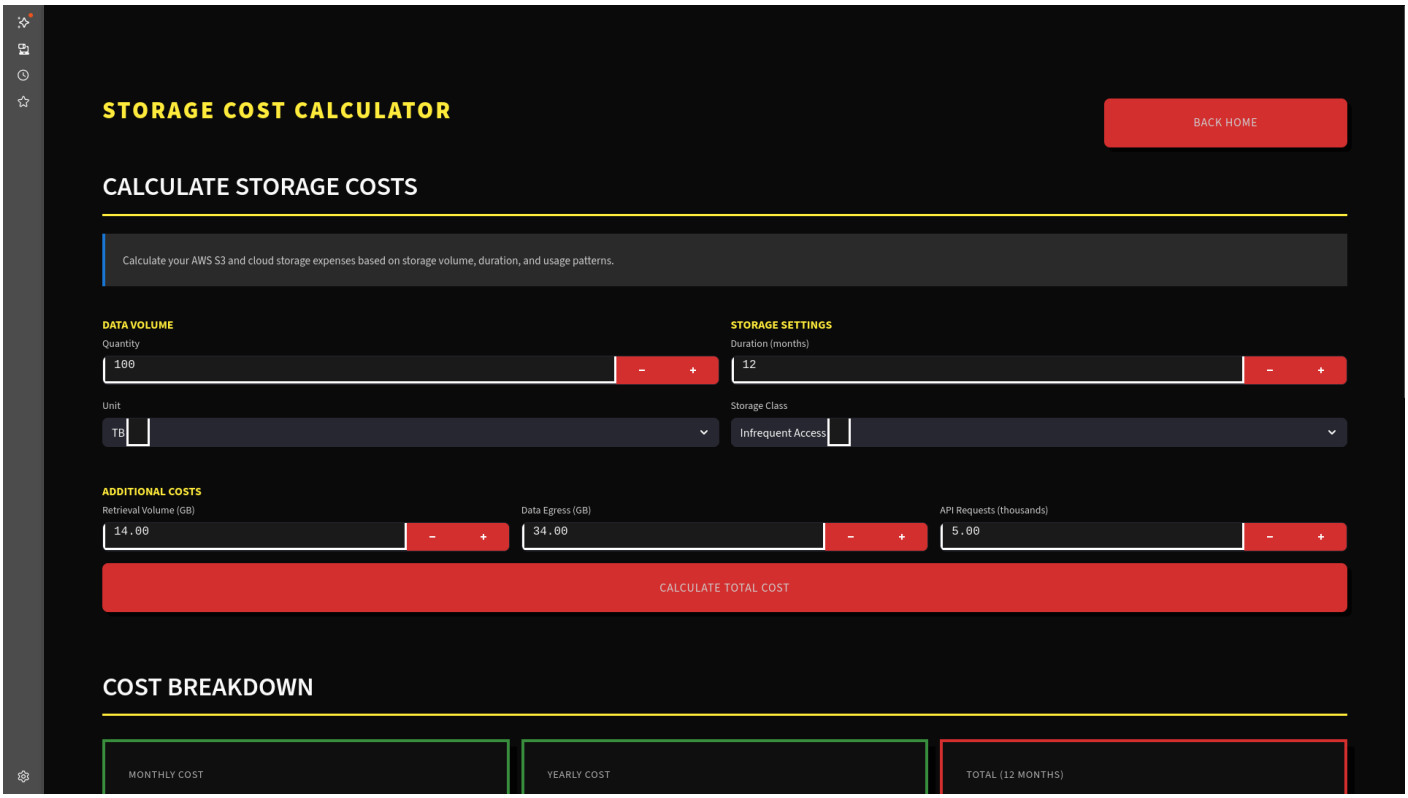
MegaGigaWhat is a cloud cost and data calculation platform built to realistically estimate cloud storage costs and large-scale data transfer times.

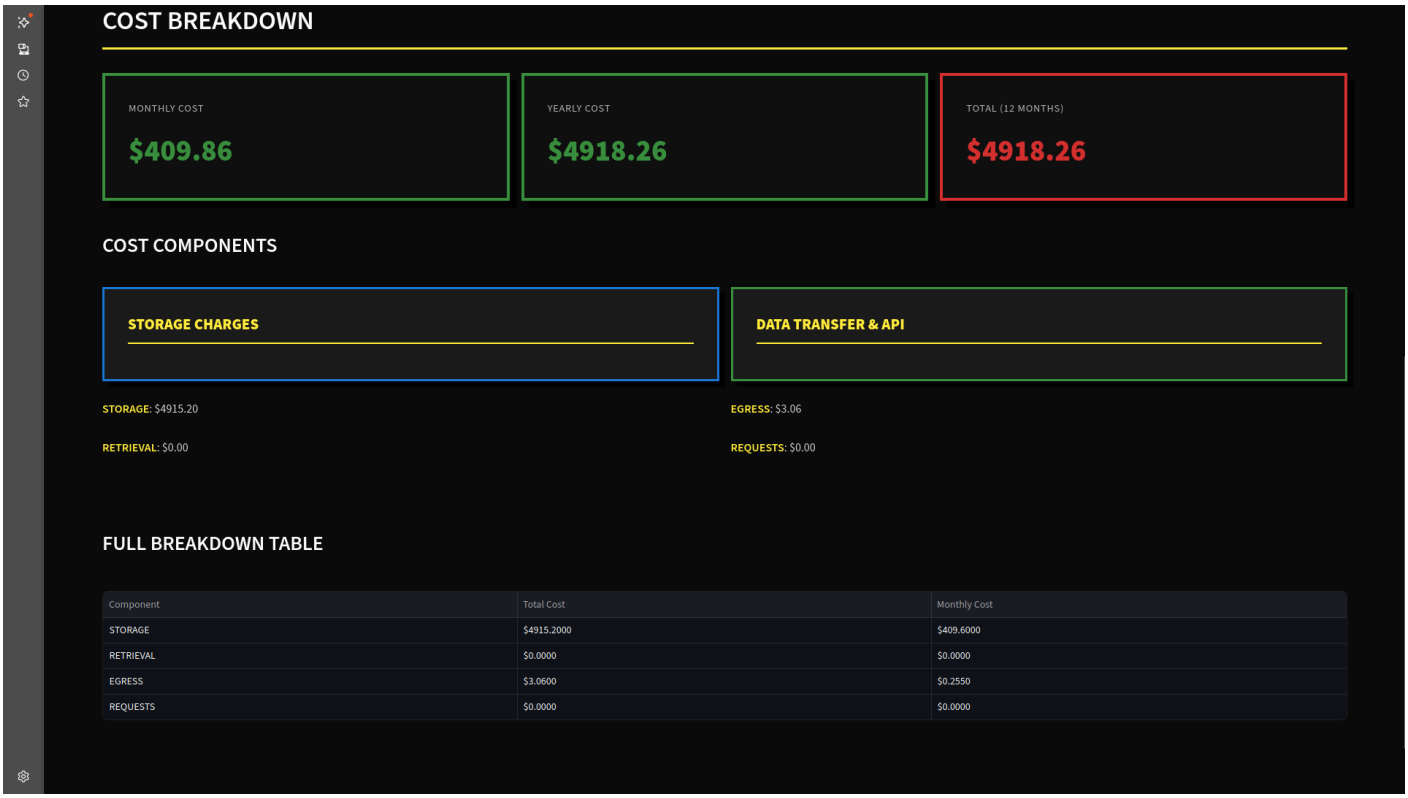




*Storage Cost Calculator

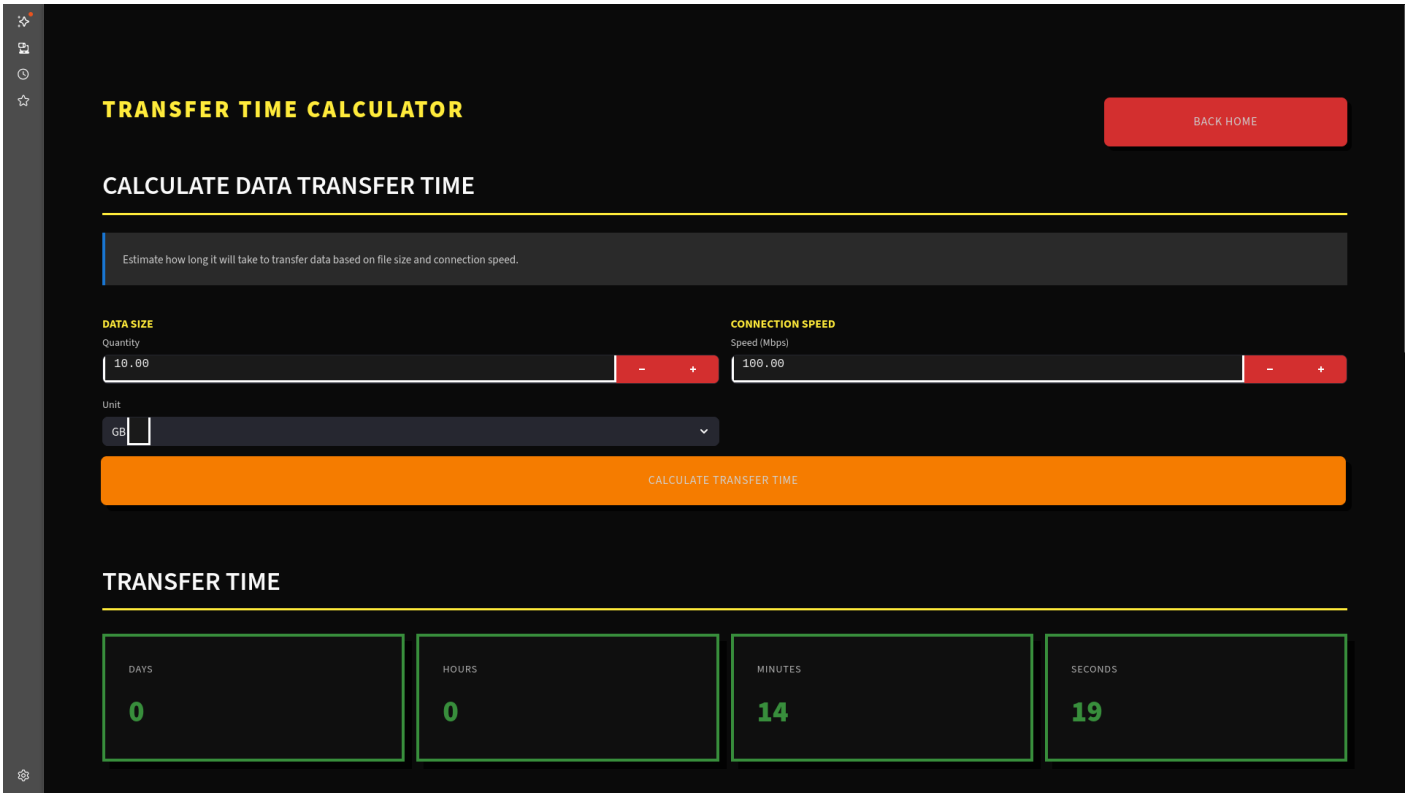
Calculates storage costs for AWS, Azure, and GCP based on storage class and usage type. I did not use a ready-made SQL or external database. Pricing data is structured manually, and I update the prices myself whenever providers change them. On the calculation side, the system separately computes Storage,Retrieval,Data egress,API request costs. All components are calculated individually and returned as a full cost breakdown. In the future, I plan to fetch pricing dynamically through a FastAPI service.

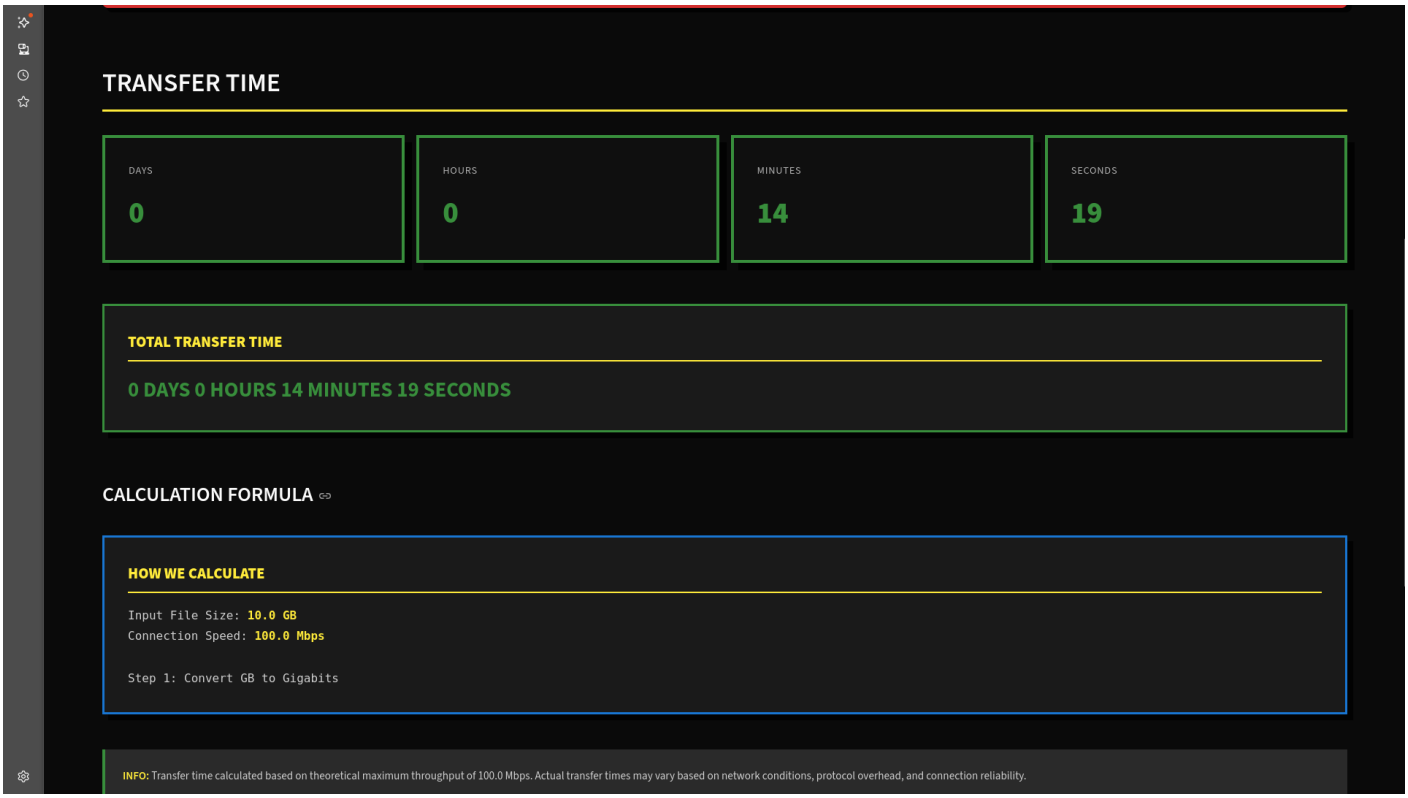




*Transfer Time Calculator

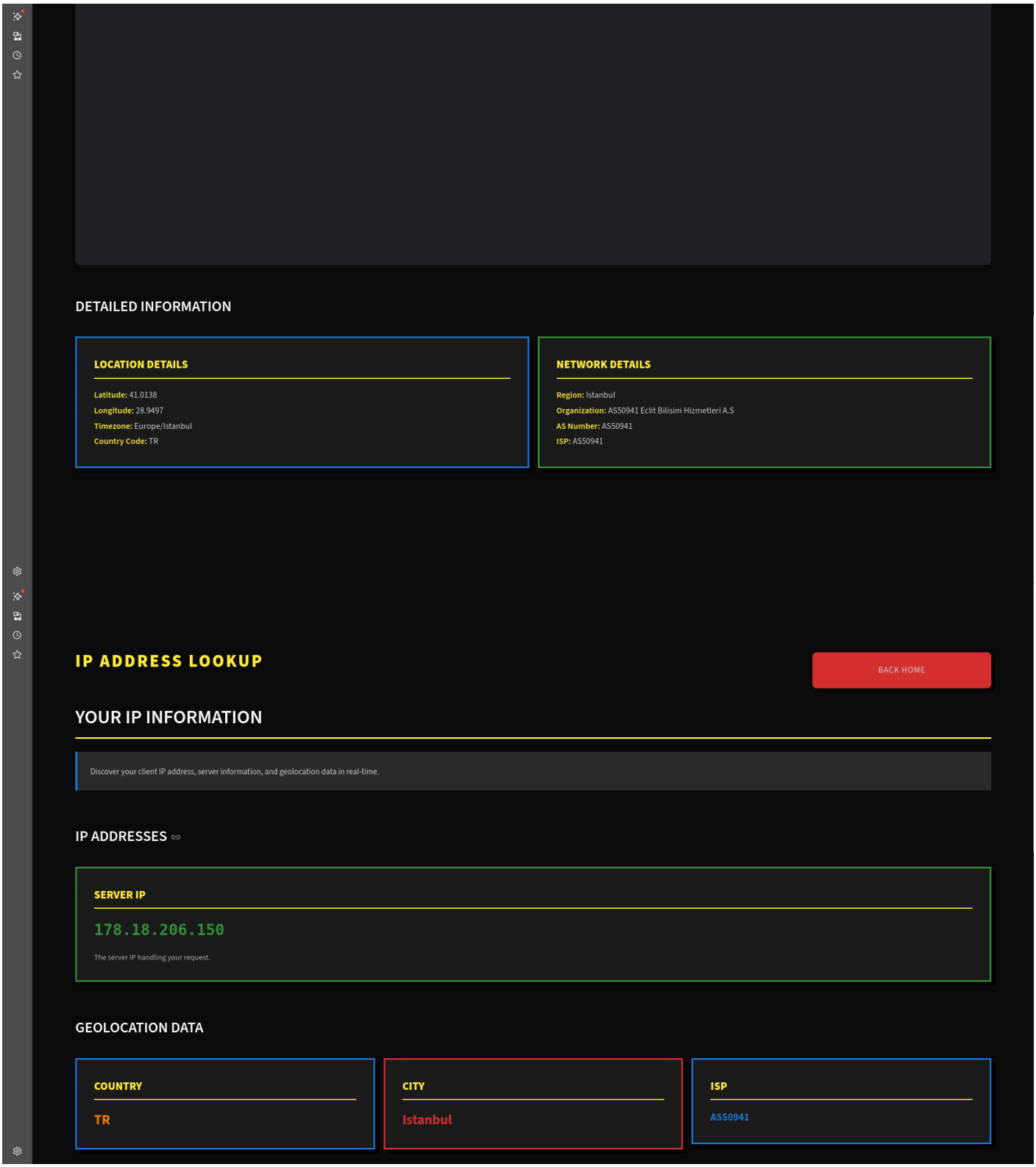
Transfer duration is calculated directly at the bit level. Data is converted into bits, bandwidth is converted from Mbit to bits, and total time is calculated in seconds. The result is then broken down into days, hours, minutes, and seconds. It does not rely on approximations — it performs direct mathematical computation.





*IP Lookup

The IP page is built with FastAPI. Users can:View their public IP address,Perform IP trace, See their geolocation displayed on a map The geolocation system uses a primary + fallback API structure. Folium is used for interactive map rendering. Overall, the project is not just a combination of ready-made services. The core logic, pricing structure, and calculation systems are built manually. Behind a simple interface, there is a technically structured and clearly defined system.

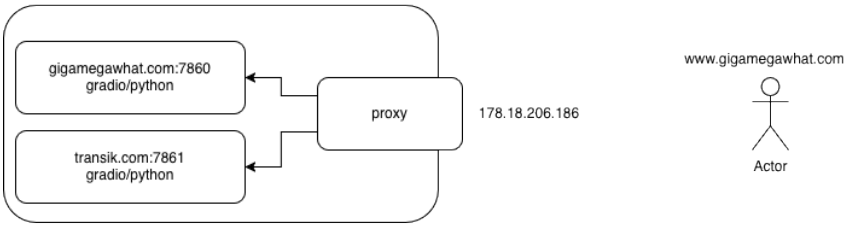


Problems I encountered while doing it and how I solved them.

-first of NETWORK PROBLEMS

*after wroting reverse proxy ı was add fast api and streamlit library(uı),was not now that ı have to add router to proxy actually ı have never research :/. İts was because ı wasn't even open a ngnix file ahahahh.. And ı decited to learn this network stuff then fix all reverse proxy by my self.Actually the ngnix story is not over. Somehow abaut 6 hours later after fix reverse proxy the endpoints was

not working.Some port problems then ı fix 'em right now still usng same proxy.




```
# /etc/nginx/sites-available/gigamegawhat.com
server {
    listen 80;
    server_name gigamegawhat.com www.gigamegawhat.com;

    # Redirect all HTTP requests to HTTPS
    return 301 https://$host$request_uri;
}

server {
    listen 443 ssl http2;
    server_name gigamegawhat.com www.gigamegawhat.com;

    # SSL configuration
    ssl_certificate /etc/letsencrypt/live/gigamegawhat.com/fullchain.pem;
    ssl_certificate_key /etc/letsencrypt/live/gigamegawhat.com/privkey.pem;
    ssl_protocols TLSv1.2 TLSv1.3;
    ssl_ciphers HIGH:!aNULL:!MD5;

    # Proxy settings
    location / {
        proxy_pass http://127.0.0.1:7860;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header X-Forwarded-Proto $scheme;

        # Optional WebSocket support
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection $http_connection;
    }

    # Optional: increase buffer sizes for larger responses
    proxy_buffers 16 16k;
    proxy_buffer_size 32k;
}
```

- ABAUT PHOTO: this is the first reverse proxy that without router and the old name of my site is transik :))) sdgjgjdlgsg.Anyway then ı just upgrated to: https://gist.github.com/mercan798/edfb5ae229f0964e30cd1ed4ff02e94b

-second one CSS CPROBLEMS

*I now that what could be the css problems.Dark and light theme incompatibility.Kind of the worst thing for me is uı frontend jobs.. Still try the beat this habit.Then the glass effect ı was not like it all it was a mountain background and glass effect for texts but actually it was like a walwmart site and ı decited to change it to like a gameboy theme..

-third one FEEDBACK

*when ı got to first feedback it was actually first feedback of my coder life the feedback was (the storage cost calculater is wrong,and we want to ip trace to ip page) okey not that bad, after ı wrote storage cost backend ı was not give user a enough input.. Then ı decited to give some more input (region,quantity,Retrieval Volume ,Data Egress ,API Requests ,storage class) After that the storage calculator was working well.Then ı add the ip trace (ısp,city,country,location map, location detail, network detail) this is how ı receive feedback.

-THE NOTE

*Of course ths is the not all proplems that antire site just most highligt problems ı guess..

*it was my first official web site ı hope it will be useful for you..

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